



TRANSPORTATION & PUBLIC UTILITIES COMMITTEE

COMMITTEE MEETING

~ MINUTES ~

Wednesday, October 2, 2019

12:00 PM

Sullivan Chamber
795 Massachusetts Avenue
Cambridge, MA 02139

Call to Order

Attendee Name	Present	Absent	Late	Arrived
Jan Devereux	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dennis J. Carlone	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Craig A. Kelley	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Quinton Zondervan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Alanna Mallon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Submission of the record

Transportation & Public Utilities Committee - Committee Meeting - Aug 21, 2019 3:00 PM

RESULT: REPORT ACCEPTED

Continued discussions on the future electricity needs of the Kendall Square area and progress toward identifying an alternate, viable location for a new substation other than the proposed site on Fulkerson Street

Sundry communications regarding the proposed Eversource substation on Fulkerson Street.

Minutes Acceptance: Minutes of Oct 2, 2019 12:00 PM (Committee Reports)



CAMBRIDGE CITY COUNCIL
TRANSPORTATION & PUBLIC UTILITIES COMMITTEE
VICE MAYOR JAN DEVEREUX, CHAIR

COMMITTEE MEETING
TRANSCRIPT OF PROCEEDINGS

OCTOBER 2, 2019
12:00 PM, SULLIVAN CHAMBER

VICE MAYOR JAN DEVEREUX: Good afternoon, everyone. We'll get started in just a couple minutes. We're waiting for a few more people to arrive. Okay. Good afternoon, everyone. I guess we'll get started. Um, and just before we do start, there is a sign-up sheet if anyone would like to speak during the public comment period, we'll have that, um, in a few minutes.

So I'm Vice Mayor Jan Devereux. I'm the Chair of the Transportation and Public Utilities Committee. Um, joined today by Councillor Dennis Carlone and, uh, Councillor Alanna Mallon and two more. Everybody's coming all of a sudden. We have, uh, Councillor Zondervan and Councillor Kelley and, um, members of our staff, including our city manager.

So we'll--all do introductions in a few minutes, but, um, first I--I'll read the call of the meeting, which is, uh, the Transportation and Public Utilities Committee is meeting to continue discussions on the future electricity needs of the Kendall Square area, and progress toward identifying an alternate viable location for a new substation other than the proposed site on Fulkerson Street.

Um, this meeting is being televised, live streamed, and privately recorded. And I also have, uh, for the committee members, the minutes of our last hearing, which was on August 21st that, um, I am submitting, uh, for the record. So just on a voice vote to accept these minutes. Okay. So moved. Okay, thank you.

Um, so this is, uh, the fourth hearing we've had on this topic. We, um, started talking about this in late May. We met in late June, again in late August, and now it's early October. Um, and I think we're making good progress on, um, thinking outside the Fulkerson Street box. Um, and I know there is a lot of public interest, uh, in finding another location. Um, last week there was a very well attended community forum organized by the, uh, Democratic Socialists of America.

Um, they have a--a Take Back the Grid campaign going, which also, uh, concerns East Boston, where there's another substation planned. Um, and, you know, we've heard a lot of public comment and there have been quite a few emails received before this hearing from--from residents who are very concerned about putting, uh, any electrical facility so near to the school, so near to a park, so near to a

residential neighborhood.

Um, we have heard various health concerns about even a low level of, uh, electromagnetic, you know, activity. And we've just heard over and over again, and this isn't news to anyone I'm sure in this room that that location is just really not acceptable from--from anyone's standpoint.

So, um, I know that members of our staff, uh, and Eversource staff and, uh, property owners and developers in the Kendall area have been earnestly meeting, uh, for now several months to discuss, uh, where else we could locate this.

We've also had a lot of discussions about demand management and, you know, non-wire solutions and how, um, even though we have these projections for higher loads over the next decade or so, um, we really need to be on a parallel track working to manage that, um, so that we are not building more infrastructure, uh, to--to enable it.

Um, but we did have a very long, um, and detailed technical discussion at our last hearing, which talked a lot about the reasons for, uh, why a substation is still needed despite best efforts to, uh, electrify the grid and to, uh, better manage demand.

Um, so that just sort of is what it is at this point. We are still working, um, I believe with the assumption that we--we do need to increase capacity, uh, and it has to be relatively close to the Kendall Square area, but we just don't want it on Fulkerson Street.

So, um, I would like to hear first I think from, um, members of our staff, including the city manager who is here with us, uh, just to give us a sort of, uh, high level overview of--of where we are with the discussions with Eversource and the property owners. Um, so if Mr. DePasquale, if you could open up, that would be great. Thank you.

CITY MANAGER LOUIS DEPASQUALE: Okay. So as soon as we had heard that the site where it was going, we kind of felt that that wasn't gonna work, and how could we do something else? So we have set up meetings with Eversource, with the development community, with city departments, and I thought we were making good progress.

And then I decided to have Bob Redden, who was the former head of assess, really become the lead person for the city in trying to see if there was a way working with Eversource and working with the development community,

could we come up with potentially another site.

And we originally talked about Port Chop park, but it was clearly not big enough. And then we actually thought about, could we do two smaller sites just to remove it from the site that it was potentially going to? Uh, so these conversations have been going, I would say in the last month or so, uh, we've gotten into specific conversations on where a potential new site could be. Could it fit the demands and the needs of Eversource?

I think the conversations with Eversource and the development community have been positive, have been trying to move forward in the right direction. We are still in the discussion stages, so I don't want to make any promises, but I can tell you that I--I feel good about the fact that everyone involved in these discussions is trying to figure out where the best possible site is.

And I do believe that over the next four to six weeks, hopefully sooner, but I would say in the next four to six weeks, there is a strong possibility that we could have a solution to this problem. I really don't want to get into many more specifics because, as you can see, this is really juggling a lot of balls and at any one movement of the ball

the wrong way, it could all fall apart.

But I really want to say that it--this has been an effort that everyone has come to the table open-minded, listened to the concerns, and has said, how can we make this work? But even with everybody trying to solve this problem, it's not an easy problem to solve.

But I think we're making progress. Uh, Bob Redden couldn't be here today, uh, but I think we just like to say that, I know it's difficult to keep on asking you to bear with us, but please give us a little more time and I think hopefully we can come to a conclusion that everyone's gonna be satisfied with.

And I really don't want to get any more specific than that. I'm sorry, that's about as much specific as I can give, but really in the middle of this, I think that's all I can say. So thank you.

VICE MAYOR JAN DEVEREUX: Thank--thank you. Um, I--I do appre--appreciate that, that you're willing to give us, um, you know, encouragement. Um, and I do recognize that these discussions have been proceeding, um, you know, with a lot of commitment on everyone's part.

So I want to take everybody at their word that this

is--this is a goal that we're--we're trying to reach together and that people are making their best faith efforts to achieve it.

So I appreciate that. Um, would the members of the Eversource team like to comment on anything or, um, just first of all, introduce yourselves for all the viewers at home and the people sitting behind you who may not know you? Thank you.

MR. TODD LANHAM: Sure. Sure. We'll--we'll do that first. I'm Todd Lanham. I am with Eversource Siting and Construction Services. We're the--the outreach part of the team.

MR. JOHN ZICKO: John Zicko, I'm the Director of Substation Engineering at Eversource.

MR. JOE MAYO: Hi. Joe Mayo. I'm the Manager of Capital Projects in Easton, Massachusetts for Eversource.

MR. TODD LANHAM: I--I just from a high level, I would echo, um, the manager's comments. We are having very good, very fruitful discussions with the development community. Um, there are some things we still want to continue to investigate, but I--I will just, um, I will just reassure you that the development community and the community as a

whole has--have been very willing to meet with us, to talk with us, to think outside the box.

And short of telling you that there's a solution out there, I--I do feel pretty confident that I think we can come up with something, um, that will, I think be, um, something you guys could--could favor. Um, again, nothing more definitive than that other than we've had some really good, very fruitful discussions and we continue down the path to investigate each of these options.

Um, I don't want to steal, uh, Joe's Thunder, but I--I will say that the--the real challenge here, and it was described yesterday pretty well, and I'll kind of give you this analogy. The real challenge isn't the parcel, and it's not necessarily the--the building structure, it's the streets and the congestion for getting all these transmission and distribution lines into and out of the station. And the analogy that was used, I think would help paint a very clear picture for you guys.

It's--it's like a--a wheel, a bicycle wheel where the hub would be the center point, um, the--the station, and much like the spokes of the wheel that go out from that central location that's similar, a little analogous to what

you can expect with the transmission and distribution lines.

In an ideal world, you can go out radio--radially and it's--it's--it's an easy way to get out of the station and into the station. And once you get, I think a couple of blocks away, much like the spokes there--there's a little more space. What happens when you're trying to get everything into a central location is it does become more congested there.

So the engineering that has to go into trying to make sure that we can get everything in and out of the station right around that parcel is--is really kind of the critical mass that--that is taking a lot of time to investigate. So the--the building and the parcels one piece of it, but what's under the streets, and I know we've said this before, it really is, that's the lion's share of the challenge, just making sure that we can get everything in and out of the station.

So again, I--I can't say anything but good things from--from our partners that we've been working with. Um, staff's been very great, been very supportive. So we're--we're moving the ball further down the field with each, um,

each meeting that we have, trying to drill down a little further into the viability of some potential options. Did either of you have any, either?

MR. JOE MAYO: Sure. Um, you know, I can add to that, that we, um, you know, we--we are working with the development community that both the city and the community pushed us to work with the developers. Um, also working with the city, you know, we--we--we did look at the Pork Chop area as--as you alluded to.

Um, I will say we--we are continuing to look at the Pork Chop, um, area, um, as well as the develop, um, as to talking with the developers. Um, each one of these sites is unique. Um, and when we looked at the Pork Chop, it's constrained, um, underground.

Um, but some of these developed areas are constrained, um, you know, on the site itself. So each one has its--its own challenges. Um, and we have, um, you know, looked at these from a--a station engineering perspective and a below grade engineering perspective. Um, and, um, and, you know, to that extent, we--we've--we've got well over 500 engineering hours into this since we've last met, just looking at alternatives. So we are not taking this lightly.

Um, we have two very large engineering companies, uh, as well as our own engineering internal staff looking at this.

Uh, so this is not something where we're taking this, um, just with our own internal effort and, you know, we are looking at this, um, you know, with all guns blazers, so to speak. Um, and, um, and it is a full-time effort for these engineering companies to do this. Um, you know, one of the things that--that does hamper you when you are looking at below grade information is, you know, we want to buy a house.

We drive by it, we look at the house, you know, you look at the city streets, you stare at roadway what's below it, you don't know. You have to go get that information. That takes time. Um, when we did the original Fulkerson study, um, we spent 14 months--you know, 14 months gathering what information from other utilities and doing physical surveys of inverts in storm drains gathering, um, data.

It took us that long to, uh, to get accurate information through the city of Cambridge. Um, and the good thing is that we did a wide net. So as we looked at some of these other options or alternatives to focus in--in some

cases we had that information.

Now, in other cases we did not. Um, and we're having to, you know, go to other utilities to see what they have. Um, you know, luckily, we--we do own the gas company in--in Cambridge. So we--we--we have the benefit of that as well. But, uh, in some of these other cases we don't, and we're having to work with other developers to see what they've developed and what--what they have.

Um, but it is a painstakingly slow process. Um, the site, well, it might look great above ground is no use to us if we can't connect to an electrically, uh, both on the transmission side and the distribution side. So, you know, we--we have to be cautious that when we look at this, and as we've--you know, we--we have had a couple of meetings here where we brought in, um, you know, our transmission planners and our--our load forecasting folks, um, that I hope, you know, the people that have been, uh, you know, listening to that is that this isn't just a substation.

I mean, we are building a better system for Cambridge and the people within Cambridge, and we want to build, you know, a reliable network is what we're trying to do here.

So this has to integrate into the Eversource system.

And the--the--the end game here is a reliable grid. Um, we do need to get more load to the customers, um, but in the end, it's gonna be a reliable grid on the distribution and transmission site. And, um, and so we have to look at this as a holistic, um, a holistic view. And, um, therefore the connectivity underground is--is vital to this project.

VICE MAYOR JAN DEVEREUX: Thank you. Um, I--I--I appreciate that there's a lot going on under the streets and--and I appreciate a good bicycle metaphor for the, uh, the hub and spokes. Um, can--can I just ask, and then I'll--I'll let my colleagues ask. Can I ask one follow-up question? When you said you spent 14 months on Fulkerson, was that before you acquired that site, or was that after you acquired the site?

MR. JOE MAYO: Um, it was after we acquired the site, yeah.

VICE MAYOR JAN DEVEREUX: Okay. All right. Thank you.

MR. JOE MAYO: I--I should take that back. I would say it was, um, no, it was--we started before we acquired the site, um, because we wanted to know if the site itself was somewhat feasible. So I'm gonna have to take that back. It was split.

VICE MAYOR JAN DEVEREUX: Okay. Um, uh, Councillor Mallon, did you have a question?

VICE MAYOR ALANNA M. MALLON: Yeah, I just wanted to-- actually, there's a couple members of your team that are on the couch over here that I wanted to invite to sit at the table. I remember there was some questions that were answered last time by this nice woman that I'm forgetting her name. So I'm just wondering if they could sit at the table with you and you certainly--maybe they can introduce them themselves as well.

MR. JOE MAYO: Sure.

VICE MAYOR JAN DEVEREUX: Thank you for inviting the-- the female members of the Eversource team to sit at the table. Um, Councillor Carlone, yes.

VICE MAYOR ALANNA M. MALLON: Can they just introduce yourselves?

VICE MAYOR JAN DEVEREUX: Oh, yes. Go ahead and introduce yourself.

MR. JOE MAYO: Yeah, sure. I'll, uh, try to slide this over.

VICE MAYOR JAN DEVEREUX: Yeah, sorry.

MS. MAIJA BENJAMINS: Hi, I'm Maija Benjamins with

Eversource. I'm Lead of Transmission Sighting.

MS. ANNEMARIE WALSH: Hi, good afternoon. I'm--thank you. Hi, good afternoon. My name is Annemarie Walsh, and I'm in community relations at Eversource.

VICE MAYOR JAN DEVEREUX: Great, thank you. Oh, yeah, go ahead.

COUNCILLOR DENNIS J. CARLONE: Thank you, Madam Chair. Um, I appreciate the updates from Eversource and, um, the city manager, of course, and progress is great. Um, and of course, this is a--a very technical and detailed analysis that you have to do. We--we get that. Um, I--I could sarcastically say, I want to make your work easier by saying forget about Pork Chop Park.

Um, I won't say that, but you got my inference. Um, you probably know the history of why there's open space there is because it was moved from Kendall Square. And to move it further away from Kendall Square completely contradicts, uh, a necessity for open space near that activity.

Even if we're removed onto your side presently on Fulkerson Street, um, that'll be another battle. And I--I would recommend you not go there, even if the city has

seriously said it might work.

Um, it is--you know, in the 1950s, the city built in parks, they built elementary schools in parks. We have half the open space that the average city has. So to consider-- I'm--I'm highly recommending you don't put a lot of time into it because I think we're gonna be back here again. And, um, we are desperate for op--good open space.

Um, and that is about as publicly oriented and visible as you can get. Um, so I--I realize you're getting mixed messages, but I--I felt I--I had to say that to share it with you publicly--privately, I was gonna say it. And the other thing is, there are many pe--we understand that it takes time, but there are many people on the council or enough, let's put it that way, to prevent any zoning going forward and--and we are looking into, um, the special permit process now related to energy. So, um, we're not asking you to rush, we're just saying that it--it is what, you know, but it's even a bigger issue with the city.

And, um, many neighbors are quite frankly, fed up with every new development being larger than what is presently in the zoning books and--and many believe--and we--those are our clients, many believe that there's more

than enough going on, um, at least in the near future.

So, um, we got to get this right, is what I'm getting at for you and for the city and for the neighborhoods. Thank you, Madam Chair.

VICE MAYOR JAN DEVEREUX: Thank you. Councillor Carlone, you want to--not Carlone. Zondervan, I'm looking at you.

COUNCILLOR QUINTON Y. ZONDERVAN: I am not Councillor Carlone. Thank you, Mr--I'm not good looking enough. Uh, thank you, Madam Chair. Um, I--I too am grateful for the--for the updates, but--but I am concerned that we still don't have an alternative site. My recollection is that we were told by Eversource that now is about the go no-go decision time.

So I--I don't know if--if you have a--a different timeline for us today, but--but if this doesn't--if we don't get an alternative site soon, then my assumption is that you're gonna move forward on Fulkerson Street, which again, as we've said is--is totally not acceptable.

MR. JOE MAYO: So, Councillor, um, you--you're right, when we first met here, we had put a target date of, I think when we formed the, um, you know, a subcommittee to

look at this. We--it's--we're asked, when do we need to know? And we had put a target date of, you know, September, early October. Um, and, uh, you know, here we are, um, and we don't have any answer.

Um, you know, as the, uh, city manager said, we're-- we're probably--you know, we think we're a month away from that. Um, and you know, we're--in the big scheme of things, we're--we're--we're past the time of when we need to make a decision. Um, the project should be from our viewpoint a lot further along.

Um, but we are--you know, right now we are not advancing anything at focusing. We are looking for, you know, an alternative site. We are looking at engineering on other sites. We have right now halted engineering efforts at Fulkerson. So I'm telling you that publicly.

CITY MANAGER LOUIS DEPASQUALE: Jan, can I get--can I--sorry. I just wanted to follow up with that. I think that's an important message to state that when we had these discussions, there was a deadline that we felt we needed to see if we were working together and in good faith could we push back. And once we saw everyone was moving in the positive direction, I want to thank Eversource because they

said no, we want to get to where we need to get there as well.

So believe me when I tell you this, this is not easy, but we're on the same page and we're trying to get there, and I think we will. And I think when we were first looking at all alternatives, Councillor Carlone, it was more about getting it away from the school. So that was a suggested site, but I can tell you, I understand what you're saying now as well.

So I--I know it's--it's easy for us to say, bear with us because we believe we're in a place that we should be saying that. But if everybody else, it's a whole lot hotter. But I--I really want to say that these have been positive discussions by everybody and you know, I--we just need a little more time.

VICE MAYOR JAN DEVEREUX: Thank you for saying that. Are you--did you have anything else, Councillor? Okay, go ahead.

COUNCILLOR QUINTON Y. ZONDERVAN: Thank you. So I--I do appreciate that, um, you are halting the engineering at Fulkerson, um, and--and I want to be optimistic that you'll find another location, but I have to say that even that

outcome is not acceptable to me.

I understand not everybody may feel the same way, but I think we need to find a way to not build this substation at all. And the more I hear about the engineering challenges that you're facing, the more it's obvious to me that it's just a non-starter.

Like we can't just keep banging our heads against that wall because even if you find a site and you're able to resolve these underground congestion challenges, and I'm living through it right now in--in front of my house, right? The--there was a three-month project that was supposed to be done to do a sewer separation that we're-- we're now going on almost a year because every time we dig up another section, oh, we didn't realize this pipe was here.

We didn't realize this conduit was here. Who put this wire over here? So these are non-trivial challenges and-- and they exist all over our city. So even if you figure this all out and you build this substation, then we're back here five years from now, we got to do another one.

At some point, we have to stop doing that and I think that point is now. So last month when you were here, I

asked about non-wires alternatives, and the answer I got was not a real answer. And so I'm wondering if you've done any further work on that?

MR. TODD LANHAM: I'll say this. Um, we--we heard similar questions. Uh, we had a--a meeting yesterday and, uh, I will take that back to the non wired team. I've got a couple of action items that I need to circle back with them, but I will--I will, um, huddle up with them again to try and get to where I think you're trying to drive. But the--the short answer is I don't have any information today that--that I could share, but I do have an action item from yesterday and from our last committee hearing to--to try and get you a little more clarity around the questions that you an--asked.

COUNCILLOR QUINTON Y. ZONDERVAN: Thanks. I appreciate that. I--I did give some very specific examples last time, including, um, the Brooklyn Queens Demand Management project in New York City that avoided, uh, a billion-dollar expansion with \$200 million, uh, demand management, um, project.

And again, I--I'm not getting anything back from you guys about any demand management or, um, you know,

alternatives so far. So hopefully the next time we're meeting you'll have more information on that as well.

MR. TODD LANHAM: We can either present it during a public forum or I can see that we get it to you offline. It's, um, I--I do know that our team was familiar with that. I don't--I don't think that, um, a lot of the details--a lot of the questions that you--they had answers, I just don't think they wanted to share them in a public forum.

But I think we can certainly, uh, talk examples about that. I think it was a--I don't know that it was a com--a direct comparative, um, it was a little different. So I just--I want to let them talk through some of their perspective on that.

COUNCILLOR QUINTON Y. ZONDERVAN: Thanks. I appreciate that and I understand, uh, the nuances and--and what I'm asking for to be clear, is a real analysis that shows us what the options are for meeting this capacity without building a substation at all.

MR. TODD LANHAM: I--we'll look into that. Jimmy, commentary.

MR. JOE MAYO: Yeah, and--and I--I--I thought you were

at the conference that we had here with our load forecasting analysis and our--and our, uh, risk analysis folks and--

VICE MAYOR JAN DEVEREUX: Could you speak into the mic a little more? [crosstalk]

MR. JOE MAYO: I'm sorry. And I thought they--you know, to that specific question, um, you know, I thought the answer to your question was that, you know, this station has to be built is that you cannot, um, you know, through energy efficiency, um, basically, you know, through those type of programs, um, you know, achieve yourself and reduce yourself out of this station. I mean, you--you--you just can't do it.

And I--and I thought they presented a fairly good argument. Now, obviously I'm biased, right? Um, I'm on this side of the table, but, um, you know, we can get that group back because, you know, they did go through a lot of those--a lot of those numbers.

So we'll just have to get them back. We'll set up an appointment with you and sit down and go through that. Um--

COUNCILLOR QUINTON Y. ZONDERVAN: Thanks. I--I'm not interested in getting the same answer again.

MR. JOE MAYO: Okay.

COUNCILLOR QUINTON Y. ZONDERVAN: The answers that they gave were not acceptable. There was no real analysis behind it and there's no report. So I want to see an actual analysis that shows what we could achieve by investing in real demand management being told that we need a thousand acres of solar to offset this capacity. That's just not a real answer. So, you know, if--if it takes another meeting with them, I'm--I'm happy to do that.

But ultimately, we need a real analysis and the report that we can look at that tells us what can we achieve with demand management. I understand that you have other reasons why you want to build a substation in terms of reliability and--and so forth.

And again, you may have to do that ultimately, and I understand that. But what I don't accept is that we're just gonna continue to increase the load in Cambridge when 86 percent of that is coming from fossil fuels. That cannot happen in the age of climate change.

MR. JOE MAYO: Well, we'll get the--we'll get the team back together. We'll sit down with you and get you what you want.

COUNCILLOR QUINTON Y. ZONDERVAN: Thank you.

VICE MAYOR JAN DEVEREUX: Thank you. Um, I know Councillor Mallon has another question, but I wanted to welcome Councillor Toomey who's joined us, and, uh, can we--can we go to Craig, did you have a question too? Just because he hasn't spoken yet. And then--then I'll go back to you, I promise.

COUNCILLOR CRAIG A. KELLEY: Thank you. And to follow up on Councillor Zondervan comment, which I--I think there are two things. So there's the fossil fuel creation and then there's the energy distribution. So if--if we created renewable energy, say, on Danehy Field to--to pick another project that the manager's not working on, um, just if we had some other site, the electricity, as I understand it would still come into this area and would need some sort of substation to then move it around. Or if--if we created with renewable energy, other sources of electricity, could we mitigate the need for an expanded substation at an absolute level?

MR. JOHN ZICKO: I'm sorry. Uh, bear--bear with me. I'm getting over a call. I apologize for my voice. Um, I think--I think the answer to that question would depend on

where those, um, electric generation, if you will, regardless of where it comes from, uh, what--what the fuel source is those electric generation resources are located.

At some point, regardless of where the generation is, uh, there needs to be a link made between that and the customer. And, you know, again, speaking in generalities, the substation and transmission and distribution system are the links, at least as we have it today.

COUNCILLOR CRAIG A. KELLEY: Thank you. So if--if we meet the electric demand with renewables, if they're not directly linked to the user, like on the roof or in the backyard or whatever, then they would still have to go through a substation to become usable by the user?

MR. JOHN ZICKO: In--in general, yes. Um, the other--the other, um, factor becomes if--if say user A has a distributed resource on their property and that distributed resource for whatever reason becomes unavailable, things break down, things need to be shut off to be maintained, then they would rely on, you know, users, B, C, and D to help make up the slack.

And that tie would come via--depend--depending on where users B, C, and D were or producers B, C, and D were

that--that would come through the transmission system, substation, and distribution system.

COUNCILLOR CRAIG A. KELLEY: Okay. So I--I would separate Councillor Zondervan's general comment to sort of two parallel tracks, one of which is the demand management, how--how can we help you push the demand down to a point where the substation that we're talking about isn't required as some people seem to think it is or has less of an impact. Uh, and then the second one is where does the energy come from in the first place? Um, which is also a very important issue.

And I would like to have that be renewable, but it sounds like even if--if the same amount of energy is created renewably, if it's not directly on site and permanent, then we'd still need the substation. So that wouldn't solve the substation problem, if I'm understanding that correctly.

MR. JOHN ZICKO: Uh, not--not--it would not necessarily solve it. That's correct.

COUNCILLOR CRAIG A. KELLEY: Okay. Thank you.

VICE MAYOR JAN DEVEREUX: I want to go back to Councillor Mallon.

VICE MAYOR ALANNA M. MALLON: Thank you, Madam Chair. Um, thank you for being here again, I apologize I missed the last meeting, but I did catch up with the, uh, video, um, and I want to thank both the city manager and the staff at CDD and Bob Redden for working together with the development community and with Eversource to try to find another location for the substation.

Um, you mentioned that this is already behind schedule for the Fulkerson substation based on us having this conversation, and now we're sort of a month or we're around the time we said we would come together with a plan, but we're four to six weeks out.

I think that the neighborhood and the community is concerned that this Fulkerson Street is going to start-- they're gonna start--you're gonna start working on Fulkerson Street and not come to a--an agreement with the city. And that this--we might just keep moving the goal posts. I--I guess what I'm wondering is what is the drop-dead date on starting work on Fulkerson?

I know we're about four to six weeks away from potentially finding another solution, but if that solution falls through and then we have to seek to find another

solution, what is the drop-dead date on this substation getting started?

MR. JOE MAYO: Thank you. We can't just go build this project. Like we can't just--obviously, we need permits, right? So we need permits from the Department of Public Utilities. So the Department of Public Utilities will decide where this site actually goes, not Eversource.

So we will present, um, you know, our best case discussion technically on where this will go. The city will intervene and say where this will go. The community gets to intervene. Um, and--and there's--there's public--there's a public hearing within the city, um, where people can voice their concerns. Um, so it is a public process.

Um, so there's--there's a long road of--of hearings, uh, where this substation will be--will get sited. Um, and so it's not just Eversource getting a permit locally, driving out to Fulkerson and building a substation. This is not the same as a developer putting up a highrise building. Um, so we cannot just go out there and build a substation.

VICE MAYOR JAN DEVEREUX: So--okay. So just--if you don't mind just telling us how long does that process take?

MR. JOE MAYO: Do you mind if I let Maija?

MR. JOHN ZICKO: Yep.

MR. JOE MAYO: If you might, uh, Maija Benjamins with the Siting, I think would be, uh, well suited to answer.

MS. MAIJA BENJAMINS: Okay. So just to help your understanding, when we say we're behind, what we're trying to do is meet the demand of what we're projecting in Cambridge. So the amount of time that it takes us to do the appropriate engineering to submit an application with Energy Facility Siting Board, and then the timeframe that we go through those hearings and that process, which for this type of project is typically two years at a minimum.

And then following that process, we have to go through procurement and materials, and then on the ground engineering. So when we're--when we're looking at the projections that we've presented to get to that point, we're already behind of where we expect the load growth to be. But we are committed to working to come up with a solution because, as what Joe was saying, it is a public process.

We do present a potential solution, our proposed solution to the EFSB, and they go through a number of hearings, they welcome interveners to the table, and at

that point we fully vet all the possible solutions. We look through what the need is. We do also address what we're referring to as non-res alternatives, but non-transmission alternatives in that process and have a robust report that's reviewed and have witnesses that review that, as well as going through site selection and routing selection of the transmission lines.

VICE MAYOR JAN DEVEREUX: Okay. I think that's helpful. I don't--I don't know that we've talked about the entire timeline in these meetings before, but like I said, I apologize, I missed the last one.

Um, the one thing I wanted to go back to was, you know, going back to your wheel analogy around the hub and the spokes, it seems to me that Fulkerson Street is a pretty awkward hub, right? When you think about Kendall Square in terms of laying the--laying the wires and--and having those spokes, was that part of your process and--and purchasing Fulkerson Street? Or is there a more--a better place to put a actual hub? It seems to me Fulkerson Street is very awkward. It's a very residential neighborhood, et cetera.

COUNCILLOR QUINTON Y. ZONDERVAN: So as--as--as Mr.

Mayo had said earlier, before we, uh, purchased the Fulkerson Street site, we, um, did start to look at what was in the streets. And I believe as--as Councillor Zondervan said, uh, and I would agree with him, that no matter--no matter where you dig in the city, it's going to be congested.

Um, we--I--I wouldn't say that--and--and I haven't seen enough of the street engineering to know this, but I would say that, you know, Fo--Fulkerson Street presents its challenges.

What I've seen of some of the other sites, they present their challenges as well. Um, the things that we--the things that we strive for, again, if I--if I kind of put on my clinical blinders for a moment, the things that we strive for are, you know, a sufficiently sized piece of property, which is a--a difficult find in a--in an urban environment. Uh, a proximity to a bulk transmission, power supply, as well as, um, proximity to where the distribution load is.

From that perspective, again, putting--just putting on clinical blinders for a moment, um, Fulkerson Street and some of the other sites that have been asked to look at

are, you know, we'll --we'll fit--we'll fulfill those requirements, not without challenges. The challenges will be different at each location.

Now, to peel off the clinical blinders for a moment, we've heard, you know, loud and clear from both the council and residents of Cambridge about their concerns regarding the Fulkerson Street site, which is why we've embarked on this, um, this alternatives analysis. I know that from a-- from a substation perspective, we have looked probably-- we've been asked to look at, I want to say, in the range of eight different locations.

Um, we have--I'm not--not at liberty to disclose where they are. We've looked at every one of them, but one, um, and I--I need to talk to my counterparts on the street side of the house, the--the TN and the D outside before I do too much work--more work on that. But we are taking it seriously.

Um, and we are, you know, we are looking at other sites and we're looking at it--at them in--in earnest with kind of all alacrity and dispatch that we can use.

VICE MAYOR JAN DEVEREUX: So just one follow-up question. So the 500 hours of engineering that you guys

have put in over since the last meeting, are those looking at those seven specific sites?

COUNCILLOR QUINTON Y. ZONDERVAN: Those are combined both substation and street infrastructure for those alternative sites, correct?

VICE MAYOR JAN DEVEREUX: Okay. Thank you. Oops. Uh, thank you, Councillor Kelley, back to you.

COUNCILLOR CRAIG A. KELLEY: Thank you. I--I think we've had part of this discussion before, but the--the way--and I'm not accusing people of--of misrepresenting or misleading, but I--I think what was just stated is--is not truly accurate of the ability of Eversource to cite stuff at the end of the day where the DP used that.

So you talk about a public process and this and that, and I understand we can write letters and people can show up, but what is our ability as a city or as a city council to tell you no?

MS. MAIJA BENJAMINS: So once we file an application with the Energy Facility Siting Board, at that point, you can--you participate as an intervener and you voice your opinion on where--on the location of the project and whether the project is needed at all.

The state is tasked at looking at, um, the energy needs of the entire state and the entire region, and working, um, to carry forward some applications of the independent system operator of New England.

So their task is to look at what the need is across all of the--the region and weigh the, um, feedback of the local entities and their concerns over it. So they--they do have to weigh all the different counterparts that we're looking at.

COUNCILLOR CRAIG A. KELLEY: Thank you. I--I would like my frustration to--to show very clearly. I--I think the answer would be, we can send letters, but we are not the decide and authority. The state is the decide and authority.

And if we want to, we could sue the state over the decision because it's a discretionary decision. But at the end of the day, do we have the authority to tell you no?

COUNCILLOR QUINTON Y. ZONDERVAN: So I think--I think what you're asking Councillors is for--for a legal conclusion, and I'm--I'm not an attorney and I'm not--I'm not gonna try to answer your question, but what I--what I can say and just, um, kind of amplify on what my colleague

Ms. Benjamins had just said.

When---when a petition gets filed with the Energy Facility Siting Board, whether it be for, um, an East Cambridge substation or any other EFSB jurisdictional facility entities, including the--including the community in which the project is located, in this case, it would be the city of Cambridge, can petition the siting board to be an intervener in the case.

That is a--again, I've--I've sat as a witness for the company on a number of these, so I'm quite familiar with it. That is--that can--the intervener status can kind of be whatever the intervener wants it to be. I have seen it run the gamut of sending in comment letters.

I have seen it run the gamut of cross-examining the company witnesses, and I've seen it run the gamut of presenting a direct case in opposition to what the company proposes.

COUNCILLOR CRAIG A. KELLEY: Through you, Madam Chair. So I'm gonna try it again. So when--when people send us emails and say, just say no to Eversource and whatnot, my understanding is we can intervene, we can petition, we can sue, but the one thing we cannot say as a city or as a city

council is no, you cannot build on the Fulkerson's site.

And I--it is--it's really a yes and no clear question, and I'm very frustrated that I'm now in the third attempt to get an answer.

MS. MAIJA BENJAMINS: The answer is yes. The decision making is done by the states.

COUNCILLOR CRAIG A. KELLEY: Thank you.

COUNCILLOR TIMOTHY TOOMEY JR: Madam Chair?

VICE MAYOR JAN DEVEREUX: Uh, yes, Councillor Toomey.

COUNCILLOR TIMOTHY TOOMEY JR: Just to follow up on-- on Councillor Kelly's, uh, point here, in your experience with other communities where there was public and city opposition to citing a substation, were any of those, um, that opposition successful in preventing you from locating in that community?

COUNCILLOR QUINTON Y. ZONDERVAN: A couple--a couple of recent cases come to mind and--and I'll steal Maija's thunder for a moment because I've, again, sat in as a company witness on a number of these. Two--two cases come to mind, where there was a municipality, two--two different municipalities that were opposed for--for very different reasons.

And in--in both of those cases, uh, the municipality did intervene. Um, they did--one did present a direct case, the other one chose not to for whatever reasons, and they cross-examined the company's witnesses. Um, at the end of the day and the end of the case, we were--we--the company and the intervener were able to settle what the differences were.

So I have not in the--in the number--in the number of cases that I've sat on as a witness, I have not seen one get denied. I have--have seen them gone in--I've seen them come out with conditions that we may not have envisioned when we went in. Um, but I have not seen one get denied flat out.

VICE MAYOR JAN DEVEREUX: Okay. I want to welcome--I want to welcome Mayor McGovern. Um, I don't know if you have anything you'd like to say, but I also, um, recognize that there are quite a few people sitting out in the audience and I don't know how many of them want to speak, so we may want to do that, but did you want to--

COUNCILLOR MARC C. MCGOVERN: I--I apologize for--for being late, but just so that I'm--I'm chiming in as well--and on the record, I--I've been here for 12 minutes or so

of this meeting and I--I--I kind of have a headache already, um, because I share Councillor Kelly's frustration about--it's a lot of very carefully chosen words and answers in this--in--in--in that we're hearing.

And I just- - I just want to be really clear and, on the record, uh, as you've heard before that, um, I do not believe that that's--that the focus on site is an appropriate site. I appreciate that you're looking at other sites, uh, as well. Um, but, you know, I will and I think this council will do everything that it can, um, to not have that cite there--cited there.

And, um, happy to work with you and others to find another location and do whatever we can. And as I said, I'm glad those conversations are happening, but, um, I share the frustration of my colleagues in this--in this matter, and I want that on record.

VICE MAYOR JAN DEVEREUX: Thank--thank you. Thank you for being here too. And I think the city manager has something to add.

CITY MANAGER LOUIS DESPAQUALE: So I would just say what I stated about a month ago, I think it is incredibly important that we resolve this and find a new site because

I believe if we don't and they move forward, no matter what the city council, the city manager feels is probably gonna end up on the site that we're hoping it's not.

So I think it is incredibly important that we continue to have the discussion. They have been a willing partner in the discussion, and I think we really have to move forward trying to really find a new site because if we don't--I don't think this is gonna turn out well. That's just my opinion.

So I don't want to let anyone feel like if it doesn't, it somehow, some way, some magic place is gonna come up. So I think it is a really relying on us right now to get to this new site and resolve this and get it out of that site.

And Nancy, I don't know if you want to add anything to that, but I think it--I think we need to be as realistic as possible.

VICE MAYOR JAN DEVEREUX: Thank you. Go ahead, Nancy.

MS. NANCY: Uh, through you, Madam Chair, I just wanted to add that it is in fact the state Energy Facility Studying Board that does make the final determination and, um, the city can intervene in that process as Eversource noted, and we would be prepared to do so and to either, uh,

voice opposition or seek conditions.

But I think historically, uh, as I understand it, very few, um, applications for setting are--are outright denied by the state, if any. So it would be sort of an uphill battle. So, uh, just to echo what the manager said, you know, looking for the alternative sites would probably be the best interest for all.

And we would certainly expect to intervene and participate in the proceedings regardless of which site it's at, and make sure that the city's voice is heard and that we do everything we can to make sure there are appropriate conditions placed on the permit for whatever site is located at.

VICE MAYOR JAN DEVEREUX: Thank you. Um, okay. I guess we'll--we'll go to public comment and then we'll have some time after that, uh, for further thoughts. So, um, I have two people signed up, but if you haven't signed up, you're certainly welcome to speak after they speak. Um, first person's name is Steven Kaiser.

PUBLIC COMMENTS

Steven Kaiser, address not provided, spoke on the electricity needs of the Kendall Square area: Commented on

the energy crisis at Kendall Square and that the City's missing an energy plan. Stressed now is the time to start and the City can't place that burden on Eversource. He urged the Council to look very closely at solutions of energy conservation, because DEP has an energy conservation program.

Ilan Livy, 148 Spring Street, spoke on the electricity needs of the Kendall Square area: I think my view on this is pretty clear, but what I heard kind of disturbed me a little bit. It is the council who permitted the density without doing the infrastructure analysis. So please don't tell us now that it is not your fault and that you can do anything to stop.

Matthew Connolly, 13 Cornelius Way in Cambridge, spoke on the electricity needs of the Kendall Square area: Commented that the best sentiment is a sense of guarded optimism. He's encouraged to see that everybody at the table has been having a conversation, but as a neighbor, he's incredibly frustrated to have no idea what's on the table. Pointed that the neighbors are not gonna give up and are gonna keep pushing forward.

VICE MAYOR JAN DEVEREUX: Thank you, Matt. I was just

conferring with the clerk and I think that if that was sent, if that letter from the Kennedy Longfellow staff was sent on September 13th, it may have been placed on a--a council agenda, but we can look back through the records and attach it to this agenda as well.

I mean, either way it'll end up on the public record. Um, and there are a number of emails attached, uh, here that we've received in the last several days.

Anyone else care to speak before I close public comment? Okay. Hearing none--oh, speak now or forever--thank you.

PUBLIC COMMENT

Joe Hermann, Cambridge, 25 Line Street, spoke on the electricity needs of the Kendall Square area: Questioned, "What type of development are we encouraging here in Cambridge?" Commented that the Net-Zero Action Plan is really meaningless if there's no opposition to new pieces of fossil fuel infrastructure, and the city is in a hard place now because of the power differentials.

VICE MAYOR JAN DEVEREUX: Thank you. Anyone else? Oh, okay. I couldn't tell if you were standing up. Okay. Um, all right. Then I will close public comment. Thank you all.

If you have, uh, thoughts you'd like to share with the committee, you can always email them, um, following the hearing to, uh, send them to clerk@cambridgema.gov and he can place some on the record as long as I think they're received by the--by midnight tonight. Um, okay.

So I will go back to the people at the table. Um, one thing I did want to mention, just in response to the public comment about lack of planning for energy needs and so forth. We had a--a committee hearing last week, I believe it was about, um, some suggested changes to the Article 19 special permit process, which would require potentially, um, a statement about what a--what a prospective development, uh, would need in terms of energy, how those needs would be met, um, to give us a better picture.

And one suggestion that came up during that discussion was having, um, an annual or biannual presentation, sort of similar to the town gown presentations that we have for institutional planning, where the big universities come to the planning board once a year and talk about what their plans are and how they, um, are coordinated with other city planning efforts.

Whether we could, uh, develop a--a similar process for

infrastructure planning so that--so that the planning board and members of the public and the council would be overall better informed about--about this because it--it is true that we haven't had direct involvement in understanding exactly how those needs are met and what they do to the--the load and the demand.

So that, uh, committee hearing, which was an ordinance committee hearing was continued, I believe. Um, and there's gonna be some more discussion about that. So it is something that we are, um, certainly grappling with, uh, admittedly, I guess belatedly, but I didn't want to just leave it out there that we're not, um, thinking of that.

And, you know, the--certainly the bioscience economy is a very important part of Cambridge's economy and that was also came up at the last hearing. So, um, there's obviously a wide range of opinion about--about that.

And I'm--I--that's not gonna open that can of worms right now, but just wanted to say that. Um, so anybody else? Okay, so we'll go to Councillor Carlone and Zondervan and then in the back row.

COUNCILLOR DENNIS J. CARLONE: Um, understanding the process a little more, I--I greatly appreciate that

Eversource is working with the city because I was told by a DPU person that basically whatever you come up with as the proposal, it's almost a hundred percent. It might be modifications, but that site is the site.

So just you're reaching out and agreeing to work with the city and the developers and--and the Kendall Square community and the neighborhood is an act in good faith, and we hope it continues because it's fait accompli, as I understand. And if--if the estimate is wrong, this I was told it literally is a hundred percent once it gets to that point because you're negotiating anyway ahead of time, I would imagine, is that incorrect?

MR. JOHN ZICKO: Again, what--what I'll speak from what my experience has been, um, that having worked on a number of substation projects is that, uh, you know, we--we do have--as--as a public utility, we do have the siting board and other DPU processes available to us.

I have come in and said, uh, at other municipalities, I've not said it in the city of Cambridge, but we don't use that process to kind of short circuit, no pun intended, short circuit, the local municipality.

Our intention is, and I--I think we've, we've done

that and I know, uh, you know, Todd has spent a lot of hours here, some of my colleagues have, um, you know, in trying to--in trying to kind of figure out what is and isn't going to play in the community and be acceptable in the community before we go in there.

Uh, are we always able to get there? No, we're not always able to get there as you--as you said, counselor. You know, sometimes there's negotiations that go on, sometimes there's conditions attached. Uh, I can't speak to the frequency of--of how these do and don't get denied, uh, or--or do and don't get accepted and go through the--the department.

COUNCILLOR DENNIS J. CARLONE: Thank you. Thank you, ma'am.

VICE MAYOR JAN DEVEREUX: Thank you. Councillor Zondervan?

COUNCILLOR QUINTON Y. ZONDERVAN: Thank you. Thank you, Madam Chair. I--I do want to appreciate some of the, uh, public comment and--and also take a little bit of the heat off Eversource because it is true that in some sense you are just coming in to try to meet the demand that has already been created.

Um, and--and that is on us. I've only been here one term, but that's no excuse. Um, but it's not too late. And--and that's why I keep insisting on a real non-res alternative because we can't just keep doing things the way we have done them in the past.

And I understand enough about electricity, I think that you may need a new substation somewhere in the city, but I don't accept that we can just keep increasing our load. That is not acceptable. And we have to use this opportunity to really change that trajectory. We have the net zero action plan, we have the arti--Article 19 Zoning amendments that are going through the process.

Um, I'm working on--on banning gas in new construction in Cambridge. We're gonna see a lot more changes like that in our policies as we start to address climate change. And we are gonna need Eversource as a partner in that process because we can't do all this stuff ourselves. We need you guys to be there with us and we don't want to have to fight you guys on--on these infrastructure projects or at all.

But again, as--as you're hearing from the community, if--if the answer comes back in a month that we have to go forward with Fulkerson Street, we're gonna fight you all

the way. And--and we understand we're gonna probably gonna lose because the decks--the deck's stacked against us, but it is not an acceptable outcome. So again, I really implore you to help us plan the future.

We are at 2%--less than 2% of our solar rooftop capacity is estimated by MIT in Cambridge. And part of the reason is that we can't even put solar panels in Central Square because the grid doesn't allow it.

So there's all kinds of improvements and changes that we're gonna need from Eversource to implement the changes that we need. And we have to reduce the demand. As, uh, the Vice Mayor said, it--it came up in the Article 19 discussions that the biotech sector is the engine of our economy, but it is also very energy intensive.

I ran a biotech company for seven years, so I'm very familiar with that problem. It is not impossible for us to do it with less energy. In fact, we know that we can do it with less energy.

So we have to go there and you have to go there with us. We can't say we're just gonna add more buildings and they're gonna consume more energy and we're gonna have to build more infrastructure and burn more fossil fuels. That

is just not acceptable anymore. We can't do that. So we have to come up with a different plan.

VICE MAYOR JAN DEVEREUX: Okay. Um, I think that's--I hope that's what we're trying to do. I--I hear you and I--I think every--everyone in this room is hearing that. Anyone, uh, Craig or Tim, do you have anything else to add?

Um, I--I want to acknowledge that we've had sitting patiently, quietly here, Owen O'Riordan, our Commissioner of the Department of Public Works, who certainly knows a lot about what's underneath the streets, um, and also Iram Farooq, who is the, uh, uh, Assistant City Manager for Community Development who knows a lot about planning.

So I don't know if either of you have anything to add. I appreciate that you've invested the time to come here, but you don't have to speak, but I also didn't want to ignore you. Okay.

Um, I--I have one actual question, which is, if--if all the chips fall into place and we find a new site and you guys say it works for you from an engineering standpoint and whoever owns the land is on board and we work out the money part of it, who--who would Eversource actually says, okay, you guys can switch sites? Because

someone at Eversource must have authorized the purchase of the Fulkerson Street site a number of years ago.

Does--is there somebody who hasn't been in any of these conversations who at some last minute could say, yeah, you guys can't do that? Or--or do you--I mean, I guess I just--I just don't want to ignore the fact that I don't think--I don't know who actually makes that decision for Eversource.

MR. JOHN ZICKO: So we would, you know, once the--once the, um, analyses are done and--and as you said, you know, we come up with this location, uh, assuming one exists for a moment, um, you know, we would--we would go back as a--as a project team, we would go back to an executive committee. I don't think it's one person in particular, um, who would make the decision.

We would go back and we would certainly weigh the, uh, you know, give them--give them the information that they needed to make an informed decision on the subject. And we would go back with, you know, if--if in the end all the analyses showed that this other location, I'll call it location X, were to work, um, and we made a recommendation to the, uh, executive committee that that was the way to

go, I don't know why they would not go with it. Okay. Uh, Ms. Benjamins has a-

VICE MAYOR JAN DEVEREUX: Okay, thank you.

MS. MAIJA BENJAMINS: I'd also like to add to that that, um, we do have monthly executive meetings and this project is on the top of the agenda. So to move forward with the process of Cambridge, we had to fully brief all of our executive counterparts or, um, to move forward with the process and to delay the--the construction of the project. So they're aware and they're supportive of us working with the city and we'd like to all come to a good solution.

MR. JOHN ZICKO: And what I--what I'll add is I had, uh, I recently had my mid-year performance review with my manager who is the vice president of, uh, substation and transmission line engineering. And he told me that, you know, I was to keep my finger on the pulse of this project and this was perhaps the most important thing on my plate. So, uh, it does have visibility at that level.

VICE MAYOR JAN DEVEREUX: Good. Well, that's good to hear. I just didn't want to leave that unanswered because-- yeah, thank you. [laughter] Um, we like--we like being a top priority. Um, okay then, if no one else has anything,

um, anything to add, I want to thank everybody for being here today.

Thank you for the 500 or so hours of additional engineering time. Thank members of the audience who didn't spoke, but who I know have also been investing a lot of time, um, and thought. And I appreciate that. And, uh, at this point, I don't know if when we'll have our next conversation about this, but I--I do hope that, um, the council and the committee will be kept apprised of--of the--the progress, um, over the next several weeks.

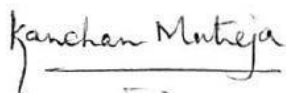
And I know we have, uh, a zoning decision to make in the short term and, um, I think the information that we've gotten today is promising, but perhaps not enough to make that decision. So I guess we'll see how that goes. But thank you, everyone, for being here and, uh, I'll adjourn. Thanks.

**The Cambridge City Council Ordinance Committee
adjourned at approximately 01:20 p.m.**

C E R T I F I C A T E

I, **Kanchan Mutreja**, a transcriber for Datagain, do hereby certify: That said proceedings were listened to and transcribed by me and were prepared using standard electronic transcription equipment under my direction and supervision; and I hereby certify that the foregoing transcript of the proceedings is a full, true, and accurate transcript to the best of my ability.

In witness whereof, I have hereunto subscribed my name this 25th day of January 2023.

A handwritten signature in black ink that reads "Kanchan Mutreja". The signature is written in a cursive style and is positioned above a horizontal line.

Signature of Transcriber