BEFORE THE ARIZONA POWER PLANT AND TRANSMISSION LINE SITING COMMITTEE

LS-354

IN THE MATTER OF THE APPLICATION OF TUCSON ELECTRIC POWER COMPANY, IN CONFORMANCE WITH THE REQUIREMENTS OF A.R.S. § 40-360, ET SEQ., FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AUTHORIZING THE MIDTOWN RELIABILITY PROJECT, WHICH INCLUDES THE CONSTRUCTION OF A NEW 138 KV TRANSMISSION LINE ORIGINATING AT THE EXISTING DEMOSS-PETRIE SUBSTATION (SECTION 35, TOWNSHIP 13 SOUTH, RANGE 13 EAST), WITH AN INTERCONNECTION AT THE PLANNED VINE SUBSTATION (SECTION 06, TOWNSHIP 14 SOUTH, RANGE 14 EAST), AND TERMINATING AT THE EXISTING KINO SUBSTATION (SECTION 30, TOWNSHIP 14 SOUTH, RANGE 14 EAST), EACH LOCATED WITHIN THE CITY OF TUCSON, PIMA COUNTY, ARIZONA.	DOCKET NO. L-00000C-24-0118-00232 LS CASE NO. 232 EVIDENTIARY HEARING

At: Tucson, Arizona

Date: July 8, 2024

Filed: July 23, 2024

REPORTER'S TRANSCRIPT OF PROCEEDINGS

VOLUME I
(Pages 1 through 246)

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BE IT REMEMBERED that the above-entitled and numbered matter came on regularly to be heard before the Arizona Power Plant and Transmission Line Siting Committee at Tucson Reid Park Doubletree, 445 South Alvernon Way, Tucson, Arizona, commencing at 1:03 p.m. on July 8, 2024.

BEFORE: ADAM STAFFORD, Chairman
GABRIELA S. MERCER, Arizona Corporation Commission
LEONARD DRAGO, Department of Environmental Quality
DAVID FRENCH, Arizona Department of Water Resources
NICOLE HILL, Governor's Office of Energy Policy
R. DAVID KRYDER, Agricultural Interests
SCOTT SOMERS, Incorporated Cities and Towns
(via videoconference)
MARGARET "TOBY" LITTLE, PE, General Public
DAVE RICHINS, General Public
JOHN GOLD, General Public

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SPANISH INTERPRETER: Ms. Alma Dausinger, to translate any requested translations from English into Spanish and Spanish into English during the public comment session.

CHMN STAFFORD: All right. Let's go on the record. Now is the time set for the hearing on the application of Tucson Electric Power for a certificate of environmental compatibility for its Midtown Reliability Project Docket No. L-00000C-24-0118-00232 or Line Siting Case 232.

Let's take the roll.

Member Kryder.

MEMBER KRYDER: Present.

CHMN STAFFORD: Member Mercer.

MEMBER MERCER: Present.

CHMN STAFFORD: Member Gold.

(No response.)

CHMN STAFFORD: Member Drago.

MEMBER DRAGO: Present.

CHMN STAFFORD: Member Little.

MEMBER LITTLE: Present.

CHMN STAFFORD: Member French.

MEMBER FRENCH: Present.

CHMN STAFFORD: Member Hill.

MEMBER HILL: Present.

CHMN STAFFORD: Member Richins.

MEMBER RICHINS: I'm here.

CHMN STAFFORD: Do we have Member Somers online?

(No response.)

CHMN STAFFORD: And Member Gold is here. He's just not at his microphone.

MEMBER KRYDER: Right. Here he comes.

Tell him you're present, Jon.

MEMBER GOLD: Present.

CHMN STAFFORD: Thank you, Member Gold.

All right. We have a number of parties to this application. All of them are parties by right. There's the applicant, Banner Health, City of Tucson, Pima County, and Underground Arizona.

Let's start by taking appearances beginning with the applicant.

MS. GRABEL: Thank you, Mr. Chairman, Committee members. Meghan Grabel from the law firm Osborn Maledon on behalf of the applicant Tucson Electric Power Company.

With me from my law firm is my associate Elias Ancharski. And also with me up at counsel table is Megan Hill, who's TEP's in-house regulatory counsel.

CHMN STAFFORD: Banner Health.

MS. DE BLASI: Good afternoon, Chairman and Committee members. I'm Michelle De Blasi with the Law Firm of Michelle De Blasi. And I am here representing Banner Health University Medical Campus.

And with me will be my witness Mark Barkenbush.

CHMN STAFFORD: Thank you.

City of Tucson.

MR. LUSK: Good morning, Mr. Chair. This is -- my name is Roi Lusk. And I'm here with Jennifer Stash representing the City of Tucson. Our witness will be Mark Castro.

CHMN STAFFORD: And Pima County.

(No response.)

CHMN STAFFORD: All right. Underground Arizona.

MR. DEMPSEY: My name is Dan Dempsey, and I represent Underground Arizona.

CHMN STAFFORD: All right. Thank you.

Would the parties like to make an opening statement, starting with the applicant?

MS. GRABEL: Yes, I would. Thank you, Mr. Chairman. And I ask the Committee's indulgence. It's a bit longer than I normally do given the nature of this project.

CHMN STAFFORD: But it's under 30 minutes; right?

MS. GRABEL: I hope so.

CHMN STAFFORD: Thank you.

MS. GRABEL: Mr. Chairman, Committee, this case is unique compared to most that this Committee hears. The transmission line that is the subject of this application is not needed simply to interconnect a new customer or a new generation to the grid. It is part of TEP's plan to upgrade and modernize the 50- to 70-year-old electric infrastructure that serves the Tucson area. And in doing so meets several critical reliability needs as I will discuss.

If I were to give a theme to this case, it would be this.

Can we put up the slides? That doesn't count against my 30 minutes.

Progress. This is a case about modernizing an electric grid to keep pace with the City's growing population and progressing with the City to meet its evolving energy needs.

The electric grid serving the Midtown Tucson area was built in the 1950s and '60s during a time of large population growth, and it has grown exponentially since then.

I thought this was an interesting picture and certainly apropos to the present case. The population of the City of Tucson in the early 1950s was around 50,000 people. According to Archive Tucson, a

University of Arizona library website that preserves the history of the City, the entire population of Tucson in the 1950s could fit with plenty of seats to spare in today's University of Arizona's stadium.

And as you can see by the evolution of the skyline, Tucson had grown considerably by 1980. And TEP's existing 46kV grid was built in that interim period between 1950 and 1970 to accommodate that marked population change.

Tucson continued to grow in the succeeding decades, much of it through infill and already populated areas, as demonstrated by the difference in intensity of the light in the center of the skyline between 1980 and 2003.

This is modern Tucson, which has grown even more since TEP first installed its 46kV system to serve the City in the 1950s. In fact, TEP has had over 30 percent load growth since the year 2000. That's just the past 24 years, the last skyline in the photo previously reviewed.

Tucson's current population of over half a million people is more than four times what it was when TEP's existing electric infrastructure was installed. Not only has the population changed, but the City's energy needs have also evolved.

The current system was designed to serve homes and buildings that were smaller, used gas appliances, swamp coolers instead of air conditioner, and relied entirely upon cars fuelled by gas.

Today Midtown Tucson is fully developed. The City encourages infill and is being built upward. Customers rely heavily on air conditioning, particularly in these hot summer days. And the community and its government shows a keen interest in encouraging the adoption of electric vehicles, rooftop solar systems, and battery storage.

An electric grid designed to meet the needs of customers in the middle of the last century simply cannot accommodate today's increasing energy demand and new energy needs. As you will hear, the existing system is at capacity and has real reliability challenges that need to be addressed now.

Rather than simply replace that old system, TEP proposes with this project to upgrade it to modern standards that can meet the future energy needs of a growing and evolving Tucson. So how is it going to do that? First TEP will build a 138kV line that connects the existing Kino Substation to the DeMoss Petrie or DMP substation with a connection through a planned 138kV Vine Substation.

This 138kV line is the second phase of the Irvington to DMP project, which is needed to comply with NERC reliability rules to avoid overloads on TEP's transmission system in the event of a transmission outage.

The first phase of the Irvington to DMP project, the Irvington to Kino line was approved by this case in case No. 178 and was completed in 2021.

The MRP project is the second phase completing a transition loop that improves reliability for both Midtown and all of TEP's customers as you will hear in detail during this hearing.

Second, TEP will construct a 138kV Vine substation. TEP's planners determined that additional transmission capacity was needed in the Midtown area, which required the construction of a supporting substation, Vine.

Running the MRP line through the Vine Substation serves the dual benefit of adding needed transmission capacity to Midtown and completing the transmission line loop that I just mentioned.

Third, TEP will retire and upgrade its aging infrastructure. It will replace the old wooden poles you have likely seen in Midtown, and if you haven't, you will certainly see them during the tour, and

replace them with more robust but fewer steel poles. And with the addition of a new 138kV transmission line and substation it will retire and remove up to eight 46kV substations and 19 miles of existing 46kV lines in the next ten years.

The result is a net reduction of utility infrastructure, which improves the appearance of Tucson streets and saves customers from paying for millions of dollars in replacement costs for these facilities.

Fourth, while not the subject of this application, TEP intends to upgrade the lower voltage distribution system serving this area as part of the overall project replacing the antiquated 4kV distribution system with a modern 14kV system controlled by an advanced distribution management system. That's a software solution that automates outage restoration and optimizes the performance of the electric grid.

This project also proposes to relocate another 15.7 miles of existing distribution lines and communication attachments belowground as part of the preferred route for this project. In fact, between retiring assets and relocating existing infrastructure underground, 32 miles of existing overhead infrastructure will no longer be visible in the Tucson area.

So not only will reliability for the area

be improved, but the visual aesthetics of the area will improve as well as many of the visual simulations will demonstrate. And just to give you one example, the current view at Park Avenue and Chauncey Lane is riddled with utility poles and lines, including communications attachments to utility poles.

I count in the left picture 15 lines and at least six poles from this key observation point. The MRP project will result in the retirement or relocation underground of all of the infrastructure on the left and in the background. The stray line running to the light pole will also be removed. It was mistakenly left up in this picture. So the new view will include only a handful of slightly taller poles with four lines run parallel on the right side of the street.

The MRP project will clean up many of the streets along the various route alternatives, not just this one. This benefit is on top of significant reliability gains that MRP will bring to Central Tucson. I would also note that communications equipment that is currently attached to the distribution poles cannot reappear on a 138kV system because it's -- by law you can't attach communications equipment to high voltage transmission.

This project has had a really long history.

It was first identified as serving a reliability need for the TEP transmission system in 2007. TEP's 138kV transmission system at that time circled the central region but left a large gap in its growing center.

NERC rules require redundancy in the event of a transmission outage and a line bisecting the Tucson area was a needed solution. That line was to be developed in two phases. The first was Irvington to Kino, which was awarded the CEC for construction for over virtually no opposition in 2018.

But when TEP started outreach on the second phase, the Kino to DMP line, it received significant public pushback. Unlike the Irvington to Kino line, Kino to DMP ran through several more organized residential neighborhoods, but insisted that the line be constructed belowground.

The City of Tucson also took the position that the Kino to DMP line had to be built underground pursuant to city ordinance, which was a position it had not taken in the prior phase of the project.

Given the community's response, TEP withdrew its initial application and attempted to devise a solution to serve the city in a mutually agreeable way.

Because the issue of undergrounding the construction of the MRP line will play a central theme in

this hearing I want to lay a little bit more background about it. As I mentioned, the City of Tucson and other stakeholders in the first attempt at siting this project took the position that portions of the line needed to be constructed belowground to comply with the local law called the Unified Development Code. You'll hear it referred to as the UDC.

The UDC establishes what is called a Gateway Corridor Zone, which is a land use overlay intended to improve the visual aesthetic of major streets and routes in the City.

Other stakeholders argue that various neighborhood and area plans also require that the line be buried belowground. TEP disputed the applicability of those ordinances and plans, which had not been sited as a reason to underground the Irvington to Kino line, which was also in a Gateway Corridor, and argued that given the truly extraordinary cost of undergrounding, which is 10 to 20 times the cost of aboveground construction, if not more, as you will hear in TEP's case, the cost difference should not be funded by utility rates.

The dispute regarding the applicability of the UDC to this project is now the subject of litigation with a decision pending any day from superior court. However, rather than wait for the outcome of that

litigation and any subsequent appeal and because of the urgent need for this project to meet Tucson's reliability needs, TEP and the City worked together in collaboration to try to find a mutually beneficial solution.

The first thing that the City and TEP did was to negotiate with stakeholder input special exceptions to the UDC that would allow for the construction of overhead transmission lines in certain circumstances such as, and as most relevant to the existing application, when the line perpendicularly crosses one of the major streets covered by the Gateway Corridor Zone.

Second, TEP and the City explored various means of funding the extreme cost difference between building the transmission line above versus belowground. They explored utility rates, whether TEP shareholders should fund it, whether private parties -- third parties could fund it, whether government resources were available to fund it, whether an underground improvement district could fund it as provided by state law, or whether the franchise fee that TEP pays to the City could be used to fund it. As you will hear in testimony, none of these proved fruitful to explore except for the franchise fee option.

So TEP and the City determined to

renegotiate TEP's franchise with the City and to increase franchise fee to pay for various things, including undergrounding and also investing in the City's climate plan, among other things. That franchise had to be approved by Tucson voters in a special election but was heavily contested and ultimately failed.

So TEP went back to the drawing board and reengaged the public and reinitiated the siting process to determine the routes that are before you today.

Before I move on to the routes, I want to emphasize how truly extensive TEP's outreach and engagement has been for this project. As you will hear in greater detail, during the witness presentation, TEP went to incredible lengths to inform and receive feedback from each of the neighborhoods that could have been impacted by this project about it. From a public survey to multiple open meetings to neighborhood listening sessions, neighborhood advisory group meetings with 21 participating neighborhoods, social media outreach, the outreach was intensive and productive as evidenced by the hundreds of comments and questions received relating to the project. As you will hear, TEP took the community's feedback to heart as it devised its various routes.

In the end, TEP landed on the 10 alternatives presented to this Committee today. This

map, which you will see often, is identical to the map on the laminated placemat in front of you and has been marked as TEP-2.

Alternatives characterized with letters A, B, C, or D indicate routes connecting the existing DMP Station identified by the northmost blue triangle on the map and the planned Vine Substation, which is the yellow triangle in the middle.

Routes tagged with numerical identifiers, so 1 through 6, indicate the routes planned between the planned Vine Substation and the existing Kino Substation, which is the southmost blue triangle.

Each alternative route has its own demerits and merits, which we will discuss over the next several days. And we realize, of course, that there are a lot of alternatives, but, given the public interest in this process, we thought it was important to present options that went through various parts of Central Tucson and had various impacts on the Gateway Corridors.

TEP ultimately requests approval of two segments that will form one looped route serving the Midtown Tucson area. The route will be a combination of a letter segment between DMP and Vine and a numbered alternative between Vine and Kino.

Of the alternatives TEP's preferred route

is alternative B and alternative 4 as depicted in orange with the black outline on this map. The preferred route is approximately 8.5 miles long and is supported by Banner.

The City of Tucson continues to assert that portions of any route that runs through a Gateway Corridor Zone and that does not qualify for special exception must be constructed belowground. Underground Arizona also argues that any project that transverses a neighborhood or area plan that has provisions regarding undergrounding must also be constructed belowground.

This map shows the various segments with an overlay of the Gateway Corridor Zone and the two impacted plans: The Sam Hughes Neighborhood Plan and the University Area Plan.

Gateway Corridor Zones are represented in dark gray covering as relevant Oracle, Grant, Broadway, and Kino. They look like the little gray worms along the side.

As you will see, every route crosses a Gateway Corridor Zone street at one point or another. The preferred route B-4 crosses Oracle perpendicularly on the north part of the map. Then crosses Broadway as it heads from the Vine Substation. And then crosses Kino as it heads east into the Kino Substation.

That said, we believe that these crossings satisfy the requirements of a special exception allowing the entire Grant line to be constructed aboveground. That special exception should also apply to other segments that cross a Gateway Corridor route.

The routes that the City is least likely to allow to be constructed aboveground, however, assuming their interpretation of the ordinance is correct, is most of Route 1, which parallels Campbell, a portion of Route D, which parallels Campbell for a short time, and a portion of Routes 2 and 6 in the blue and pink, which parallel Broadway for a short time.

I would also note that Routes 5 and 6 require an approval from the Union Pacific Railroad. Despite TEP's efforts to get the railroad's approval of a route that implicates the railroad, we have not yet had confirmation that a route that can be built on the required time frame. So for this reason, if you choose Routes 5 or 6, we ask that you also approve an alternative in case we are unable to get the necessary authorization from the railroad on time.

As you will also see from the hashtagged area, which is where the neighborhood plans are, every single route runs at some point in time through property covered by the University of Area Plan and Routes 1 and 2

also run through property covered by the Sam Hughes Neighborhood Plan.

We firmly disagree that these plans have the strength of regulation that would require TEP to construct a 138kV transmission line belowground in these areas. Plans only apply to the project if they are incorporated into regulation through a zoning change, for example.

Moreover, because 15.7 miles of existing utility infrastructure will be relocated belowground as part of the preferred route and more for other alternatives and up to eight kV substations and several -- I'm sorry, eight 46kV substations and several more miles of distribution lines will be retired in the coming years resulting in a net reduction in overhead lines, TEP believes that the project firmly meets the purposes of these neighborhood and area plans.

Of these routes TEP prefers B-4 because it best balances the economic construction of the line with our interest in respecting the wishes of City, Banner, and other stakeholders who have urged a route other than down Campbell. That said we can build any of them. We are certainly not going to ask this Committee to resolve the legal question as to whether local law requires that the line be constructed belowground.

If, however, the Committee selects a route that it believes may conflict with a local ordinance or applicable plan, we are going to ask that you make a legal finding that the law allows you to make to supersede local regulations.

Specifically, an Arizona Revised Statute 40-360D allows this Committee to issue a CEC notwithstanding any ordinance, master plan, or regulation if the Committee finds as a fact that compliance with such ordinance, master plan, or regulation is unreasonably restrictive, and compliance therewith is not feasible in lieu of the technology available.

Assuming this Committee agrees that an area or neighborhood plan does not require undergrounding and it is only required for a route that runs through a Gateway Corridor, this finding would be required for Routes D, 1, 2, and 6.

If you agree with Underground Arizona that the plans do, in fact, have the force of law, you will need to make this finding for any of the routes that are approved because we cannot avoid the University Area Plan. This project simply cannot be built without running near the U of A.

So to the extent you choose a route that requires a legal filing -- a legal finding to construct,

we believe the facts will bear out that a requirement to build this project belowground is unreasonably restrictive, and the compliance with that law is not feasible in light of the available technology.

First, it's important to understand that feasible must mean more than possible in the context of this law. We do not contest that the law [sic] can be constructed belowground. It is physically possible to do so. It's hard to concede of a local law that would be physically impossible to comply with. But feasibility has other components, including cost, practicality, and ratepayer impacts.

As you'll see from the slide, the law generally holds that feasible includes an economic component. The Arizona Supreme Court, for example, has found that reasonable feasibility includes consideration of whether a project is achievable from a practical standpoint and economically sound.

The United States Supreme Court interpreted the word "feasibility" under the context of OSHA to include both economic and technical feasibility.

The Third Circuit also agreed that it would comport with common usage to say that a standard that is prohibitively expensive is not feasible.

And while this is a case of first

impression in Arizona, courts in other jurisdictions have hold that the increased cost of local undergrounding ordinances applied to transmission lines can render local ordinances unreasonably restrictive, prohibitive, and subject to state preemption.

For example, in Ohio the Ohio Court of Appeals held that in light of the evidence that underground installation would increase substantially the cost per mile we hold the ordinance to be unreasonable as applied to the project.

Similarly, the Wisconsin Public Service Commission overrode a local undergrounding ordinance holding that the proliferation of undergrounding ordinances would intolerably interfere with the orderly statewide planning, certification, and construction of necessary utility projects.

Massachusetts agreed finding that, quote, "There is ample evidence in the record upon which the Department reasonably could find the cost of constructing an underground transmission line prohibitive."

Our Arizona Commission has also weighed in on the matter. In a decision published last year, it put in writing its policy that -- and I'm going to quote the bold -- "Installing electric transmission lines underground is much more expensive than building them

aboveground.

"Underground transmission lines can also be more costly and challenging to maintain and repair. As a general matter, utilities under the Commission's jurisdictions should avoid incurring those higher costs unless underground installation of a transmission line is necessary for reliability or safety purposes or to satisfy other prudent operational needs.

"Installing a transmission line underground for other reasons, such as stakeholder preferences, would add unnecessarily to costs recovered through rates."

It then also noted another legal remedy for funding the underground construction of lines through the creation of an underground improvement district which the impacted residents rejected in this case, as you'll hear.

I would also note that the law specifically requires this Committee to consider the costs of the project and ratepayer impacts in its decision-making. That's A.R.S. 40-360.06(A)(8).

So against that legal backdrop, we believe that the facts will bear out that a requirement to build this project belowground is unreasonably restrictive and that compliance with that law is not feasible in light of the technology available.

In this case, as you will hear in evidence,

the cost to underground is anywhere from 14 to 22.2 times the cost to construct aboveground. Maybe in the future the technology will make it less expensive, but that surely is not the case today.

And from an environmental perspective, which is what this Committee was formed to address, it is incredibly disruptive to the environment to underground a project digging wide and deep trenches in narrow streets and requiring the relocation of existing conflicting underground utilities elsewhere with additional land impacts, not to mention the significant noise and traffic disruption associated with underground construction.

Undergrounding also has a much longer and variable construction time frame. It takes months to build a mile of an underground transmission line compared to a day or two to install an aboveground utility pole.

Tucson is also culturally sensitive area, and it is highly likely that the digging required for underground construction would unearth a historically rich artifact. In that case construction could be considerably delayed. All of this risks the much needed 2027 in-service date.

An additional delay in this case is just not an option. The Tucson system, as I talked about before, is aging and it's failing. There's an urgent

need to address it. TEP has already spent more than $10 million to band-aid its existing system, which is old and outdated, from a delayed 2024 in-service date. And it will have to spend another $10 million in repairs to this old system if we miss the 2027 in-service date.

And if it's delayed beyond then, TEP would need to replace the entire 46kV system for more than $50 million without the added capacity or modernization benefits, and it would still need to build another transmission line connecting Irvington to DMP for transmission reliability reasons. Time really is of the essence. This project can't be delayed any further than it already has been.

Of course, you're going to hear everything I just told you in evidence. Each of the Committee members present should have your binder with all of the exhibits and materials that the TEP team intends to use through the hearing and on your iPads as well. The exhibits are also accessible on the iPads as I just mentioned thanks to our great AV team.

We intend to present witnesses in four panels. On the first panel we will hear from Mr. Erik Bakken, Vice President of System Operations and Environment for TEP; Mr. Clark Bryner, Manager of Siting Outreach and Engagement for the company; and

Mr. Christopher Lindsey, TEP Senior Advisor Transmission Business Strategy and Development. Mr. Bakken, Mr. Bryner, Mr. Lindsey will present an introduction and overview of the project, its purpose and need, and its history.

Mr. Larry Robinson, director of engineering for the company, will then join Mr. Bryner to discuss the preferred and alternative routes for the project on the second panel. This panel will lead the virtual tour, which will be broken up into digestible route flyovers.

Third, Mr. Bryner will discuss public outreach together with the planning and siting process that produced the project before the Committee today.

And finally, Mr. Robinson will join Mr. Jason Jocham, a Vice President and Project Director, for Sargent & Lundy, to testify to the estimated costs and operational considerations for undergrounding portions of the proposed 138kV transmission routes.

In the event that questions about property valuation in the study area arise, TEP will also offer Ms. Sara Baker, a commercial and residential real estate appraiser, as a rebuttal witness to discuss the impacts of transmission lines on the market value of residential properties.

In closing, the Midtown Reliability Project

is needed for reliability. The current 46kV infrastructure serving Central Tucson is 50 years old or older and is either poor or in very poor condition. It looks its age and it is at capacity creating a risk of low voltage and outages. It needs to be replaced with a system that is built to meet today's needs.

MRP is needed for better service continuity. The project will complete the 138kV loop around Central Tucson initiated with the Irvington to Kino line allowing customers in this area to benefit from another source of power should an outage occur, thus making outages shorter and less frequent.

It's needed for modernization. TEP's existing 46kV system was not designed to serve the needs of homes and businesses built 50 to 70 years ago. This project adds three times the capacity of the current system allowing for additional population growth and energy usage and supporting modern technologies that the Tucson community wants such as electric vehicles, rooftop solar, and battery storage.

It's needed for regulatory compliance. NERC reliability rules require TEP to build a transmission path from DMP to Irvington for transmission reliability purposes, and this project meets that need.

And finally it's needed for economic

growth. The project will upgrade service to the University of Arizona, Tucson's largest employer, and to Banner, each of which provides services and benefits for the entire Tucson community.

Notably, as I've mentioned, between the undergrounding and relocation distribution and communication infrastructure and retirement of the existing 46kV system, this project will remove 32 miles of aboveground poles and wires. The result is a significant net reduction in visible utility infrastructure.

Of course, as I noted, any line approved in an area that is required by local law or plan to be constructed belowground requires a concomitant finding that the local law or plan is unreasonably restrictive and the compliance with it is not feasible. This finding can and should include economic considerations.

We believe that at the close of the proceedings you will conclude that the Midtown Reliability project will help meet Arizona's need for adequate, economical, and reliable supply of power with minimal impacts to the environment and ecology of the State.

We therefore respectfully ask that you approve the requested CEC. As a resident of the Sam

Hughes neighborhood was quoted as saying in the Tucson Daily Star article relating to the MRP project, "Let progress progress." Thank you.

CHMN STAFFORD: Thank you, Ms. Grabel.

Banner Health, would you care to make an opening statement?

MS. DE BLASI: Yes, I would, Chairman.

Thank you again. My name is Michelle De Blasi of the Law Office of Michelle De Blasi, and I'm representing Banner Health.

The Banner University Medical Center Tucson campus, which I'll refer to as the medical center, provides comprehensive acute care, quaternary, and tertiary services. These services provide -- include -- provided include hospital, emergency, including life flight, and ongoing medical treatment to members of the Tucson community.

Banner is an Arizona non-profit corporation whose primary mission is to protect the health of the populations it serves through the provision of affordable health care.

As part of its mission, Banner owns and operates the medical center. The medical center is the primary teaching affiliate of the University of Arizona College of Medicine and provides special services

including comprehensive heart and cancer care, advanced neuroscience techniques, and a multiorgan transplantation program.

The medical center is one of two Level I trauma centers in southern Arizona. Diamond Children's Medical Center located within the medical center provides specialized pediatric services, including neonatal and intensive care emergency medicine and cancer therapies.

The medical center is located on approximately 30 acres of land within the University of Arizona Tucson campus at the intersection of North Campbell Avenue and East Elm Street, also known as 1625 North Campbell Avenue adjacent to the proposed site for the construction of the UA North Vine Substation.

The medical center campus contains facilities for inpatient and outpatient medical care, including four patient hospital towers, numerous ancillary medical buildings, associated administrative facilities, and a greenbelt that was constructed to provide a buffer between the medical center and surrounding historical neighborhoods as part of Banner's commitment to minimize impacts of the medical center on those neighborhoods.

The corridor selected for this project is of critical importance to the medical center and will

directly impact the use and operations of the medical center. Applicant's preferred route near the medical campus and Vine Substation would avoid impacts to the use, maintenance, and buffer between the medical center buildings and the adjoining neighborhoods, flight operations of the medical center, and future potential changes or additions to the medical center campus.

Applicant's preferred route also avoids Banner's concerns with the impacts to the project, both real and perceived, on the medical center, sensitive medical equipment and public perceptions of the medical center. Thus, Banner has chosen to intervene as a party in this case.

As the Committee knows, this development -- the development of this project has been a long process, and Banner has been involved throughout that process. To date Banner has invested over $700 million in the development of its medical campus.

As a critical resource to the Committee it is crucial to ensure there are not any issues that arise in this case that would impede the medical services and operations of the medical campus.

We have conferred with the applicant and other intervening parties on the preferred and alternative routes, and we believe the preferred route

near the medical campus as currently proposed will not impact the viability of the medical campus services and operations.

Banner will be presenting one witness, Mr. Mark Barkenbush, who is the Vice President of Facility Services for Banner. We have provided Mr. Barkenbush's professional background as our prefiled testimony summary as prefiled Exhibit BUMCT-1.

Mr. Barkenbush will testify regarding the overview and history of the medical center, the medical center's coordination agreement with the Jefferson Park Neighborhood Association, critical safety and viewshed issues related to the operation of the medical facility, electrical service provided by TEP's Midtown Reliability Project to the medical center, and the medical center support for TEP's preferred route versus alternative routes.

Mr. Barkenbush will present his testimony through a PowerPoint presentation which we provided in our prefiled exhibits as prefiled Exhibit BUMCT-2. And I believe the applicant has agreed to be so kind as to put our presentation on all of your iPads for next week.

We would like to thank the Chairman and Committee for their time and expertise for this important project and the applicant and other intervening parties

for conferring with us on the issues prior to the hearing. Thank you.

CHMN STAFFORD: Thank you.

The City of Tucson?

MR. LUSK: Thank you, Mr. Chair, and members of the Committee.

The concern that the City has in this proceeding is not related to the necessity for progress or the necessity for this project in and of itself.

What the concern the City has and is willing to discuss and defend is its ability to enforce its own code. And that's been our position throughout the entirety of this proceeding as well as our discussions with the applicant as well prior to this proceeding.

There are many things that we think will be positive about this project, and we have little concern about those things. The only thing we are involved in this -- the only reason we are involved in this particular proceeding is because under state law we're required to be as because the applicant has requested a specific factual finding that you make. And that factual finding was already discussed by Ms. Grabel, and I won't belabor it.

But the -- for the specifics of that

decision, I will clarify it's not a legal finding. We're not intending that you be judges and arbiters of the law. What the statute requires is that you make a factual finding. And that factual finding, again, is unreasonably restrictive -- that our code is unreasonably restrictive, and compliance therewith is not feasible in view of technology available.

It says nothing about cost in that particular provision. And I think that's important to understand for the Committee members because what we're not suggesting is that this is a cheap thing to do or even that we would suggest that TEP do that.

What we're suggesting is that the reasons that the City has and that its voters have put the mayor and council in power to enforce those provisions is for their -- their ability to run the City in which they want to.

And I know we're going to conflate these -- these terms in this -- in this proceeding quite a bit. Utility ratepayers, taxpayers, community members, they're all the same here in Tucson; right?

The City of Tucson has people who have decided to make certain decisions about their own city and their other right-of-way. And we ask that the Committee and applicant respect those, and that's all

we're intending to proceed with in this proceeding.

What's very clear I think what you'll find throughout this proceeding is, and I think the applicant will also say this as well, is they're not saying that they can't do this. They're not saying that under this -- if you were to make this factual finding they couldn't build the route underground.

What they're saying is it's very expensive, and that's a different thing. It's also not necessarily so that it couldn't be done financially or economically. It's just very expensive. And there are many, many things that are very expensive that we do everyday and that we do all day, and that is not the standard that the factual finding you're asked to make is. And we'll -- we'll argue that again during our own presentation.

Thank you.

CHMN STAFFORD: Thank you.

Pima County?

MS. GRABEL: Mr. Chairman, we got an e-mail from Mr. Yu from the County who said he will just be participating remotely and won't be involved in this proceeding.

CHMN STAFFORD: So he'll just be watching it?

MS. GRABEL: I think he's watching it.

CHMN STAFFORD: Okay. All right. Do we have Member Somers on the line?

MEMBER SOMERS: Yes, we do.

CHMN STAFFORD: Great. Just making sure you were here because I heard you were having some trouble calling in.

MEMBER SOMERS: So, yeah, we finally got that put aside, so I've heard the majority of the presentation so far.

CHMN STAFFORD: Okay. Excellent. Excellent.

Up next we have Underground Arizona.

MR. DEMPSEY: Hi. My name is Daniel Dempsey, and I represent Underground Arizona.

First of all, thank you for doing your job. It's not an easy job. And we're really appreciative of you taking the time to solve these issues for our communities.

Underground Arizona exists to educate you and the community about underground electric lines in Arizona. There are many misconceptions perpetuated by the utility companies that are easy to disprove.

The biggest is that undergrounding a project costs substantially more than aboveground. It does not -- it does cost more up front, but it saves

money over the long run such that the lifetime cost of the asset can be less than aboveground lines, especially in urban high-density settings.

The cost of undergrounding is not at all infeasible. We will demonstrate this beyond a reasonable doubt in our testimony.

As you know, under the line siting statute the Line Siting Committee does not have jurisdiction over underground lines. Had TEP chosen to underground where required by Tucson's laws this project would be done by now.

Such a project happened recently in Chandler where SRP paid to underground about three miles of transmission lines. It did the same thing five years earlier.

In addition, in Central Phoenix, APS is currently refurbishing and reconductoring an 11-mile underground transmission line at its own expense.

And in Tempe adjacent to ASU and Tempe Town Lake is another underground transmission line through an economically important area.

These are but a few examples of transmission lines in Arizona that were undergrounded because doing so was deemed prudent.

In Tucson we have a handful of areas of

historic or economic importance where undergrounding has been required by law since the 1980s after the Arizona Supreme Court confirmed a City's right to do so.

TEP has done everything it can to ignore these laws, is attempting to run aboveground transmission lines through the very center of Tucson and the economic heart of southern Arizona, which is important to all of Arizona in our competition with other states for tourism and business.

Its argument is that cost usurps all other considerations. Looking at the line siting factors, however, demonstrates that cost is but one factor out of nine. It is given no more importance than any other factor. And the City of Tucson's decades-old laws that TEP is asking you to override exists precisely to protect the other factors.

Ultimately, we will demonstrate that the cost to ratepayers of TEP obeying Tucson's laws is either nonexistent or insignificant. It is certainly nowhere near infeasible.

Moreover, TEP's project seeks to create a loop for redundancy. However, as we will also show, there's absolutely nothing about this project that requires this redundancy to go through so many legally protected areas.

TEP could avoid these long-protected areas to achieve its desired redundancy. Instead, it seeks to have you tell us these protected areas and the other line siting factors are insignificant compared to costs.

We ask you to deny TEP's application because none of the line siting factors favor approval. Please invite TEP to reapply once it takes the other factors seriously.

Please do not help TEP drag this process out any further than it already has. Help it follow the lead of APS and SRP in protecting Arizona's assets.

You will see that the community, including Underground Arizona, supports the project so long as it follows local laws which protect our most valuable assets.

I look forward to going through this process with you, and thank you for your time.

CHMN STAFFORD: Thank you.

Ms. Grabel, would you like to call your first panel.

MS. GRABEL: I would. Thank you, Mr. Chairman.

We call Mr. Bryner, Mr. Lindsey, and Mr. Bakken for the first panel, which is purpose in need and project overview.

CHMN STAFFORD: All right. You said Bryner, Lindsey, and Bakken for the first panel?

MS. GRABEL: Correct.

CHMN STAFFORD: Okay. All right. Mr. Lindsey, would you prefer an oath or affirmation?

MR. LINDSEY: Oath.

CHMN STAFFORD: Do you swear the testimony you will give in this matter will be the truth, the whole truth, and nothing but the truth so help you God?

MR. LINDSEY: I do.

CHMN STAFFORD: Mr. Bryner, oath or affirmation?

MR. BRYNER: Oath.

CHMN STAFFORD: Do you swear the testimony you will give in this matter will be the truth, the whole truth, and nothing but the truth so help you God?

MR. BRYNER: Yes, I do.

CHMN STAFFORD: Mr. Bakken?

MR. BAKKEN: Make it three for three. Oath.

CHMN STAFFORD: All right. Do you swear the testimony you will give in this matter will be the truth, the whole truth, and nothing but the truth so help you God?

Mr. Bakken: I do.

CHMN STAFFORD: Thank you.

Please proceed.

MS. GRABEL: Thank you, Mr. Chairman.

CHRIS LINDSEY, CLARK BRYNER, AND ERIK BAKKEN, called as witnesses as a panel on behalf of Applicant, having been affirmed or sworn by the Chairman to speak the truth and nothing but the truth, were examined and testified as follows:

DIRECT EXAMINATION

BY MS. GRABEL:

Q. Mr. Bryner, please state your name and business address for the record.

A. (Mr. Bryner) My name is Clark Bryner. My business address is 88 East Broadway, Tucson, Arizona.

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

A. (Mr. Bryner) I'm employed by Tucson Electric Power as the manager of siting outreach and engagement.

Q. What is your role in this matter?

A. (Mr. Bryner) For the Midtown Reliability Project, I've acted as the project manager responsible for the overall preparation of a CEC application, including all of the outreach and engagement activities, the various siting and analysis activities we've done.

Q. All right. Would you please briefly describe your education and experience for the Committee, and you're welcome to advance to the slide that contains that information as you do so.

A. (Mr. Bryner) Yeah. So I have a bachelor's in geography and a master's in bioregional planning both from Utah State University.

I'm a member of the American Planning Association and am a certified planner, a certification that I've had since 2011. I have over 18 years of experience in the electric utility industry primarily with Tucson Electric Power where I've filled a number of different roles.

For the past couple of years I've been responsible for siting. And prior to that, I spent about 10 years in maintenance and asset management with direct responsibility for the maintenance of our transmission system.

And prior to that, I spent about six years as an environmental and land use planner, a number of those years with a consulting firm doing siting projects for various utilities in Arizona as well as throughout the western United States.

Q. Thank you.

As the project manager for the Midtown

Reliability Project, please turn to Exhibit TEP-1 which is the application for a CEC.

You need to lift weights to pick up our application.

A. (Mr. Bryner) Got it.

Q. Was TEP-1 prepared by you or under your direction and control?

A. (Mr. Bryner) Unfortunately, yes.

Q. Are the contents true and correct to the best of your knowledge?

A. (Mr. Bryner) Yes.

Q. Do you have any changes you would like to make to TEP-1?

A. (By Mr. Bryner) I do have a couple.

Q. Okay.

A. (Mr. Bryner) Okay. So if you were on page 23 of the CEC application, so TEP-1 under Section 4, I'd like to revise the cost estimates that we provided.

So I want to point out that the direct cost for the transmission and right-of-way acquisition didn't change. However, after we submitted the application, we found a few areas where we didn't include all of the associated costs to move some of the existing lower voltage distribution lines underground. So that resulted in a change to the cost estimate for several of the

alternative routes.

So these costs are reflected under our witness presentation, which is TEP-8 under Slides 200 and 201. And they are also -- I know we haven't talked about the placemat yet, but they're also reflected on the placemat in front of you. So those are the correct costs as opposed to -- so I'd like to say use the costs on the placemat or on Slides 200 and 201 as opposed to the costs that you see on page 23 of the application.

And then the second correction that I'd like to make is from Exhibit G-3 of the application, so, again, the exhibit is TEP-1, and it's pages 128 through 130 of that exhibit. And those are visual simulations from key observation point 30. So those visual simulations show the perseverance of some existing overhead facilities even after the completion of the project. And our project would actually remove those facilities as part of this project.

So we have updated visual simulations from that key observation point that shows the removal of those facilities, and they're included in the witness presentation, again, which is TEP -- Exhibit TEP-8 on pages 47 through 49.

MEMBER RICHINS: Chairman.

CHMN STAFFORD: Member Richins.

MEMBER RICHINS: Can you clarify which page numbers we're using? Because there's some in the middle and there's some on the side. So which ones?

MR. BRYNER: So the ones on the side are sort of a master page number. If you went through 2000 pages, it would go from 1 through 2000. So this would be the page numbers in the middle that are specific to that exhibit is what I'm talking about.

MEMBER RICHINS: Thank you.

MR. BRYNER: Yeah.

BY MS. GRABEL:

Q. Thank you, Mr. Bryner.

Please turn to Exhibit TEP-2 which is the map of the proposed project.

A. (Mr. Bryner) Okay.

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

A. (Mr. Bryner) Yes.

Q. Are the contents of Exhibit TEP-2 true and correct to the best of your knowledge?

A. (Mr. Bryner) Yes. They are.

Q. Do you have any changes that you would like to make to Exhibit TEP-2?

A. (Mr. Bryner) No.

Q. Is this map the same map that is contained on

the laminated placemats that have been provided to the Committee Members and intervenors?

A. (Mr. Bryner) Yes. It is.

Q. You've noted a bit, but what other information is presented on those placemats?

A. (Mr. Bryner) so, yes, on the -- you saw the map on the one side. On the reverse side you have three visual simulations. These are from three different key observation points along TEP's preferred route Route B-4. And they're represented in three different pole finishes.

So you have in the photo on the left side, a galvanized steel finish. In the middle a painted pole finish in the color of Mohave sage. And on the right side a weathered pole finish, which the weathered finish is TEP's standard and our preferred pole color.

Below that, you have a matrix of the various routes and the factors, the evaluation criteria that TEP used to evaluate and compare one route to another that helped us to decide which routes were brought forward in this CEC application as well as which route ultimately was selected as our preferred route.

You'll see Nos. 1 through 4 and 1 through 6 on the top routes there and the bottom routes. Those are numbers that are a relative ranking of one route to another with respect to that evaluation criteria.

Q. And looking at the evaluation criteria, one of the columns further to the right says, "Plan Ordinance Compliance."

Does the ranking pursuant to that criterion assume that the City of Tucson's interpretation of the Gateway Corridor ordinance or zoning overlay and the existing university and neighborhood plans are -- is accurate?

A. (Mr. Bryner) Yes. It does.

Q. And does TEP dispute the applicability of the Gateway Corridor Zone and the Plans?

A. (Mr. Bryner) Yes. We do.

Q. All right. Thank you.

Is the information contained on this reserve side of this placemat found elsewhere in the evidentiary record?

A. (Mr. Bryner) Yes. It is.

So the visual simulations are found in TEP's Exhibit 1, specifically under Exhibit G-3 of the application. And the data found in the summary table is also found in TEP-1 under Exhibit B-2 in appendix D, which is our siting study.

Q. Thank you.

Please turn to Exhibit TEP-3 which is the testimony summary of Clark Bryner.

A. (Mr. Bryner) Okay.
Q. Was TEP-3 prepared by you or under your direction and control?
A. (Mr. Bryner) Yes.
Q. Are the contents of TEP-3 true and correct to the best of your knowledge?
A. (Mr. Bryner) Yes.
Q. Do you have any changes you would like to make to TEP-3?
A. (Mr. Bryner) No.
Q. All right. Thank you.
Moving on to Mr. Lindsey.
Mr. Lindsey, please state your name and business address for the record.
A. (Mr. Lindsey) My name is Chris Lindsey. And my business address is 88 East Broadway, Tucson, Arizona.
Q. By whom are you employed and in what capacity?
A. (Mr. Lindsey) Tucson Electric Power. And I'm the senior advisor of transmission business strategy and development.
Q. What is your role in this matter?
A. (Mr. Lindsey) I will describe the project's history, purpose, and benefits as well as describe technical and engineering components of the project.
Q. Thank you.

And will you please give the Committee a brief description of your education and experience.

A. (Mr. Lindsey) You got it.

I joined TEP back in 2006 and have 17 years of experience in the electric utility industry.

A majority of my time has been focused on the planning of both transmission and distribution systems as it relates to growth and technology integration.

I hold a bachelor's of science degree in electrical engineering from the University of Arizona and have been a registered electrical professional -- excuse me, a registered professional engineer in the State of Arizona since 2010.

In my current position, I'm focused on the strategic development of transmission and generation systems to support the company's clean energy transition. Probably more importantly for today's hearing in previous roles with the company and during the development of this project I provided direction and oversight for short and long-term planning functions related to both transmission and distribution systems for TEP.

Q. Thank you.

Please turn to TEP-4, which is the testimony summary of Chris Lindsey.

A. (Mr. Lindsey) Okay.

Q. Was TEP-4 prepared by you or under your direction and control?

A. (Mr. Lindsey) Yes. It was.

Q. Are the contents true and correct to the best of your knowledge?

A. (Mr. Lindsey) Yes.

Q. Do you have any changes you would like to make to TEP-4?

A. (Mr. Lindsey) No. I do not.

Q. Thank you.

Moving on to you, Mr. Bakken.

Please state your name and business address for the record.

A. (Mr. Bakken) Erik Bakken, 88 East Broadway, Tucson, Arizona.

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

A. (Mr. Bakken) Tucson Electric Power as the Senior Vice President of Energy Resources and the Chief Sustainability Officer.

Q. What is your role in this matter?

A. (Mr. Bakken) I oversee our generation fleet as well as system control, which includes transmission planning along with development and acquisition.

Q. Thank you.

Will you please briefly describe your education

and experience.

A. (Mr. Bakken) Yes. I have an undergraduate degree from the University of Arizona and a law degree from Arizona State University. I've been with TEP just over 25 years now with various areas of oversight and increasing responsibility over those 25 years.

As I mentioned, I currently oversee our generation fleet, which includes the clean energy transition that we're going through as well as system operations.

And then the chief sustainability officer and everything that comes along with the sustainability efforts that TEP has.

Q. Thank you.

CHMN STAFFORD: One second. You said you got your B.A. from which university?

MR. BAKKEN: From the Arizona State University.

CHMN STAFFORD: Okay. I thought you said it the other way around for a second.

So you got your J.D. from the University of Arizona, then?

MR. BAKKEN: That's correct.

CHMN STAFFORD: Okay. Okay.

MR. BAKKEN: Yep.

CHMN STAFFORD: I thought it heard it reversed when you said it.

MR. BAKKEN: Did I flip it?

MS. GRABEL: The flip is my educational background.

MR. BAKKEN: Subliminally.

CHMN STAFFORD: Please proceed. Thanks.

MS. GRABEL: Thank you.

BY MS. GRABEL:

Q. Mr. Bakken, please turn to Exhibit TEP-5, which is the testimony summary of Erik Bakken.

A. (Mr. Bakken) I've got it.

Q. Was TEP-5 prepared by you or under your direction and control?

A. (Mr. Bakken) Yes.

Q. Are the contents true and correct to the best of your knowledge?

A. (Mr. Bakken) they are.

Q. Do you have any changes you would like to make to Exhibit TEP-5?

A. (Mr. Bakken) I do not.

Q. So you're all on this panel to discuss the purpose and need for this project, give a summary of its history, and provide a project overview.

To that end, Mr. Bryner, will you please turn to

TEP-8, which is PowerPoint presentation prepared for this hearing.

A. (Mr. Bryner) I thought we were done. Okay. I'm there.

Q. Mr. Bryner, have you seen this presentation before?

A. (Mr. Bryner) Yes. I have.

Q. Was it prepared by your or under your direction and control?

A. (Mr. Bryner) Yes.

Q. Is its contents true and correct to the best of your knowledge?

A. (Mr. Bryner) Yes. They are.

Q. Do you have any revisions to Exhibit TEP-8?

A. (Mr. Bryner) No.

MS. GRABEL: At this time I'd like to move the admission of Exhibits TEP-1 through 5 and 8.

CHMN STAFFORD: I typically just admit them all at the end.

MS. GRABEL: Okay. We can do that.

CHMN STAFFORD: I'm keeping track of which ones you've covered. And I do believe the parties have already stipulated to all of TEP Exhibits 9 through 11; correct?

MS. GRABEL: That's correct. We did that.

MR. LUSK: That's correct.

BY MS. GRABEL:

Q. All right. Mr. Bryner, please begin the overview of the purpose and need for the project.

A. (Mr. Bryner) Thank you.

So the electric grid serving the Midtown area of Tucson was built in the '50s and '60s. This was during a boom in Tucson's population from under 50,000 in 1950 to just over 200,000 in 1960.

This was a time prior to the widespread installation of air conditioning, and swamp coolers were more the norm. Many appliances including water heaters and stoves were gas, and homes had few electronic devices and typically just a single television set.

And in some homes Leave It to Beaver was being watched on that television set, and you can see the actor Jerry Mathers who played Beaver, he was a nine-year-old boy at this time.

Since that time the population of the City has continued to grow, and now numbers over 500,000 with a population in the metro area of over 1.2 million. And with that growth has come additional business, industry, restaurants, and hotels.

The University of Arizona has grown, and with that more student housing and high-rise dorms. The

university hospital was built in 1971 and has grown to be a substantial community asset now known as Banner - University Medical Center, and we've got them represented here. It's one of only two Level I trauma centers in southern Arizona as we heard.

Residential growth within the City of Tucson is illustrated on the graph shown on the right screen. But beyond that the City encourages infill development. And in some Midtown areas we've seen some very high intensity infill projects.

All of this growth has continued to be served by the electric system that was built in the 1950s and '60s. The assets are both extended to the limits of what they can serve, and they're also aging as is our beloved actor Jerry Mathers from Leave It to Beaver. He's now 76. And I'll say looking at the picture there I think he's aged a little bit better than some of our equipment.

Now, I'm a transplant to the Tucson area, but Mr. Lindsey has spent his whole life here. Do you want to just elaborate on some of the things you've seen change?

A. (Mr. Lindsey) You've got it, Mr. Bryner.

So I think it's important to add that a lot of this development and modernization we're talking about here today in the Midtown area has occurred over the past

decade or two.

So Banner, which was called university medical center when I was born there in the early '80s, looked nothing like it does today as you see on the screen. And when I was a student at the U of A in the early 2000s, there were nowhere near the housing options you see with all the high-rises built in and around the university as well as in the downtown area with the easy access from the streetcar.

A. (Mr. Bryner) Thank you. So to show this in another way, on the screen on the left, you'll see a depiction of a 1950s-era home. So, like I mentioned before, lifestyles were different back then than they are today.

Now, I didn't live then, so I'm just going off of what I've heard. But homes were much smaller, many appliances were gas. And those that were not were less efficient than what we have today, but there were far fewer of them.

Again, air conditioning wasn't widely adopted yet, and evaporative cooling was more the norm.

And lastly, all the vehicles were gas powered.

Today, we find a Midtown area that's fully developed where basically the only opportunity for development is upward. And in contrast to the behavior

of the '50s and '60s electric appliance and technology use is everywhere, air conditioning is a necessity, sometimes having more than one unit per home.

Most have converted the old gas stoves and water heaters to electric, and newer electric technology is being adopted more widely, including electric vehicles, distributed generation such as rooftop solar, and battery storage.

And a very important note, the community continues to rely on the same old electric system that was built in the 1950s. We all know that nothing lasts forever. The existing system has served its purpose and it has done so very well, but it no longer meets the needs of the City and is due for modernization.

CHMN STAFFORD: Quick question with that slide. What's the mini-split?

Is that like a smaller air condition or something?

MR. BRYNER: Yeah. They're typically -- they work to cool off one room or one portion of your house. A lot of the times it's used to make it more energy efficient so that you don't have to cool the entire house down or the building or whatever. You can just cool that one, control the temperature up or down.

CHMN STAFFORD: Okay. Thank you.

MR. BRYNER: They're very nice.

CHMN STAFFORD: I think I need one of those in my house.

MEMBER LITTLE: They're awesome.

MR. BRYNER: So rather than simply replace the old electric system, which was designed to meet the needs of the 1950s, TEP proposes to upgrade the system to modern standards that will not only meet current electrical needs but the foreseeable needs too as consumer electrical usage continues to evolve in response to new technology and climate change.

So TEP will replace the old wooden poles with more robust steel poles that can withstand increasingly severe weather. These poles will support a looped 138kV transmission line that will strengthen the regional grid and provide reliability to customers both within the Midtown area and greater Tucson.

TEP will replace a number of aging 46kV substations with a single modern, fully redundant gas-insulated 138kV substation that has a footprint only slightly larger than any one of the substations that it will replace.

And TEP will not stop with the higher voltage transmission system. The Midtown Reliability Project includes upgrades to the lower voltage -- or

lower voltage distribution system as well.

The antiquated 4kV distribution system will be replaced with a modern 14kV distribution system that will be controlled through an advanced distribution management system and will provide reliability benefits to all of our residential, business, and commercial customers in the area while also meeting the electrical demand.

The Midtown Reliability Project allows us to do this once to do it right to modernize the grid, which will help Tucson thrive now and long into the future.

So the need for -- the need for a 138kV transmission line connecting TEP's DeMoss Petrie Substation, which is -- which is located near I-10 and Grant Road and the Irvington Substation, which is located near I-10 and Alvernon Road, was first identified in 2007 in order to avoid overloads on the transmission system in a contingency.

As you can see on the map, there was a fairly large gap in TEP's transmission system with the U of A right at the center of it. The new line would create a loop around downtown Tucson or around the downtown and Midtown Tucson as well as some of our growing south side communities.

So in 2021, TEP constructed what is the first phase of the transmission line by constructing the new Kino Substation connected with -- to Irvington through the Kino to Irvington transmission line. This first phase was urgently needed to bring more capacity to serve some major new development that was occurring near Kino Parkway and I-10, which is really, really close to the Kino Substation.

But that didn't fully meet the purpose of the project. So a connection between the DeMoss Petrie Substation and the Kino Substation, shown on the map, is still needed, and that's what we're here to talk about.

So I want to show you in a little more detail the conditions driving the need for the Midtown Reliability Project.

So to start, I want to orient you to the image on the screen. So this is a recent aerial image from Google Earth that generally depicts the Midtown portion of Tucson that will benefit greatest from this project. The extent of the view is bounded by 36th Street on the south, basically I-10 on the west, Grant Road on the north, and Country Club Road on the east.

A couple other things, downtown Tucson is basically in this area close to the I-10 symbol, and the U of A -- you can see the big A kind of in the middle of

the screen.

So I'm going to step back a few years and show you the grid in the Midtown area at the time the need for the 138kV line between DeMoss Petrie and Irvington was identified. If you'll recall, that was in 2007. And that was still the state of the grid in 2021 prior to building the first phase of the project between Kino and Irvington.

Now, on the screen the blue lines and pins represent power lines and substations that operated 46kV. So this is -- we've discussed this was a standard that TEP introduced in the mid-20th century. The purple lines and pins represent higher capacity 138kV lines and substations. These were built for the 21st century.

Again, on the map, I just want to point out that you can see the 138kV system kind of skirts all the way around the Midtown area of Tucson, leaving all of that still in that older, antiquated 46kV system. It hasn't been upgraded to the 138 system.

Now, here's a look at actual customer usage prior to the project. In the red and orange areas, energy use was nearly overloading the available capacity of the 46kV system.

Areas in yellow and green had more available capacity, but their reliability could still be

compromised by outages in some of the adjacent overloaded areas.

And beyond that, TEP has continued to see peak energy demand increase throughout the community.

Now let me show you the state of the grid in Midtown today. So I'll be kind of referencing the screen on the right now.

So we recently completed the first phase of the proposed transmission line loop from Irvington to Kino. If you'll notice how -- our slides are looking a little bit funky, but we -- we recently completed the -- so the transmission line, this purple line right there, represents the line from Irvington to Kino, and this is the Kino Substation.

And you see how the area around that turned from red to green. So it used to have almost no available capacity, and now it's green, which represents that it has plenty of available capacity under peak conditions.

However, you'll also notice that those blue lines and pins, the 46kV system, is still there. Because with only one point of service that -- the Kino Substation is on a radial, so it only has one point of service. So that 46kV system serves as the backup in the event that something happens. And the same conditions

that existed before that are shown on the left screen are still there today.

So the Midtown Reliability Project will complete the transmission loop between DeMoss Petrie and Irvington. It will build the transmission link from DeMoss Petrie to the proposed Vine Substation. And let me point that out. So DeMoss Petrie over to Vine. So Vine is going to be located just north of the U of A campus, and then a transmission line from Vine to Kino.

This will provide two feeds to both the Kino and Vine substations through a reliable transmission loop. And very importantly, this will -- whoops, sorry. Our animation doesn't seem to be working on the screen. But imagine, if you will, the blue lines and pins, those will all go away because we'll be able to retire that 46kV system, and it will just be the 138kV system. No need to use your imagination anymore. It's gone.

So this fully resolves any current concerns to meet customer demands under peak conditions. And it provides plenty of capacity for future growth. In the event of a transmission line outage, because of the way the system is designed, customers would experience no interruption in service.

BY MS. GRABEL:

Q. Mr. Bryner, certain opponents of this project

has proposed what they call the halfway solution in which only the portion of the line from DMP to Vine is constructed.

Is that a viable option for TEP?

A. (Mr. Bryner) So, no, it's not, not a viable option. And I'll show you that on the screen. So up on the screen right now this is a concept that's been floated most vocally by Underground Arizona who's represented here. In this scenario a transmission line would be built from DeMoss Petrie to Vine, but no connection would be made between Vine and Kino.

So both the Vine Substation and the Kino Substation would be left as radial lines, so they would just have that single source.

I'm going to turn to Mr. Lindsey so that he can provide a little bit of a more technical response as to why this is not an acceptable solution for TEP.

A. (Mr. Lindsey) Okay. So as Clark mentioned, and I think it's really important to note as we walk through this, that this proposal we see here would place both Vine and Kino Substations on radial 138kV lines.

So walking through an outage of the Irvington to Kino circuit -- the automation went quick, but you can see the line from Irvington to Kino is out in this scenario, and we would expect widespread outages until

repairs could be made. So depending on the time of year and the nature of the outage, this could be prolonged.

The example on the screen's hypothetical but it is informed by a 46kV outage we had a few weeks ago. Right now we still have the old 46kV system, as Mr. Bryner mentioned, in service as a backup, but if you'll reference the image on the left, those 46kV facilities are at capacity.

So as a result and in the outage that occurred a few weeks ago, we were unable to restore power to the entire area fed by those 46kV substations, and it resulted in a prolonged outage. So this is a real world scenario we're dealing with right now.

So without the completed loop on the 138kV side, and once these 46kV facilities you see here on the left are retired, this outage would likely result in rolling outages throughout this darkened area you see on your screen to your right with almost no way to serve the Bridges area -- you've heard us reference that a few times. That's a major commercial center shown in the dark black on this image -- until we made repairs and restored the 138kV line into service.

CHMN STAFFORD: And just for record, you're talking about Slide 18 of the presentation; correct?

MR. LINDSEY: Yes, sir.

CHMN STAFFORD: Okay.

MR. LINDSEY: So more importantly, if that didn't sound bad enough, we want to walk through an example of an outage of the DMP to -- DeMoss Petrie to Vine Station.

So in the event of an outage on the transmission line between DMP and Vine, similar to what we were discussing for Kino, the dark area shown on the map would experience widespread rolling outages until the 138kV could be restored.

And here's the big difference for us from the last example. In the very dark area around the U of A and Banner, this area would be out of power entirely until repairs were made. So this creates a significant safety concern for the community as Banner is only one of two Level I trauma centers in southern Arizona.

So expanding on this issue a little bit, the only connection to the university and Banner will be made via this new Vine Substation. We will not have the ability to provide an alternate feed even if the 46kV system was left in service. This creates an unacceptable operational situation for us and our most critical customers.

BY MS. GRABEL:

Q. So, Mr. Lindsey, if you could explain a little

bit better why can't you do the halfway solution and keep up to 46kV infrastructure for backup purposes?

A. (Mr. Lindsey) So, as I mentioned, the way the Vine Substation's configured the only connections to the University of Arizona and Banner UMC hospital will be made via that new Vine sub.

So, as we're discussing this outage here, an outage of this DMP to Vine 138kV line would subsequently -- we'd have an outage at the Vine Station. It's our only source without the loop being completed. We do not have plans or the capability to connect the old 46kV system at Vine.

CHMN STAFFORD: And you're looking at Slide 19 of the exhibit --

MS. GRABEL: TEP-8.

CHMN STAFFORD: -- TEP-8; correct?

MR. LINDSEY: Yes, sir.

CHMN STAFFORD: All right.

MS. GRABEL: Thank you.

MEMBER GOLD: Mr. Chairman.

CHMN STAFFORD: Yes, Member Gold.

MEMBER GOLD: Not being familiar with your substations, is the Vine Substation existing today?

MR. LINDSEY: So, Member Gold, no, it is not. That's the proposed new 138kV to 13.8kV substation.

MEMBER GOLD: Okay. Then I have a question. I'm looking at Route 210, Aviation Parkway.

MR. LINDSEY: Okay.

MEMBER GOLD: Why is nothing considered going along that parkway to connect your two existent substations?

MR. BRYNER: If -- Member Gold, if I could jump in.

So right now, I mean, what we're showing on this screen doesn't show any of our proposed routes. We do have some proposed routes that do go along Route 210, Aviation Parkway. The lines on the map right now are just conceptual just to show that we need a connection there.

MEMBER GOLD: Okay. So the connection you're putting up is primarily to service the university and Banner, because that's where it's located; is that correct?

MR. BRYNER: So yes and no. It is to service the university and Banner. It's also to service all of the customers in this portion of Tucson.

As you saw from some of the earlier slides that I showed, we have no 138kV service throughout the entire area, and that entire area is at or over capacity and needs additional capacity to be served.

MEMBER GOLD: Understood. And the university and Banner use a tremendous amount of electricity; is that correct?

MR. BRYNER: I won't dispute that.

MEMBER GOLD: All right. Have you secured the area to build that substation?

MR. BRYNER: Yes, we have.

MEMBER GOLD: Okay.

BY MS. GRABEL:

Q. Mr. Bryner, before you move on, for the record, how many additional customers other than Banner and the U of A will be receiving reliability benefits as a result of this project?

A. (Mr. Bryner) I should -- it's just under 40,000. Sorry. I can't remember the exact number, but it's just under 40,000 business, residential, commercial customers are within this area.

Can I correct that? I just remembered. Okay. It's just under 40,000 residential customers. And then we have just under 7,000 business customers. So it's around 45,000 total customers that will benefit from this project, the U of A and Banner being two of those customers.

Q. Thank you. Please continue.

A. (Mr. Lindsey) Okay. So there's just a few last

things to mention about this solution. So kind of regrouping here.

So a few comments about maintaining the 46kV infrastructure. It drastically reduces the efficiency of this overall project as you can see. We would need to rebuild many of these existing lines and subs you see on the left there in blue within the neighborhoods to increase the ability of our 46kV system to reliably back up Midtown Tucson during this proposed -- or this 138kV outage.

Even in this overbuilt situation that we're discussing here with both a new 138kV line to Vine and a rebuilt 46kV system, we'd -- our customers would still experience outages while system operators and field crews made adjustments to the system during these types of emergencies.

This is all avoidable with completing the Midtown Reliability Project and the transmission loop between DeMoss Petrie and the existing Kino Substation.

MEMBER GOLD: Mr. Chairman.

CHMN STAFFORD: Yes, Member Gold.

MEMBER GOLD: I'm not familiar with which poles have which voltage on them, so just something to clarify it for me.

You just have an outage right now at Ina

and I believe it's Shannon where a microburst knocked down some of your poles, and they've been down for a couple of days now. What size poles are they?

What size lines? Are they 48? Are they distribution lines? What are they?

MR. LINDSEY: So, Member Gold, I believe that was a 46kV line in that area. We can confirm, but from the pictures that I saw I believe it's 46kV.

And just a quick -- I mean, all of us utilities like to come up with new voltages; right? So a quick rundown of the TEP standard voltages within town, we have a 138kV standard transmission voltage that we're talking about expanding here today. We also have an older as mentioned 46kV system that dates way back kind of to the beginning of our system. And we really termed that or call that a sub transmission system, really don't consider that a true transmission type system.

From a distribution perspective, we have both 13.8kV. Sometimes we refer to that as 14 just for simplicity's sakes. And also a 4kV system, which is really 4.16kV. And you'll hear us talk a lot about that here today with the opportunity this project brings to convert the old 4kV system to 14.

MEMBER GOLD: So the ones that are down are the 38kV. And what I've noticed when I saw them if I get

this correctly is they're wood poles, and they splinter when a microburst hit them.

MR. LINDSEY: That's typically what we see during a storm outage is the older wooden poles do fail in the micro bursts. To talk about what we're looking to do in this area related to this project, it's another opportunity to upgrade to the steel pole standard. And we don't typically see storms and microburst damage these types of facilities we're proposing.

MEMBER GOLD: That's what I needed to know. Thank you.

CHMN STAFFORD: Thank you, Member Gold.

BY MS. GRABEL:

Q. Mr. Lindsey, before you continue, has TEP restored power to all of those customers on Ina and Shannon?

A. (Mr. Lindsey) It sounds like we have not, but I am -- is that confirmed? So, yes, we have not restored to all customers in that area.

Q. Were this project in place would restoration be smoother and more quick?

A. (Mr. Lindsey) So we're talking about an outage in a different part of town. I'll step out and say if we had facilities like we're proposing in this project in that area of town, then, yes, restoration would be

smoother.

But it's very hard to just generally say that. There's a lot of particulars on our distribution system. But in general where we're looking to move towards 138kV loop transmission system, an upgraded 13.8kV distribution system, it really brings a lot of capacity to the city and allows for a lot more flexibility from an operational perspective.

Q. Thank you. Please continue.

A. (Mr. Bryner) All right. So just a couple more slides on this subject.

I just wanted to talk a little bit about some of the aging assets that we've mentioned.

So on the Slide 20, the screen on the left, this is a look at the state of the existing assets in the 46kV substations today. So the pins or the teardrops, the dark red ones, represent equipment within those stations that have an average age closer to 60 years. So that's, again, looking at transformers, breakers, major equipment and those overall averages.

The ones that are -- there are no green ones up through. But the ones that are yellow, those are -- have an average age that's a little bit younger.

But the major piece of equipment in all of these substations are the transformers. In each of these

cases, those transformer are the oldest piece of equipment in those substations, and they're all in that 50 to there's a couple of them that are approaching 70 years old.

MEMBER RICHINS: Chairman.

CHMN STAFFORD: Yes, Mr. Richins.

MEMBER RICHINS: Will all of these 46kV substations be retired?

MR. BRYNER: That's correct.

MEMBER RICHINS: And what's the environmental disposition of the land that those -- that equipment has been sitting on for quite a while?

MR. BRYNER: Yeah, so, Member Richins, good question. And we've been asked that several times throughout our public outreach process.

And so, you know, it's eight substation sites. They're not huge sites. They're about, you know, a half an acre to, you know, maybe a little bit larger in some cases. So there's been equipment there for a number of years. You know, our transformers are filled with mineral oil. Our breakers -- our older breakers are also filled with mineral oil. And we would clean up those sites. If had there been any leaks over the years or anything, we would remove all that equipment, properly dispose of that, clean up, remediate anything that needed

to be remediated, and then we would likely sell those sites.

Does that answer your question? I'm not sure if that --

MEMBER RICHINS: No. It does. It's just thinking about those sites located in the existing neighborhoods there might be opportunities there.

MEMBER KRYDER: Excuse me, Dave. You're moving away from your mic.

MEMBER RICHINS: Oh, sorry.

There just seems there might be some partnership opportunities with the neighborhoods that you're going through. Because we just did this in the City of Mesa. We upgraded our system from 4 to whatever.

But we partnered on those old sites and turned them into microparks or other, like, maybe there's a parking need somewhere, just things like that, that could help alleviate the impacts of those site -- the change of those sites.

MR. BRYNER: Sure. And some of those suggestions have come up in some of our meetings. I don't think that we're opposed. I think we're open to discussing and figuring out things that could be done with those sites that would be best for the community.

MEMBER RICHINS: But I did hear on the

record the commitment for total environmental cleanup.

MR. BRYNER: Correct.

MEMBER RICHINS: Thank you.

MEMBER LITTLE: Mr. Chairman.

CHMN STAFFORD: Yes, Member Little.

MEMBER LITTLE: Mr. Bryner, do you have your or any of your members there on your team have an average loading on those 46kV substations? Are they reaching their maximum load, loading capacity?

MR. BRYNER: We do have that information. It's not in the top of my head, but it might be in Mr. Lindsey's.

MR. LINDSEY: Yeah, from an average perspective, we'll take that at break and get you an exact number.

If we could go back a few slides, though. Is that possible?

MR. BRYNER: Yeah.

MR. LINDSEY: So the slide on the left screen here shows just a pictorial look at the capacity on the 46kV system and those substations from a color perspective. So you can see in the southern part of the project closer to Kino Station we had a very limited amount of capacity in red.

And then as we move up further into

Midtown, there's a little more flexibility on the 46kV system. Again, this is very general. So what we'll do at break is get you an exact of the stations.

But this is just a pictorial look of the limited capacity on the 46.

CHMN STAFFORD: And for the record, Mr. Lindsey, you're referring to Slide 14 of TEP-8; correct?

MR. LINDSEY: Yes, sir.

MEMBER LITTLE: I don't need the average loading. The colors, then, in the areas reflect the loading on the substations?

MR. LINDSEY: Yes, that's correct.

MEMBER LITTLE: Okay. I had another question. I can't remember what it was. So --

MR. BRYNER: If I could just add, Member Little, to that. You see the green in the upper left, so those are coming out of the one -- two 138kV stations. One is our DeMoss Petrie and the other is our Tucson Substation.

MEMBER LITTLE: Right. Right.

CHMN STAFFORD: So those are not on the 46kV system. That's why they look great.

MEMBER LITTLE: I guess my other -- the other thing that I was going to say, and it's more of a

statement than a question, which is that I realize that in today's world often -- you know, people talk about putting solar on houses. And they're -- often the older systems have problems with back feeding the solar back into the grid on the older distribution systems.

MR. LINDSEY: So, Member Little, I think that's a great observation. And one of -- and we may have just breezed through it so far today. But one of the big advantages of this project is it does support additional technology.

So going back through our story here, the system was built when, you know, solar really wasn't a thought. Energy storage wasn't a consideration in any fashion from a residential perspective. Electric vehicles weren't either.

And so we do see some major limitations I would say specifically in this area on our 4kV distribution, so I know it's a little bit outside of a context of a line siting conversation, but one of the things we're trying to get across here is just how many layers of the system we're making improvements with when we're talking about this project.

So building the 138kV loop, building Vine Substation allows us an opportunity to upgrade that 4kV system to 13.8. And many of the we call them hosting

capacity studies that we've run across our system that look specifically at solar integration, those 13.8kV facilities fare much better than our 4kV.

And actually, there's even more technical limitations on what we do from a sizing perspective with the 4kV system. And so it's really just an antiquated distribution system that's served well. I mean, we like to put it down here today, but it's done a good job. But it's time to replace it with something better.

MEMBER LITTLE: Thank you.

CHMN STAFFORD: With that we've been going for about 90 minutes. I think our court reporter needs a break. I see a lot of members of the public in attendance. I just wanted to admonish them that the ex parte rule is in effect, and they are not to discuss merits of this case with the members.

With that let's stand in recess for approximately 15 minutes.

(Recess from 2:34 p.m. to 2:53 p.m.)

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

Ms. Grabel, please continue.

MS. GRABEL: Yes, thank you.

BY MS. GRABEL:

Q. Mr. Lindsey, before we reengage with the

presentation, were you able to clarify the results of the recent outage that you discussed with Mr. Gold while we were on a break?

A. (Mr. Lindsey) Yes, I was.

Q. Will you please correct the record on the various conversations that you had?

A. (Mr. Lindsey) So a couple details about that outage. We are still making repairs to the pole line, but all customers are back in service. So I think before I stated that customers were still out of service. That was incorrect. All customers are back in service.

We still are making repairs. And a little more detail, it was a double circuit 13.8kV line, so two distribution circuits, one on top of the other, not a 46kV line. But I think the example still holds true, the old wood poles sustained damage in the storm.

MEMBER GOLD: Thank you very much. So the lines -- the customers have been restored service, your guys are still working on it. Are the streets still closed?

MR. LINDSEY: I don't believe so, no.

MEMBER GOLD: Thank you.

CHMN STAFFORD: I believe Member Somers has a question. Member Somers.

MEMBER SOMERS: Yes, Mr. Chair. How do you

hear me?

CHMN STAFFORD: We can hear you. Please proceed.

MEMBER SOMERS: Very good. I wanted to follow up a little bit on the question asked by Member Richins, which had to do with the environmental footprint of the existing system.

So eight stations that potentially are going to be replaced, could the witness tell me how old are those stations? When were those built and how old is the equipment?

MR. BRYNER: Yes, Member Somers. This is Clark Bryner. I can respond to that question.

So these substations, we've shown some of them on the screen with some relative -- well, we showed average ages of the equipment. But those stations, the oldest one was commissioned in the late '50s. And then some of them were commissioned in the '60s. I think the newest station was commissioned in the '70s, but I would have to double-check on that. But they're all 50-plus years old.

MEMBER SOMERS: And during the testimony in response to one of the questions about cleaning up the environmental footprint of the areas, they mentioned that -- the witness mentioned that there was oil

involved; correct?

MR. BRYNER: Correct. So the transformers and breakers in those stations are oil filled, and it's with mineral oil. And the mineral oil is -- prior to some of the more current, you know, uses some of that mineral oil did contain PCBs.

MEMBER SOMERS: Yeah. And that is exactly where I wanted to head with that. Is there any of the legacy equipment still in that area that contains the Polychlorinated Biphenyls or has all that been removed and replaced?

MR. BRYNER: I would have to double-check to be certain. So my prior -- one of my prior positions was in asset management and maintenance, and I left that a couple of years ago. At that time we still had three pieces of equipment in our system throughout the entirety of our system that had PCBs. So I would have to double-check and see if it's any of this equipment.

MEMBER SOMERS: Okay. And are you aware if any of these eight sites when equipment was replaced and upgraded if there was a cleanup done to remove PCBs from the area --

MR. BRYNER: I'm not aware --

MEMBER SOMERS: -- from the dirt or anything that might have contaminated?

MR. BRYNER: Sorry. I'm not aware of that. I don't know if any of my colleagues might be.

MR. BAKKEN: Member, this is Erik Bakken. As it relates to PCBs, if we become aware of a spill of oil or a leak of oil onto the soil and that spill contains PCBs, it is cleaned up immediately and to all environmental standards.

MEMBER SOMERS: Excellent.

And then the new the stations that will replace these eight obviously will not have equipment containing PCBs since federal -- I believe it's a federal regulation passed in 1979 -- sound right? -- that new equipment does not contain this carcinogen?

MR. BAKKEN: That's correct. We do not have any new equipment that contains PCBs, nor would any equipment that we install as part of this project contain PCBs.

MEMBER SOMERS: Okay. And then just going back to what Member Richins asked was is that the company if this is approved in replacing those eight old stations -- those eight stations that an environmental assessment and cleanup would be done for any type of contamination to include the Polychlorinated Biphenyls?

MR. BAKKEN: Yes. We typically do what's called a phase 1 study to understand what, if any,

contamination has occurred. And then we proceed to clean up that contamination.

Now, we might look for partners as we look for different opportunities with that property whether it's a sale or potentially some type of park opportunity, pocket park typically we call them. Yeah, exactly.

So we may look to partner with certain entities for that cleanup, but certainly it would be cleaned up before there was any public use of that property.

MEMBER SOMERS: Okay. And maintaining the environment is part of our charge on the board, so that's why I wanted to ask these questions on how these were going to be cleaned up and removal of potential legacy equipment that may or may not contain PCBs. So thank you, Mr. Chair.

CHMN STAFFORD: Thank you, Member Somers.

Ms. Grabel.

MS. GRABEL: Thank you.

BY MS. GRABEL:

Q. I believe, Mr. Bryner, it's your turn to continue with the presentation?

A. (Mr. Bryner) Yeah. Thank you. So I believe we ended up talking about the state of the existing equipment. And I just wanted to make the comparison of

what is there today to what we will have in the future.

So as opposed to having those eight aging 46kV substations along with all that equipment in need of replacement, all of that will be not replaced like in kind, rather retired. And we'll end up having the picture that's on the right-hand screen, Slide 21, with all 138kV stations, all new equipment, all to today's standards.

And in addition to that, what you're not seeing on the screen right here is we'll replace -- or we'll also retire 19 miles of 46kV lines that feed those eight 46kV substations.

All right. So just to summarize, so the Midtown Reliability Project is needed for modernization. TEP's existing 46kV system was designed to serve the energy needs of homes and businesses that were built in the mid -- the mid to late 20th century. Energy usage has increased since then with changes in technology and population. And the old system must be modernized to meet current demand.

The project adds three times the capacity of the current system, which will allow for additional population growth. It will also allow for additional energy usage that will support modern technology such as electric vehicles, rooftop solar, and battery storage.

It's also needed for reliability. The current infrastructure serving Central Tucson, as we've seen, is 50 years old or older, and it's either in poor or very poor condition. And it's at capacity, which creates a risk of low voltage or outages, and it needs to be replaced.

It's also needed for better service continuity. The project will complete the 138kV around Central Tucson that was initiated by the Irvington to Kino line, which will allow customers in the area to benefit from another source of power should an outage occur. So that would make outages shorter and less frequent.

It's also needed for regulatory compliance. NERC reliability rules require that TEP build the transmission line or a transmission path from DeMoss Petrie to Irvington. This project meets that need, and it avoids the need to build yet another transmission line in the area to satisfy that requirement.

And lastly, it's needed for economic growth. The project will upgrade the service to the University of Arizona, which is Tucson's largest employer. It will also upgrade the service to Banner - University Medical Center, which we've heard about the importance of that facility to the community. These each provide services and benefits for our entire community and region.

It will also provide enhanced energy capacity in Central Tucson that will support anticipated increases in jobs, anticipated growth. That's all laid out in our local municipal plans.

And one other thing that I can't highlight enough, it will allow us to retire those eight aging 46kV sub transmission substations as well as the lines that feed them. That won't happen immediately. It will take us probably about 10 years once we get this line in service to make all the cutovers and reconfigure the circuits and everything, but in the end that will result in a substantial change for the better in the appearance of Tucson streets, and it will also result in a substantial savings in -- in millions of dollars that our customers won't have to pay to replace or upgrade these antiquated systems.

Overall the Midtown Reliability Project will provide a timely, costly -- or a cost-effective upgrade to older systems. It will help TEP maintain affordable rates. It will increase reliability and strengthen the grid for all of TEP's customers, even well beyond the Midtown area.

Q. Thank you, Mr. Bryner.

Let's go on to Slide 23. I think it is important for the Committee to understand the long

history of this project beginning with when it was first identified in TEP's Ten-Year Plan.

So, Mr. Lindsey, I believe you're going to kick off the timeline.

A. (Mr. Lindsey) Yeah, I'd be happy to.

So you see here on the screen to your left, timeline of the project. So I'll walk through some of these -- these key milestones related to this project. So the need for the transmission line was originally identified as far back as 2007 in our Ten-Year Plan.

Originally, it was identified as a -- technical difficulties.

Originally, back in '07 it was identified as a new 138kV line from Irvington substation to Tucson substation. So I point that out as we walk through this history we're going to point out some advantages of the move to DeMoss Petrie.

Then in 2016, you can see our asset management department identified the need to replace aging equipment at a number of these 46kV stations. We've hit that a few times, but that was another milestone I would consider in the development of this project.

This analysis was then included in planning studies to determine the best path to move forward.

2018 was a big year for us. We completed a

saturation study that identified the need for the Vine Substation. You'll hear more about that study a little later in the presentation.

Also in 2018, the Ten-Year Plan moved the line termination, as I mentioned, from Tucson substation to DeMoss Petrie. So this allowed for a couple key things in this area of town. So originally we had planned, like I mentioned, to connect this line to Tucson Substation. Moving it to DMP allowed us to repurpose that 138kV connection or bay at Tucson Station to install a new transformer. So that transformer allowed us to add distribution capacity to the downtown area where we don't have many options for expansion and better serve that area of town. So that project's complete.

It also allowed us to move this connection of this line to DeMoss Petrie, as I mentioned, to better align with future transmission projects in the area.

So also in 2018 we received the CEC for the -- really the first leg of this overall project, the Irvington to Kino line.

Q. And to clarify, Mr. Lindsey, is the Midtown Reliability Project associated with the Irvington to Kino transmission line?

A. (Mr. Lindsey) Yes. That's correct. As we've been discussing in a fair amount of detail, upgrading to

138kV line improves reliability, also supports our efforts to convert to a higher voltage 13.8kV distribution system.

Q. Okay. Thank you.

Was the Irvington to Kino line approved in Case 178?

A. (Mr. Lindsey) Yes. It was.

Q. Did that line attract any intervenors?

A. (Mr. Lindsey) No. It did not.

Interestingly enough, it had a fair amount of support from the public. They saw the need. They experienced some of the reliability issues we're talking about over time. And at the time also saw all of the development coming in. If you remember the Bridges commercial development we talked about a few slides ago, they saw that coming in and really understood the need for the project.

Q. Did the Irvington to Kino project involve the construction of aboveground 138kV transmission facilities in a Gateway Corridor?

A. (Mr. Lindsey) Yes. It did.

Q. Thank you. Please continue.

Are we going to Mr. Bakken? Mr. Bakken, I guess you're picking up.

In 2022 TEP ultimately withdrew the Kino to DMP

application; correct?

A. (Mr. Bakken) That is correct.

Q. Why did it do so?

A. (Mr. Bakken) At the time we received feedback from mayor and council and concerns from other stakeholders on the first application. And those concerns were really related to the Gateway Corridors primarily.

Q. And for the Committee's benefit, what is the Gateway Corridor?

A. (Mr. Bakken) Gateway Corridors are a zoning regulation that requires some infrastructure, not all, but some infrastructure to be placed underground. Gateway Corridor designations are given to some major arterials, the largest really and busiest streets through town typically.

We have built transmission infrastructure in Gateway Corridors historically. The City and TEP today disagree on the application of Gateway Corridors to transmission infrastructure, and I think we've heard a little bit about that.

Q. Okay. Thank you.

After withdrawing the Kino to DMP application the first time, TEP and the City of Tucson collaborated on finding solutions to the concerns raised by the City

with respect to constructing the project within a Gateway Corridor Zone; correct?

A. (Mr. Bakken) That is correct. We reached out to both the city manager as well as the city attorney, set up discussions on, really, what became a weekly basis to look at different options for this transmission project.

We looked at available funding sources as well as those conversations evolved, talked about the special exception process for the Gateway Corridor regulation.

Q. Thank you. Please explain the special exception process negotiated with the City and how that process would have addressed the City's concerns.

A. (Mr. Bakken) So ultimately we developed the special exception process that includes exceptions to undergrounding transmission lines for things like railroads, major highways like the aviation highway as well as perpendicular crossings are just some of the examples that we developed through that special exception process, which is now part of the UDC.

Q. So what was the outcome of that process?

A. (Mr. Bakken) We were able to develop a number of exceptions and then have those adopted, like I mentioned, within the UDC, which we would be able to avail ourselves of if we decided to move forward with an

underground project.

Q. All right. Thank you.

So even with the special exceptions in effect, and those are circumstances, as you've described, that would allow TEP to construct aboveground within the Gateway Corridor Zone, if TEP was building a line within the Gateway Corridor, would it still have to build portions of that line belowground?

A. (Mr. Bakken) Yes.

Q. Did TEP and the City attempt to find ways to fund that belowground construction?

A. (Mr. Bakken) We did.

In collaboration with the City through those conversations we looked at a number of different options, customer rates. We looked at franchise as well as private contributions or third-party contributions. We talked about shareholder funding. We also discussed the possibility for government funding. We looked at another mechanism within the City called the utility tax. And then we also looked at undergrounding districts.

Q. All right. Thank you. Let's take each of those in turn.

First, you mentioned the option of funding the underground portion of the project by customers through rates.

Why is that not a viable option?

A. (Mr. Bakken) Undergrounding EHV, or extra high voltage, which the 138 voltage is classified as, the cost of doing that is really prohibitive. The business model -- our business model really is based on overhead construction from inception, from the inception of the company. We've been what's called an overhead company.

The costs are passed through to customer rates, and those costs are passed through the rate kind of mechanism or rate process to customers.

And in order to keep costs down, anytime we look at an infrastructure investment, we're really looking for the most cost-effective solution. We really intend to and strive to maintain affordability for all customers.

Q. Thank you.

MEMBER KRYDER: Mr. Chairman.

CHMN STAFFORD: Yes, Member Kryder.

MEMBER KRYDER: May I pose a question?

CHMN STAFFORD: Certainly.

MEMBER KRYDER: Let's say going ahead that the decision was taken for a particular section, whatever it might be, to underground it, and I think I just heard you say that the cost under the current business model would be to pass that to the ratepayers; is that correct?

MR. BAKKEN: That would typically be how an

investment in infrastructure is funded or paid for. However, we have and I think we showed it in the opening statement a guideline from the Arizona Corporation Commission, which says that in most circumstances, in particular for reasons of aesthetics, that those costs would not be passed through to customers.

MEMBER KRYDER: Who would pay for them then, just out of TEP's pocket?

MR. BAKKEN: Well, that's -- that's what we're here to talk about today. If we were forced to go underground, I think we would, one, look for that special exception; and, two, potentially, as, you know, we've talked about, look for other funding mechanisms. And if none of those were available to us, potentially go to the ACC to look for or the Arizona Corporation Commission to look for an exception to their guideline and to their policy.

MEMBER KRYDER: I'm showing my ignorance because that's truly what it is. Are there cases where if it was passed to ratepayers, is it to the entire customer base of TEP or would it be to the selected ones who are kind of on the route, or how is that all determined? Fill me in.

MR. BAKKEN: The way that the ratemaking process works today is that that cost would be passed

through to the entire rate base. And one of the concerns obviously we have as we look at this project is that where we're seeing the most -- where we're seeing concerns coming from stakeholders are from discreet neighborhoods along the route.

And so to benefit those customers at the expense of our entire rate base is -- or our entire customer base is something that we're concerned about.

MEMBER KRYDER: As a TEP customer, I'm concerned about it too, but that's aside from the specific point here. But I appreciate the information that you have.

So did I hear in that that the customers who were having this directly impacting in their businesses and homes and so on could form their own taxing district or something like that to pay for it? Help me understand that too.

MR. BAKKEN: Sure. It's an underground special tax district created by or mechanism of statute. And neighborhoods or others, a particular area, is able to initiate that special taxing district, form that special taxing district, and then pay additional incremental taxes to fund undergrounding of either distribution or even transmission infrastructure within that special district. It can be residential, but

commercial is also able to utilize that -- that mechanism.

MEMBER KRYDER: So this would be directly on your real estate taxes, or is it put into your TEP bill and paid out this way?

How does that all work?

MR. BAKKEN: I believe we have never done it. We looked into it for customers and committed to assisting those customers if they decided they wanted to move forward with that. I believe it's just in addition to a property tax.

And then as those taxes are collected, it goes towards the funding of the underground costs.

To date, we have not had anybody approach us with an interest in funding one of those special tax districts.

MEMBER KRYDER: Thank you.

Is it, like, a bonded thing?

So we're looking at 50 years, or is it 10 years, or how does that all fit together?

MR. BAKKEN: I believe there is a time limitation. Ten years was the time frame that you would pay that special tax or that incremental property tax for funding or reimbursing us for the cost of undergrounding.

MEMBER KRYDER: And how is the base of that

figured?

Is it so many feet from the buried cable, or is it by customer, or what's all that?

MR. BAKKEN: It's really at the discretion of those that wish to form or initiate the process for forming a special underground district. So it can be as few or as many customers along a particular route or that are impacted feel they're impacted by utility infrastructure to form that district.

MEMBER KRYDER: So --

MR. BAKKEN: It's an opt-in I guess I would say process.

MEMBER KRYDER: So it's an opt-in.

So that if I was, just to pick on your biggest customer here, Banner, I propose this, and I'm David homeowner across the street there on Elm Street, I could say, well, gee, Banner's got lots of bucks, let's have them form the district and increase their taxes and I don't have to opt-in, or is it everybody gets opt-in who is a user or how -- again, I'm truly confused by this.

MR. BAKKEN: It's not everybody opt-in. It's a -- if I understand correctly -- and, again, we have not gone through this. We looked at it and offered to assist anybody that wanted to avail themselves of it.

But it would be in our case a neighborhood that opts in. Certainly businesses could opt in as well.

And if you had a large commercial entity that was paying higher taxes, they would be funding more of that undergrounding cost than, say, the average residential customer.

MEMBER KRYDER: Okay. I appreciate that. And I appreciate also that you haven't really gone through the process and so on so you don't have all the answers. I'll stop talking and taking time, but I needed at least this to kind of get my brain around what was potentially going on. Thank you very much, Erik.

MR. BAKKEN: Yeah, sure.

BY MS. GRABEL:

Q. And, Mr. Bakken, just to correct the record for a minute, you stated that the purpose of this proceeding is to find a funding mechanism for undergrounding.

That's not what TEP is proposing to do today, is it?

A. (Mr. Bakken) No. We're looking to site -- find the appropriate path to site the transmission line.

Q. Okay. Thank you.

And so if the Committee chooses a route that would require undergrounding by the City of Tucson, and under its interpretation of the law, it would need to

make a finding that allows it to preempt that local ordinance; is that correct?

A. (Mr. Bakken) That is correct.

Q. And if the Committee chooses to adopt the route but declines to make that finding, we're either going to have to go to the Commission to see if we get an exception to their policy or risk not building a project and getting the reliability benefits of that project; is that correct?

A. (Mr. Bakken) That does seem to be the position we would be in. That is correct.

Q. Okay. Thank you. And I --

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

CHMN STAFFORD: Yes, Member Hill.

MEMBER HILL: I just to clarify, so the Irvington to Kino Substation -- and I just want to understand a little bit of the special exception process that you went through.

Did you use the special exception process to go to actually site that with the City?

Because it's all aboveground; right?

MR. BRYNER: I guess any of us were fighting over it.

So the special exception process to the Gateway Corridor ordinance did not exist at the time the

Irvington to Kino project line was constructed in 2021 or at the time that it was approved in 2018. That didn't come about until 2023, I believe --

MEMBER HILL: Okay.

MR. BRYNER: -- in concert with these discussions and trying to find a solution.

MEMBER HILL: And then to clarify, the Irvington to Kino Substation siting and construction through the gateway areas, did the Gateway Corridors exist and prohibit aboveground infrastructure or -- at that time, or was it okay at that time?

I'm trying to understand how -- how everybody, the parties, got to a place where this was built aboveground in these corridors without a special exception process it sounds like, so that wasn't it.

How did we get there?

MR. BRYNER: You know, I'm actually going to pass this one off to Mr. Lindsey because he was more in the picture at that point.

MR. LINDSEY: So, Member Hill, it's a good question. I don't think we had -- I don't -- I guess I can't weigh in on interpretation of the Gateway Corridor as it relates to Irvington to Kino because it just didn't come up as a concern during the hearing or during any conversations with the City.

So we built the line overhead.

MEMBER HILL: Okay. Thank you.

MR. BRYNER: If I could add just one fact. So the Gateway Corridor Zone was adopted by the City in 1982, so it's been around for quite a while.

MEMBER HILL: And maybe this is a question for the City at a later point because you guys don't know the City ordinances inside and out.

But since 1982, has it always had a prohibition against overhead -- I don't know what exactly the -- the infrastructure, if you want to call it that or some --

MS. GRABEL: Member Hill, if I may interject. I think this may be a legal interpretation, and it's kind of the subject of the dispute between the City and TEP.

But the ordinance has had the same language, as I understand it, and I'll defer to the City on this, since it was adopted, and utility infrastructure has been built aboveground during that time.

But the correct interpretation of the ordinance is the subject of the superior court proceedings.

And I will let Mr. Lusk weigh in if I've said anything incorrect.

MR. LUSK: Thank you.

I think we can correct a little bit of what the confusion is with our witness Mr. Castro --

MEMBER HILL: Okay.

MR. LUSK: -- who is a planner with the City, and he can provide a little bit of additional information.

MEMBER HILL: The context for that?

MR. LUSK: Yes, absolutely.

MEMBER HILL: Okay. And then, Ms. Grabel, you said that the Committee here today has kind of two choices. One, we can approve a corridor and indicate that in our findings -- I'm not going to find all the words, but in our findings we understand or we found that the burden of doing this is not economical and the project should proceed overhead basically, or we can identify a corridor but not have that finding, and then the project may not proceed at all.

But I see another pathway here. I see the superior court decision may be making some decisions about this. Can you --

MS. GRABEL: So I think the problem with that, Member Hill, is that we don't yet have a superior court decision, and that decision will probably be appealed, and the appellate process taking a really long

time, and we have 2027 in-service date.

And so I don't think we can let that legal process play out to its ultimate outcome without risking the project time line, and time is of the essence.

Do you have something you want to add, Ms. Hill?

MS. HILL: Thank you, Member Hill, Mr. Chairman. Thank you, Ms. Grabel.

Also, too, I want to be clear that the -- and, Mr. Lusk, I think would agree with this that the --

MEMBER KRYDER: Can you move closer.

MS. HILL: I'm sorry.

-- that I think Mr. Lusk would agree with this is that the superior court litigation really only applies to the issue of the Gateway Corridor and the UDC applicability.

To the extent that the University Area Plan is determined to require undergrounding, that in and of itself has nothing to do with the current pending superior court litigation. And because, as we said before, the location of the Vine Substation, the Committee would have to make that finding for those plans absent an agreement by parties here today.

MEMBER HILL: Okay.

MEMBER GOLD: Mr. Chairman.

CHMN STAFFORD: Yes, Member Gold.

MEMBER GOLD: This was from Ms. Grabel or Ms. Hill. I'm not sure which one.

You're using terminology that I guess some people are familiar with. I'm not.

MS. GRABEL: Okay.

MEMBER GOLD: And I've looked at hundreds of exhibits. I have a stack of papers that's got to be a foot and a half thick with everything in it.

I don't remember seeing a map that says these are the areas where you must go underground by law.

Is there such an exhibit that we can look at that says these are the areas that you have to go underground by law?

MS. GRABEL: We do have exhibits that are contained in the witness PowerPoint presentation that Mr. Bryner will go over in a later panel, I think the next panel, that show where the City of Tucson currently would require us to go underground and where the University Area Plan and the Sam Hughes Neighborhood Area Plan and others that could require undergrounding if they have the force of law, which we dispute, and how they intersect with the routes.

So, yes, you will hear testimony to that regard in the upcoming panel.

MEMBER GOLD: That will make our lives a little easier if we can see that.

MS. GRABEL: Certainly.

MEMBER GOLD: We can see the rationale with what you're doing.

The second question, what's your relationship with the railroad?

MS. GRABEL: So they are a stakeholder to this proceeding because some of the lines -- they're an impacted -- they're not a party, but some of our lines impact their railroad.

MEMBER GOLD: Have you considered using their right-of-way or along their right-of-way to run their lines?

MS. GRABEL: So Routes 5 and 6 do contemplate that. And this is something Mr. Bryner can talk to later.

The concern we have with the railroad rights-of-way is we have not been able to get an affirmative answer from them whether we would be allowed to construct.

And so if you decide that route, we would ask that you choose an alternate route as well in case the railroad doesn't let us.

MEMBER GOLD: Is there a reason why the

railroad wouldn't let you?

MS. GRABEL: I've reached out to them and asked them, and I just haven't received an answer back, so I don't know the answer to that.

MEMBER GOLD: Thank you.

MS. GRABEL: Certainly.

CHMN STAFFORD: Ms. Grabel.

MS. GRABEL: Yes.

CHMN STAFFORD: Would condemnation be an option then?

MS. GRABEL: I will let Mr. Bakken answer that question because I think that's a business decision.

CHMN STAFFORD: It guess it depends if it's economically feasible, I guess; correct?

MS. GRABEL: So to condemn I -- yes.

And I'm not sure actually as a matter of law if you can condemn railroad property, but, Mr. Bakken.

MR. BAKKEN: That would be my concern. I can't say in my experience that we have ever encountered that situation. But I do know that the railroads have certain privileges that other property owners don't have.

So whether or not as a utility we would be able to condemn a railroad property, I'm uncertain as to whether or not we have the ability to do that at this

point.

CHMN STAFFORD: But you could condemn other property that's outside of their right-of-way alongside it theoretically?

MR. BAKKEN: Theoretically, certainly condemnation is a last resort, one that we don't like to necessarily avail ourselves of. But theoretically it could be a possibility.

CHMN STAFFORD: All right. Thank you.

MEMBER RICHINS: Mr. Chairman.

CHMN STAFFORD: Yes, Member Richins.

MEMBER RICHINS: First, I would pay good money to watch a railroad and a utility go at it in a condemnation process. I mean, that should be on ESPN, seriously.

MR. BAKKEN: The Ocho.

MEMBER RICHINS: Seriously. Good luck with that.

Mr. Lusk, when you're -- will you prepare -- your witness is a planner; correct?

MR. LUSK: That's correct.

MEMBER RICHINS: To the issue that Ms. Grabel brought up on area plans being enforceable, can you find out if those area plans are part of your general plan. Which is ratified by voters?

I'm just curious as to the Sam Hughes Area Plan and the University Area Plan.

MR. LUSK: Sure.

MEMBER RICHINS: Sometimes those find themselves into general plans, and general plans are approved by voters, which gives them a little bit of heft over a -- sometimes there's less formal plans that are done.

So I just want to understand where those plans sit in the legal hierarchy of your planning department.

MR. LUSK: Sure. If I may, I think I can tell you that they're legislative in nature at this point. I can verify that to be sure. But our general plan is adopted by the voters, and the specific plans or area plans are legislatively adopted.

MEMBER RICHINS: Are they found also in the general plan, general area plans?

MR. LUSK: So I would have to -- I would have to check to be sure. But I don't know for -- I don't believe they are, but I can check just to have -- and have Mr. Castro --

MEMBER RICHINS: That would be great. Have him be prepared to discuss the legislative route that those were -- that those took.

MR. LUSK: Of course. Yes, sir.

MEMBER RICHINS: The other question I had was getting at the undergrounding cost number.

So on page 11 or page 29 of the ginormous document, right, page 11 of the application, it talks -- it cites a -- some cost estimates from SRP and APS. Your consultant says that the cost estimates are consistent in your application here.

But you use an example of a route that was estimated to cost 17 million, which later to underground it was going to cost 87 million, so $67 million more. By my math that's a factor of five. And I've heard that it's more expensive by a factor of 10 and now by 14 to 22.2.

So I'm not sure what numbers we're using for what's the actual cost of undergrounding, because your example is five, yet you've gone as high as 22. So I just -- what are the conditions that make that --

CHMN STAFFORD: Member Richins, I believe they're going to address that in the last panel when they have the expert.

MS. GRABEL: Correct. We've hired Sargent & Lundy to do that analysis specific to this case, which is the 14 to 22.2 times number.

MEMBER RICHINS: Got it. Thank you.

That's all I had.

CHMN STAFFORD: Ms. Grabel.

MS. GRABEL: Okay. Thank you.

BY MS. GRABEL:

Q. I think when -- before the Committee began asking questions we were talking about the variation options that the TEP and City explored to potentially fund the underground construction of the MRP project, and you had begun to talk about why utility rates wasn't an option.

Do you have any concerns that agreeing to include the cost of undergrounding the project in utility rates would set a precedent that could be used to require the undergrounding of future transmission projects?

A. (Mr. Bakken) Yes. We do have that concern.

And, in fact, we did some analysis on undergrounding all projects in the Ten-Year Plan, which I believe Mr. Lindsey had referenced. And the results of undergrounding those projects in that Ten-Year Plan was a cost of 2.5 billion or a 20 percent increase in rates, which translates to about 25 to $26 per month per customer.

In fact, Tucson Electric's power services remained remarkably affordable, costing less than -- on an inflation-adjusted basis costing less than it did

25 years ago. TEP's residential electric rates have increased about approximately 1.9 percent per year on average over the last 25 years. The average annual inflation rate over that same time period was about 2.5 percent.

So you can see adding that type of additional cost for undergrounding projects into the future would put a significant strain on affordability for our customers.

Q. And, Mr. Bakken, that $2.5 billion relates to only undergrounding the projects in your Ten-Year Plan. There would be additional transmission projects not included in this year's Ten-Year Plan; is that correct?

A. (Mr. Bakken) That is correct.

Q. So that number would only increase?

A. (Mr. Bakken) Yes. It would likely increase as we continue to move through the clean energy transition that we're going through today and having to build transmission in order to access additional clean power.

Q. Okay. Thank you.

Does TEP face any other capital investment needs that are going to increase utility rates in the coming years?

A. (Mr. Bakken) Yes.

You know, we've really got to think about how we

allocate resources to capital infrastructure and balance that allocation between generation, like I mentioned, as part of the clean energy transition looking at things like wind, solar, solar-plus-storage.

We're also looking at potentially additional natural gas within our portfolio with the ability to eventually burn a cleaner fuel source, something like hydrogen. We've also got to balance that with transmission as we've been talking about today.

And then obviously we mentioned the issue that we had -- the outage that we had on Ina due to a micro burst. We've got to ensure that your distribution facilities are also as reliable as possible.

And that becomes even more in focus, I think, today potentially than it has been in the past as we look at wildfire mitigation efforts and the investments we need to make to ensure that our system is as robust as possible related to the potential for wildfires.

You know, as we look at all of those kind of demands or how we would allocate funding, TEP expects to invest approximately 3.5 billion over the next five years to keep our service safe, reliable, affordable as we've been talking about for all customers, everybody within the customer base and not just specific groups.

And, you know, we really think that that is

critical as we move through this clean energy transition and see the various demands that we have for investment and for funding.

Q. So if TEP were required to underground transmission projects, that $3.5 billion would almost double; correct?

A. (Mr. Bakken) Yes.

Depending on how far out you went, it could certainly double.

CHMN STAFFORD: I have a quick question on that.

That $3.5 billion investment, is that for both -- does that include generation transmission and distribution investments?

MR. BAKKEN: It does. Yes.

BY MS. GRABEL:

Q. Is affordability of TEP rates a concern to the company?

A. (Mr. Bakken) Yes.

As I mentioned a few times, affordability is a key factor in how we look at the investments we're making and the service that we provide.

TEP has a relatively high percentage of low-income customers close to I believe it's 20 percent or below the poverty line. So we need to ensure that

we're maintaining affordability so the customers aren't faced to make tough choices about paying for basic needs.

Also, I think we've talked a little bit about economic development and lower rates certainly allow us to be competitive when we're attracting new customers and do that in order to support economic development within the region.

Q. So would you agree, then, that it is important to mitigate rate increases where possible?

A. (Mr. Bakken) Yes. That is important.

Q. Does TEP have any concerns about asking all of its customers to pay to underground a line purely for the aesthetic benefit of certain neighborhoods that object to its aboveground construction?

A. (Mr. Bakken) Yes.

Q. And I know you talked about the Arizona Corporation Commission's policy with Member Kryder, so I won't ask you to do that again.

What about shareholder funding, why was shareholder funding not a viable option?

A. (Mr. Bakken) As you might expect, shareholders expect a return on their investment. This return is really set by the Arizona Corporation Commission as part of that ratemaking process that we were discussing earlier.

Shareholders are willing to invest in a company based on a reasonable rate of return, which, again, is set by the Arizona Corporation Commission. Investing in infrastructure without a return is not really sustainable and would eventually lead to higher rates for all customers.

Potentially our credit rating would suffer, borrowing costs would increase, and then those costs would be passed through that ratemaking process to customers.

Without shareholders willing to invest in TEP or banks were unwilling to lend money to TEP we would not be able to maintain the safe, reliable, affordable service, let alone successfully kind of move through this energy transition to make the investments that we need to get there to be successful in the transition.

Q. Thank you.

You also mentioned that TEP and the City have explored funding the cost of undergrounding through private parties.

Can you please elaborate on that?

A. (Mr. Bakken) Yes.

As we had some of those conversations with the City, we were looking at I think I mentioned a number of different options. One of those was private

contributions or third-party contributions.

We discussed potentially the U of A or Banner contributing to the undergrounding costs that we were facing at the time or that we were looking at the time. And in those conversations it was either determined that those parties were unwilling or unable to make those contributions.

Q. Okay. Thank you. And I know you explored with Member Kryder the creation of an underground district.

Did I understand your testimony correctly that you did explore that option and talked to certain neighborhoods about it, but they rejected the idea?

A. (Mr. Bakken) We certainly let neighborhoods know that this option was available to them, and, like I mentioned, have now been approached and that we would assist really in helping to set up those special undergrounding districts.

To date we have not been approached by any neighborhood, any individual, any commercial entity to move forward with the undergrounding district option.

Q. Thank you. You mentioned government funding as a potential resource.

What were the results of exploring a government funding option?

A. (Mr. Bakken) We looked at a number of different

options related to federal funding, state funding, and city funding, whether or not there might be some mechanism or fund out there that we could use to help pay for some of the undergrounding that may be necessary.

As we looked at those options, did not find anything that this project particularly would qualify for, any of those kind of government funding options that might be out there.

Q. In the end TEP and the City explored funding the underground construction of this and potential future transmission projects through an expansion of the utility franchise; is that correct?

A. (Mr. Bakken) That is correct.

Q. So by way of background what is a utility franchise?

A. (Mr. Bakken) So a franchise is an agreement that we have with really any municipality that we operate in, in this case City of Tucson, that allows us to use their rights-of-way for utility infrastructure.

Q. Does TEP make any other payments to the City that could have been used to fund the underground construction of transmission projects?

A. (Mr. Bakken) Yes. There is also a utility tax that is part of, I believe, the UDC. And we collect that utility tax from our customers. We serve as a

pass-through. That money then goes to the City, I believe, as part of their general fund.

Q. Why wasn't the utility tax a workable option?

A. (Mr. Bakken) As we talked about the utility tax with the City, it's a very complex mechanism. And the ability to amend the utility tax we found just to be something that was not workable with the City.

And as you might imagine, you know, really two reasons: One, the complexity and, two, nobody wants to raise taxes. And so for those two reasons it was determined not to be a viable option.

Q. So how did TEP and the City propose to use the franchise agreement to fund the undergrounding of the transmission lines?

A. (Mr. Bakken) So as we talked about, the franchise, we determined it to be the best option really for meeting both TEP's goals as well as the City's goals. Those goals include preserving the Gateway Corridor along with funding for aspects of the City's Climate Action Plan.

So part of the incremental funds collected through the increase in the franchise fee would be used for undergrounding utility infrastructure with a portion of it being used to allow the City to move forward with initiatives within its Climate Action Plan.

Q. Did the proposed franchise agreement require action from Tucson citizens?

A. (Mr. Bakken) It did and does require a vote of approval from Tucson residents.

Q. And did the undergrounding proposition, I believe it's Proposition 412, go up for election?

A. (Mr. Bakken) Yes.

We moved forward with a special election. Ultimately Proposition 412, which included an increase to the franchise fee, was defeated.

Q. How did TEP proceed with the project after the failure of Proposition 412?

A. (Mr. Bakken) At that point, we didn't see really any other viable options but to come back to the siting Committee, and that's why we're here today to look at the potential for overhead routes to make the connection between Kino to Vine to DMP.

Q. Okay. Proponents of undergrounding point to Salt River Project's use of an aesthetic fund to pay for the construction of underground transmission lines.

Does TEP have such a fund?

A. (Mr. Bakken) No. We do not.

And, in fact, it's interesting SRP doesn't pay a franchise fee. They don't have a utility tax. But the aesthetics fund is an amount that they're able to recover

from SRP ratepayers in lieu of a franchise fee or a utility tax, that it dedicates those funds to the cities for use at the City's discretion associated with utility projects. And I believe that's the one -- and the mechanism that they used in Chandler. And really those are for beautification, but they could also be -- those funds could be used for undergrounding as well.

Q. All right. Thank you. Does --

MEMBER GOLD: Mr. Chairman.

CHMN STAFFORD: Yes, Member Gold.

MEMBER GOLD: Member Mercer was --

MEMBER MERCER: Go ahead.

MEMBER GOLD: I guess she wants me to go first.

MEMBER MERCER: Go ahead.

MEMBER GOLD: What was proposition --

MEMBER KRYDER: Closer to the mic, please.

MEMBER GOLD: What was Proposition 412?

MR. BAKKEN: So Proposition 412 was a special election that looked at revising -- I would say modernizing the franchise that we have on the books today to include an increase in that franchise fee that, like I mentioned, would be dedicated in part the majority to undergrounding infrastructure. But it also had a portion that was carved out for the City to move forward with

climate action initiatives under their Climate Action Plan.

MEMBER GOLD: So this was a City of Tucson proposition?

MR. BAKKEN: Yes, it was.

MEMBER GOLD: Did it affect TEP rates?

MR. BAKKEN: It would not have affected TEP rates as they're approved by the Arizona Corporation Commission. But the way that the franchise fee works is that we collect it from customers and then pass it through to the City. So that portion of it on our bill would have increased.

MEMBER GOLD: So the rates for Pima County in general, which you provide electricity to Pima County as well, would also go up, or according to that proposition would it have just have affected Tucson?

MR. BAKKEN: It would just have affected the citizens and residents of Tucson.

MEMBER GOLD: So the residents of Tucson under that down?

MR. BAKKEN: That is correct.

MEMBER GOLD: That resolution would have allowed them to underground all these lines that are in question?

MR. BAKKEN: It would have provided a

funding source for this line and potentially for future lines.

There was also some language, if I remember correctly, that if a committee that was set up as part of that agreement determined that they had other priorities or other lines that needed to be underground, they could use the funding for that as well. But it would not be used to underground every transmission line within the City of Tucson.

MEMBER GOLD: But this was turned down by the voters of Tucson?

MR. BAKKEN: That's correct.

MEMBER GOLD: That's the reason you're here today?

MR. BAKKEN: That is the crux of the reason why we're here today, yes, to --

MEMBER GOLD: So the City of Tucson needs the power, but they declined to pay for the undergrounding of that power.

Am I summarizing that correctly according to Proposition 412?

MR. BAKKEN: I would say that the residents of Tucson determined that paying for undergrounding and maintaining affordable rates was their priority, and that was shown in the vote.

MEMBER GOLD: Okay. So let me rephrase that. So the residents of Tucson had an opportunity to have underground rates which would -- underground their lines which would have bypassed this Committee, but their rates only would have gone up for that privilege, but they declined to vote for that; they turned it down?

MR. BAKKEN: That's correct.

MEMBER GOLD: That's what I needed to know. Thank you.

MEMBER HILL: Mr. Chair, I have a follow-up question.

CHMN STAFFORD: Yes, Member Hill.

MEMBER HILL: Mr. Bakken, was the vote that Tucson citizens took exclusively for the cost of undergrounding transmission, or were there a lot of other things in that ballot measure?

MR. BAKKEN: There were a number of other components of the ballot measure, the franchise itself, some other changes that we made to the franchise, but certainly as it was talked about leading into the election, there were two kind of major factors: One using funding for undergrounding transmission and the other using funding for moving forward with the City's Climate Action Plan, people coming down on both sides of those issues.

MEMBER HILL: Because my recollection of this just following it in the news was that it was a little bit confusing to folks because there was a lot of Climate Action Plan things that would be funded in it.

Do you remember -- and, really, what I'm getting at is that I don't know that we can conclude that Tucson voters turned this proposition down because of the cost of undergrounding.

My recollection is that there were a lot of other climate action pieces that were somewhat controversial in the Committee, and it made it harder for citizens to know exactly what they were voting on. It wasn't just one thing.

So the Climate Action Plan pieces that would be funded with this, can you characterize what those might have been?

MR. BAKKEN: As we looked at the Climate Action Plan with the City became part of our conversations, there were areas that where we aligned things like cooling centers in extreme heat situations, looking at the potential for battery energy storage in certain areas of the City.

Like I mentioned, there were really kind of two factors, I think, that went into people's decision or the City of Tucson residents' decision to vote either for

or against.

MEMBER HILL: Yeah.

MR. BAKKEN: One was the transmission. Certainly that was a big area of conversation, and then as well as the Climate Action Plan.

MR. LUSK: Mr. Chair, I apologize for interrupting. I didn't want to belabor it, but I think we can just admit through -- with the Applicants a stipulation we could admit the resolution as voted upon, if that's helpful.

CHMN STAFFORD: Is there already an exhibit, Ms. Grabel, or not?

MS. GRABEL: It is not, Mr. Chairman. We would need to admit that, but we can do so.

CHMN STAFFORD: Well, it seems when you put on your direct you can have your witness introduce it and add it to your exhibits.

MR. LUSK: Certainly, Mr. Chair. Thank you.

CHMN STAFFORD: Thank you.

I have a quick question. When we're talking about --

MEMBER HILL: I have just one last comment.

CHMN STAFFORD: Well, one quick question here.

So you were talking about the franchise and it was going to be -- it was going to pay for -- it was going to raise the franchise fee from TEP, and that would enable the City to spend that money on a number of environmental improvements and undergrounding; correct?

MR. BAKKEN: That's correct.

CHMN STAFFORD: Okay. My question is in TEP's rates you operated all throughout Pima County in a number of cities; correct?

MR. BAKKEN: That's correct.

CHMN STAFFORD: All right. Now, do the franchise fees, are they collected only from the customers in the cities, or are they added to the cost and spread out among all ratepayers?

MR. BAKKEN: Typically, we have a franchise fee with each municipality or each town that we operate in.

CHMN STAFFORD: Well, I get that, but how is that collected from the ratepayers through your rates?

MR. BAKKEN: It's collected -- there's a designation. We're able to designate those customers that are within the City of Tucson or that are within the City of Marana or that are within the town of Oro Valley and then collect whatever that franchise fee is, whatever the agreement is with that entity, on the bill that we

send to our customers.

CHMN STAFFORD: Okay. So if I'm a resident of Green Valley, I'm not paying for the franchise fee for the City of Tucson?

MR. BAKKEN: That's correct.

CHMN STAFFORD: Okay. Thank you.

Member Hill, you had one more question.

MEMBER HILL: Thank you.

Mostly that I don't want -- I want to say that I thought the franchise agreement approach was an elegant solution that the City and TEP came forward with that -- that had it passed could have addressed a lot of things.

But I also think that sometimes when we put propositions in front of the public, they have a hard time tracking things that have lots of moving parts and pieces.

And so I -- I just don't -- I don't want us to conclude that because the residents of Tucson turn down a proposition that it was about the cost of undergrounding. I do think that there was a lot more going into that decision.

And I want to compliment the folks here on trying to create an elegant solution because I thought it was really creative. And it's unfortunate it didn't

pass, but I just don't want to conclude that it was just the underground costs that was a concern to residents.

MEMBER MERCER: Mr. Chairman.

CHMN STAFFORD: Yes, Member Mercer.

MEMBER MERCER: So I'm a little confused here. So Proposition 412 was turned down, so we all understand that.

My understanding was that the people of Tucson voted it down because it would only benefit -- the underground lines would only benefit certain neighborhoods; is that correct?

And everybody in Tucson would have had to pay for it for the improvements or the underground, but it would only benefit certain neighborhoods, and that's why we voted it down.

MR. BAKKEN: Certainly that -- that was a concern, and that's why we attempted to craft -- and thank you very much for the comment, Member Hill -- attempted to craft a funding mechanism that would not only apply to a project like this but could also apply to projects going forward.

And then to the extent that there were any additional funds or extra funds, we could apply it to other neighborhoods, other projects, other overhead existing lines so that we had the ability to ensure by

setting up a committee that it wasn't just benefitting one part of the City of Tucson, that we had the ability to allocate funds to various parts, various projects within the City.

MS. GRABEL: Mr. Chairman, if I may.

CHMN STAFFORD: Yes, Ms. Grabel.

MS. GRABEL: I think that Mr. Lusk's suggestion of putting Proposition 412 into the record is a good one, and I think that that will explain everything that it was to pay for.

And I think it's very difficult for Mr. Bakken because he has no personal knowledge of why the various voters decided to turn it down. Perhaps we could just kind of let that document speak for itself, and everyone can draw their own conclusions about the meaning of the failure of Proposition 412.

CHMN STAFFORD: Right. I think that's an excellent suggestion, because it seems that the undergrounding thing might have been an unpopular part of the proposition, but certainly there were more parts to it than that, and we can't know what individual voter -- what weighed their decision to vote no. I mean, it could be just as simple as I don't understand it, so I'm voting no because it's an increase in costs.

Bottom line, we don't -- we don't -- we

will never know, but we can certainly look at the proposition.

And do you have the language like the CliffsNotes or the -- it's the paragraph that explains what it is briefly that the voters would read?

Because I think that's probably going to be more relevant because that's what a lot of people -- they look at that and gauge what they're going to vote based on the synopsis and the -- it's not called the CliffsNotes. It's got another term. I just recall it off the top of my -- the summary or --

MS. GRABEL: Description.

CHMN STAFFORD: -- description. There's -- yeah. Because that would explain what the effect of the proposition would do. I think you need to have that attached to the actual -- in addition to the actual text of the proposition because I think that may be more instructive as to what drove people's decisions.

MR. LUSK: Mr. Chair, if I may. I think we can provide that.

CHMN STAFFORD: Yes, Mr. Lusk.

MR. LUSK: We can provide that information. There's a truth in voting publication that goes out with each proposition, and we can provide that.

CHMN STAFFORD: Excellent. Thank you.

MR. LUSK: You're welcome.
MEMBER MERCER: Mr. Chairman.
CHMN STAFFORD: Yes, Member.
MEMBER MERCER: One more -- one more thing on that same subject.
So Mr. Dempsey, he's still here, he's representing the Underground Arizona. He would like to see this whole project to be underground; right?
MR. DEMPSEY: No.
MEMBER MERCER: Is that my understanding?
MR. DEMPSEY: Just the --
MEMBER MERCER: Just certain areas?
CHMN STAFFORD: Get to the microphone instead of answering, otherwise the court reporter is not going to pick up your answer.
MR. DEMPSEY: So, no, just the areas that have been required by law since the '80s.
MEMBER MERCER: Okay. So I guess my question is was this a part of Proposition 412?
MR. LUSK: Member, I apologize. When you say "this," what are you --
MEMBER MERCER: The underground.
CHMN STAFFORD: Mr. Lusk, please go to the Chair and announce it. Because I'm hearing your voice and I don't recognize it, so I'm looking around confused

as to who's speaking.

MR. LUSK: Sure. I apologize, Mr. Chair. This is Roi Lusk for the City of Tucson.

I'm just clarifying that the member, Member Mercer, is asking about whether the Gateway Corridor Zone itself was a part of the Proposition 412?

MEMBER MERCER: Yes. The what Mr. Dempsey's asking for certain areas to be underground on this project.

My question is were those areas part of the Proposition 412 that were turned down by the voters?

MR. LUSK: They were not. To clarify, Proposition 412 was an up or down vote on renewal of the franchise agreement with the -- with the applicant.

MEMBER MERCER: Okay. Thank you.

MEMBER RICHINS: Mr. Chairman.

CHMN STAFFORD: Yes, Member Richins.

MEMBER RICHINS: Is there a current franchise agreement in place now --

MR. BAKKEN: Yes, there is.

MEMBER RICHINS: -- due to the failure of that?

For how much longer?

MR. BAKKEN: Yes. This is Erik Bakken.

And, yes, there is a franchise in place

today, and I believe it expires in 2026.

MEMBER RICHINS: And what are the ramifications of that expiration should it occur?

MR. BAKKEN: Potentially there would be no agreement between TEP and the City of Tucson for the infrastructure that we have placed in city rights-of-way.

Beyond that, not sure what the implications are.

MEMBER RICHINS: Thank you.

MEMBER GOLD: Mr. Chairman.

CHMN STAFFORD: Yes, Member Gold.

MEMBER GOLD: This is a question for Ms. Grabel or Ms. Hill.

Let's assume there are residents in, say, the Sam Hughes neighborhood which doesn't -- let's assume -- I'm sorry. Let's assume there are residents in a neighborhood, example Sam Hughes neighborhood, they do not want overhead transmission lines. Do they not have the option for 10, $20,000 to have the lines that they could normally see buried down individually?

Is that not an option? Because I have friends in the Foothills who did that.

MS. GRABEL: Thank you, Chairman Stafford, Member Gold.

I can't comment on the dollar amount, but

they do have the option of exploring the underground improvement district that we discussed with Member Kryder earlier.

And do you want to add to that, Ms. Hill?

MS. HILL: Thank you.

All right. Mr. Chair, Member Gold, I believe Mr. Robinson when he testifies can give you a little bit more of an explanation about the options that individual homeowners have to have the distribution and the lines coming to their homes actually undergrounded. He can give you kind of a little bit more of a technical overview of what those options are, if that's what you're talking about as well.

But there are actually very few transmission lines, you know, throughout the City of Tucson. Certainly the Foothills area has not very many. And so distribution and that sort of thing are a different animal than a 138kV line.

MEMBER GOLD: So if I understand you correctly, Ms. Hill, the 138 lines cannot be buried?

MS. GRABEL: So, okay, I understand the question better now.

There's a distinct difference between undergrounding smaller distribution facilities and larger transmission facilities. And we're going to get into

that during the undergrounding panel.

And so, for example, this project proposes to build the 138kV transmission line aboveground because of the extraordinary cost differential between aboveground construction and belowground, but it's also going to bury the smaller distribution lines because it just doesn't cost -- because the cost differential isn't nearly as much. It's done pretty regularly.

MEMBER GOLD: So if I understand correctly, the 130-volt transmission lines do not impact these areas where you have residential homes that they're complaining about or they do?

MS. GRABEL: They do.

And so this project proposes to build 138kV transmission lines through residential -- in portions through residential areas. But proposes not to underground -- build them underground.

MEMBER GOLD: But if the residents choose to have those lines buried, can they?

MS. GRABEL: The 138kV line?

MEMBER GOLD: The 138.

MS. GRABEL: It's going to depend on the area and, of course, if there's a funding option for that underground construction.

MEMBER GOLD: Well, if they wish to pay for

it themselves, can they?

MS. GRABEL: I guess Ms. Hill wants to address this.

MS. HILL: So, Mr. Chair, Member Gold.

So that's -- when we're here, when we talk about this, obviously Mr. Bakken has been through the taxing district possibility. That would be a possibility for an area that, you know, can form their own taxing district, special taxing district, to underground certain lines.

But one of the things that you'll hear in future testimony with Sargent & Lundy is the cost of that. And so most of the time what would be in that homeowner's viewshed that they would want to underground would probably be in the several-million-dollar range to underground a 138kV line.

And so when Mr. Jocham from Sargent & Lundy testifies, he can probably give you a much more specific answer to that question.

MEMBER GOLD: Thank you.

CHMN STAFFORD: And that'll be on panel 4?

MS. GRABEL: Correct.

MS. HILL: Yes. We anticipate that will be Friday.

CHMN STAFFORD: Okay. Any other questions

from members?

MEMBER SOMERS: Mr. Chair.

CHMN STAFFORD: Is that Member Somers?

MEMBER SOMERS: Yep, that is Member Somers. I just want to make sure you can hear me.

CHMN STAFFORD: Yes. Yes. Do you have a question?

MEMBER SOMERS: Just a brief question. We spoke a little bit or I heard some testimony about the franchise agreement. There is one in place even though another failed an election; is that correct?

MR. BAKKEN: Yes. This is Erik Bakken again. That is correct.

MEMBER SOMERS: Okay. And does either state law or the existing --

CHMN STAFFORD: Member Somers, you broke up there. Can you start your question over again, please.

MEMBER SOMERS: I can. Yeah, you've been breaking up as well a little bit here and there, so I think it's the Wi-Fi.

So the question is does state law or the franchise agreement with the City of Tucson that's in place require an installation of underground where required by local laws?

So the zoning ordinance or scenic corridor

or specific plans that require undergrounding, is that in state law or the franchise treatment?

MR. LUSK: So, Mr. Chairman, this is Roi Lusk with City of Tucson. If I can --

CHMN STAFFORD: Yes, Mr. Lusk.

MR. LUSK: If you can attempt to clarify Member Somers' question.

I think there are two things going on. One is the franchise, one is state law. Those two things don't really have anything to do with each other, at least for this proceeding.

The franchise doesn't necessarily control what this Committee can do as well as this Committee doesn't really control what happens with the franchise, so I'm not sure that it would be helpful to sort of go down that road very far, if that makes sense, Member Somers.

MEMBER SOMERS: Sorry. You guys are breaking up here.

CHMN STAFFORD: Okay. Did you not hear his response, Member Somers?

MEMBER SOMERS: No, I did not. It froze.

CHMN STAFFORD: Can you try again now, Mr. Lusk?

MR. LUSK: I don't know if I can get the

words right again, but I'll try.

Member Somers, Mr. Chair, I think the concern is that they're -- amongst both the applicant and some of the parties is that there are two different things going on. One is the franchise and one is state law, and those don't really intersect very well or at all.

This Committee has no impact on what the franchise agreement between the applicant and the City of Tucson dictates as well as the reverse of that.

So the franchise doesn't -- or the franchise doesn't dictate the Committee, the Committee doesn't dictate the franchise, so they're not particularly relevant for this hearing at least as to what is required for undergrounding, if that makes sense.

MS. GRABEL: And TEP concurs with that.

CHMN STAFFORD: Thank you, Ms. Hill.

MEMBER SOMERS: Okay. That's interesting because there's been a lot of questions about how things are paid for.

And my follow-up question to that is if it's required by local law, either the state law or local law or the franchise agreement, to be -- for a line to be undergrounded in a certain area based on local law, and my follow-up question is who in those laws -- who's

required to pay for that?

Is the City required to pay for that?

Do you have to put up the special taxing district, or does that fall to TEP?

MS. GRABEL: So, Mr. Chairman, Member Somers, that's exactly what the City of Tucson and TEP were attempting to determine when they met after -- or prior to the failure of Proposition 412 was how to pay for it. And the conversation about the franchise --

MEMBER SOMERS: My question is is it in law or ordinance on who's required to pay for it as it currently sits?

MS. GRABEL: That's the subject of a superior court proceeding. It's not currently --

CHMN STAFFORD: Mr. Lusk.

MR. LUSK: Mr. Chair, Member Somers, I apologize. I'll try to answer. And I will immediately say that I think Ms. Grabel's correct. We do have some disagreement about that.

But there is no requirement that I'm aware of in either state law or in local law that requires any particular party to pay for undergrounding.

What I think our disagreement is -- and I won't go too far down that road, but what our disagreement is is that we believe the franchise has some

information about who's required to pay for that, and I believe the applicant has a different interpretation of that franchise.

MEMBER SOMERS: So there -- there are local ordinances and view corridors that have been adopted that require or request power lines to be undergrounded, but there's nothing in there about who pays for this or how it's paid for?

MR. LUSK: This is Roi Lusk with the City of Tucson.

Member Somers, I apologize. There was a side conversation. Can you repeat your statement again.

MEMBER SOMERS: My question is that there are also local view corridors potentially impacted here where we're being asked to maybe avoid those because of site issues.

So there are local ordinances or view corridors in place by the City of Tucson that would require undergrounding of the power lines, but there's nothing saying in that law or anywhere else who pays for it?

It's just a question up in the air right now in the courts?

MR. LUSK: That is correct. That ordinance does not determine who pays for the undergrounding.

That -- the City of Tucson -- I apologize. This is Roi Lusk for the City of Tucson again.

The City of Tucson would -- would interpret that to go -- to mean that the franchise would control.

MEMBER SOMERS: But it's an interpretation that's -- and it's nebulous, and that's why it's in front of the court? Would that be accurate?

Yeah, I see a head nodding.

CHMN STAFFORD: Someone please say yes.

MS. GRABEL: Yes.

MEMBER SOMERS: Thank you.

CHMN STAFFORD: Thank you, Ms. Grabel.

Is that the end of your questions, Member Somers?

MEMBER SOMERS: That does. Thank you. And I apologize, but I think it's your Wi-Fi that's kind of cutting in and out on me at least for the moment, but so I was able to get everything out of that. Thank you.

CHMN STAFFORD: Great. Excellent. Thank you.

Ms. Grabel.

BY MS. GRABEL:

Q. Okay. I believe that where we left off, Mr. Bakken, is you were talking about the difference between SRP and TEP in terms of whether TEP can establish

an aesthetics fund.

And you were about to differentiate TEP from SRP on the basis that SRP does not pay a franchise fee or a utility tax and collects moneys from its ratepayers to fund an aesthetics fund, which it dedicates to cities for use in transmission projects.

Is TEP differently situated from SRP?

A. (Mr. Bakken) Yeah. I think that's right.

Before I go there, SRP does collect from their customers funds that can then be used by the cities where they operate for not only transmission projects undergrounding, for instance, but other kind of beautification projects as well.

The difference is that SRP isn't regulated, doesn't require ACC approval for that type of fund.

On the other hand, we do, you know, pay a franchise fee. We pay a utility tax. And those are recovered from our customers.

So thinking about the ACC's policy regarding undergrounding, I think it's highly unlikely that the ACC would approve something like an aesthetics fund really on top of the franchise fee as well as the utility tax to fund undergrounding.

So that I think is -- explains or hopefully clarifies kind of the difference between SRP's aesthetics

fund and our franchise fee and utility tax.

Q. Thank you.

To put this in context, how much money did Tempe pay to the City of Tucson under its franchise agreement in 2023?

A. (Mr. Bakken) Under the franchise agreement approximately $15 million.

Q. How much money did TEP pay in utility rates in 2023?

A. (Mr. Bakken) For the utility tax --

Q. Tax, my apologies.

A. (Mr. Bakken) That's all right. A utility doesn't pay utility rates.

But under the utility tax it was approximately the same, $15 million.

Q. Can the City use those funds to help pay for the underground construction of transmission lines?

A. (Mr. Bakken) They can --

MR. LUSK: Mr. Chair, I apologize. I --

CHMN STAFFORD: Announce yourself when you speak, Mr. Lusk.

MR. LUSK: Sorry. Roi Lusk with City of Tucson.

Just real quickly, I'm not sure that Mr. Bakken is the correct person to be able to answer as

to what the City can do with its funds.

CHMN STAFFORD: He can certainly give his opinion, Mr. Lusk.

MR. LUSK: Sure.

CHMN STAFFORD: And you're free to put your witness on and contradict anything he says.

MR. LUSK: Happy to do so. Thank you.

CHMN STAFFORD: All right. Thank you.

Mr. Bakken, please continue with your answer.

MR. BAKKEN: Yeah. So certainly the City has a number of different priorities. And to date, they have decided not to use those funds for undergrounding utility infrastructure.

MS. GRABEL: Thank you.

I think those are all the questions I have on this topic, so absent any from the Committee I'm going to turn back to the time line and Mr. Lindsey.

BY MS. GRABEL:

Q. Okay. So Mr. Lindsey, will you conclude with the rest of this time line?

A. (Mr. Lindsey) Yes. Sounds great.

So we'll round this slide out here. We've been here for a bit.

As mentioned, without prop 412, we decided to

restart the siting and public outreach process for this project as the need for the project has only grown in importance over time.

In this effort -- so let me see here -- starting in '23, we evaluated a larger study area and also looked at several additional routes beyond our initial effort in 2019. This led us to the CEC application we're discussing today.

It's important to note that the original in-service date for this project is now the summer of 2024. The need to modernize the electrical infrastructure in Midtown is critical for supporting our customers today.

And to highlight some of the challenges we're having in this area of town, the next slide shows some of the investments we've made -- thank you -- and plan to make to support the system between now and the new in-service date of 2027.

Q. So, Mr. Lindsey, I have to interrupt you for a moment.

A. (Mr. Lindsey) Yes.

Q. You mentioned briefly that the original in-service date was 2024 and that has been extended to 2027; is that correct?

A. (Mr. Lindsey) That's correct.

Q. So has that delay had any financial consequences to the company and its customers?

A. (Mr. Lindsey) Yes. It has.

Q. And that's what you're about to go into?

A. (Mr. Lindsey) Yes.

CHMN STAFFORD: And, for the record, you're looking at Slide 25 of TEP-8?

MR. LINDSEY: That is correct.

CHMN STAFFORD: Thank you.

MR. LINDSEY: So to provide a little more detail on those impacts and the result of the delay, we've either made or plan to make investments in the existing system to ensure they continue to operate as reliable as possible.

So these investments have come in the form of increased inspection and maintenance as you can see in the top line, also purchasing of spare parts due to the concern of equipment failures. So as we're talking about this old system, we're really just trying to keep it limping along in anticipation of this project.

So these investments have also come in the form of replacing 46kV equipment that would not be operationally reliable until 2027 no matter how much maintenance was performed.

Specifically we replaced substation

equipment at Winnie and are developing designs and similar upgrades at the Olsen Substation that would otherwise be retired with this project.

So as you see here, we've invested or plan to invest just over $10 million as a result of the delay putting us at that over 10 million point.

So further, if the project's delayed beyond the '27 in-service date, this is where things get even more challenging, we expect another roughly $10 million to be spent just to band-aid the existing system in this area of town to maintain reliability.

One of the things that's of great concern in this area of town is if we do not gain approval for a line and get to build the Vine Substation, without the approval -- sorry. I lost my point there -- we'd be faced with a complete rebuild and expansion of our 46kV system in Midtown adding another 50-plus million dollars of investment into an antiquated system without addressing the need to modernize Midtown.

And as mentioned before, we'd still need to build another transmission line to meet NERC reliability standards. If you recall the map, we'd still need to connect Kino somewhere and we'd still need to build additional facilities outside of DeMoss Petrie, so we'd be back here talking about what that project would look

like in some fashion.

MEMBER LITTLE: Mr. Chairman.

CHMN STAFFORD: Yes, Member Little.

MEMBER LITTLE: Mr. Lindsey, is that 9 and a half million dollars just -- is that, like, per year, or if the project is delayed a year?

Because you talked about even more additional costs if it's delayed, if the project doesn't happen.

MR. LINDSEY: Member Little, that's a good question.

So the 10 million is what we're looking to invest into Olsen Station to get us into that 2030 time frame. So it's really just a short-term investment into that substation to maintain reliability.

MEMBER LITTLE: Thank you.

CHMN STAFFORD: Yeah. I had a question about that Slide No. 25.

The 10.6 million total investment, what is the time frame for that?

Is that up to today, is that through '27?

MR. LINDSEY: So, Chairman Stafford, that includes the investment at Winnie Substation for new equipment, and the point about plan 2 includes additional maintenance between now and the project in-service date.

So most of that has been spent.

CHMN STAFFORD: Of the 10.6 million?

MR. LINDSEY: That's correct.

CHMN STAFFORD: So that's -- mostly that's been incurred already?

MR. LINDSEY: Yes.

CHMN STAFFORD: And so then the 9.5 million, below that that's what you expect to incur between now and '27?

MR. LINDSEY: After '27.

CHMN STAFFORD: After '27?

MR. LINDSEY: Yes. Correct.

CHMN STAFFORD: So you have a bit left of the 10.6 to spend between now and '27, but then after '27 you're looking at 9 and a half million more for what time frame?

MR. LINDSEY: Chairman Stafford, we're talking about getting us to 2030.

CHMN STAFFORD: Okay. '30. So three years. So another 9 and a half million for that three years, '27 to '30, then?

MR. LINDSEY: That's correct.

CHMN STAFFORD: Just to band-aid the existing distribution system together?

MR. LINDSEY: That's correct.

CHMN STAFFORD: Okay. Now, and you mentioned another number. Was it, like, $50 million or something? That would be to rebuild the entire was it 43kV system?

MR. LINDSEY: Chairman Stafford, that's correct.

So we're looking at a significant investment in the 46kV system in Midtown if we don't build this 138kV line as proposed.

CHMN STAFFORD: Okay. So the expense for that would be from now until 2030, 2027, whenever you get that -- those improvements made assuming that this -- you don't -- aren't able to build this 138kV line?

MR. LINDSEY: Chairman Stafford, that's kind of our -- our -- if we don't get approval to build the line, our only other option is to invest in the existing system.

So without the Vine Substation, without the completion of the Kino to DMP 138kV line, our only other solution that we're faced with is just dumping money into this old system. So it's beyond the 2030 time frame.

CHMN STAFFORD: Okay. And that's you said about $50 million?

MR. LINDSEY: That's what we approximate to rebuild the existing system, yes.

CHMN STAFFORD: And then what is the -- your estimated cost to build your preferred route aboveground, then, for comparison?

MR. LINDSEY: Chairman Stafford, I'm going to have to ask --

CHMN STAFFORD: I think it's in your placemat, but I want to make sure I'm looking in the right spot.

MR. BRYNER: It's approximately the same amount to build the Vine Substation and the overhead transmission line. It's right around 52 million one way or the other to rebuild the 46, build the 138.

CHMN STAFFORD: But the 138kV system has additional reliability benefits and it will enable you to grow into the future greater than just improving the 43kV distribution system; correct?

MR. BRYNER: Yes, that's correct.

CHMN STAFFORD: Okay.

MEMBER LITTLE: Mr. Chairman.

CHMN STAFFORD: Yes, Member Little.

MEMBER LITTLE: Just to clarify, you still in order to make NERC requirements need to have backup connection between the -- on the 138kV system.

So you're talking about needing if this is -- if this is not approved, needing to invest the 50

million to upgrade the 46kV system, which would still be wood poles, somewhat marginal and in addition having to build a different route 138kV line to satisfy your reliability requirements?

MR. LINDSEY: Member Little, that's correct.

So we are not really talking about those costs because we have not scoped what that looks like. We're planning to build this transmission line that we're discussing today as our solution because of the exact points you point out here.

So we would be -- we'd be looking at in addition to that 46kV investment, which would likely -- just a small correction, we would look to install steel poles very similar but not quite as robust as the ones needed for a 138kV system.

I'll note within the neighborhoods' back lot in many cases as we'll see later this week we'd still be looking at investing in that system and coming back to this Committee with a solution that has not been scoped to loop Kino in to connect that -- that loop and meet the reliability promises we made to that neighborhood.

And what we haven't talked too much about quite yet is additional need leaving DeMoss Petrie in the future. So that's another one of these NERC requirements

that fall into the scope of this project.

Mentioned earlier, the levels of efficiency this project brings allow us to resolve all of these issues with one project, and that's what's -- I mean, that's what I get excited about. But we'd be back at the drawing board trying to resolve that problem and scoping and studying within our transmission plans what that might look like.

MEMBER LITTLE: Mr. Chairman.

CHMN STAFFORD: Yes, Member Little.

MEMBER LITTLE: One more point. And that is that whatever reconstruction of the 46kV sub transmission system gets done, if that were the case, would not be under the jurisdiction of the -- of the Commission. It just would get built.

CHMN STAFFORD: But they'd still need a 138kV line somewhere even if they did beef up the -- is it 46? I'm saying it wrong? It's 43? It's 46?

MEMBER LITTLE: 46.

CHMN STAFFORD: -- 46kV system you still have to have a 138kV transmission line down the road; correct?

I'm just making sure I got all this.

MR. LINDSEY: Chairman Stafford, that's correct.

I mean, obviously we would -- this is all what ifs and in the future, but we probably wouldn't be looking at building in this area. We'd be taking that new line from Kino likely east or west. Again, it hasn't been studied or scoped, so we'd have to get through that process. And we'd also be looking at additional upgrades outside of DeMoss Petrie Substation on the 138kV side.

So you're correct. There's more to come.

CHMN STAFFORD: All right. Okay.

MEMBER MERCER: Mr. Chairman.

CHMN STAFFORD: Yes, Member Mercer.

MEMBER MERCER: So a question for Mr. Lindsey.

So can you just put it in layman terms what are the benefits or the pros and cons of just rebuilding the existing project or the existing what we have right now?

MR. LINDSEY: Sure. So there's -- I'll walk through them at a high level.

So the higher voltage not only of the 138kV solution, not only provides additional capacity we also operate it differently. So it's a looped system, meaning it's fully redundant, it's always connected on both sides, providing multiple sources of energy to our substations.

Conversely, the 46kV system is a lower voltage. It has less capacity. And it also is operated radially. So from -- we do have connections we can make manually in the field with that system, but if we do experience an outage, it's very similar to those examples we were talking about earlier where power will be out until we manually restore our customers.

So they will experience an outage. Depending on the time of year, severity of the issue, it would be prolonged, and that's really what we're trying to get away from with this solution.

So just a really high level, 138 not only has more capacity, we operate it in a way that is much more reliable.

A second piece that's outside of the transmission conversation but very much a part of this project is we also design our substations at the 138kV level with much more capacity. So it allows us to not only have redundancy at substation level that our 46kV stations do not have, it will set us up to convert to 14kV from 4, again, a whole other step up in the world for the distribution system, additional capacity, additional reliability.

And so when you compare the systems, there's just really no comparison.

MEMBER MERCER: Okay. So besides the reliability, what about the way it looks?

MR. LINDSEY: So from an aesthetic purpose, from comparing the two systems -- well, I guess the way I'd answer that question is if we were to build new versus new, right, not new versus existing, so our 14kV system today built new would look very similar to say we needed to rebuild a 4kV line in this area that fell down using similar poles, similar arms, similar wires aesthetically looks no different.

MEMBER MERCER: So basically it would still look ugly?

MR. LINDSEY: The advantage -- so I'm an electrical engineer, so this stuff all looks great to me.

So the difference I would say is there'll be less infrastructure.

So Mr. Bryner mentioned earlier we're going to be removing a number of miles of 46kV as part of this. We're retiring eight substations with two. So you can see our impact to the community is really reduced when we go to these higher voltages and different types of standards all while bringing more capacity and reliability. So we're really looking at just a much better system.

MEMBER MERCER: Thank you.

MEMBER GOLD: Mr. Chairman.

CHMN STAFFORD: Yes, Member Gold.

MEMBER GOLD: So, again, so this is to your side of the tables. If I understood this correctly, in 2000 -- in 1975 you used 787 megawatts for Tucson roughly.

In 2003, it's three times higher, the 24 -- 22 -- 2,422 megawatts now converting megawatts to kilovolts, I know how to do that.

If you do not do these upgrades -- judging by the growth in usage, are we going to have brownouts if you do not do those upgrades?

MR. LINDSEY: So, Member Gold, I think the easy answer to that is yes.

MEMBER GOLD: Thank you.

MR. LINDSEY: The longer answer would be we're going to do everything we can to keep the lights on; right? I mean, we're going to move forward with that $50 million of investment because our responsibility is reliability and serving our customers.

From -- as a planner I'm not going to be happy about spending those dollars on this part of the system when I could be investing it somewhere else. There's more efficient ways to use that.

But, yes, there are major limitations with

the existing system, and it's going to require, as Mr. Bryner mentioned, just as many investment to keep it limping along to just meet what we need to for the near term versus what we're looking at here today.

MEMBER GOLD: So if I understand this correctly, and I'm going to use a different analogy. People loved steam engines in its day. Steam locomotives were beautiful. They moved the people. But as the population grew and transportation needs increased, the switch to diesel was actually required. The steam engines just couldn't have done it in the long run no matter how much they tried.

If I understand this correctly, it's a similar analogy. The 46kV system is old. It's low capacity. It's nonredundant. And it's reached the limit of its technological capability.

You can put band-aids on it. You can put up new little poles, but the correct thing to do is to go to something that is better today. The 138kV system is looped, which means you have redundancy. You're not going to have blackouts. It has more capacity so you're not going to have brownouts.

The population is growing, temperatures are going up, more electricity is being used by everybody. To throw money into steam engines when everybody should

be using a diesel engine doesn't make sense. It's not economically good for the community. It's not economically good for our company. It's not economically good for anybody.

So I don't see why we're questioning the need for this. I think it's straightforward we need to upgrade the system. The question is are you allowed to upgrade the system? And that I believe is why you're here today; is that correct?

MR. LINDSEY: Member Gold, I think we'd have to agree with most of that, yes.

MEMBER GOLD: Thank you.

CHMN STAFFORD: All right. Thank you. We've been going another 90 minutes, so I think the court reporter is due another break. Let's take a 10-minute recess.

(Recess from 4:33 p.m. to 4:48 p.m.)

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

Ms. Grabel.

MS. GRABEL: Thank you, Mr. Chairman.

BY MS. GRABEL:

Q. I think we left off on we were talking a bit about reliability and the aesthetics benefits of the proposed project compared to rebuilding the existing

system and then adding another transmission line.

So I think this is a good time to address the Staff letter that was filed in the docket. I know that, Mr. Lindsey, have you reviewed the letter that was filed in the docket from Commission Staff regarding the reliability benefits of this project?

A. (Mr. Lindsey) Yes. I have.

Q. And do you recall that Commission Staff took the position that it could not weigh in on any reliability benefits because we had not presented them with a system information study, system integration system?

A. (Mr. Lindsey) System impact study?

Q. There we go. That's it, SIS.

A. (Mr. Lindsey) Yes. I've reviewed that.

Q. Okay. Thank you.

And do you also recall Staff's recommendation that we explore a little bit on the record how TEP studies its system to determine what transmission lines need to be added for reliability purposes?

A. (Mr. Lindsey) Yes.

Q. And can you talk a little bit about that?

A. (Mr. Lindsey) Sure.

Q. What is TEP's process for identifying needed system improvements for its system?

A. (Mr. Lindsey) So I'll walk us through the

process. It's a little detailed. It's probably the last thing we want to talk about at the end of -- end of the day, so I'm going to keep it high level and walk through our study process.

So we call this process our transmission planning criteria and assumptions. So this is used for conducting both near and long-term transmission planning studies. And it's actually a public document, so we can provide that as needed. And within that document it outlines a study process.

And so -- excuse me. So I'll hit the highlights here. This study's conducted on an annual basis, and it's really looking at two main things: What we call our Ten-Year Plan and towards the end of the process our NERC compliance reliability studies.

So first we start with a load forecast, and that doesn't mean a load forecast for the entire system. So there's been some numbers thrown out about system peak load. That's part of this forecast. But what we do with those numbers is really drill down all the way to each substation bus.

So you've seen some of our 138kV substations on the maps. In the future Vine would be included in that forecast. And so we get the loading all the way down into the 138kV system so we can evaluate that

transmission system.

So the next step is case development. So what we do here is we model our transmission system. And this includes -- the focus today is 138, but this includes our entire system, our 345kV and 5000kV system as well. We build those models and -- in our powerful software, the GE PSLF software.

And so within that step we are conducting both power flow and transient stability studies to look at the reliability of our transmission system as it looks today with loading and, again, from that long-term horizon out ten years. So that allows us to identify any weakness or upgrades on an annual basis within that Ten-Year Plan study.

So results of those studies are used to develop that plan, as I mentioned, and that plan is submitted to the Corporation Commission on an annual basis.

Q. Thank you, Mr. Lindsey.

What were the results of that study for this project?

A. (Mr. Lindsey) So, you know, understanding some of the feedback and comments related to the system impact study, really the Ten-Year Plan is akin to an SIS. So a system impact study is a little -- sorry, I'm jumping into a little more detail before I get to your question.

Q. You're good.

A. (Mr. Lindsey) The impact study's more traditionally conducted for, say, a new generator connecting to the system or a new connection to another utility. But, really, the Ten-Year Plan is looking at identifying the impacts or the needs of the system. And I would consider this project -- well, it is -- mitigation to issues that we found in that Ten-Year Plan study.

So, again, a strong connection between our Ten-Year Plan studies that we conduct on an annual basis for our entire transmission system to a system impact study. And really this project among others in our Ten-Year Plan are designed to resolve issues that we identified in that study.

CHMN STAFFORD: Ms. Grabel, you referenced the Staff letter.

Is that an exhibit somewhere?

I don't see it on your list of the 19.

MS. GRABEL: It is not a TEP exhibit. They filed it in the docket in response to your question, but we did not make it an exhibit. We can do so if you'd like us to.

CHMN STAFFORD: Yeah. Could you make that TEP-20, then?

MS. GRABEL: We will actually make it TEP-25. We filed some additional exhibits in the record today regarding public outreach.

CHMN STAFFORD: All right. I have not seen those yet, but thank you.

MS. GRABEL: Sure.

MEMBER LITTLE: Mr. Chairman.

CHMN STAFFORD: Yes, Member Little.

MEMBER LITTLE: There's an old in lots of way electrical utility system planner I would like to say -- just go on the record as saying that the type of study that Mr. Lindsey has described is the type of study that I, in my position here, representing the public, like to see to indicate that the project is safe, reliable, and has been studied with respect to the entire system, not just a specific little piece of it.

And I appreciate that the planning process that TEP has -- goes through with respect to these projects.

MS. GRABEL: Thank you, Member Little.

BY MS. GRABEL:

Q. Do you have anything further you'd like to put in the record, Mr. Lindsey?

A. (Mr. Lindsey) Maybe just a couple things to round out our full planning process.

So I've focused so far really on our Ten-Year Plan. Once those are complete and planning memos for internal documentation are submitted, we then take that new system configuration.

So, again, we've identified new projects from where we started, coordinate that with our adjacent utilities who are doing the same thing at the same time. We're all on the similar path here in the state from a timing perspective based on the Ten-Year Plan requirements.

And then utilize those new models. So, again, we're building these cases bigger and bigger with new transmission lines that are designed to resolve issues like this one here we're talking about and then utilize those new models to conduct our reliability studies.

So we are required to study our transmission system to meet NERC compliance requirements, so federal reliability requirements as well as the state Ten-Year Plan. And so it really builds on top of that annual Ten-Year Plan.

So really just thought it was worth sharing to round out what that full study process looks like for us.

Q. All right. Thank you.

Mr. Bryner, why don't you continue with the presentation. I believe we are on the Slide 26.

A. (Mr. Bryner) Sure. I'd be happy to.

So just -- we've talked about the project quite a bit, but, I guess, I want to be very direct about the components of the Midtown Reliability Project.

So it includes four main components: A new substation, which is the Vine Substation; a new transmission line connection; upgrades to the distribution system; and the retirement of aging assets.

So while the proposed transmission line is the subject of this hearing, it's what you're here to make a decision on, it's important that you're aware of the full scope of the project so you can understand kind of why we designed the project in the way we did.

So I want to first just have a quick discussion, and we've talked about this some already, so I won't belabor it too much, but why do we have the two end points of the project? You know, so why is it connecting between Kino and DeMoss Petrie?

Okay. So we talked about where Kino -- or where DeMoss Petrie is at, and we talked about the connection of Kino to Irvington. So we know and we've established the fact that we need to create a new transmission path between those two.

And the first leg of that transmission path -- sorry. I forget about my mic. The first leg of that

transmission path was the Irvington to Kino line. The next leg would be our DeMoss Petrie to Kino line to complete that loop.

So the big thing is why does this need to go through the Vine Substation? And we've also -- I think we've established this pretty clearly, it's for efficiency purposes. By doing this, it keeps us from having to build another transmission path elsewhere.

We need to build the substation. We need to add capacity. We need to replace this aging infrastructure, so we need the Vine Substation. It needs a transmission line to serve it. We also need a path in roughly the same area. So by doing this we're able to have dual purposes and meet both of those needs.

So let's talk about why the Vine Substation needs to be where it's at.

Q. And, Mr. Bryner, real quickly, TEP is not required to obtain a CEC to construct a substation, so why are we including a discussion of the Vine Substation in this application?

A. (Mr. Bryner) So as you'll very likely hear tonight during the public comment session, or if you've reviewed some of the public -- or some of the comments that are in the application, there were a lot of concerns from -- primarily from some of the neighborhoods in that

area about the proximity of the substation to their neighborhoods.

But the reason why we've included it in our application here is because the location of the substation impacts the location of the line. It's a critical part of our project. And, again, as we mentioned, by building this one substation, it will allow us to replace or retire eight other substations. So we wanted to make sure that we provided a proper explanation.

So let me go ahead and start with the saturation study. So Mr. Lindsey mentioned this briefly when he was going over the project time line. So this was conducted in 2018 by a third party. The purpose of this study was to identify the ultimate buildout of TEP's system based on load projections which were informed by current loads, demographics, and zoning.

The study identified system requirements to meet those load projections. And one of those requirements was the identification to -- or one of those requirements was the fact that we needed additional capacity in the Midtown area. And that additional capacity would be met by a new substation with a load center that was right at Speedway Boulevard and Vine Avenue. You may not be super familiar with those roadways just yet, but you will be

fairly soon.

So, I guess, once we identified the need for a substation and the load center for that substation, we began the process of looking for a suitable site and purchasing the land.

So TEP typically -- our typical substations are air-insulated substations, so they've -- you know, the equipment is separated by space to provide the necessary clearances for safety, and that takes space. So these substations are usually on a parcel about five to seven acres in size.

But we were familiar with this area, and we knew that it was fully built out, and finding some available land of that size was going to be very challenging, if not impossible.

And so we considered a gas-insulated substation, or a GIS. So a gas-insulated substation that uses nonflammable, nontoxic gas to insulate the electrical equipment within sealed conduit, so whereas the air-insulated substation uses air for that purpose.

So these substations cost more, but they do require a lot less space, and so it was something that we felt like we could accommodate within the spaces that might be available to us.

So you can see these two different substations

on the screen. The one on -- this is Slide 30. The substation on the left is actually our Kino Substation that we've talked about quite a bit. And the one on the right is our Tucson Substation. We've also mentioned that a little bit. And so the gas insulated, it has an open-air 46kV substation, but the 138kV substation is sitting underneath that canopy.

So between 2018 and 2020 TEP searched for a site. There were six site-selection requirements. So I've got those listed on Slide 31. So it needed to meet technical system requirements. It needed to be of sufficient size, which in this case could include potential parcels that would, you know, accommodate a GIS substation. So one to two acres would be acceptable.

It needed to minimize impacts to natural or cultural resources. We needed to have a willing seller, and the land needed to be available for TEP to purchase. It needed to be compatible with surrounding land uses. And it needed to be cost-effective.

So during that initial site-selection process, we identified a total of 15 sites. And through that effort, it resulted in the purchase of the Vine Substation.

I believe -- I can't remember who asked the question before, but do we own the land for Vine

Substation? The answer is, yes, we do own the land for it.

So, as I also mentioned, this site had its critics, primarily from the Jefferson Park neighborhood, which is located north of the site.

So even though TEP had the land before we restarted the siting process in 2023, following the failure of Proposition 412, we did another comprehensive review of sites to see if anything new had become available since we previously identified those other 15. And as a result of that, we did identify five additional sites which were evaluated.

Now, lastly, during the first phase of our siting process, we sought public and stakeholder input on any other available sites, and as a result of that two additional sites were identified and evaluated. So making a total of 22 potential sites that were reviewed as part of TEP's site-selection process.

I'll take just a couple minutes to walk through these sites detailing how each did not meet each the site-selection requirements or, in other words, why they were eliminated from consideration.

So, first of all, so slide -- or sites 2, 3, 4, 5, 6, 7, and 8 were all too small, so they were eliminated.

Sites 9, 10, 11, 12, 13, 14, 15, 16, and 21 were all too far from the load center, so they did not meet the technical requirements.

Sites 17, 20, and 22 all had unwilling sellers. So that only left us with a few potential sites.

So I'll go ahead and start with the Vine Substation site, the site that was selected.

So the site -- the site was the former home of the University of Arizona facilities management and maintenance buildings. So it was already disturbed. It's 1.6 acres in size, so it's sufficient in size to accommodate a GIS substation.

It's located within an area that has similar land uses that are classified as industrial and commercial. And it's located adjacent to two existing substations.

And last but not least it did have a willing seller, which is why TEP was able to purchase it.

Site 18 was looked at in conjunction with our efforts to find a solution to fund the construction of the line underground down Campbell back in the '22 to '23 time period.

The site is currently privately owned and functionally serves as a retention basin. It is of sufficient size for a GIS substation. And with some

extra work and cost we could make it function as a substation site with stormwater retention below.

And at the time the owner was willing to sell. However, those discussions were held in the context of Proposition 412 passing and the line being underground. So when 412 did not pass, the viability of Campbell as a route for the line was in question, and those discussions ended.

And lastly, site 19 was identified in 2023 just prior to restarting our siting efforts. And the site is currently a surface parking lot. The owner was willing to sell. The site is borderline too small. It's 1.3 acres. But it wasn't out of the question to make it work.

So TEP didn't pursue this site for two reasons: One, because the existing -- or because of the existing location of our distribution feeders it would be quite a bit more costly than the proposed site on Vine. So, as I mentioned, the Vine Substation site is adjacent to those two existing substations, so reconfiguring the circuits would be fairly simple there. And the second reason was this site would be surrounded by residential uses on all sides. In all of our public outreach efforts, we've constantly heard feedback that substations belong in industrial and commercial areas, not in residential

areas.

And so, as I mentioned, the Vine Substation fits this more closely than this site does, which is within a residential neighborhood.

So there were no advantages to this site over the Vine site, and it was eliminated from consideration.

So just kind of a recap on the Vine Substation site. So, as I mentioned, it's located within an industrial and commercial area. On -- on -- this aerial image shows the site with -- it's kind of hard to see on the screen, but it's bounded by a yellow line.

And on the north side of this site is a recycling center. East of the property is a parking garage. On the south side of the property are those two substations that I talked about. And then on the west side, yes, it is single-family residential.

And this residential area is part of the North University neighborhood. The boundary of the Jefferson Park neighborhood is Lester Street, which I know it's not labeled on here, but it's the street that goes right across the very top of the screen.

As I already mentioned, the site is 1.6 acres in size, so it's sufficient in size to build our GIS substation. And the site is located a little north of the load center that we had identified in the saturation

study. As I mentioned, that was at Speedway Boulevard, which is a little bit south of this and Vine Avenue, but fairly close, and it did meet our system technical requirements.

And, as I already mentioned, because of the proximity to the other substations, reconfiguring those circuits would be less costly. And since it's a fully built out and disturbed site, environmental impacts would be minimal.

Q. Mr. Bryner, just to reiterate, the selected site for the Vine Substation is right next to an existing TEP substation that will eventually be retired once Vine is constructed; correct?

A. (Mr. Bryner) That's correct.

Our U of A medical substation is located right there just directly south of the Vine Substation site.

Q. Is the proposed Vine Substation essentially an upgrade to the existing TEP system?

A. (Mr. Bryner) So I would say the Vine Substation is a critical component of the upgrade of this specific portion of TEP's 46kV system to a 138kV system.

Q. Thank you.

A. (Mr. Bryner) All right. So this -- so now looking on the right screen, which is Slide 40, this is a photo of the existing site and a simulation of what the

substation would look like as proposed.

So the substation would be screened by a 13-and-a-half-foot masonry perimeter wall, and it would also feature landscaping along that wall.

One thing to note is the change in the property from its previous use, which was a maintenance building for the University of Arizona, so there had -- that had quite a bit of traffic coming in and out of the site, so we would not have that kind of traffic coming in and out of our substation, and so it would relieve traffic and parking congestion in this area, and it would also improve visual quality and kind of the pedestrian experience along Vine Avenue.

Q. And, Mr. Bryner, I note that the simulated condition on the bottom of Slide 40 appears to remove several utility poles that appear in the current condition.

Why were those poles removed?

A. (Mr. Bryner) Yeah, so thank you, Ms. Grabel.

So if you look in the current condition, these poles, those are 46kV poles that source the current U of A medical substation. So as part of this project, those 46kV lines will retired and removed along with that substation.

Now, going down to the simulated condition, we

don't show --

MEMBER SOMERS: Mr. Chair.

CHMN STAFFORD: Yes. Who's speaking?

MEMBER SOMERS: This is Member Somers.

CHMN STAFFORD: Member Somers, can you please turn your camera on? It makes it a lot easier for the court reporter to make out what you're saying.

MEMBER SOMERS: I'll try.

CHMN STAFFORD: Thank you.

MEMBER SOMERS: There we go.

All right. So as you can probably tell, I have to go into a city council meeting right now, so I'm going to have to sign off.

CHMN STAFFORD: Okay. We're going to take a break here pretty soon anyway and get ready for the public comment that begins at 5:30. I think we'll take a break as soon as Mr. Bryner finishes his answer. But we're back tomorrow at nine.

MEMBER SOMERS: Nine o'clock. Thank you.

CHMN STAFFORD: Thank you. Good night.

MEMBER LITTLE: Mr. Chairman.

CHMN STAFFORD: Member Little.

MEMBER LITTLE: Mr. Chairman, is this the view from the residences that are on the west side?

MR. BRYNER: So, yeah, to orient you a

little bit, so we're looking south along Vine Avenue. So the substation is on the -- it's shown on the left side is the east, and so the residences are located on the west. So you can't quite see them in the frame, but, yeah, this would be the view from the --

MEMBER LITTLE: On that side. Great. Thank you.

MR. BRYNER: And so, yeah, looking at the simulated condition, so we don't have any new poles here. So that's not exactly correct because we didn't -- we created this simulation to share at some of our public open houses that we had, and we didn't want to demonstrate that we made a decision already on where this new line would go. And so we simply didn't show those.

But we will have a transmission line coming into this substation either from the south along Vine, the north along Vine, or just east of this location. Those are where our alternative routes are at.

BY MS. GRABEL:

Q. Thank you. Please continue.

A. (Mr. Bryner) So we've discussed the substations and why those sites were identified to meet the project need.

CHMN STAFFORD: Mr. Bryner, let's stop there. You can start with the -- you've covered the

substation. You can get to the details of the line itself tomorrow. We need to take a break to get switched up to gear up to take the public comment at 5:30.

MS. GRABEL: That's fine. We only have two slides left of this panel, but I understand timing constraints.

CHMN STAFFORD: Yeah. Because otherwise we'll be starting the public comment late, I think.

MS. GRABEL: We don't want to do that.

CHMN STAFFORD: All right. So with that let's take a recess, and we'll come back at 5:30 for public comment. Thank you.

(Recess from 5:15 p.m. to 5:32 p.m.)

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

This now is the time set for public comment on the Midtown Reliability Project, Line Siting case 232.

Each member of the public will have three minutes to speak. The podium is to my right. We do have a Spanish interpreter available. Ms. Grabel, where -- where is the interpreter?

THE INTERPRETER: Right here, sir.

CHMN STAFFORD: Oh, right there. Thank you. We have a Spanish interpreter here.

All right. We have a number of people

present in the room to make public comment. When I call your name please come to the podium. You'll have three minutes to give your remarks to the Committee.

Up first we have Alexandria Thomas. She indicated maybe she would speak.

All right. Up next we have Roberta Santiago. She indicated maybe.

We have a Mike Attwood. He indicated he wished to speak. Mike Attwood.

Please state your name and spell your last named for the record.

MR. ATTWOOD: Hello, my name is Mike Attwood, and that is spelled A-t-t-w-o-o-d.

CHMN STAFFORD: You can go ahead make your comments now, sir.

MR. ATTWOOD: So I am the president of the North University neighborhood, and along with many of the other neighborhood associations who are affected by this project I oppose the -- what TEP has continued to do of not agreeing to underground this project.

We fully understand that this is an upgrade to existing infrastructure and have no -- excuse me -- going first is kind of hard.

We have no opposition to the upgrade itself, but of course we have some issues with the

specifics going through our neighborhood.

None of us want this to happen, and we've repeatedly said this over the course of many years. And of course we believe that TEP should follow the law as it says that they legally have to underground their lines and we're not sure why there is this continuing opposition to what has been basically settled law and why it doesn't apply to them.

We don't think any of the arguments make much sense, and we hope that the outcome is in favor of undergrounding, or at the very least to change the routes.

We've had many conversations about what the routes should be, and every single time we feel that we are a little bit unheard as the routes seem to be picked before even asking neighborhoods. Repeatedly we have said different routes that we prefer and have had different outcomes, different proposals.

So in conclusion, we believe that this is not the correct way to do this, although a very necessary project. Thank you.

CHMN STAFFORD: Thank you.

Up next we have Adria Brooks.

MS. BROOKS: Hi, everyone. My name is Adria Brooks, B-r-o-o-k-s.

So I'm a little under-prepared today. I just found out about the project a couple days ago, but I'm former staff as a transmission engineer at the Wisconsin Commission. I currently work for the Department of Energy in the grid deployment office as a National Transmission Planning engineer.

CHMN STAFFORD: Can you please slow down?

MS. BROOKS: Sorry. I'll back up. Let's rewind that. Hi everyone, my name is Adria Brooks, B-r-o-o-k-s.

In my former career I worked at the Wisconsin version of the ACC at the Commission there as a transmission engineer. My background is in transmission engineering planning. I currently work for the U.S. Department of Energy in national transmission planning. So I'm very new to this project. I'm coming today not with any of those hats on, but rather as a resident who's in the study area.

So I mostly have some questions for this group, recognizing you can't necessarily answer them, but I would be curious to hear about those if anyone in the audience knows or if someone can point me to where I could find the answers, I would appreciate that.

So looking at national data for what we need, what a transmission system needs for reliability

for demand growth for clean energy integration, I'm not at all surprised that Tucson needs to upgrade its 48kV system up to 138.

That doesn't surprise me. If anything I'm actually wondering if 138 is large enough. And I would love to know if studies were done to understand how far into the future 138kV is going to get us. Would it be better if we were doing 161 or something higher.

So I'm curious to know if we're rightsizing this or are we going to be back in this room 10 years from now because we need to upgrade the line again, in which case could we consider going ahead and rightsizing those transmission poles or some of the substation components that were repaired to reconnect to 161 in the future.

So with that question, my second set of questions is I'm wondering if these are the traditional steel cables that we're using or if we're going to be using advanced conductors for this project, in which case that might help lessen the right-of-way and lower the towers that we're going to need in order to get the reliability that we need from this project.

That's all. Thanks.

CHMN STAFFORD: Thank you. You should probably consult with the applicant. They should have

the answers to those questions for you.

MS. GRABEL: Mr. Bryner's coming up right now.

CHMN STAFFORD: All right. Up next, we have Margo Belval.

MR. BELVAL: Well, as you can see I'm not Margo but Margo is my wife and her interests -- our interest is she purchased a house in Sam Hughes, I believe it was 1975.

CHMN STAFFORD: Can you please state your name and spell your last name for the record, please.

MR. BELVAL: Oh, okay. Sorry. My name is Ron Belval, B-e-l-v-a-l.

And I'm mainly here to support the TEP transmission planners because I was part of that group a long time ago, and so I can't bad-mouth those people at all.

So in the application, TEP acknowledged that the Midtown area in the Sam Hughes and other neighborhoods adjacent to the university all provide considerable value to the greater Tucson metropolitan area. So there's that. There's value of not only to the Midtown area neighborhoods of building a project and increasing reliability. But there's a broader value.

On the other hand, looking at the actual

planning of it, I think you could look at it two ways, who benefits. If you think there's a project that benefits Midtown, then it sounds like 46kV upgraded because I believe I saw that it was approaching the limit of its capacity. So if you're just focusing on that, you might look at a smaller project.

But the 138kV line if I recall correctly, and it's been a few years, that building that line would create another path between the major sources from the transmission system that TEP has in the south and with a 500kV source out of Tortolita.

So building this project improves the reliability of the 138kV network that serves the greater metropolitan area. So that's who benefits from this.

So, and I'm sure that TEP has looked at -- the planners have looked at all the alternate routes. But since these neighborhoods provide such a great value and they have a long historical legacy, I would hope that the Commission or Line Siting Committee would consider that factor in making this decision, the quality, the visual aspects of it that would definitely be changed by a transmission line could detract from the value.

And so -- and getting back again to the engineering aspect of this, there are three main paths between the sources, and one or two of them goes out,

then the other one gets overloaded and closing this 138 path, and tell me if I'm wrong, would provide another path to alleviate the loading thereby improving the reliability.

And I've always had a hard time dealing with the incremental cost of undergrounding, but I think there's certain places where that may be warranted, and if you do find it's warranted and I hope you do, then since this is a broader benefit, this shouldn't be borne by the TEP ratepayers in general. Thank you.

CHMN STAFFORD: Thank you.

Up next we have Jan Gordley, but she has indicated she does not wish to speak.

We also have a Terah Partridge, which she has indicated she does not wish to speak.

Colleen Nichols. She has indicated she does not wish to speak.

Warren Egmond does not wish to speak.

Michael Guymon.

MR. GUYMON: Good evening. My name is Michael Guymon. G-u-y-m-o-n.

I'm president and CEO of the Tucson Metro Chamber, and I'm also a Ward 6 resident in the Sewell neighborhood near 5th and Craycroft.

The Tucson Metro Chamber strongly supports

Tucson Electric Power's application for a certificate of environmental capability for the Midtown Reliability Project.

As the region's leading business advocacy organization, representing 1400 member businesses and 160,000 employees, the chamber is committed to fostering competitive, thriving economy.

The chamber supports initiatives that create an environment where businesses can flourish and the community can prosper, while also balancing the economic development with community needs.

TEP's Midtown Reliability Project does just that, and is a significant step toward promoting a robust, reliable energy system that underpins economic growth and enhances the quality of life for all Tucsonans.

I can tell you that as an employee, former employee of Sun Corridor for seven and a half years working with companies that are looking to relocate or expand into our region, TEP was in almost every single conversation with those companies to help them understand the electric liability and the access to electricity within our community, which was one of the major components that companies look at when they're looking to relocate or expand.

Reliable power infrastructure is foundational to economic development, fostering business growth, attracting new investments and supporting the overall economic health of our community.

This upgrade will directly benefit 62 Central Tucson neighborhoods, including over 36,900 homes and more than 6800 businesses while also paving the way for new business development and job opportunities in the area.

Additionally, the project will enable TEP to retire up to eight 46kV substations within 10 years, avoiding significant replacement costs and resulting in a more efficient infrastructure.

TEP's transmission and distribution improvements will allow customers in the area to continue adding rooftop solar, private battery storage systems, and electric vehicles promoting sustainable energy solutions and advancing our community's economic and environmental needs.

The Tucson Metro Chamber believes the Midtown Reliability Project is vital for Tucson's continued growth and prosperity. We encourage the Committee to approve TEP's CEC application to ensure reliable and robust power infrastructure that will drive economic development and support the thriving central and

greater Tucson area.

Thank you very much.

CHMN STAFFORD: Thank you.

Up next we have Rosemary Bolza.

MS. BOLSA: I'm Rosemary Bolza, B-o-l-z-a.

I live in the Jefferson Park neighborhood about one block and a half from where the Vine Substation is proposed.

When I first heard about -- and I do believe that TEP can do better than this. When I first heard about the project, it was in conjunction with the U of A becoming carbon neutral. And I thought, well, that's great.

But as we've learned more about it, the Vine proposed substation is in a very awkward place. It has to thread its way through Banner and these historic neighborhoods. And I believe that the TEP local employees are really fantastic people.

But I feel that the administrators of TEP are trying to bully the neighborhoods in accepting this location of this substation that is so awkward. And I'm very concerned about the idea of aboveground high power lines in our era of wild weather. There was just a microburst that knocked down five poles onto standing traffic. Now, the big poles probably won't snap like

that, but the lines can.

And also with our era of terrorism, these lines are susceptible to people with drones, to people cutting them, and I just we've been at this for years. And I think it's time to look at better technology and better methods. Thank you.

CHMN STAFFORD: Thank you.

Dorothy Richman does not wish to speak.

Randy Hotchkiss.

MR. HOTCHKISS: Randy Hotchkiss, H-o-t-c-h-k-i-s-s. I live at the intersection of Campbell and Mabel, East Mabel Street in the Blenman-Elm neighborhood. I represent the Blenman-Elm neighborhood in this endeavor, my house is one block east of Campbell, two blocks north of Speedway, definitely in the TEP high-power transmission line impact area.

I represent the Blenman-Elm neighborhood, and the neighborhood overwhelmingly objects to the aboveground power line. Several reasons. I'm a U of A alum, Tucson native, I love Tucson. I lived in Phoenix for a while -- sorry, Phoenix people. I lived in California for a while. Tucson is a wonderful place to live and we want to keep it that way.

TEP, a 138kV aboveground power line structure would visually, severely visually impact the

gateway to Tucson and the University of Arizona. We rely on this gateway to attract visitors, to attract businesses, to attract everybody. It's right from the airport, it's a direct route right into the Tucson community and U of A campus.

Loss of property values up to 40 percent has been well demonstrated, although TEP does not agree with me on that. It is well demonstrated up to 40 percent if you live within 400 feet. It breaks down lower as you move out.

My house is within 400 feet.

The negative impact of living near or under power lines has a negative health hazard. TEP disputes that. There's been several studies including leukemia studies in children. If you want to go to Google it, go ahead and Google it. Impact of high-powered transmission lines on health with children and leukemia.

The Campbell-Kino gateway scenic route, it's a direct route to U of A campus, I told you that. The route passes through several historic neighborhoods, churches, Banner Medical Center. It would be absolutely criminal to run a high-powered transmission line along this route.

To protect the gateway scenic route, the City of Tucson enacted the gateway and scenic corridor

ordinance which requires new power lines must be placed underground. The City of Tucson Gateway Corridor Zone Section 5.5.4 subsection (b)(a) states that all new utilities must be aboveground -- I'm sorry, below ground, underground. Sorry.

CHMN STAFFORD: You're over three minutes. You've got another 10 seconds to wrap it up, sir.

MR. HOTCHKISS: Ten seconds. Have I gone three minutes already?

CHMN STAFFORD: Yes.

MR. HOTCHKISS: Have I?

CHMN STAFFORD: Yes, I'm timing you.

MR. HOTCHKISS: Okay. I'll just get right to the end. It's absolutely outrageous that TEP wants to do this to our neighborhood, the Gateway Corridor, the University of Arizona, Banner, the historic neighborhoods. We must protect our neighborhoods. We must protect our city's Gateway Corridor. We must protect our historic neighborhoods. We must protect our scenic routes. We must protect the beauty of Kino Gateway Corridor.

TEP and its Canadian parent company must follow the established laws and put the underground line underground. Thank you.

CHMN STAFFORD: Thank you.

Up next we have Christine Villela. I'm sure I'm not pronouncing that correctly.

MS. VILLELA: My name is Christine Villela. It's okay. Lots of Ls. Spelled V-I-l-l-e-l-a.

Thank you, members of the Committee, for your time tonight. I along with my father own eight homes on East Adams Street in the North University that are along the TEP preferred alternative route. We oppose TEP's alternative route that allows high-powered aboveground lines along East Adams in this neighborhood.

My father, Mike Teufel, has submitted a letter to the Corporation Commission, and I ask that you carefully consider before making a decision. I didn't know what this meeting was like. I brought 12 copies if those could be passed around. I just can't know it was this big.

But East Adams is purely a residential street. Why TEP picked East Adams as a preferred route is a mystery to us, because there are more direct routes to the Vine Substation.

Regardless, TEP's own preferred alternative B and preferred 4 place some of the high-powered lines in this residential North University and Jefferson Park neighborhood underground. But when it gets to Adams Street, TEP is proposing to bring them out of the ground

directly over the residential houses owned by my father and me, which are rented to young students.

There is no reason that if the plan is approved the lines through Adams Street should not be underground. The length is less than 2,000 feet. There is nothing that would make it expensive or difficult to place these lines underground.

I'm not aware of any government entity that is allowed high-powered aboveground lines to go directly over preexisting residential houses where young people are living.

These lines are not safe for young people. The National cancer Institute has stated that various studies have shown that those high-powered lines increase childhood leukemia by 1.4 and twofold. This is not something that I'm making up. It is in detail in the letter that we sent and it's on the cancer.gov/about-cancer/causes-prevention/risk/radiation/electromagnetic-fields-fact.

There is no reason that TEP, which is owned by Fortis, Inc., cannot afford to place these lines in this 2,000-foot stretch underground. In 2023 alone Fortis, which owns TEP, made $1.5 billion in profits. Fortis has paid 50 consecutive years of increased dividend paid to shareholders. Fortis has more than 68

billion in assets and more than 12 billion in 2023 fiscal revenue.

Fortis has paid its chief executive and president, David Hutchins, more than 14 million in 2022. I ask you to do the right thing, and if you allow high-powered lines through the residential streets in North University and Jefferson Park that you require TEP to put them underground. I thank you for your time and consideration on this matter and for your public service.

CHMN STAFFORD: Thank you.

Up next we have Peg Weber.

Jesse Lugo does not wish to speak.

Are you Peg Weber?

MS. WEBER: I am.

CHMN STAFFORD: Thank you.

MS. WEBER: Good evening, I am Peg Weber. W-e-b-e-r. I have a home in the neighborhood North University.

Our area, North University, is not historical. However, we're part of Tucson next to historical neighborhoods. My -- I'm sorry I did not say I was going to speak when this -- when you-all called me up.

It's important for our community to look at our whole community. I don't think that any of us

disagree that we don't need better, more efficient power. In our area, we believe it should be underground. I think for the whole city, it should be underground. Because as has been pointed out it can be afforded and it is the right thing to do.

There have been a lot of Tucson plans, we always say let's do the right thing. When you go to public meeting what would you like to see? And everyone says we would like to see fewer cars, we'd like to see bike lanes, we'd like to see better pedestrian things and all of the -- everyone gets excited.

And then that dissolves when we can't afford it. But we can afford it and we need to. We need to make our communities stronger and it's not like we can do that later. We need to do these things now, and this is one of those now things that we could do. Make the things go underground and prove the electricity as they should be and move on to the next neighborhood and the next neighborhood.

Because this really is a whole Tucson problem, issue, and opportunity. Thank you.

CHMN STAFFORD: Thank you. Sara and Earl O'Neil indicate they do not wish to speak. Kathi McLaughlin.

MS. MCLAUGHLIN: Good evening. My name is

Kathi McLaughlin, M-c-L-a-u-g-h-l-I-n.

I'm a licensed architect in the state of Arizona for 48 years. Planning and urban planning, architecture and urban planning have been my interests.

TEP is here to argue that the Arizona Corporation Commission should override Tucson's long-standing local regulations regarding utilities along scenic and gateway routes. TEP's argument -- sorry -- that might be better.

TEP's argument rests entirely on the validity of its assertion that the cost to underground its lines is so much greater than the cost to overhead that the cost makes the project infeasible.

However, in other legal documents TEP has acknowledged the exact opposite, that the cost of undergrounding is indeed feasible.

TEP acknowledged this fact when it signed its current franchise contract with the City of Tucson. In that contract, TEP explicitly agrees to underground its utility projects at its own expense wherever the City had required undergrounding prior to the execution of the contract, which is the case here. And that the costs for undergrounding will not be a limiting factor or argument against undergrounding.

TEP must have understood that the costs of

undergrounding are feasible or it could never have entered this contract with the City. Or worse, it entered into the contract in bad faith.

Tucson requires undergrounding of utilities within the city in only a few circumstances, and the reason TEP could sign the contract in good faith is because the cost to underground is, in fact, feasible.

Take TEP's own estimates for the cost of undergrounding the project, setting aside for the moment that the estimates are likely inflated, divide the costs by the number of ratepayers and then spread the cost per ratepayer over the actuarial life of the project. And the result would be -- wouldn't come anywhere close to even 1 percent increase of a $100 TEP utility bill.

So less than one percent cannot be considered infeasible.

And for those low-income Tucsonans who might have problems with even a tiny increase in their electric bill, there are programs available that would offset that extra cost.

So when TEP tells this Commission that the cost of undergrounding is so infeasible that it warrants the ACC overriding duly enacted local regulations, it is simply not the truth.

The Kino-Campbell scenic route is the only

scenic route actually constructed to be a scenic route. This happened in 1985. It became the gateway from the airport into the heart of the city with Campbell Avenue extending all the way to the Catalina mountains. It's the only avenue that does that in the entire city.

Tucsonans paid for that pathway to remain beautiful and inviting. Uglifying it with monstrous TEP infrastructure would be tragic. And now TEP wants to renege on a binding commitment it made to Tucson when the City extended TEP's franchise. Please hold TEP accountable for its promise.

CHMN STAFFORD: Laurie Mulcahy does not wish to speak.

Tony Pyle does not wish to speak.

Herman Weez does not wish to speak.

Meg Johnson does not wish to speak.

Nancy DeFeo does wish to speak.

MS. DEFEO: Nancy DeFeo, D-e-F-e-o.

TEP has assured you that the construction of 138kV transmission lines will have no impact on nearby property owners and has submitted a study to that effect.

There are a few points in that report that I'd like to refute.

Important point 1: The report implies that transmission lines, the height and size proposed by this

project, are already common in the center of the city. This is false. Their study contains no such examples in the center of the city of either a transmission line or of any other line higher than 60 percent of the proposed lines.

Important point 2: Half the studies done on 138kV transmission lines conclude that those lines do reduce nearby property values. Therefore a reasonable conclusion is that at least some or many property owners will suffer reductions in their property values.

Approximately 2,000 residential property owners live within two blocks of the proposed project on roadways where the City requires undergrounding. The study reporting property value reductions find that the drop in property value averages about 5 percent.

Example: If even one-half of affected property owners end up with a loss of 5 percent, it would mean a total loss of $20 million in property values to those Tucsonans based on the median price of Tucson homes. That big loss might be the best-case scenario.

Important point three: TEP says the effect of value reduction lasts only four to six years and then disappears. Even if that was true, and it is contested by many studies, it will still cost all those residents a lot since the average duration of home ownership in the

country is only about eight years.

Therefore a fair number of those affected owners will likely sell their homes within four to five years. It would cost each of those hundreds of Tucsonans about $20,000 on average at the median home price. That's a huge loss of money for a typical family to bear, and the majority of Tucsonans along the proposed route are typical average families.

Most important point four: When the Committee is thinking about fairness to ratepayers, remember these ratepayers, who many studies show could well lose many thousands of dollars if the project is built aboveground. Compare that great loss to a differential cost of maybe a dime to a dollar a month to all ratepayers if the project is constructed underground.

CHMN STAFFORD: Up next, Christy Cummins.

MS. CUMMINS: Good evening, and thank you for providing this opportunity for us to speak. As you can tell the majority have been comments about wanting the lines to be underground.

CHMN STAFFORD: Can you please state your name and spell the last name for the record? Thank you.

MS. CUMMINS: I'm sorry. Christy Cummins. C-u-m-m-I-n-s.

The majority have been asking for

underground. I was lucky enough to go with my husband to the TEP meetings that spoke to the neighborhoods that would be affected by such a situation.

At each meeting we all begged and pleaded for undergrounding, and it became clear that it would never happen. And they told us directly it will never happen, it's way too expensive. So we worked hard on trying to route this -- this situation, find the best routes. There are no best routes because all of them will go through somebody's neighborhood. So you have to pick somebody else's neighborhood for it to go through, which was very unfair.

My objection to the whole aboveground is the situation I have seen on Grant going east, on Fort Lowell, if you start looking around our streets they have been putting up these ginormous poles and they are hideous. And I don't see any solution. This seems to be the only thing they can do is put up those humongous poles that are nothing but a visual abomination.

So my objection is visually any of these things above the ground have been awful and they have impacted me. They have impacted our neighborhoods. Even though they're -- most of them are on major streets, but they're all up Tucson Boulevard which has a lot of neighborhoods in that. So my objection is aboveground is

so bad looking that it affects -- it makes our city look like third-world country and I have lived in third-world countries. Thank you.

CHMN STAFFORD: Thank you. Up next we have Jim Cummins.

MR. CUMMINS: My name is Jim Cummins, spelled exactly like the lady before me, C-u-m-m-I-n-s.

I was the neighborhood representative for the Richland Heights East neighborhood for this advisory group with TEP. My neighborhood is on the far northeast periphery of the study area, but nonetheless we were -- I was engaged with them and I thank TEP for having that advisory group. At least we could understand the project and see what was going on.

As I've heard from many of the other people that were engaged with this, I would say that nobody was happy with the final solution, even though we all probably agreed that the project needed to go ahead. It's additional power requirements in all these neighborhoods, it's a fact of life that we're using more and more of this electricity.

The solutions that have come up with are always going to impact neighborhoods. The only way to not -- to minimize that impact is to put them underground. I'm sure that this Committee, the ACC, the

City of Tucson, there's all rules and regulations that'll say, gee, we can't do that, we can't force this. But it's something that needs to start somewhere and this Committee could be one, it could be the ACC, it could be TEP's parent company saying, you know, we have enough money, we can do this and make it better.

And lastly, I just finished a week-long tour with a college buddy of mine of northwest New Mexico, southwest Colorado, some beautiful communities that we saw. And one of the things that struck me was throughout these communities, you saw very little aboveground utilities. And it's not just power lines it's cable lines, it's telephone lines. All these things.

Once you start to notice it, you see it everywhere. And I'm hoping this Committee could help drive some change in the organizations, in Tucson's directives, and in TEP's parent company and make a difference now and try to get this stuff underground. Thank you.

CHMN STAFFORD: Thank you.

Up next we have Gayle Hartmann.

MS. HARTMANN: Mr. Chairman, I think it is Mr. Chairman.

CHMN STAFFORD: Yes.

MS. HARTMANN: And members of the Committee, my name is Gayle Hartmann, G-a-y-l-e H-a-r-t-m-a-n-n.

I'm president of the Sam Hughes Neighborhood Association. We are a Midtown neighborhood bounded by Campbell Avenue, Country Club Avenue, Speedway Boulevard, and Broadway Boulevard.

Tucson Boulevard bisects our neighborhood.

Originally the huge poles that are proposed as part of this project were to run along Campbell Avenue, our western boundary. More recently Tucson Boulevard has been proposed as an option that would bisect our neighborhood. Our neighborhood is strongly opposed to this proposal of TEP.

I want to point out initially that a statement by TEP in a recent information card that we received is really misleading. It states, "Using input from Midtown residents and other stakeholders, TEP identified several potential overhead transmission line routes."

The several potential overhead transmission line routes were presented by TEP, but they were not agreed upon by Midtown neighbors. I'm sure you know that in reality there is a strong feeling among the residents in our neighborhood and other neighborhoods that the

proposed lines need to be underground.

Underground is common in many parts of the country as the recent speaker just mentioned, and we are convinced that that is the only reasonable solution here. Also, as others have pointed out, undergrounding seems to be economically feasible.

I'm sure you know that there's more than one local ordinance that clearly states the industrial poles that this project plans to use have no place on several of our streets.

We have a University Area Plan and the scenic gateway and route ordinance are both examples that make it very clear that undergrounding is required. And these ordinances have been in place for a number of years. TEP certainly knew of their existence and therefore should have planned to underground their lines from the beginning.

In addition, I note that when considering a certificate of compatibility, historic sites and structures need to be taken into account. The Sam Hughes neighborhood and other neighborhoods are historic neighborhoods and are on the National Register of Historic Places. The huge poles being proposed have no place in or near any historic neighborhood.

I want to make it clear that we are not

suggesting that the project as proposed should be sited somewhere else. A recommendation that was put forth some months ago proposed that aboveground poles would be acceptable in industrial areas, but that in all other locations the poles need to be underground. We concur with that proposal and hope you will as well. Thank you.

CHMN STAFFORD: Thank you. Up next is Jonathan Salvatierra.

MR. SALVATIERRA: Mr. Chairman, as a point of information --

CHMN STAFFORD: Can you please get to the microphone?

MR. SALVATIERRA: Mr. Chairman, as a point of information, how many more speakers are left?

CHMN STAFFORD: Let's see.

MR. SALVATIERRA: There's been about 30 to 40 percent that declined.

CHMN STAFFORD: I have nine names on the sign-in sheets that have indicated they want to speak and then I don't know how many we have either on the phone or on the Zoom call.

MR. SALVATIERRA: Okay. I have a single one-page summation and I'd like to finish it.

CHMN STAFFORD: Well, let's start by getting your name and spell your last name for the

record, and then you can commence with your remarks.

MR. SALVATIERRA: Thank you. My name is Jonathan Salvatierra, S-a-l-v-a-t-I-e-r-r-a.

Commission members, stakeholders and public, I'm a retired railroad conductor, an active licensed real estate broker, Democratic LD20 PC 246 member, specializing in community health and environment advocacy, as well as over 20 years with the Citizen Advisory Board as a member on the Mission Linen-Park Euclid HAZMAT superfund site.

My experience from these endeavors over a lifetime as a native Tucsonan gives me a unique view of the challenges and the dismal benefits gained when industry, ADEQ, and civil servants fall short of safety guarding the quality of Pima County residents' health, environment, and economic liability risk exposure. And this may be in some related elements historic.

Many U.S. -- many U.S. -- well, Tucson citizens remember the scenic sunrise butte of the Enron era when TEP at their Irvington plant made a million dollars of revenue each night generating California energy needs. TEP got the money and we got the sooty sunrise to breathe.

This facility must not be permitted to sell energy outside of Pima County needs. Our regular ozone

alerts, moderate to poor air quality and unnecessary deadly silent killers of our youth and seniors.

So is the long-standing public disinformation on the overhead energy poles cost basis versus undergrounding cost and lower maintenance.

The Shannon and Ina Roads two-week closure from the verified -- a verified tornado is one of the more scenic and road hazard issues threatening our public health and safety.

TEP murder poles exist along Euclid, Country Club, and Alvernon, mere inches from city street curbs. Safety is second to profit along our city streets without bike lanes.

TEP's renewable wind and solar are dwindling benefit to homeowners, but look invitingly interesting as their dog and pony show TV ads.

TEP's 2050 renewables projection will leave Tucsonans the last to ever benefit from new technology.

Finally, TEP as a proxy for foreign-owned parent Fortis took $1.6 billion out of this country and Pima County in 2022, while every public franchise fee dollar we pay for gets surcharged 12 percent more before the asset or benefit becomes a converted asset of Fortis.

It is my fervent hope that this Commission denies and refuses to be bound to the -- to comply with

TEP's misleading rhetoric. Until the state, county and city can review TEP as a short-term subcontractor in transition to a commonwealth public energy group that keeps the new assets we safely underground for our continued scenic public safety and cost benefit solution. That's all I have. Thank you.

CHMN STAFFORD: Thank you. All right. Margaret Kish does not wish to speak.

Rhonda Baga does not wish to speak.

Pat Homan does not wish to speak.

Evelyn Thomas has a question mark.

MS. THOMAS: My comments have already been made by many other people.

CHMN STAFFORD: So Evelyn Thomas does not need to speak.

Vytas Sakalas.

MR. SAKALAS: Thank you. Thank you. My name is Vytas Sakalas, spelled S-a-k-a-l-a-s.

I'm a 32-year resident of the city of Tucson in the Sam Hughes neighborhood, and a member of the Sam Hughes Association Board of Directors.

Upgrading the existing power lines in the city of Tucson is not in dispute. That is necessary.

However, we ask that TEP respect the wishes of the people of Tucson. By the way, Phoenix, Tempe,

Scottsdale, and even downtown Tucson enjoy underground power lines, so it's only fair that we get them in our scenic corridor areas as well.

Because we care about how our city looks. TEP is apparently in deep denial of aesthetic values that are important to any city, and Tucson residents agree on that in general.

Industrial-scale power poles are not appropriate in Midtown Tucson. We ask that TEP serve the residents of Tucson first instead of seeking to extract the most profits for a relative handful of out-of-state and foreign investors.

Tucson's underground coalition has conducted an extensive in-depth study of the issue and concluded that undergrounding the upgraded power lines is very feasible. And it would be the most appropriate solution. It's a solution that would be in accord with the law preserving our city's viewshed, the Gateway Corridor, and property values are vital to the City of Tucson. Thank you.

CHMN STAFFORD: Thank you. Paula Chalmsky said she does not wish to speak.

Diana Lett.

MS. LETT: My name is Diana Lett, my last name is spelled L-e-t-t.

I am the treasurer of Feldman's Neighborhood Association and the chair of our Neighborhood Preservation Committee. I'm seeing that people can't hear me. Is that true?

Again, I'm the treasurer of Feldman's Neighborhood Association and the chair of our Neighborhood Preservation Committee.

I want to explain an aspect of the cost to residents that has not been elucidated by the previous speakers. Historic district, Natural Register historic districts exist to preserve the historic streetscape. If you put giant power poles in front of historic buildings, not only do the individual buildings lose their National Register listing, the entire streetscape loses its listing and potentially the entire neighborhood.

Whenever individual structures lose their listing, that's an approximately 50 percent increase in property taxes automatically.

If an entire district loses its listing every property in that district loses its tax break.

This is a very big deal for people trying to age in place. We really want you to understand that this is a big part of why neighborhoods really vehemently object to abovegrounding power lines on neighborhood streets and historic districts. It is a huge burden,

economic burden on the citizens. Thank you.

CHMN STAFFORD: Up next we have Andrew Christopher.

MR. CHRISTOPHER: Hello, can you hear me?

CHMN STAFFORD: Get a little closer to the mic, please.

MR. CHRISTOPHER: Is this good?

CHMN STAFFORD: That's better. Thank you.

MR. CHRISTOPHER: I'm Andrew Christopher, common spelling. I'm a Commissioner on the Tucson-Pima County Historical Commission. We sent a letter to the ACC dated July 1, 2024. I would encourage you all to read it. It outlines dozens of neighborhoods and historic districts and assets that this potential route would impact. However, I'm not going to be speaking on behalf of the Commission tonight. Somebody else will later in the evening.

I am also the president of the Arroyo Chico Neighborhood Association, and I was in the Neighborhood Association Advisory Group that met with TEP several times.

One thing that we all agreed on was there was no proposed route that we could unanimously support. All the routes impacted one group or another, and if you shove the route away from one asset you impact another.

So in these meeting we learned a lot of revealing information from TEP. One of them being that a lot of their substations are equipment exceeding 50 and 60 years old. Many of them rated in TEP's own assessment in poor or in very poor condition. As many of you know we experience regular power outages when we have major storms, and in extreme cases we have a whole blocks of power lines failing into traffic.

So as TEP is so concerned with reliability, a good place to start would be properly maintaining the infrastructure that they already have and that we already pay them to maintain.

We have been told that the demand for electricity has gone up citywide across all consumers. But the location of the Vine Substation should tell you all you need to know about where the real demand is coming from. The University of Arizona builds another multi-story research building every couple of years and another multi-story student housing complex goes up at about the same rate. However, the U of A and big developers like that pay lower rates for their power than the average residential citizen.

TEP makes hundreds of millions of dollars in profit every year, yet they claim they can't afford to do the right thing and underground these lines. It's

time that they pay up and make their industrial consumers pay their fair share. Thank you.

CHMN STAFFORD: Thank you. Charles Vernon does not wish to speak. Geoff Boyce.

MR. BOYCE: Thank you, all. My name is Geoff Boyce, B-o-y-c-e.

I am a homeowner and resident in Pie Allen neighborhood. I have been following this process for a long time, and I am really -- I'm here to voice really a feeling that I know many of my neighbors share, which is being kind of despondent and certainly upset that at the end of many years of conversation and engagement by all of the neighborhoods impacted by the proposed line siting that the option of undergrounding these lines, which I think is almost a consensus certainly among the people who have spoken tonight, you hear this over and over and over again, has been dismissed by TEP, is not on the agenda now as a solution for this infrastructure project.

As you've been hearing, many of the neighborhoods that are going to be impacted by these new transmission lines are historic neighborhoods and the scale of these transmission towers is way out of scale with the historic neighborhoods that they're going to run through.

I frankly think it's outrageous that there

is a feasible solution that is broadly supported by the Tucson community, by the residents who are adjacent to this project that is not seriously being considered by TEP and I -- I sincerely hope they will -- they will revisit that question and that this Commission will use whatever leverage it has in order to insist that they revisit that option. Thank you.

CHMN STAFFORD: Thank you.

Ryland Plassman does not wish to speak.

Tom Baca does not wish to speak.

Donnie Carroll does not wish to speak.

Kevin Bitten.

MR. BITTEN: Hello, my name is Kevin Bitten, I'm president of the Pie Allen Neighborhood Association, and I'm here to encourage the Commission to not certify this project, and represent Pie Allen in that respect.

I'd like to start with an anecdote. When a representative of Tucson Electric Power came to our neighborhood meeting and we discussed this, the obvious solution seemed to be to underground these lines. And when I mentioned that to the person who was representing TEP, what he said was, well, the Corporation Commission has deemed it unsuitable for us to charge our customers the costs there would be to underground the lines, so

that's not feasible.

I'd like to read something for you from an article entitled "TEP Seeks Rate Hike Despite Company's Rising Profits," published in the Arizona Capitol Times.

In 2020 TEP's profit or revenue above costs was 191 million. That jumped to 201 million in 2021, 217 million in 2022. These increasing profits came despite high inflation and other pandemic-related economic stresses that have burdened many individuals and businesses.

I'd like to point out also to everyone that for TEP, there really is only one responsibility and that's their fiduciary responsibility to their shareholders. The same is true of Fortis. And in our system of government and economy, it's contingent on democratic institutions like the Corporation Commission to be the only counterweight against that sole value for a corporation.

Legally, a corporation's board, their only responsibility, in fact, they're negligent if they don't serve this responsibility, is to serve the profitability of the corporation in order for the shareholders to increase in value.

And they would actually be negligent if they failed to do that. If they could get 200 million

out of us they will, if they can get 400, it's their responsibility to get 400. If they can get 600, their responsibility is to get 600. They have no responsibility to our community or to whether it's beautiful or livable or anything like that.

And I don't begrudge them that. That's their job. It is the Arizona Corporation Commission's job to be our representative and put some constraints on that board, so they can go to their shareholders and say, well, we would have gotten 600 million but that Arizona Corporation Commission made it now we can only get 200 million.

So I encourage you to think about the people of Tucson and that we really -- you're our only representative at this point in this fight. We have passed a local law. But apparently that can be overridden on a state level.

So you're really, you're our only advocates at this point. So please keep our perspective in mind. Thank you.

CHMN STAFFORD: Thank you. Henry Schnecklin does not wish to speak.

Stacey Plassmann does not wish to speak.

Paula Chronister.

MS. CHRONISTER: Hi, my name is Paula

Chronister, it's spelled C-h-r-o-n-I-s-t-e-r.

Ive been involved with this process over the last year. I've attended every public meeting we've had. I've also served on the advisory group as a representative from the Palo Verde Neighborhood Association, of which I serve on the board there.

The Palo Verde Neighborhood Association is not directly benefitting from this, but it actually sits on the -- it's actually east of Country Club, so it's right on the edge of the service area for here and as a result of that TEP reached out to us to get involved.

One of the things that you've heard and I've heard literally everywhere I've been has been this idea of undergrounding. This is not a new idea. Every -- literally every time there has been an open forum on this, probably 99 percent of the people spoke to undergrounding.

Gayle Hartmann came up here and spoke and I agree with her, which is the idea you can actually put certain kinds of thing overhead in industrial areas and go underground in town. And I think that's a good solution. I liked what the last speaker had to say which is you guys are our representative now.

We've given all the input, we've actually had the opportunity to provide through this period of

time and we're now asking you to really think about the quality of life in Tucson and, you know, what the Tucson citizens actually want with this.

And this, again, has been just a consistent request not only through this TEP process but through the TEP process that I think happened, what, three years ago, six years ago, five years. Five years of the same request going on.

So please take this into consideration and recognize what the residents want. And that there is a solution that we can come together on, but TEP actually has to, you know, come forward with some additional funds or initial innovations in how we do things.

TEP also with the advisory group did talk about mitigations, that in the event that they got approval to be able to move forward that they would actually work with neighborhoods to actually look at mitigating certain kinds of things.

Those things could look like painted poles. You go out on Sunrise in this town and you'll see poles painted, and they sort of start to disappear. It looked like working with people around vegetation actually trying to make things much more visually palatable regarding things. And I would encourage in the event you actually do move forward with this that you actually ask

TEP to work very diligently with the communities affected in terms of actually implementing those mitigations. Thank you.

CHMN STAFFORD: Thank you. Up next we have Matt Somers.

MR. SOMERS: Sorry, Chairman Stafford, I decided to go and make some comments. My name is Matt Somers, S-o-m-e-r-s.

I have a few points to make. First of all, let's have a reality check on a couple things.

I would love to go ahead and have it undergrounded easily. Problem is we've already gone through the Broadway widening. It took one year to go one mile. According to the past history on this, there has been noted that it's five miles, it will take approximately five years to underground.

In order to get the underground, it's got to be a culvert 20 feet wide and 10 feet deep, because of the size of the line. Which means if you're trying to go on any street you're going to take out traffic for literally years. It's going to be awful. Having worked at the water department, you're going to find utility lines underground that you didn't even know about. So I love to have undergrounding but there is a problem with it.

I do understand that the preferred line is B4. I believe it's called B4. I would suggest C5. C5 goes down Stone from Grant, east on Speedway, comes back on Speedway, goes back down Stone and goes towards the downtown area. I believe this would be the best way to mitigate any problems with the neighborhoods that are represented today and have been represented in the past.

Okay. Especially for the reason that B4 won't work real well is because you have 40,000 students going to the U of A with 15,000 approximate support staff.

So therefore, you're going to have huge amount of people walking, driving, using their electric bikes and everything else all over the place. With these lines that are approximately 10 feet wide at the base, you are going to have visual problems on traffic. That would be awful on Euclid. I hate to go and say to use Stone but Stone is not used anywhere near as much. Okay.

And then, let's see here. The substation that is supposed to be on Vine is going to use one of the most deadly chemicals out there in order to exist.

Since they can't put five acres together to make it an outdoor substation and only two acres at the best, they're going to use a chemical that's going to have 200,000 times as bad in carbon emissions if you have

one cubic foot, if that is released, one cubic foot of that chemical it's going to wipe out over 200,000 cubic feet of air. That's how dangerous that is.

Europe has some substation chemicals for the same thing that is nowhere near as damaging to the environment and nowhere near as dangerous. I believe that needs to be also considered in this.

Okay. Again, I would love to go and have it underground in some wonderful way that could be done by magic. But it will not, and as I say it will be five years of problems with the -- with the traffic in the area.

Okay. Please do not use Euclid, though. That is one that would be awful.

Okay.

CHMN STAFFORD: You're over three minutes, sir.

MR. SOMERS: Oh, well, thank you and good luck.

CHMN STAFFORD: Thank you very much.

Up next we have Kim Franklin, who is a maybe. All right. None from Ms. Franklin. Joe Plassmann is a no to speak.

Jennifer Becker does not wish to speak.

Is it Mindy Bassie does not wish to speak.

Stephen Yozwiak.

MR. YOZWIAK: Hello, everyone. Mr. Chairman. So I don't live --

CHMN STAFFORD: Can you state your name and spell your last name for the record, please.

MR. YOZWIAK: Yes.

CHMN STAFFORD: Thank you.

MR. YOZWIAK: Stephen Yozwiak, it's Y-o-z-w-I-a-k, and I don't live anywhere near this proposed project. I live up in northwest Tucson. But I come down to visit friends and family all the time along the proposed routes of this project.

And I'm back in the Tucson two years ago from Phoenix, in part because I finally remembered as a student at U of A the beauty of the mountains surrounding the Old Pueblo, and it hurts me to consider how the viewscape of the Catalina mountains will be permanently compromised by this proposal.

I've been to the informational open houses, read the maps and the literature, talked to many experts about this proposal, and I object. I conclude that it's exceedingly possible to put these lines underground. Now, sure it will maybe cost a bit more. But don't think of it as a cost. Think of it as an investment. An investment in the future.

These tall poles and lines you're proposing, they would degrade not the nearby property values, but also in turn erode the value of adjacent properties leading to a cascading effect of dwindling desirability of the entire central city. This is simply unconscionable and extremely shortsighted.

If you approve this, what will you tell your children and grandchildren when they learn that you could have made a difference, that you could have made their world better? Let me say with the firmest resolution I can muster, I object to the Corporation Commission approving the proposed overhead lines recommended by TEP.

The preference of the multitude of residents who oppose this project must be heard and followed. We have an election coming up in November and if this is approved by the Corporation Commission, it will give the residents of this state, the voters one more reason to vote out the current regime and elect three Democrats to run the show now. Thank you very much.

CHMN STAFFORD: Thank you. I don't have any more sign-in sheets with public requesting to speak. Do we have anybody on the Zoom or on the phone?

A/V TEAM: Mr. Chairman, I have five online

participants who have indicated they wish to speak.

CHMN STAFFORD: Let's take the first one. I can't see any names to call.

A/V TEAM: Mr. Chairman, first will be Molly McKasson.

CHMN STAFFORD: Hello, Molly, can you hear us?

MS. MCKASSON: Yes.

CHMN STAFFORD: Can you please state your name and spell your last name for the record.

MS. MCKASSON: Yes. Thank you, Mr. Chairman. Thank you, Committee members. My name is Molly McKasson, M-c-K-a-s-s-o-n. I'm a long-time resident of Midtown Tucson.

State law specifically identifies a list of factors that the Line Siting Committee should consider when deciding upon a proposed project. Most of the factors suggest that the project can be permitted to cost more if the expense avoids inflicting a negative effect on a factor that the law includes in the list. Overheading the Midtown Reliability Project has a serious negative impact regarding three of the factors on the list.

For one, the project would violate the very first factor regarding the presence of official city

plans for future development. Tucson has enacted plans for gateway and scenic routes and for the Tucson University Area Plan that specifically call for the undergrounding of new ultimate lines within those areas, plans which overheading the project clearly violates.

The fifth factor suggests -- asks that the Line Siting Committee give consideration to scenic areas which is the very purpose of the gateway and scenic routes. The factor also directs the Committee to give consideration to the historic sites. The proposed project runs along or straight through a number of Tucson neighborhoods dating from the 1800s, they're additional designated historic neighborhood zones and that not coincidentally are also covered by the University Area Plan policy that no new utilities be constructed overhead.

The sixth factor calls for giving special consideration to the area's total environment. The health of the economy is a key element of everyone's total environment. Tourism is central to Tucson's economy. So is the ability to attract new businesses and jobs to Tucson. Both of these are jeopardized by having a string of 100-foot structures and transmission lines going straight through the heart of the city.

The factors the Committee is required to

consider give it the power to reject the power that does not adequately address these factors when there's a feasible alternative. We believe there is a feasible alternative when you've heard us tonight.

In terms of both technological ability and cost, the alternative is undergrounding where the City requires which is what TEP committed to do when it signed its last franchise contract with the City.

Thank you for recognizing that this project goes against state law. Thank you so much.

CHMN STAFFORD: Thank you.

A/V TEAM: Mr. Chairman, next I have Betsy Larson.

CHMN STAFFORD: Betsy Larson.

MS. LARSON: Hello, Chairman Stafford. My name is Betsy Larson, L-a-r-s-o-n.

I am president of the West University Neighborhood Association. First and foremost, we fully understand the need for updated infrastructure. The U of A, Banner and student towers have stressed our historic areas' infrastructure.

However, Tucson should not be forced to accept overhead lines through and above our core economic centers, historic zones, schools and homes. All routes presented will have a negative impact to our Old Pueblo.

For example, look at the preferred route. It will place the pole in lines across Speedway. It is the major route for students and parents and others coming to give our tax dollars who expect a beneficial town or a beautiful town and campus. Instead their first impression will be industrial poles and wires.

Coming from the south, the poles will graze elementary and high schools, leading across an iconic area known was the University Boulevard Bay Gate Square. This corridor is the main hub for all things U of A. It's ridiculous to think that TEP finds it reasonable to place the lines above such a busy and dense economic hub.

Because of our area's challenges, multiple zoning protections have been created. All neighborhoods, corporations and even the U of A must comply with the zoning protections afforded by the historic preservation zones, University Area Plan and Main Gate overlay. Why should TEP be exempt from these rules?

TEP customers deserve to have an Old Pueblo that they can be proud of. I beseech you, Chairman Stafford and fellow Commissioners, to hold TEP, UniSource and Fortis accountable. Tucson deserves better. Thank you.

CHMN STAFFORD: Thank you.

A/V TEAM: Mr. Chairman, next is Tim

Hagyard speaking on behalf of the Pima County Historic Commission.

MR. HAGYARD: Hi, my name is Tim Hagyard, H-a-g-y-a-r-d. And I'm a Commissioner on the City of Tucson-Pima County Historic Commission. And just our stance on the over -- overhead routing. We don't feel that -- we feel the routes under consideration have a negative impact on the existing historic neighborhoods and the community of Tucson and our historic and cultural resources.

We don't -- we don't feel that there is any of the routes that are available are not going to have a negative impact on the historic neighborhoods and our cultural resources.

And so there's been a lot of talk about the economic -- you know, the reliability of the electricity system, and I think nobody's against reliability of the electrical system.

But what we are against as a community is the impact, the negative impact of the economic, the historic, and cultural resources that it will negatively impact. If the conversation was are we going to put these lines through the Saguaro National Monument, it's a clear -- it's a clear idea that this is going -- would have a negative impact on the Saguaro National Monument.

You know, that it diminish it, it would -- and that's what -- that I feel and the historic mission feels it's going to diminish our neighborhoods.

So we don't feel that there is a route that's going to make -- that's -- that's going to have a positive impact on Tucson, and we think that the best alternative is to look to other resources or undergrounding of the system. Thanks.

CHMN STAFFORD: Thank you.

A/V TEAM: Mr. Chairman, next is Meredith Aronson.

MS. ARONSON: Hello, good evening, and thank you for making time for a public session today. My name is Meredith Aronson, A-r-o-n-s-o-n.

I had the pleasure of serving with the TEP Neighborhood Working Group. I am no longer part of my neighborhood association and not representing that organization in my comments tonight.

I would like to echo very strongly Molly McKasson's earlier comments with regard to the responsibilities of the Committee. I think we often put into contrast business needs relative to neighborhood or community needs.

And in this context, I believe it's important to remember quality of place, which has been

talked about a lot tonight, is as important to economic development as all of the other factors that folks like our chamber of commerce focus on.

The quality of place attracts businesses because it is a beautiful place for families to come and live. So it's not simply an aesthetic, it is part of a foundational aspect of our economy locally.

The fact that we have ordinance to protect our gateway and scenic corridors is essential in this decision in not undergrounding the full system, but along our scenic and gateway corridors the ability to make a clean decision to underground in respect for local law.

These are challenging times. We certainly recently saw the state go through a process of local decision versus state law with regards to housing. These are important conversations for us to be able to have.

But I do hope that the Committee and recommendations of the Committee in this context can take into account the strong response you've had tonight with regards to protecting the quality of place in the name of our economy in Tucson long term. Thank you for your time. I appreciate the ability to comment.

CHMN STAFFORD: Thank you.

A/V TEAM: Mr. Chairman, next and the last person who's indicated to us that they wish to speak is

Henry Knaack.

MR. KNAACK: Hi there. My name is Henry Knaack, that's spelled K-n-a-a-c-k.

And I'm a homeowner in Jefferson Park, and I'll try to make this quick.

I am with a group of us who want to underground lines. Many folks today have already stated better than I what the significance of undergrounding is, and what the stakes are if we don't.

The biggest issue to underground or not underground, though, seems to be that it keeps coming back to the cost, as stated not to be as much as 10 times what the cost would be to aboveground the lines.

It's my understanding that the organization Underground Arizona has done their own analysis of the cost for undergrounding and they may have found TEP's estimate to be highly inflated.

This is my main concern for comment today. Before any decision is made by this body I urge you to make any information you have or maybe still need to obtain transparent so that the public can understand why there is a disparity between the estimate from TEP and those underground experts, as that is the main rebuttal for undergrounding consideration. Thank you.

CHMN STAFFORD: Are there any other public

commenters on the phone?

MS. YONKERS: I'm interested in speaking.

CHMN STAFFORD: Please state your name.

MS. YONKERS: My name is Marie Yonkers, Y-o-n-k-e-r-s.

I'm a long-term resident of Sam Hughes and I do live in between Tucson Boulevard and Campbell. So the issue of aboveground electricity has certainly been significant in our lives.

I'd like to address something a little different. TEP speaks of the urgency of this project, claiming a decision must be made now. But the delay has been solely because of TEP.

TEP has been unwilling to follow not only our local regulations of the City, but also obligations it freely agreed to in its franchise contract with the City. It is why the project has stalled.

TEP could start the project immediately, tomorrow even, were it willing to follow city rules and its contactual commitments to the City.

The basis for public opposition is that TEP has not done this. Otherwise, there is broad backing for the project in Tucson and this includes both the Neighborhood Undergrounding Coalition of Tucson and Underground Arizona.

It is flat false for TEP to say that organizations such as these oppose the entire project. They do not oppose. To the contrary, they firmly support the project except that they and most Tucsonans simply expect TEP and the project to comply with our local laws and keep faith with TEP's contractual obligations to the City. Thank you very much.

CHMN STAFFORD: Thank you. Are there any other public commenters? We have all the sheets from the front? Beg your pardon? Is there anyone else who wishes to speak?

MR. YOZWIAK: Mr. Chairman, yes, just an informational point.

CHMN STAFFORD: You need to come to the microphone so we can get you on the record.

MR. YOZWIAK: Thank you again. Stephen Yozwiak, Y-o-z-w-I-a-k. First name is S-t-e-p-h-en, it's a common spelling.

Anyway, I was just wondering how long is it going to take? Is there a date certain when this panel will make a recommendation to the Corporation Commission? And then in turn, is there some potential date when the Corporation Commission might act on your recommendation?

CHMN STAFFORD: That's all set pursuant to statute. Under the statute, the Committee has 180 days

from the time notice goes out to render its decision.

Once that decision is transmitted to the Corporation Commission, they must rule on it no earlier than 30 days and no later than 60 days after it's submitted to them from the Committee.

Ms. Grabel, I think that's a correct interpretation of the statute?

MS. GRABEL: That was perfect, Mr. Chairman.

CHMN STAFFORD: That is the time frame we're working with under the statute.

MR. YOZWIAK: Thank you very much.

MS. GRABEL: And Mr. Chairman, we have TEP customer service representatives here to speak with anyone that has additional questions they want to ask.

CHMN STAFFORD: All right. TEP says they have customer service representatives here in the room that are available. Could they stand and raise their hand? So the people can see who they are and they can consult with them for answers to specific questions. There they are.

MS. GRABEL: And it's regarding their service, not regarding anything --

CHMN STAFFORD: Right. Regarding the project, yes. They probably can't answer questions about

your bill.

MS. GRABEL: They can do that, actually.

CHMN STAFFORD: Is your mic not on?

MS. GRABEL: No.

CHMN STAFFORD: Can we get Meghan's mic on? Ms. Grabel's mic on? Excuse me.

MS. GRABEL: It's okay. Yes. So they are here actually to answer questions about any individual service.

CHMN STAFFORD: Okay.

MS. GRABEL: Including their bills.

CHMN STAFFORD: Their knowledge is over all things TEP not just this project.

MS. GRABEL: Correct.

CHMN STAFFORD: Excellent. Are there any other public commenters?

A/V TEAM: Mr. Chairman, Meredith Aronson is asking if she might speak one more time to ask a question.

CHMN STAFFORD: Well, we don't really answer questions. Is it question about the project or is it --

MS. ARONSON: It's a question. I just learned that the lawsuit between TEP and the City of Tucson with regards to undergrounding was -- has been

handed down in favor of the City. And I was curious how that decision which is quite recent, obviously, how that might impact this Committee's decision-making.

CHMN STAFFORD: Well, that will have to be addressed through the process. I mean, I'm sure it will be introduced as an exhibit by one of the parties and the Committee will weigh it when they make their decision. All right.

MS. ARONSON: Thank you.

CHMN STAFFORD: With that, we conclude the public comment session. We stand in recess until nine a.m. tomorrow morning when we resume the hearing.

We are in recess. Have a good night.

(Proceedings recessed at 7:09 p.m.)

STATE OF ARIZONA)
)
COUNTY OF MARICOPA)

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

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

I CERTIFY that I have complied with the ethical obligations set forth in ACJA 7-206(F)(3) and ACJA 7-206(J)(1)(g)(1) and (2).

Dated at Phoenix, Arizona, July 14, 2024.

JENNIFER HONN, RPR
Arizona Certified Reporter
No. 50885

I CERTIFY that GLENNIE REPORTING SERVICES, LLC, has complied with the ethical obligations set forth in ACJA 7-206(J)(1)(

GLENNIE REPORTING SERVICES, LLC
Arizona Registered Firm
No. R1035