OFFICE OF ZONING AND ADMINISTRATIVE HEARINGS

FOR MONTGOMERY COUNTY

PETITION OF PEPCO - DARNESTOWN SUBSTATION	**OZAH No. CU 16-04**

A hearing in the above-entitled matter was held on January 7, 2016, commencing at 9:38 a.m., at the Stella B. Werner Council Office Building, Office of Zoning and Administrative Hearings, 100 Maryland Avenue, Second Floor, Rita Davidson Memorial Hearing Room, Rockville, Maryland 20850 before:

Martin L. Grossman

Hearing Examiner

A P P E A R A N C E S

On Behalf of the Applicant:

Scott Wallace, Esq.

Linowes & Blocher LLP

7200 Wisconsin Avenue, Suite 800

Bethesda, Maryland 20814

Also Present:

Thomas Hawkins, Jr., Burns McDonnell

William W. Riggins, III, Linowes & Blocher, LLP

Rachelle Negen

Will Ollison

Patrick Fitzgerald

Pat Oliver

C O N T E N T S

E X H I B I T S

Exhibit No.(continued)		Marked	Received
69	Resume of William H. Bailey, Ph.D.	268	325
70	October 2006 Status Report on Human Health Effects of EMF	285	325
71	Resume of Gabriel D. Weber	296	325
72	Letter from Fire Marshal Approving Fire Access Plan	324	325

P R O C E E D I N G S

MR. GROSSMAN: Good morning, all.

ALL PARTICIPANTS: Good morning.

MR. GROSSMAN: Mr. Wallace, I take it?

MR. WALLACE: Yes.

MR. GROSSMAN: You ready to proceed?

MR. WALLACE: Yes.

MR. GROSSMAN: Let me call the case. All right. This is a public hearing in the matter of Potomac Electric Power Company, PEPCO, CU 16-04, an application pursuant to Zoning Ordinance Section 59.3.6.7.E for a conditional use to allow construction of a public utility structure known as the Darnestown Substation at 16010 Riffle Ford Road in Gaithersburg, Maryland. The site consists of 2.645 acres identified as Lot 1 Evangelical Formosan Church of Washington and located at the northwest corner of the intersection of Darnestown Road and Riffle Ford Road in the RE-1 zone. It is subject to the Potomac Sub-Region Master Plan. The land is owned by the applicant.

This hearing is conducted by the Office of Zoning and Administrative Hearings. My name is Martin Grossman. I'm the Hearing Examiner, which means I will take evidence here and write a report and decision in the case.

Will the parties identify themselves, please?

MR. WALLACE: For the record, my name is Scott

Wallace with the law firm of Linowes & Blocher on behalf of applicant, PEPCO.

MR. GROSSMAN: All right. And are there others in the audience who are not witnesses to be called by Mr. Wallace, who wish to be heard today? All right. I see two hands in the back. Sir, would you identify yourself, please?

MR. PANDYA: Yes. My name is Pranav Pandya. Last name P-A-N-D-Y-A. First name P-R-A-N-A-V.

MR. GROSSMAN: P-E-R-N --

MR. PANDYA: No. P- as in Paul, R-, A- as in apple, N- as in Nancy, A- as in apple, V- as in Victor.

MR. GROSSMAN: Okay. And how do you pronounce your last name, sir?

MR. PANDYA: Pandya.

MR. GROSSMAN: Okay. And you wish to be heard in support, in opposition or just commenting?

MR. PANDYA: Opposition. And I'm one of the residents in the nearby cul-de-sac.

MR. GROSSMAN: Okay. Nearby cul-de-sac?

MR. PANDYA: Yes.

MR. GROSSMAN: But would you state your address, please?

MR. PANDYA: Yes. 12703 Hallman Court, H-A-L-L-M-A-N Court, Darnestown, Maryland.

MR. GROSSMAN: Okay. Sir?

MR. SILVERMAN: Good morning. My name is Cary Silverman. It's C-A-R-Y, Silverman as it sounds.

MR. GROSSMAN: All right.

MR. SILVERMAN: I'm also a resident of Hallman Court, 12705 Hallman Court in Darnestown, Maryland. And I'm in opposition.

MR. GROSSMAN: I received your, I received your letter.

MR. SILVERMAN: Thank you.

MR. GROSSMAN: All right. Anybody else? Seeing no other hands, gentlemen, would you step forward and have a seat at counsel table, if you would? All right.

Let me explain a little bit about the procedures here and the nature of the proceeding. It's formal in the sense that we operate like a courtroom. We have a court reporter who takes everything down. All witnesses are sworn in and they're subject to cross-examination. We follow Rules of Evidence, although they're somewhat more relaxed than a courtroom Rule of Evidence. And it's orderly procedure. A little less formal than you'll see in a courtroom. We're here today for an application for a conditional use. And a conditional use which used to be called a special exception, which was a misnomer because it's really not, it's not a variance which the term special

exception implies. A conditional use or a special exception is a use that's permitted by the Zoning Ordinance if certain conditions are met. And they're spelled out in the Zoning Ordinance and also in the report of the Technical Staff of the Maryland National Capital Park and Planning Commission which you all should have received a copy of. If not, we can make that available to you. We refer to them generally as the Technical Staff.

I should mention that we're governed by the new Zoning Ordinance here, which went into effect about a year ago and it was amended recently on December, effective December 21, 2015 and we're governed by those amendments as well even though the application may have preceded that date. All right. That's preliminary matters.

Mr. Wallace, have you executed, or your, your client, executed an Affidavit of Posting?

MR. WALLACE: We have.

MR. GROSSMAN: All right. Would you bring that up, please?

An Affidavit of Posting is an affidavit from the applicant indicating that the site has been posted as required by the Zoning Ordinance.

MR. WALLACE: I believe it is with your staff for notarization.

MR. GROSSMAN: Oh, okay. Maybe they have that for

--

MR. WALLACE: They have maybe even given to you.

MR. GROSSMAN: It may even be, she's always way ahead of me. I got to tell you.

MR. WALLACE: She was ahead of me too.

MR. GROSSMAN: Yes, she did. All right. So the Affidavit of Posting will be Exhibit 53. Okay.

I should mention that a preliminary plan of subdivision is required in this case and since the preliminary plan that exists must be amended, any conditional use if one is approved here would be subject to that preliminary plan. Any issues with that? Seeing no hands, I'll go on.

Mr. Wallace, do you agree to the conditions recommended by the Technical Staff and affirmed by the Planning Board in this case?

(Hearing Exhibit No. 53 was marked for identification.)

MR. WALLACE: We do.

MR. GROSSMAN: Have you amended the landscape plan as the, as the Planning Staff had called for?

MR. WALLACE: We have.

MR. GROSSMAN: Okay. All right. And I'll have you present that in the normal course as you will. All right. I'd also ask that you have a witness address the,

the matters that were raised, the concerns that were raised by the opposition letter which was forwarded by Mr. Silverman. And as I read that letter, it contains essentially 12 concerns and it also contains a number of proposed conditions which are suggested if the conditional use is granted over the opposition. I can run them down as I read the opposition letter. And that is Exhibit 51. (1) The proposed substation does not meet the requirements of a conditional use under the statute; (2) that PEPCO is proposing an industrial use large power station, power substation that will adversely alter the character of the block and is likely to reduce property values; (3) the scale of the proposed PEPCO substation is out of proportion to the surrounding community; (4) PEPCO is also seeking to build a structure that is just two feet short of the maximum permitted building height and will tower over their homes; (5) the substation although theoretically designed to resemble a farmhouse will not look like a farm; (6) the proposed use is inconsistent with the Darnestown planning area; (7) the potential health risks of placing an electric substation within feet of homes -- and on that point, I do want you to also certainly address the question of whether there's any danger from fire or explosion to these nearby homes; (5), I'm sorry, (7) I gave; (8) noise generated by the substation; (9) where PEPCO plans to situate the

transmission poles is a concern; (10) additional rain runoff; (11) traffic during construction, although it's pretty much conceded that there won't be traffic created during operation; (12) placement of such a large power substation within feet of homes is inappropriate and will place a disproportionate unfair burden on the homeowners as a PEPCO right-of-way with towers and utility poles already borders their houses.

So those are the points. That's not the same numbering system exactly as was in the letter, but I just wrote them down as I read it. That I'd like to make sure that you have a witness address. And I will certainly give the opposition an opportunity to testify about that.

All right. Let's see. Well, I guess that's my preliminary points. Any other preliminary matters that you wish to raise, Mr. Wallace?

MR. WALLACE: No.

MR. GROSSMAN: All right. Gentlemen, any opposition? Do you have any points you wish to raise?

MR. SILVERMAN: We have one --

MR. GROSSMAN: As a preliminary matter. I'm going to give you an opportunity to be sworn in and testify.

MR. SILVERMAN: Okay. Okay. Then no.

MR. GROSSMAN: In the normal course, the applicant would go first and you would go after that. We usually make

accommodation if you need to leave because these things sometimes last well into the afternoon or after that even. If you need to leave for some reason, we usually make an accommodation for members of the public who wish to give testimony early with the consent of the applicant. Are either one of you in that situation or do you wish to proceed in the normal course?

MR. PANDYA: It's okay.

MR. SILVERMAN: I'm fine. I do have one just preliminary question.

MR. GROSSMAN: Yes.

MR. SILVERMAN: Just a clarification on what, what's the process if we want to have, show an exhibit or share something with, with you and PEPCO? Do I provide a copy of that to, how does that work?

MR. GROSSMAN: Yes. You should provide a copy to the, in the course of it. And hopefully, you would do it now so that they have a chance to look at it and can respond. If it comes in at any point, they would certainly be entitled to look at it and a copy would be marked here and then at the end we ask if anybody wishes to move the exhibits in and then the exhibits are then moved into evidence at the end.

MR. SILVERMAN: Okay. I'm happy to share them now.

MR. GROSSMAN: Okay.

MR. SILVERMAN: If, if they'd like that.

MR. GROSSMAN: I think that would be helpful so that Mr. Wallace and his experts have an opportunity to look it over. When individuals come to testify, the, the rules are relaxed. If, if an, if an organized opposition comes, an association and the like, they're required to file things 20 days in advance of the hearing. But individuals may come and, and testify without doing that.

MR. WALLACE: Just as a procedural matter.

MR. GROSSMAN: Yes.

MR. WALLACE: We also intend to have exhibits that we would ask to be introduced into the record which have not, are not in the record now.

MR. GROSSMAN: Okay.

MR. WALLACE: We would, I think it would be better for our presentation to do it as we are introducing them.

MR. GROSSMAN: Okay.

MR. WALLACE: And talking from them. And certainly we'll give as much time, there's nothing new necessarily, but we'll certainly give as much time to review --

MR. GROSSMAN: The amendment to the landscape plan and --

MR. WALLACE: Yes. For example. You know. The

aerial, for example.

MR. GROSSMAN: Okay. I don't think there'll be any surprise in, in that.

MR. WALLACE: No. I don't think so. And some resumes, of course, as well.

MR. GROSSMAN: Certainly. I should mention to you, gentlemen, that the, because there are amendments to the plans, which are going to be filed today, minor amendments dealing with the comments, mostly for dealing with the comments of the Technical Staff, the record will remain open for 15 days after this hearing in order if anybody has a response to the things that are being filed today. And you may comment on that. It won't be left open for general commentary from everybody. It'll be left open for commentary on these changed documents.

MR. PANDYA: Sir, you said it could be open for 15 days?

MR. GROSSMAN: Yes. It'll be open for 15 days. Potentially longer if something occurs at the, at the hearing that warrants it. But my plan, when I saw that there were going to be amended documents, to give everybody an opportunity to respond to them was to leave it open until January 22, 2016. That agreeable, Mr. Wallace?

MR. WALLACE: I'm sorry. I was taking a look at the --

MR. GROSSMAN: Okay. What I said was because there are, are amendments to plans being submitted today, I was going to leave the record open for, until January 22, 2016, 15 days, in order to allow commentary on the amendments.

MR. WALLACE: Okay. Absolutely.

MR. GROSSMAN: Not general commentary on the case. And Mr. Pandya, I see that you're also a signatory on the, on the letter, Exhibit 51.

MR. PANDYA: Yes, sir.

MR. GROSSMAN: Okay.

MR. WALLACE: You know, again, I'm not sure what the context of those will be discussed from one appears to be some type of expert report prepared regarding electro-magnetic fields by a party that I don't think is here. I, I can't say I'm not going to --

MR. GROSSMAN: I'll let you make whatever objections you have --

MR. WALLACE: Yes.

MR. GROSSMAN: -- at the appropriate time when they seek to introduce that.

MR. WALLACE: Yes. I would say it's a significant amount of information to be presenting at this time.

MR. GROSSMAN: I understand. And the way the Zoning Ordinance is written, as I was saying before,

individuals can come in and they don't have to indicate in advance that they're coming in and can testify. In fairness, it's a little bit different if you're offering expert testimony such as calling an expert witness. In those cases, I would generally require that somebody, that you notify and file something indicating who the expert is and what they're qualifications are and the, a summary of what they intend to offer as a, in fairness to the other side. I don't know what these documents are exactly, but we'll get to that and cross that bridge when we come to it. There's nothing specific in the Rule about that for individuals. I, I approach it that way as a fairness matter although I am in the process of amending the Rules to cover that, that point in fact.

Mr. Wallace, do you have an opening statement?

MR. WALLACE: Thank you, Mr. Grossman. We are, we are here today to present the Conditional Use application for PEPCO's Substation. This is a much needed improvement to the electrical service for this area of the County. They have a situation where because of new growth in the area, the existing facilities for electrical service will reach a point of being over-taxed in the very near future, which will cause liability issues for the, for the area. This is a thoughtfully designed structure where citizen interests have been taken into consideration. And a result, changes

to the projects have been made, which you will hear about more today. We are happy to have the full unanimous support of the Planning Board in support of this application and we are, I believe that with the testimony presented today, what is in the record, what will be in the record, we have satisfied all the required conditions for approval of this conditional use application.

MR. GROSSMAN: All right. Gentlemen, I will await your opening statement as part of your, as part of your presentation under oath. All right.

Would you call your first witness, please, Mr. Wallace?

MR. WALLACE: Thank you. I call Ebenezer Botchway.

MR. GROSSMAN: Mr. Botchway. All right. You prefer if Mr. Botchway sits, I think, we often have the witnesses up here. Sometimes at the end of the table, depending on where things are set up. I think the end of the table is probably, gives you better access to the plan. Is that the way you have it set up? So the end of the table is a good situation? All right. Well, there's actually a chair right there at the, at the end of it.

MR. BOTCHWAY: Oh, yes. Here.

MR. GROSSMAN: Yes, sir. I'm sorry. And would you state your full name and your business address, please?

MR. BOTCHWAY: My name is Ebenezer Botchway. My business address is 701 9th Street, N.W., Washington, D.C.

MR. GROSSMAN: Would you raise your right hand? Do you swear or affirm to tell the truth, the whole truth and nothing but the truth under penalty of perjury?

MR. BOTCHWAY: I do.

MR. GROSSMAN: All right. You may proceed, Mr. Wallace.

DIRECT EXAMINATION

MR. WALLACE: Mr. Botchway, can you, please, state your current occupation and position?

MR. BOTCHWAY: I'm a senior supervisor for civil and structural engineering for the three units of PHI, PEPCO, Delmarva and ACE, Atlantic City Electric.

MR. GROSSMAN: And, I'm sorry, Mr. Botchway. I missed part of that. You're the senior supervisor for what?

MR. BOTCHWAY: for civil and structural engineering.

MR. GROSSMAN: Civil and structural engineering.

MR. WALLACE: And we will be providing a resume for Mr. Botchway. You're welcome to, I can certainly hand it in now if you have, it may help you with some of the statements.

MR. GROSSMAN: That would be good. Thank you. Do you have a copy for the opposition?

MR. WALLACE: Yes. Here's two copies.

MR. GROSSMAN: Thank you. All right. Mr. Botchway's resume will be marked as Exhibit 54. All right, sir. You may proceed.

(Hearing Exhibit No. 54 was marked for identification.)

MR. WALLACE: Okay. If you'd please briefly describe your educational and professional background.

MR. BOTCHWAY: I have a, I have a civil and structural engineering degree from the University of District of Columbia. I have a Master's Degree in environmental management from the University of Maryland. I have a professional engineer's license for the District, Maryland and Commonwealth of Virginia.

MR. WALLACE: Okay. And can you, how long have you been with PEPCO?

MR. BOTCHWAY: I've been with PEPCO for 36 years.

MR. WALLACE: Okay. And can you please review briefly your experience with design and construction and operation of electric substations?

MR. BOTCHWAY: Yes, sir. Of my tenure at PEPCO I have been the lead engineer for civil and structural at a specific substation for about six, seven substations within their, their D.C., Maryland and Virginia, D.C. and Maryland regions.

MR. WALLACE: What was that number again? I'm sorry.
MR. BOTCHWAY: Seven.
MR. WALLACE: Seven. Okay. Thank you. I would move Mr. Botchway as an expert in substation design, construction management and operations.
MR. GROSSMAN: All right. Now as part of the process, there's something called voir dire of experts. That is, before somebody, when somebody is introduced and a party seeks to call somebody as an expert, you are given an opportunity or the parties are given an opportunity to examine the, the designated expert as to qualifications. Just not, not as to the substance of what the testimony will be, but as to his qualifications to be considered an expert in the field in which he was proffered. So I give you that opportunity now. Gentlemen, either one of you or both of you. You have questions regarding this witness's expertise? You have to speak up because it --
MR. SILVERMAN: I have no objection to that.
MR. PANDYA: Not right now. No.
MR. GROSSMAN: Well, this is the only opportunity --
MR. PANDYA: But can we, this is the only opportunity?
MR. GROSSMAN: The only opportunity to ask him

questions about his expertise.
MR. PANDYA: Okay. All right. No, sir. No.
MR. GROSSMAN: All right. All right. Based on Mr. Botchway's resume and his explanation of his background and education, I accept him as an expert in, what was exactly the designated --
MR. WALLACE: Substation design, construction management and operations.
MR. GROSSMAN: Okay. Substation design, construction management and operations. All right.
MR. WALLACE: Okay. Mr. Botchway, behind you is an aerial photograph. This is not in the record. I would, this is an aerial photograph of the, the, the site and the surrounding area. I would ask this to be put into the record. I think it --
MR. GROSSMAN: Would you, would you write on it Exhibit 55, please?
MR. WALLACE: Yes. And I, I believe it's --
MR. GROSSMAN: And that will be aerial photo of surrounding area is Exhibit 55.
(Hearing Exhibit No. 55 was marked for identification.)
MR. WALLACE: Mr. Botchway, could you on the aerial exhibit locate the property on which PEPCO intends to construct a new substation as part of this application?

MR. BOTCHWAY: Yes, I will. It's at, we are at the northwest corner of Riffle Ford Road and Darnestown Road.
MR. GROSSMAN: All right. And is it that, that area that's outlined in red --
MR. BOTCHWAY: Red. Yes, sir.
MR. GROSSMAN: -- on the, on the exhibit?
MR. BOTCHWAY: Yes, sir.
MR. GROSSMAN: All right.
MR. WALLACE: And does PEPCO own the subject property?
MR. BOTCHWAY: Yes. PEPCO does.
MR. WALLACE: And when did it purchase the property?
MR. BOTCHWAY: Purchased the property on about late 2010.
MR. WALLACE: Okay.
And that deed is in the record as Exhibit 14. Okay.
Can you just generally describe your plans for the property? Just the project and what the purpose of the substation is.
MR. BOTCHWAY: We plan to put, put in a regular substation at the corner of that intersection. And the purpose of that work is to feed up, you know, we have

different load requirements and definitely at that corner has been identified as a load center where we've put up a substation to be able to meet our reliability and distribution for foreseeable future that we might have some sort of shortages.
MR. GROSSMAN: And I take it by load, you're talking about the demand for electrical power?
MR. BOTCHWAY: Yes, sir.
MR. GROSSMAN: All right.
MR. WALLACE: And just as an aside, obviously, a lot of the testimony is going to be technical from the point of view of electrical transmissions. Obviously, if there's any questions about acronyms, phrasing, whatever, they can be asked and answered.
MR. GROSSMAN: All right. Thank you.
MR. WALLACE: I'm, I'm not going to explain every point there is, but that is helpful. Thank you.
MR. GROSSMAN: All right.
MR. WALLACE: So the purpose of the substation again is to provide for enhanced reliability for this area of the County?
MR. BOTCHWAY: That's, that is correct.
MR. WALLACE: Okay. What kind of equipment will be installed and operated at the substation? And for that purpose, would there be, which exhibit? Which one? This is

the floor plan?
MR. BOTCHWAY: Yes.
MR. WALLACE: Okay. Does that work for you?
MR. GROSSMAN: And is that a copy of an exhibit that's already --
MR. WALLACE: This is a copy of Exhibit 20 in the record.
MR. GROSSMAN: Okay.
MR. WALLACE: These are the floor plans that were submitted as part of the application.
MR. GROSSMAN: All right.
MR. WALLACE: Can you walk through, please, Mr. Botchway, the --
MR. BOTCHWAY: Yeah. The building itself will be housing the heart of the substation is the transformers. The transformers and other, and its associated equipment. The associated equipment usually helps to protect the transformer or having each of those functions. The transformers can be, are located far away from any residence that we have within the four quadrants of the surrounding substation. There's a, an access road in the middle of the substation at the roofed area. The only roofed area we have in here will be two levels where we have what we call the cable vault in the, in the first floor, and the switch gears on the top floor. Every place, every, every other place in

the building will be open with a screening on the top to make sure that we don't have any birds flying into the substation to destruct equipment upon performance.
MR. GROSSMAN: So what kind of screening are you talking about on the top?
MR. BOTCHWAY: We have like an expanded metal grate that is interwoven much like you have for your screening for your windows and the like.
MR. GROSSMAN: So it's a woven material that'll be just covering the, the otherwise open unroofed space?
MR. BOTCHWAY: Correct.
MR. GROSSMAN: Okay.
MR. BOTCHWAY: And it's basically, you, we have structures underneath to support it so you've got cases of operation, people can walk on there, remove them and replace them as, as, as they need arises.
MR. GROSSMAN: Remove the --
MR. BOTCHWAY: The screens.
MR. GROSSMAN: The screens. Okay.
MR. BOTCHWAY: Yeah. So all these areas will be, will be screened. We have --
MR. GROSSMAN: And these areas, just so the record is clear. What areas are you talking about?
MR. BOTCHWAY: From right about, from around right about here to the end of the property.

MR. GROSSMAN: Okay. By here, you mean, is that the front, by the way? The bottom is the front?
MR. WALLACE: Yeah.
MR. BOTCHWAY: This is the front facing Darnestown Road.
MR. GROSSMAN: So there's about, looks like maybe a fifth of the area on, from the front towards the back is roofed and the rest of it, going towards the back will be open. Is that what you're saying? Except for the screening?
MR. BOTCHWAY: That is correct.
MR. GROSSMAN: Okay.
MR. BOTCHWAY: That meant the transformers will be located right about right here.
MR. GROSSMAN: Right here being --
MR. BOTCHWAY: Being --
MR. GROSSMAN: -- in the second fifth of the, from the front or so.
MR. BOTCHWAY: From the front. Second fifth. Yes, sir.
MR. GROSSMAN: Right.
MR. BOTCHWAY: And then there is a driveway for accessibility to the different equipment. Beyond that we have what we call breakers. We have electrical breakers to assist the transformer operation. Add some kind of a

protection scheme much like a breaker you'd get in your house to isolate equipment for repairs and replacement.
MR. GROSSMAN: Oh, okay. And those circuit breakers are located centrally in the building?
MR. BOTCHWAY: Inside the building.
MR. GROSSMAN: Inside the building. Right.
MR. BOTCHWAY: Beyond that, you have your CCPD current coupling are potential devices.
MR. GROSSMAN: What does CCP stand for?
MR. BOTCHWAY: CCPDs usually helps regulate inner residual currents that are slower. You know, that straight currents and the like. It's what take --
MR. GROSSMAN: Well, what, what do the initials, what do the initials, CCP, stand for?
MR. BOTCHWAY: Current coupling potential device.
MR. GROSSMAN: Okay.
MR. BOTCHWAY: Yes. Beyond that, beyond that, right about, that's, that, the, the combination of the CCPDs and then there are, we have the switch, the circuit breakers, CCPDs from about the middle fifth of the property. That is two-thirds out of the way.
MR. GROSSMAN: Right.
MR. BOTCHWAY: Beyond that, you have the high tension transfer bus, which is basically conductors that would help facilitate the new design of this substation

whereby you can transfer a load between the transformers which in the past you couldn't. In the, in the old design one bus feature is dedicated to a transformer and that's all you got. But in this instance, because of the transfer bus's tension, high tension transfer bus, you could do that with this substation.

MR. GROSSMAN: Okay.

MR. BOTCHWAY: Make it's more, make it more reliable.

MR. GROSSMAN: All right.

MR. BOTCHWAY: Beyond, that's what's inside the building. On the outside, what, what we have been trying to do is to mimic a farm like design. So we have what you call a partial, we call it as a mansard roof, which is a false roof. That is --

MR. WALLACE: And if I could just interrupt you just for a second.

MR. BOTCHWAY: Yes, sir.

MR. WALLACE: Ebe, because there's another exhibit that might be helpful for you to talk from it. Would you like to talk from this one?

MR. BOTCHWAY: Yes. Yes.

MR. GROSSMAN: And what is the exhibit number of that exhibit you --

MR. WALLACE: And this is Exhibit 7.

MR. GROSSMAN: All right.

MR. WALLACE: There are two sheets and they're both 7 and --

MR. BOTCHWAY: They're both 7, yes.

MR. WALLACE: These are, these are the conceptual elevations. I don't know which one you want to start with. Obviously, both --

MR. GROSSMAN: Yeah. We have a 7A and 7B is --

MR. WALLACE: Oh, they are so 7A and -- okay.

MR. BOTCHWAY: Correct. That's correct.

MR. WALLACE: And obviously we'll be providing more detailed testimony about the architecture. This is just to provide an overview.

MR. GROSSMAN: Okay.

MR. BOTCHWAY: Yeah. Just touching on the general façade treatment of the building, the building itself is what I called initially a brick and block type of a building. It has different designs around, you know, windows and the like to break the monotony of a one long piece of a block on the building. We have false roofing system in here which did not go entirely throughout the building, but from the outside it looks like a mansard roof. Much like, like a church or you see in the Rockville area for various, various, various businesses in the strip malls and shopping centers that you see around here. We have an

open driveway. We have a removable door in the middle for the access road which goes up and down because if you put up a regular gate, opening it would take up a lot of space.

MR. GROSSMAN: All right. And that, that, you say, is that on the side of the --

MR. BOTCHWAY: Yeah.

MR. GROSSMAN: That's the side entrance?

MR. BOTCHWAY: On the front here --

MR. WALLACE: I, I, we took the inside the building. We probably should have taken the outside the building for a second, but I can --

MR. GROSSMAN: All right.

MR. WALLACE: Yeah.

MR. BOTCHWAY: But for the outside, right here, is, is the removal, you know, removal door in here. That gives access to the open access road where space we have in the middle. And that's to facilitate repair and removal of transformers which would be done entirely inside the building.

MR. GROSSMAN: Okay. Is there a north, south key on that diagram that you are referencing now?

MR. BOTCHWAY: I, yes. There is, but it's very, no, I'm sorry. That's, we have another --

MR. WALLACE: I was going to say we can --

MR. BOTCHWAY: This exhibit shows the north arrow

here.

MR. GROSSMAN: All right. What exhibit is that you're --

MR. WALLACE: And that's not quite an exhibit yet, but if you give me a second.

MR. GROSSMAN: Okay.

MR. WALLACE: I can, let's see. You want to look at the north side? I can do them side, if you want, we can do them side by side too.

MR. BOTCHWAY: No. This is fine.

MR. WALLACE: Okay.

MR. BOTCHWAY: This --

MR. GROSSMAN: What exhibit is that?

MR. WALLACE: Exhibit --

MR. BOTCHWAY: Exhibit, I'm sorry, 48.

MR. WALLACE: That's Exhibit 48.

MR. GROSSMAN: 48.

MR. BOTCHWAY: 48A.

MR. GROSSMAN: Okay. All right. So 48 --

MR. BOTCHWAY: It's a little hard for you to see from that distance, but --

MR. GROSSMAN: All right.

MR. BOTCHWAY: I can bring it closer if you --

MR. GROSSMAN: I can pull it out if need be. That's the Conditional Use Site Plan.

MR. BOTCHWAY: Okay. With the note I wrote in here, that's a reference note I wrote in here.
MR. GROSSMAN: Right.
MR. BOTCHWAY: Which means I would like for straight face going to the west a little bit.
MR. GROSSMAN: All right. It's on, it's on the northern, in effect, the northern side.
MR. BOTCHWAY: Northwest.
MR. GROSSMAN: Northwest side of it. And the entrance that you were referencing also looks like it's on the north --
MR. BOTCHWAY: In the northwest of --
MR. GROSSMAN: Right. Side of the, of the building.
MR. BOTCHWAY: That is correct.
MR. GROSSMAN: Okay. All right. That's helpful. Thank you.
MR. BOTCHWAY: Yes.
MR. GROSSMAN: You can return to whichever exhibit you want to look at.
MR. WALLACE: If you flip that, Ebe, that's back to the floor plans. No. Flip around. Yeah.
MR. BOTCHWAY: Flip around. Okay. So in continuing the outside design, we, we went to greater lengths by working with the community back and forth. We

started with almost like a townhouse look with brick and block and based on comments we got from the community and the Planning Office that we have to go through different iterations and we came up with this type design. So it has gone through some changes, but basically inside equipment remains the same design. The inside remains the same.
MR. GROSSMAN: Okay.
MR. BOTCHWAY: Okay.
MR. WALLACE: Can you describe it, I'm sorry, you have already done it, but a little more detail, the wall enclosure around the courtyard, how high is that and what functions does it serve?
MR. BOTCHWAY: The wall serves the function for one, security, and secondly, for any kind of noise that might exit this property beyond the equipment confinements. Because of the height of the wall, it helps to diffuse any noise propagated horizontally outside. It helps also for the security of the, of the equipment that is inside. By NESC standards, National Electric Safety Code, we have to have some kind of protection from the public and then also to protect the public from coming in contact with the equipment.
MR. WALLACE: Okay. What, what determines the size of the building and the enclosure for the, for the equipment?

MR. BOTCHWAY: The equipment for one, because there, we, we do have three transformers with associated equipment. The reason for the size of the, that we have here, one is because of National Electric Safety Code clearances. If you have a transformer with conductors around it, you need to separate it from another transformer by a certain distance. If you, you have average folks coming to the substation, walking around, they have to maintain certain distances from the equipment for, for the obvious purposes of getting short circuited. So there are certain requirements for clearances when you're dealing with electrical equipment. Because of those clearances you have to maintain those spaces within the substation. That is the reason why if you have one equipment, it's not just equipment occupying the space. You have to have distances away from it that in the public, in the public arena or people coming to the substation will be able to maneuver through the substation without having to have it violate that distance that you need to --
MR. GROSSMAN: All right. Well, one of the concerns raised by the opposition was the height and size of the building in question. Is it possible to reduce the height and size of this building with the current equipment that you would like to have in it?
MR. BOTCHWAY: It, it would be very difficult.

Let me, and the, and the main reason, and the reason for that is the equipment that we are bringing to this site in here that's for, we, the idea is to provide reliability. The purpose of the main determining factor for our company is when, in case of outages, operation of electricity we can provide loading. Of course, we are, we will have some shortage of loading in the near future as the rules of, for the substation. But the real meat of the problem that we have is bringing service back on when we lose service. This new design here makes up for that. To bring service back on as quickly as we can by the fact that with all this associated equipment that we have in here, it gives us the flexibility to, to change feeders between transformers. By having this here, yes, that's gives us the ability to bring service back on so quickly in case of outages. That's secondly. Thirdly, it helps also with the fact that we do not have to have spare transformers situated all over the place or in, spend a lot of money for spare transformers for these locations because the flexibility or the design where because these transformers are interchangeable with the feeders as it come, gives us the opportunity to reverse it. Not too many transformers in spare. Because then if there's a problem, you can always come in and then interchange the feeders to utilize any of the transformers in there without having any whole lot of spares.

MR. GROSSMAN: But actually you're addressing the question I haven't quite asked yet.
MR. BOTCHWAY: Yes.
MR. GROSSMAN: Which is whether or not, why you need a lot of equipment and can it be reduced. That's a follow-up question, but really what I'm asking you is assuming you have all the equipment and this design --
MR. BOTCHWAY: Right.
MR. GROSSMAN: -- that you presently intend to have --
MR. BOTCHWAY: Yes.
MR. GROSSMAN: -- is it possible to reduce the size of the building, its outline as well as the height of the building? Because that was a concern of the opposition?
MR. BOTCHWAY: Correct. It, it would not be possible because this is the bare, absolute bare minimum considering the clearances that we have for each equipment.
MR. GROSSMAN: Okay. And now, let's get back to the question that you were addressing, which is why you have three transformers and so on. Is it necessary to have the three transformers? I understand you've indicated now in your testimony that it is helpful for reliability. It gives you flexibility if I understood your testimony.
MR. BOTCHWAY: That is correct.
MR. GROSSMAN: In case, I presume, one of those

transformers goes out, you have others. Would all three be in use at the same time or only one? I, I don't, because I didn't quite follow what you're saying there. Is it, you're saying that, that you have one in operation. You've got two spares located there. How does that work?
MR. BOTCHWAY: Well, with, with that, if you want to I can bring an expert who will be able to handle that or I can give you the general idea is that, that because of the three phases, most electrical conductivity uses three phases. Three phases demands three separate dedicated transformers to handle each phase.
MR. GROSSMAN: So are you saying that all of those three transformers are operational all the time?
MR. BOTCHWAY: Yes.
MR. GROSSMAN: Okay. All right.
MR. WALLACE: Is that, is that, we --
MR. GROSSMAN: So I'll, I'll let you, if you want to call another witness on the point, you certainly can.
MR. WALLACE: Yes.
MR. BOTCHWAY: Right.
MR. WALLACE: We can, we have another witness to supplement that testimony.
MR. BOTCHWAY: Yes.
MR. WALLACE: Yes. And I'm, there, just to be clear. There are three active transformers and then there

is space --
MR. BOTCHWAY: For a spare transformer.
MR. WALLACE: For, right. Okay. And, and we get into the operations. Can you describe the staffing, such that it is, the delivery schedules, things like that? What, what'll happen around the substation on a 24-hour period or daily basis and, and provide some information about that, please?
MR. GROSSMAN: Before you get to that --
MR. WALLACE: Oh.
MR. GROSSMAN: -- I, I, your question, I didn't, and I didn't quite understand. You're saying there are three active transformers in the facility and space for a fourth one, which is not there?
MR. BOTCHWAY: Which --
MR. GROSSMAN: Is that what you're saying?
MR. BOTCHWAY: -- is not there, but it will be a space where we can store a transformer in cases of emergency within the vicinity. Then we do not have to, because, because, the reason for that is the lead time for a transformer, ordering and delivery, is so long, I would say --
MR. GROSSMAN: Well, that's what I don't understand. Is it going to be stored there? It'll be there, but not in operation? Or are you saying it's not

going to be there? You said space so that's why --
MR. BOTCHWAY: It, it, we will have a transformer space, transformer will be there, but it won't be operational.
MR. GROSSMAN: Okay. So you'll have three transformers that are operational and a fourth spare one --
MR. BOTCHWAY: A fourth for spare.
MR. GROSSMAN: Okay.
MR. BOTCHWAY: Just in case we have a problem there, we can easily replace it and shorten the space of the down time.
MR. GROSSMAN: I understand. Okay. Now you can get to the operational question --
MR. WALLACE: Okay.
MR. GROSSMAN: -- that Mr. Wallace was asking.
MR. WALLACE: You were describing the, the operations of the site. You know, again, what will happen on a daily basis around the site and inside the site?
MR. BOTCHWAY: Well, I need, I'd, I'd like to emphasize that this station will be in its final form, final construction form will be unmanned. There won't be anybody at all in the substation, but it will be remotely monitored 24/7 for any kind of other operation that are goes, that goes on within the substation, there's an eye on it, electronic eye on it at all times. Once in a while, we'll

have operators on schedule. Maybe biweekly, monthly. To visit the substation to make sure everything is going on correctly and then to pick up any stray trash that some, you know, individuals or maybe neighborhood trash that has been thrown into the site, to keep the place clean.

MR. WALLACE: Do you have a regular maintenance of the grounds and landscaping?

MR. BOTCHWAY: Yes. We do.

MR. WALLACE: Okay. Can you describe the security around the site? Both the perimeter security and the building security.

MR. BOTCHWAY: Yeah. The security, we have different forms. We have the perimeter physical security, which will be that, on a metal fence that will be closed at all times. And then in, and within the building also we have the walls, of course, that goes up high and the gates and locks are always locked. And that is a security requirement within PEPCO, all substation facilities has to be locked. And the lock, anytime we have locations where you open any door, there is a signal goes to our security, central security agency. As we, employees going in, we have to report every time we open any door to go in. We have to report to our security that we are entered and when we leave, we report likewise that we have left the place. Security-wise, we have small signs on the doors that

indicates some couple of doors by code. We have to have that from the National Electric Safety Code. That is a high voltage danger area.

MR. WALLACE: Can you describe the fence? You said there was a perimeter fence around the property. What, what's the height of the fence?

MR. BOTCHWAY: They, they will be wrought iron fence. The fence will be decorative in nature. It will be seven foot high with three, three band across and it will have a gate at this entrance on the, on the --

MR. WALLACE: Yeah. Excuse me.

MR. BOTCHWAY: On the main entrance.

MR. GROSSMAN: All right.

MR. BOTCHWAY: It will, it will have, it will have the main entrance. They will have a gate which one gate that will be opened and closed. It will be closed at all times.

MR. WALLACE: With card access to --

MR. BOTCHWAY: With card access to, what we call cyber security.

MR. WALLACE: And just to correct your recollection of the facts. The, the fence will be seven feet or eight feet?

MR. BOTCHWAY: The fence will be --

MR. GROSSMAN: I think the, that he's suggesting

to you it's probably eight feet. Is that --

MR. BOTCHWAY: It's eight feet. The fence will be eight feet.

MR. GROSSMAN: -- what you're suggesting, Mr. Wallace?

MR. WALLACE: Yes.

MR. GROSSMAN: Right.

MR. WALLACE: And, and the material is aluminum or wrought iron?

MR. BOTCHWAY: It would be --

MR. WALLACE: Suggesting aluminum.

MR. BOTCHWAY: Suggesting, no.

MR. WALLACE: And we have various witnesses who have, but the, the point about the height. What determines the height of the fence? Why do you use the, the height of the fence at, at eight feet?

MR. BOTCHWAY: Correct. The height of the fence is usually controlled by the Code.

MR. WALLACE: Which Code are you referring to?

MR. BOTCHWAY: Which is the National Electric Safety Code, NESC. It's a requirement that we have eight feet of fence, but at the very minimum, we can deal with seven.

MR. GROSSMAN: All right. And you're saying it's aluminum not, not iron?

MR. WALLACE: Aluminum?

MR. BOTCHWAY: It's aluminum.

MR. WALLACE: It's black aluminum. Yes.

MR. GROSSMAN: All right.

MR. WALLACE: There, and that is in the record as a detail, a sheet, a detail pulled out of the landscape plan. And, and just from that exhibit, the, the, yes, state, you know, keeping with that exhibit.

MR. BOTCHWAY: Okay.

MR. WALLACE: Can you just, the fence is how far off the property line approximately? It, it may vary as you work around the site.

MR. BOTCHWAY: It does vary, but on approximately, we have it about 30 feet away from the, from the building and it's about 20, 20 feet from the property.

MR. WALLACE: And it is, as I said, it may vary.

MR. BOTCHWAY: It may vary in, in --

MR. WALLACE: Yes. But it's approximate. You know, 15 to 20 --

MR. GROSSMAN: So approximately 20 feet from the property line and 30 feet from the building? Is that the idea?

MR. WALLACE: Yes. At the closest point to the building. Yeah. Exactly.

MR. GROSSMAN: Okay. Okay.

MR. WALLACE: And is PEPCO providing landscape screening along the fence?
MR. BOTCHWAY: Yes. We, we have.
MR. WALLACE: And --
MR. BOTCHWAY: And this exhibit, that indicates that the landscaping all around to screen the building all around the property.
MR. WALLACE: Okay. Moving on to the construction. Approximately how long will it take to construct the substation once you, if you are approved and if your building permits are issued?
MR. BOTCHWAY: I think the actual building construction would take about a year. And then the installation of the electric equipment would take another eight, six to eight months.
MR. WALLACE: Okay. And does most of the construction activity occur within the site or will any of the adjacent roads be affected by the construction of the, of the building itself?
MR. BOTCHWAY: For the building itself, all the construction would be heavily concentrated inside the property.
MR. WALLACE: Okay.
MR. BOTCHWAY: Nothing on the road.
MR. WALLACE: Do you expect any significant road

closures as associated with the construction of the building?
MR. BOTCHWAY: Not for the construction, but there will be no, there will be maybe trucks taking out dirt that have to be mitigated through the construction entrance where we will have a base where we can wash the trucks. Every truck that, that leaves the property will be washed for any dirt tracking on there. But that will be controlled by the building permit process.
MR. WALLACE: In terms of construction access, are you intending to use the existing driveways that are constructed on Riffle Ford for construction access?
MR. BOTCHWAY: That is correct. Yes, we intend to use the existing construction entrance that was in, in place by the Formosan Church.
MR. WALLACE: We'll have additional information about the existing driveways with a, another witness. What noise can be expected from the substation? What noise can be expected?
MR. BOTCHWAY: The only noise that associated with most of the substation is the transformer. The transformer obviously makes a, everything else is more of a conductor type so there's no noise associated with that. The transformer, and we've gone through greater lengths to try to mitigate the noise. For one, during the purchase of the

transformer one of our specification requirements is to limit the number, the noise that, the final noise that comes from the transformer. By, up close to the, the noise ordinance for the neighborhood, which is around 55 decibels.
MR. WALLACE: We'll have additional information --
MR. BOTCHWAY: That --
MR. WALLACE: -- about the noise study as well.
MR. BOTCHWAY: That, and that is our first line of defense. Our second line of defense also is to situate the transformer. We've done, we've done considerable studies that shows that the natural frequency of the transformer noise as we've replaced the surrounding with, surrounding wall around the transformer, certain distance is 1.9, 2.8 and 3., 5.2 distances you create what is called resonance. And it will make this transformer noise propagate more louder. So we go through these distances to make sure that we don't put the enclosure wall within these distances to, and, to make sure that we go through the external for definitely the sound of the transformer. That's number two. Number three is the transformer walls itself that surrounds the transformer, we will use what we call sound block. Sound block is a, is, it's an integrated systems much like you see in the high school gymnasiums. When you go to a gym, you see little slots in the blockwork in the gymnasiums in high schools and colleges. We utilize the same

technology here. It has slots in there that when the sound propagates from the source point, when it hits the block, it gets through those slots and then there's a metal strip in there to distribute, diffuse it inside the block so that we don't have any kind of reflection of the sound to make it even louder. So to keep, so as to keep all the sound within the limits of the transformer, we go through these greater lengths to make sure of that. And then on the, on the last end, at the end of the property, at the end of construction, we make sure we bring in sound testers to test the sound on the property line as the Code requires to make sure that we're meeting the 55 decibels noise ordinance for the neighborhood.
MR. WALLACE: Okay.
MR. GROSSMAN: Aside from what the ordinance says, do you know for a facility of this size with the number of transformers, three operational transformers of this size, what will be the likely level of noise in decibels at the property line?
MR. BOTCHWAY: For this design, based on my experience of the company, I would say we will have maybe 30, 25 to 30 percent less than the noise level that is, the Code requires.
MR. GROSSMAN: Okay.
MR. WALLACE: And of course, there is a noise

study in the record and we will have an expert to testify on that noise study.
MR. GROSSMAN: All right.
MR. WALLACE: Mr. Botchway, initially when the hearing began, I represented on behalf of PEPCO that with regard to the conditions of approval recommended by the Planning Board they were acceptable to you. Is that the case?
MR. BOTCHWAY: That is correct.
MR. WALLACE: Okay. Great. In light of your testimony and the information in the record, do you believe the proposed conditional use will be in harmony with the character of the surrounding neighborhood?
MR. BOTCHWAY: I do.
MR. WALLACE: In your opinion, will the proposed conditional use cause any objectionable traffic, noise, odors, dust, illumination or lack, or issues with regard to the parking provided? And we actually, we didn't really touch too much on the parking. If you want to just briefly describe for an unmanned station what kind of parking you would be providing?
MR. BOTCHWAY: Well, we'll be providing the, the usual requirement, building code requirements from the American Disabilities Act that we provide at least two or three parking spaces for handicapped.

MR. WALLACE: Okay.
MR. BOTCHWAY: And there for operational use. We provide a lot of parking. But mostly, most of the parking for operational use would be inside the substation. That is the reason for the access driveway inside the building.
MR. WALLACE: So the --
MR. BOTCHWAY: And open and go in and close the gate.
MR. WALLACE: The two spaces that are provided on the driveway are adequate for your operational needs?
MR. BOTCHWAY: Yes. Yes, sir.
MR. WALLACE: If the Hearing Examiner grants the application, it's your intention to construct and operate the improvements in accordance with the plans that have been submitted into the record?
MR. BOTCHWAY: That is correct.
MR. WALLACE: Okay. Is there anything else you'd like to add at this time regarding the project and its --
MR. BOTCHWAY: I, I would say that we have gone through coordination with the neighborhood when we started this project as has been our practice. When the project was first announced, we did a sketch, went to the neighborhood. We went to the civic association. We talked to them.
MR. GROSSMAN: Which civic association?
MR. BOTCHWAY: Darnestown Civic Association. We

talked to them extensively. I think three or four meetings was what we had with them in addition to communication in between those meetings as to what they would like to have and how we can accommodate their requests and demands. Based on that, we went back to the, the Planning Hearing and they also had some recommendations for us. We, we incorporated those recommendations to the former design as we have it today. So, and additionally, when this substation gets finalized, it will be in harmony with the neighborhood. We have been good corporate citizens in all of the substations. This would not be the only substation we'll have. So we have experience with cooperating with neighborhood and anybody who might indicate any kind of objective noise or sound and any, anything that they want to talk about that is dearest to the well-being in the neighborhood. We are able to listen to them and work with them to make sure that we mitigate those instances. And so far, we have been, we have lived peacefully in harmony in all our substations we have.
MR. WALLACE: Do you know --
MR. GROSSMAN: Mr. Wallace, you actually interrupted your question to ask about parking and so you never got an answer to your question, the multi-part question.
MR. WALLACE: Thank you. So in your opinion, will

the proposed conditional use cause any objectionable traffic, noise, odors, dust, elimination or concern with parking?
MR. BOTCHWAY: No, it will not.
MR. WALLACE: Okay. Thank you.
MR. BOTCHWAY: We have, we have enough parking for personal use.
MR. WALLACE: And the other issues discussed?
MR. BOTCHWAY: And the other issues, because in a substation most people who will come over there will be trained so the parking lot is mainly for handicapped and outsiders. If they come, they will be escorted through it. So.
MR. GROSSMAN: All right.
MR. WALLACE: Subject to additional questions based on the residents or yours, I have no more direct questions for Mr. Botchway.
MR. GROSSMAN: All right. Have a seat, Mr. Botchway, right there. And we'll allow the opposition to cross-examine you. Mr. Pandya.
MR. PANDYA: Thank you, sir.
CROSS-EXAMINATION
MR. PANDYA: Thank you for the explanation and the details that you have, you have gone through. You said that you have built about what, seven substations in this area.

You were responsible for design and construction in your --
MR. BOTCHWAY: That is correct.
MR. PANDYA: Okay. And you also said that you, this is one of the regular substations. That's the term you used. Does that mean that you have built those other seven substations that are in size, the volume-wise as well as electrical capacity-wise, is this classified as one of the regular substations or is this something that is not built in this area?
MR. BOTCHWAY: This, the size that you see over here we've built in other areas. It's just that for this purpose, we have two different levels of substations that we have built in the past. And I would call the 80 MVA and --
MR. GROSSMAN: I'm sorry. Called what?
MR. BOTCHWAY: The 80, 8-0.
MR. GROSSMAN: 8-0.
MR. BOTCHWAY: MVA substation and that type of substation do not have the capability to interchange feeders coming to each transformer. This design does. It increases reliability. It gives you flexibility to be more responsive to any down time. That is the reason why we term, we consider ourselves improving reliability at all times, making studies. That's the reason for this size. And the reason why I believe you wanted to know if this size is, we have other substations for the old technology. As new

technology comes up, we like to take advantage of new technology to improve efficiency and effectiveness of our transformers. And that's what we have done here.
MR. PANDYA: Many --
MR. GROSSMAN: All right. But you, you actually haven't addressed his question, which is is this one bigger than other substations in the area? That's really what his question was. You've given an explanation of why it --
MR. BOTCHWAY: That is correct.
MR. GROSSMAN: -- may be bigger but --
MR. BOTCHWAY: Right. Right. Right.
MR. GROSSMAN: -- is it bigger?
MR. BOTCHWAY: Yes, it is.
MR. GROSSMAN: And how much bigger in, in terms of volume, compared to, let's, instead of volume, let's, let's talk about square feet.
MR. BOTCHWAY: Fifty percent bigger.
MR. GROSSMAN: It's 50 percent bigger than --
MR. BOTCHWAY: Yes.
MR. GROSSMAN: -- you average substation you've built before?
MR. BOTCHWAY: Correct.
MR. GROSSMAN: Do you have any that have been this size?
MR. BOTCHWAY: Yes, we do. Not in this area, but

in the urban, District of Columbia area.
MR. GROSSMAN: Okay. Go ahead, Mr. Pandya.
MR. PANDYA: May I continue?
MR. GROSSMAN: Certainly.
MR. PANDYA: Same question. The other part is is there any substation of this size, and you have said that this is 50 percent bigger, but that is similar in size or closer to this size or a little bit smaller, whatever, that is in such a close proximity. If I --
MR. GROSSMAN: Well, you have to finish your question. Don't --
MR. PANDYA: The distance-wise.
MR. GROSSMAN: Close proximity to what?
MR. PANDYA: Is it as close in proximity as the other residences?
MR. BOTCHWAY: Please repeat that --
MR. GROSSMAN: Do you have other substations --
MR. PANDYA: Other substations that are --
MR. GROSSMAN: -- that are as close, of this size or comparable that are as close to residences as this one will be?
MR. BOTCHWAY: Yes, yes, we do. We do.
MR. PANDYA: So --
MR. BOTCHWAY: And they are, we have, some substations we have even one common wall to residences and

offices.
MR. PANDYA: But they are not three transformers. Not this high voltage capacity.
MR. BOTCHWAY: This high voltage and this size.
MR. PANDYA: Three same mega volts, whatever the term is. Same electrical capacity.
MR. BOTCHWAY: Yes, we do.
MR. PANDYA: Okay.
MR. GROSSMAN: And where are those located just so we can --
MR. BOTCHWAY: One that I can, that comes to mind is 10th, 10th and L Street in the District of Columbia. Another --
MR. GROSSMAN: 10th and L Street, N.W.?
MR. BOTCHWAY: That, N.W. Yes, sir. We have another one 2nd and O Street, N.W. Another comes to mind is on 9th, 8th, 9, 7, 8th Street, 9th Street substation.
MR. GROSSMAN: 9th and, 9th and H?
MR. BOTCHWAY: 9th and G, H, 9th and E.
MR. GROSSMAN: N.W. also?
MR. BOTCHWAY: Between, yeah. Between 8th and 9th and E Street.
MR. PANDYA: Just for the record, they are, they were all in District of Columbia not in Montgomery County. Right? This is the biggest one in Montgomery County that

you will build. In size, volume-wise, electrical capacity-wise and in this close a proximity with the residences?

MR. BOTCHWAY: In, in Montgomery County.

MR. PANDYA: Yes.

MR. BOTCHWAY: In Montgomery County, I would say yes.

MR. GROSSMAN: Well, let me, also the three places you listed, 10th and L Street, N.W., are there residences nearby? That sounds like the business district in the District of Columbia.

MR. BOTCHWAY: There, there are, there are residences for the O Street. There are residences next door to us for that.

MR. GROSSMAN: And O Street.

MR. BOTCHWAY: O Street.

MR. GROSSMAN: And what about at 10th and L, N.W.?

MR. BOTCHWAY: There are residences right across the street and a, even a hotel, Marriott Hotel, next door to us.

MR. GROSSMAN: All right. And 9th and E?

MR. BOTCHWAY: And 9th and E are businesses.

MR. GROSSMAN: Okay.

MR. PANDYA: And they have the same construction, open construction, same, similar construction? There is exposed --

MR. BOTCHWAY: And we have another, yeah, very similar. We have a substation that is, it's been approved and it's being built right now in the, in, in the waterfront area, which is next, next to a residence area which is twice as big as this. Much bigger than this.

MR. GROSSMAN: And where is that?

MR. BOTCHWAY: That is at, between 1st, Buzzard Point, between 1st and 2nd Street and Q and R Street.

MR. GROSSMAN: Okay. And what, what's, which quadrant of the city is that?

MR. BOTCHWAY: It's in S.W.

MR. GROSSMAN: S.W. Okay. And in the ones that you have operational that are of similar size --

MR. BOTCHWAY: Um-hmmm.

MR. GROSSMAN: Are there complaints regarding noise or operations from residents or nearby businesses?

MR. BOTCHWAY: No, we haven't had any complaint at all.

MR. GROSSMAN: Okay. All right. Mr. Pandya.

MR. PANDYA: Okay. You said that because of the new technology and you are trying to, and we appreciate that PEPCO is looking at the power outage issue and this is going to help the community. However, the, the question is is this the only option that is feasible? Has PEPCO looked into other, other areas, other locations other than this, an

option of having one transformer only here, a smaller transformer or multiple transformers that will resolve this question? Why, why this location where --

MR. GROSSMAN: Well, all right. So you have --

MR. PANDYA: Sure.

MR. GROSSMAN: Then don't ask multiple questions. Have there, other options that have been considered.

MR. PANDYA: I'm sorry, sir. I'm not used to this, sir, if I do this, sir.

MR. GROSSMAN: No. I understand. It's, but you're asking good questions. I just want to make sure they're one at a time.

MR. PANDYA: Sure. Okay.

MR. WALLACE: We have another witness who is more, is prepared and is intended to answer these types of questions about site location.

MR. GROSSMAN: Okay.

MR. WALLACE: So I prefer to have that witness do that and that'll be our next witness actually.

MR. GROSSMAN: All right. Well, let's, let's let this, that'll be fine. Let's let this witness answer to the extent that he knows of other options.

MR. WALLACE: And deferring to Zinn as an option, of course.

MR. GROSSMAN: Okay.

MR. BOTCHWAY: Right. I, I have general knowledge of the, of its, the inner workings to locate these sites so I would defer that to our planning expert --

MR. GROSSMAN: All right.

MR. BOTCHWAY: -- to discuss that.

MR. GROSSMAN: All right. That's fine subject to your being recalled if there, if there's not a satisfactory answer to a legitimate question here of other options.

MR. PANDYA: The sound test that you talked about, that once the completion or after the completion of the construction, once you, that you will perform a sound test. Who will witness that?

MR. BOTCHWAY: We have an independent consultant who, who, that will, that will come in and perform the sound test.

MR. PANDYA: Will the residents around the community, will we be part of that so we can witness it?

MR. BOTCHWAY: If, if you want to, we can invite you to come and witness their, the testing.

MR. PANDYA: If this goes through, we would like to go on record that we would like to be part of the, witness that.

MR. BOTCHWAY: That would not be a problem.

MR. PANDYA: Okay.

MR. GROSSMAN: In fact, I take it there wouldn't

be an objection to that being a condition if there is a, of any conditional use.
MR. WALLACE: That's absolutely --
MR. GROSSMAN: Okay.
MR. PANDYA: The security surrounding the property, this ornamental, aluminum, eight-foot tall fence. Is there a picture of that or will there be barbed wires on that or anything that is sharp that will, I mean this is a security fence, but I'm just curious.
MR. BOTCHWAY: No. It, it would not have any barbed wires on the top. We have a picture or view of it. It will be, if you go into the NIH campus --
MR. PANDYA: Um-hmmm.
MR. BOTCHWAY: Around Rockville Pike, you'll see pretty much it's similar, something similar to that.
MR. PANDYA: Okay. As far as the security, will there be security cameras and will there be, will there be security cameras?
MR. BOTCHWAY: There will be security cameras, cameras at this location.
MR. PANDYA: Will, will they be only focused towards the, your property or will it be for the surrounding areas as well? And where I'm going to, sir, is --
MR. BOTCHWAY: The, the, the requirement is to make sure that nobody gets in close proximity to our, to our

equipment. So we'll have security cameras for that purpose. Not, not so much for the neighborhood. But we don't have a mandate for that.
MR. PANDYA: Right.
MR. BOTCHWAY: But there will be security cameras around, around the equipment and in the building.
MR. GROSSMAN: Well, I think Mr. Pandya, what Mr. Pandya is getting at is, is will their, their privacy, the neighbors' privacy --
MR. PANDYA: Yes.
MR. GROSSMAN: -- be intruded upon by the security cameras?
MR. BOTCHWAY: Oh, no. Definitely not. It will be inside to make sure that if somebody undermine the, our perimeter, physical perimeter security, we will be able to identify the person inside. Not --
MR. GROSSMAN: It won't be taking pictures pointing out towards the neighborhood?
MR. BOTCHWAY: No. Definitely not.
MR. GROSSMAN: Okay.
MR. BOTCHWAY: We have no mandate for that.
MR. PANDYA: Okay. If I go back to your drawing there --
MR. BOTCHWAY: Yes, sir.
MR. PANDYA: And again, this might be a question

for someone else. But going back to the proximity to the residences.
MR. BOTCHWAY: Yes.
MR. PANDYA: I cannot read it from here, but if I remember the drawing that you had presented earlier, if I, if you can go back to --
MR. BOTCHWAY: This drawing, you're talking about this, right?
MR. PANDYA: Right. So if you go back --
MR. BOTCHWAY: These are residences over here.
MR. PANDYA: On the outside.
MR. WALLACE: Keep going.
MR. PANDYA: Yeah. Outside.
MR. BOTCHWAY: Oh, outside.
MR. PANDYA: I hope they are not there. Yeah.
MR. BOTCHWAY: Sorry. So in this direction.
MR. PANDYA: At the south --
MR. BOTCHWAY: We wouldn't put you that close to it.
MR. PANDYA: Yeah. I, I don't want to. Southwest corner. That dimension is about 99 feet, 9, can I stand up and --
MR. BOTCHWAY: Southwest corner?
MR. PANDYA: Yeah.
MR. BOTCHWAY: These dimensions?

MR. PANDYA: No. Very southeast corner.
MR. WALLACE: If it's easier for you to approach, please do.
MR. PANDYA: South, yeah.
MR. BOTCHWAY: South, southwest. This is --
MR. PANDYA: I'm sorry.
MR. BOTCHWAY: -- southwest.
MR. PANDYA: This is southeast corner. This is southwest corner.
MR. BOTCHWAY: It's southwest. Okay.
MR. PANDYA: This is north, south --
MR. BOTCHWAY: Correct.
MR. PANDYA: -- east, west.
MR. BOTCHWAY: Correct.
MR. PANDYA: So southwest corner.
MR. BOTCHWAY: Correct.
MR. PANDYA: This dimension is 99.7 feet. Correct?
MR. BOTCHWAY: Yes. Yes.
MR. PANDYA: So, and this is right in the backyard of the family here, right? This is, so that's where their backyard starts.
MR. BOTCHWAY: So --
MR. PANDYA: And if the kids are playing there, if the kids are playing in this backyard, they are within 99

feet of this property. The, the, the high voltage, whatever term you have used. I don't remember. But call this high voltage area. They are within the 99 to 100 feet. I'm just reading off of this drawing.

MR. BOTCHWAY: This, correct. That's just at the building.

MR. PANDYA: No, I understand.

MR. BOTCHWAY: That's the building wall. Equipment are farther away from it.

MR. PANDYA: But, sir, it said they are within 10 feet further. So 100 feet.

MR. BOTCHWAY: It's, it's just a conductor here. The transformer sits right here.

MR. PANDYA: But they are high voltage conductors, right?

MR. BOTCHWAY: They, they're high voltage, high tension.

MR. PANDYA: Okay. I just wanted to make sure that that --

MR. BOTCHWAY: Right.

MR. PANDYA: High voltage conductor start within 100 feet of the kids playing in their backyard.

MR. BOTCHWAY: Correct.

MR. PANDYA: Just, I want to just make sure that that's, that's the understanding I get. That if the, if

this is people's backyard. If they are doing barbecue or kids are playing, they are within 100 feet of the high voltage lines. I'm just looking at the drawing. These have --

MR. BOTCHWAY: Yeah. You, you're looking at a building wall. Distance. They have the wall in between --

MR. PANDYA: I do understand that. But --

MR. BOTCHWAY: -- the conductors --

MR. PANDYA: -- the high voltage lines, they transmit waves and then again we can --

MR. GROSSMAN: Well, let's not, let's not have you testify now, but --

MR. PANDYA: I, I don't want to do that, but I just wanted to make sure that the distance-wise --

MR. GROSSMAN: -- but I understand.

MR. PANDYA: -- it is very close.

MR. GROSSMAN: I understand the question. The question he's asking is whether or not the actual high voltage lines would come within 100 feet of the property line of the neighbors to the southwest?

MR. BOTCHWAY: I'll leave, there, there will be some high tension, HTTR, high tension transfer cable that is, will be situated right here. Now --

MR. WALLACE: Above ground or below ground?

MR. BOTCHWAY: They are, they're above ground.

They're above ground.

MR. GROSSMAN: And right here being in the center part of the building?

MR. BOTCHWAY: At the, at the ceiling, I'm sorry.

MR. GROSSMAN: You said right here. You were pointing to your building. They're in the middle of your building?

MR. BOTCHWAY: This is the back, from the back, in the back.

MR. GROSSMAN: The back of your building.

MR. BOTCHWAY: Back end of the building.

MR. GROSSMAN: Okay.

MR. BOTCHWAY: There will be, and then we have a roll of equipment for the CCPDs and then the, the breakers and then you have a driveway before you get to the transformers.

MR. GROSSMAN: Right. But that, the specific question is will there be high voltage lines within 100 feet of the property line of the residences to the southwest of the site?

MR. BOTCHWAY: Yes.

MR. WALLACE: Before you answer that question I would like you to make sure that, and we may need to step aside for a second and do this, that that is, 100 feet is the actual distance. And it might be but --

MR. GROSSMAN: Right.

MR. WALLACE: -- we're being a little bit cavalier with our measurements.

MR. GROSSMAN: I can certainly --

MR. PANDYA: And I'm sorry. Maybe approximate 100, 100, 105 feet. I am not sure.

MR. GROSSMAN: Well, whatever the, that's the, that's the question. If the witness doesn't know, somebody, your, any one of your witnesses can, can measure it off and --

MR. WALLACE: Yeah, I just want to make sure it's a measured, it's an actual measured distance.

MR. GROSSMAN: And then, and then whatever the expert evidence is as to whether or not that would be any potential harm or not --

MR. WALLACE: It's a different --

MR. BOTCHWAY: Correct.

MR. GROSSMAN: -- is something else. But right now the question is just to the distance.

MR. PANDYA: Distance.

MR. BOTCHWAY: Yes, it is. The distance. What do you say?

UNIDENTIFIED MALE: Overhead or underground.

MR. GROSSMAN: You want to have another witness testify as to that?

MR. WALLACE: We'll have another witness testify to that exact point.
MR. GROSSMAN: Okay. All right.
MR. WALLACE: I just want to be very clear about distances.
MR. GROSSMAN: Sure.
MR. PANDYA: I don't know whether you are the right person to ask this question, but will there be another witness for the transmission lines along the --
MR. WALLACE: Yes.
MR. PANDYA: Okay. I have no further questions right now, sir.
MR. GROSSMAN: All right.
MR. PANDYA: But if I have any other, if I can think of something, can I call this gentleman back here or no?
MR. GROSSMAN: Well --
MR. PANDYA: How does it work?
MR. GROSSMAN: Well, usually not, but I think we'll make an exception given that we had some waffling in, in terms of the answer so the answer would be yes. Mr. Silverman, you have questions?
MR. SILVERMAN: Thank you.
CROSS-EXAMINATION
MR. SILVERMAN: Mr. Ebenezer, a few questions.

First I wanted to back up a little bit and make sure that I have the footprint of this property, of the substation exactly right. Am I correct that the substation structure will be 150 feet by 160 feet for a total of approximately 24,000 square feet? Is that the current number?
MR. GROSSMAN: You're talking about the outer walls?
MR. SILVERMAN: The outer walls. Yes, sir.
MR. GROSSMAN: Okay.
MR. BOTCHWAY: Outer walls is 150, yes, that's correct.
MR. SILVERMAN: Okay. And do you recall if, if earlier renditions of this have a smaller footprint?
MR. BOTCHWAY: Earlier renditions?
MR. SILVERMAN: Earlier versions of this substation that were circulated to the public, public or presented at community meetings.
MR. BOTCHWAY: No. It, it, about the same size.
MR. SILVERMAN: About the same size.
MR. BOTCHWAY: In earlier renditions. Yes.
MR. SILVERMAN: And was the community initially told, say for the first meeting, the, that this would be comparable to, would look, have a residential look? Let's say that.
MR. WALLACE: Could I ask for some specificity as

to what first meeting? What date?
MR. SILVERMAN: I'm sorry. The first meeting was, this was January of, January 8th, 2015 meeting with the Darnestown Citizen Association Board of Directors.
MR. BOTCHWAY: Correct.
MR. SILVERMAN: Yes. There was, and I'd like to just enter into the, the record the meeting notes from that meeting and I've already provided them with a copy.
MR. GROSSMAN: All right. Okay. Let's, let's mark that as, if you bring up a copy here, we'll mark that for identification as Exhibit 56.
(Hearing Exhibit No. 56 was marked for identification.)
MR. WALLACE: And we're reviewing those now.
MR. GROSSMAN: All right.
MR. WALLACE: Now that we understand the contents.
MR. GROSSMAN: This is, Exhibit 56 is minutes from Darnestown Civic Association, abbreviated DCA, Board and PEPCO on January 8, 2015. Okay.
MR. WALLACE: And will I be allowed to ask questions about the --
MR. GROSSMAN: I'm, you'll be allowed to, to redirect. Certainly. What, what, ask questions --
MR. WALLACE: About the nature of the minutes. Who prepared them? Things like that.

MR. GROSSMAN: Well, certainly. When they, when they testify. Right now, they're not admitted. They're just marked for identification. Okay. All right. Mr. Silverman, what questions do you have regarding that?
MR. SILVERMAN: Yes. Okay. So, so as we just discussed, at the meeting our recollection is that this was presented as a substation that was going to have a residential look. Correct? You answered that that is correct, right? That's what's reflected in the minutes?
MR. BOTCHWAY: Initially, yes.
MR. SILVERMAN: Initially.
MR. BOTCHWAY: Yes.
MR. SILVERMAN: And was, our, our recollection is also that there was no size given to the community as to what the scope of this project was going to be at that time and I think the minutes reflect that as well. Is that your recollection at that point in time a year ago that there was no size proposed?
MR. BOTCHWAY: Yeah, it was because we had a rendering with size attached to that.
MR. SILVERMAN: There, there was a size attached to that?
MR. BOTCHWAY: Yeah.
MR. SILVERMAN: Okay.
MR. PANDYA: May I please?

MR. BOTCHWAY: We had a rendering.
MR. SILVERMAN: I'm sorry?
MR. BOTCHWAY: I said we did had a rendering. I wasn't sure.
MR. SILVERMAN: There was, I, I recall a rough rendering, but, but the notes seem to suggest there, and our recollections don't remember any, any particular --
MR. GROSSMAN: Well, you can testify about --
MR. SILVERMAN: So, we can testify. I'm sorry. I'm sorry. We'll continue.
MR. GROSSMAN: -- about that, but these are just cross-examination.
MR. SILVERMAN: Okay. The, there was a second meeting that was in, in May 20th. Well, the meeting was May 28th. And I just wanted to submit to the record the, the notice that was sent to the community. Now this was not a notice that PEPCO sent. It was a notice that was sent by the Darnestown Board of Directors to the surrounding community. I don't see anything, if you're cc'd on this. Doesn't appear that you were cc'd, but the Darnestown Board of Directors is all included on here as well as several of the neighborhood residents. And I --
MR. GROSSMAN: Now, Mr. Silverman, are, are you intending to use these documents as part of your questioning of this witness?

MR. SILVERMAN: Yes. Yes, I do.
MR. GROSSMAN: Okay. Then you can mark them now.
MR. WALLACE: Is that this document here?
MR. SILVERMAN: Yes. No, no. That's the next, that's the following meeting. Well, that is my notes following the meeting. I'm submitting the, the notice of the meeting that we received. Yes. That's it. It's dated May 20th.
MR. GROSSMAN: Okay. This will be Exhibit 57.
(Hearing Exhibit No. 57 was marked for identification.)
MR. SILVERMAN: Now this is the notice that the residents received which alerted them to this upcoming meeting and, and influenced whether they decided to come or not.
MR. GROSSMAN: Okay.
MR. SILVERMAN: And it's --
MR. GROSSMAN: This --
MR. SILVERMAN: -- it's, the question that I have for you is it states that we were told by PEPCO.
MR. GROSSMAN: Well, let me, let me identify it for the record what it is. It's the May 20, 2015 notice from DCA to the neighborhood of an upcoming May 28, 2015 meeting, I guess I'll say Board meeting regarding PEPCO substation. Okay.

MR. WALLACE: And we're showing that as 57?
MR. GROSSMAN: Exhibit 57. That's correct.
MR. WALLACE: Thank you.
MR. SILVERMAN: So the notice stated that according to DCA it was represented to them that this would be the good news, quote, was that this would be disguised as a house and, and blend in, into the community. Do you recall having a conversation with anyone in DCA in which you used terms like that? Or anyone else? A PEPCO representative.
MR. BOTCHWAY: Please repeat that again.
MR. SILVERMAN: The, the notice that was circulated by DCA to the community as to whether --
MR. BOTCHWAY: Yes.
MR. SILVERMAN: -- you know, of this upcoming meeting.
MR. BOTCHWAY: Um-hmmm.
MR. SILVERMAN: It states in it that the good news is that we were told that this substation would be disguised as a house, singular, and blend into the community. Do you recall conveying that information to the Darnestown Citizens Association at any point or was that a misunderstanding?
MR. BOTCHWAY: No, it was not. It was something that we, that was a very preliminary rendering that we brought to that meeting.

MR. SILVERMAN: For, when you say --
MR. BOTCHWAY: Rendering.
MR. SILVERMAN: -- to that meeting you mean the first meeting in January?
MR. BOTCHWAY: Well, I think I may, I stated that on our initial discussion with DCA we brought a rendering which had the look of a residential front, façade. In our discussion with them, they decided that they do not want that kind of a residential look. That we should just make it look more farm like. Coincidentally, we started with that and we, we have a subsequent meeting with the Planning Office Staff.
MR. SILVERMAN: We're going to get to all of that. That's --
MR. BOTCHWAY: And they also told us that that residential look would not fit this, this part of the property. So if it's at all possible, they, they will be more than happy to deal with any kind of look that had a farm like look, more like a barn. That's why we change it from the residential look to the barn like façade. That was what they requested.
MR. SILVERMAN: I understand that. I'm just trying to establish at this point that, that the meeting notice that went out to the community represented this as, as a singular home, which may have influenced whether

residents felt this was a concern to even attend the next meeting. That's, that's all I'm trying to establish here.

MR. BOTCHWAY: We are just guided by what your community residents wanted us to do.

MR. SILVERMAN: Okay. So at that second meeting now that was on May 28th, that was the first time my recollection is that you presented those different options. Correct? That it was sort of an option to look like a farmhouse which is where you went --

MR. BOTCHWAY: I think it was, are you indicating as being the second, or the second --

MR. SILVERMAN: The second, this is the second meeting.

MR. BOTCHWAY: Yes. Yes.

MR. SILVERMAN: May 20, 28th --

MR. BOTCHWAY: That is correct.

MR. SILVERMAN: It was the one that looked like a, sort of a, I call it the fire house option. It had that kind of look. It was one that looked like it said town patents and there was the, the sort of farmhouse.

MR. BOTCHWAY: Correct.

MR. SILVERMAN: Is that correct? Now my, my own meeting notes from that meeting which I attended indicated that it was represented that the footprint of the structure at that time was 120 feet on each side. That's my meeting

notes. And are my meeting notes incorrect?

MR. WALLACE: We're not sure what meeting notes he's referring to?

MR. SILVERMAN: I'm sorry. I didn't, you've got a copy of the May 28th notes. I can give you a copy.

MR. GROSSMAN: All right. Let's mark that as Exhibit 58, will be Mr. Silverman's, Mr. Silverman's notes from May 28, '15 DCA meeting. All right. So is his recollection incorrect or that, is that what was presented to the Darnestown Civic Association?

(Hearing Exhibit No. 58 was marked for identification.)

MR. BOTCHWAY: I believe their recollection was that we presented three different design façade and the association pretty much stated a preference for one, which would be the farmhouse.

MR. SILVERMAN: I don't disagree with that. But my question is is the size that I, I wrote down as representing incorrect?

MR. BOTCHWAY: I, I, the 120 feet that you indicated was, I think we made mention of the fact that, yeah, that is correct, but we are still, a design is evolving.

MR. SILVERMAN: Um-hmmm.

MR. BOTCHWAY: But we make that pretty clear to

the, all our meetings.

MR. SILVERMAN: Um-hmmm.

MR. BOTCHWAY: That the design was evolving.

MR. SILVERMAN: Okay. Okay. So the size was, was smaller at that time. My next question is, you know, you stated during your testimony that you believe that the substation is in harmony with the neighborhood. When you were designing the project, did you consider the size and height of the surrounding buildings to homes in Hallman Court?

MR. BOTCHWAY: We were guide, yes, we did, but we were guided by the, on the underlying zoning requirements for that location.

MR. SILVERMAN: I'm sorry. I don't, I don't understand.

MR. BOTCHWAY: We were guided by the underlying zoning requirements for that location.

MR. SILVERMAN: What requirements are you referring to?

MR. BOTCHWAY: The requirements stating that the height for that location --

MR. SILVERMAN: Oh, I see.

MR. BOTCHWAY: -- shouldn't be more than 40 feet.

MR. SILVERMAN: So the maximum height is 50 feet so you, you, you designed this at the maximum height?

MR. BOTCHWAY: No. We, we, yes, we considered the neighborhood, but we could, we could not violate what the underlying zoning requirements were. So we stayed, we stayed within the requirements for the zoning.

MR. SILVERMAN: Right.

MR. BOTCHWAY: For that lot.

MR. SILVERMAN: Are any of the neighborhood, the neighboring houses at 50 feet?

MR. BOTCHWAY: I'm sorry?

MR. SILVERMAN: Are there any neighboring houses at 50 feet?

MR. BOTCHWAY: There are not, but the zoning requirement demands that we stay under 50 feet.

MR. SILVERMAN: That doesn't demand that you be at 50 feet. It demands that you be under 50 feet.

MR. BOTCHWAY: But that's an option. And remember, when you said 120 and as opposed to 150, I think what we stated to your, your group was that substation building as it is, you have certain equipment that you have to have within the station. As you shrink the, the floor area the station tends to go up because we have to bring equipment and stack, stack it on top. And as you lower the, as you lower the height then you have to take some of the equipment and then put it on the ground. So almost like a, a silly putty, you press it. You close it, it grows up

high. If you press it on the top, it grows up wide. That's the nature of the design of a substation. The equipment inside remains the same. We have to have those equipment for the substation to function correctly. So we, we're guided by the fact that I think one of the concerns raised at the meeting was to lower the height of the building because we came before a much higher height of the building when we met. And then the concern was can we reduce the height. Of course, when we reduce it then you have to make it a little wider to accommodate the equipment that is going to be used inside.

MR. GROSSMAN: How, well, how much higher was it if, it's currently set for 48 feet, which is two feet under, as I understand it, two feet under the maximum height. How much higher was it originally designed than that?

MR. BOTCHWAY: I'm sorry?

MR. GROSSMAN: How much higher than 48 feet was it originally designed?

MR. BOTCHWAY: Within our design preliminaries, we had it, actually had it almost like about 52, and then I reach out to Ben in charge of zoning and zoning requirements. I reach out to ask them if we, because we don't want to go through variances.

MR. GROSSMAN: Right.

MR. BOTCHWAY: So can we redesign it height-wise

to bring it down under the zoning requirements. So that, that, that, that took some time to bring it back down.

MR. GROSSMAN: I might mention, Mr. Silverman, that the applicant is planning to call a land planner expert who might be able to respond in more detail to your harmony questions.

MR. SILVERMAN: Okay. Okay.

MR. GROSSMAN: I've allowed this witness to testify in that area briefly because he is somebody who has an operational knowledge of substations although he's not qualified and hasn't been offered as a land planner expert, an expert in land use. So it is somewhat out of his sphere of expertise although not entirely since he's used to the operational part, but they do plan to call a land planner.

MR. SILVERMAN: Okay. Well, on, I've got some more questions and, and if you think the land planner would be better to answer them, I'm sure that --

MR. GROSSMAN: Well, I don't want to restrict your, your cross-examination. I'm just telling you that you might get more direct answers to that from the land planner.

MR. SILVERMAN: Okay. You talked earlier a bit about there being differences between types of substations and maybe you can help clarify this for me. I've submitted for the record a, a, some aerial photographs of the substation that is, you can, probably the closest to, to

this proposed substation located at Travilah --

MR. GROSSMAN: All right. Let me mark this --

MR. SILVERMAN: -- Road in Darnestown.

MR. GROSSMAN: -- so that we, so this is Exhibit 59 and it is an aerial photo. This is a PEPCO substation?

MR. SILVERMAN: I believe so.

MR. GROSSMAN: Of PEPCO substation at, this is at Darnestown Road and Travilah Road. Actually there are two photographs. So say 59A is the aerial photograph and 59B is a street photograph of the same. Okay. So Exhibit 59A, Exhibit 59B. All right. Now your question.

(Hearing Exhibit Nos. 59A and 59B were marked for identification.)

MR. SILVERMAN: Okay. So my, my, my first, are you, are you familiar with this, this substation?

MR. BOTCHWAY: Yes, I am.

MR. SILVERMAN: Okay. And do you know what the approximate dimensions of the, of the substation? I can make an estimate based on the, the grid here, but you may know better than I.

MR. BOTCHWAY: That's about 1, 110 by 79.

MR. SILVERMAN: Yeah, that's almost exactly right. So it's, it's about maybe 75,000, 8,000 square feet. I've got the calculator in front of me. So that's roughly one-

third of the proposed Darnestown substation in terms of its footprint?

MR. BOTCHWAY: I'll say about close to a half.

MR. SILVERMAN: One half. Okay.

MR. BOTCHWAY: Fifty --

MR. SILVERMAN: Okay. And in terms of the height of --

MR. GROSSMAN: Hold on one second. Mr. Botchway, would you tell me on this photograph, this aerial photograph, 59A, what is the substation here that we're looking at?

MR. BOTCHWAY: It's, what, what is it?

MR. GROSSMAN: Which building is the substation?

MR. SILVERMAN: Oh. That's the, that's the one, he may, this is it.

MR. GROSSMAN: Okay.

MR. BOTCHWAY: Yes.

MR. GROSSMAN: So if it's, there's no objection to it, I will note on your photograph Substation and make an arrow to it so that, I'm going to use a pen that writes on it there. Substation. It looks by the way, that building looks like it's enclosed. Oh, I see. I see what is a netting on top, I suppose.

MR. BOTCHWAY: Yeah.

MR. GROSSMAN: Okay. All right. So I just, I

just drew the word Substation with an arrow so that we know what we're talking about. Mr. Silverman, is that agreeable?
MR. SILVERMAN: Yes. That's, that's agreeable. Thank you.
MR. GROSSMAN: Okay.
MR. SILVERMAN: And, and just for, for clarification, Mr. Botchway, it would seem 110 by 79 is actually what was the total --
MR. PANDYA: 7,900.
MR. SILVERMAN: 7,900 square feet whereas the proposed substation, as you testified earlier, 24,000. That's more than, more than three times, the Darnestown substation would be more than three times the size of this. Not half.
MR. GROSSMAN: Actually 79 times 110 would be more than 7,900, wouldn't it? Can you multiply that? Because that's, that's 79 by 100 is --
MR. WALLACE: You, you don't want me, you don't want me doing the math, so pass.
MR. GROSSMAN: 79 times 110 is somewhat above 7,900.
MR. SILVERMAN: Times 79, it's 86, 8,700 roughly.
MR. WALLACE: And let's just, so we're clear about the size of the footprint. Yeah, our, the, our footprint is closer to 22,000 square feet.

MR. SILVERMAN: Okay.
MR. WALLACE: And we can give you, we have the exact --
MR. GROSSMAN: Okay. The proposed --
MR. WALLACE: Yeah, proposed.
MR. GROSSMAN: -- footprint is 20 --
MR. SILVERMAN: So it's about two and a half times the size. That is what, what it comes down to. Just for, we have on that all on the same page.
MR. BOTCHWAY: About, about two. 16.
MR. SILVERMAN: Okay.
MR. PANDYA: We can go to the exact dimensions later.
MR. SILVERMAN: So is, can you explain. Is this a different kind of, of substation? Is that, that the reason for the difference?
MR. BOTCHWAY: Yes, I can, it is, it is a different, not a different kind, but same substation, but because we are taking, we're making use of new technology, we have to bring in the new, new equipment and the flexibility, as I indicated earlier, of using multiple transformers for down time effects and if --
MR. WALLACE: Height doesn't matter. I'm sorry to interrupt you --
MR. BOTCHWAY: Yes.

MR. WALLACE: -- Mr. Botchway. We, we have another witness, Mr., Mr. Morton, next to me, who is much, not better, but much more able to talk about this issue in a, in a very technical way that needs to be addressed. Is that appropriate to say?
MR. BOTCHWAY: Yeah.
MR. WALLACE: Yeah.
MR. BOTCHWAY: Yes.
MR. WALLACE: And I have no problem bringing Mr. Morton in now to help --
MR. GROSSMAN: Well, shall we wait for Mr. Morton to testify to get that, that answer?
MR. SILVERMAN: That's, Mr. Morton. Sure. We can, okay. We can wait for --
MR. GROSSMAN: He's the next listed witness so.
MR. SILVERMAN: Okay. Well, maybe there's, there's sort of another basic question I wanted to check with you. Do you, do you know the, the height of this substation? I, I, it looks to me from 59B that it's approximately the size of a, the height of a street lamp although, you know, it's not, you know, easy to tell. Do you know how high it is?
MR. BOTCHWAY: For this station?
MR. SILVERMAN: For the Travilah, I'm sorry.
MR. GROSSMAN: The Darnestown one?

MR. SILVERMAN: The Travilah substation.
MR. BOTCHWAY: Travilah.
MR. GROSSMAN: Right.
MR. BOTCHWAY: Travilah is about 35.
MR. SILVERMAN: Yeah, that's what I thought. Okay. So, and so the Darnestown substation is about 15, 13 feet tall.
MR. BOTCHWAY: Darnestown is maybe, maybe 30 feet.
MR. WALLACE: Or 28, or 48.
MR. BOTCHWAY: Or 48.
MR. SILVERMAN: Right. Right. And is, is that also an issue --
MR. BOTCHWAY: About 10 feet.
MR. SILVERMAN: -- of the, maybe this is for the next witness. Is that also an issue of the equipment being different or, or why is there a 13 foot difference between the two?
MR. MORTON: I can speak to that.
MR. WALLACE: Well, the next witness can speak to that.
MR. SILVERMAN: For the next witness? Okay.
MR. BOTCHWAY: Next, yeah.
MR. SILVERMAN: I wanted to, you, you addressed some landscaping issues. I don't want to get into, to, I know you'll have another person, a landscaping plan, but

just for clarification. We've got down it's an eight-foot tall fence that is black aluminum. Correct?
MR. BOTCHWAY: Correct.
MR. SILVERMAN: There's no barbed wire or anything going to be on the top of these fences. I just wanted to make sure that was, that was clear. And you had testified earlier, I just want to be clear on this because it didn't seem clear to me on the diagram. The, the fence is set back how far from the property line on Hallman Court? Can you, can you tell me that?
MR. WALLACE: Do you want to --
MR. SILVERMAN: On the Hallman Court side.
MR. GROSSMAN: Which is the Hallman Court side?
MR. BOTCHWAY: That's, Hallman, Hallman Court is back over here.
MR. PANDYA: The west.
MR. GROSSMAN: To the west. The, the area that Mr. Pandya was referring to?
MR. SILVERMAN: Yes. The two sides on the west side.
MR. GROSSMAN: The southwest.
MR. BOTCHWAY: This side.
MR. GROSSMAN: Okay.
MR. BOTCHWAY: It's 15 feet.
MR. SILVERMAN: It's 15 feet?

MR. BOTCHWAY: Yes. Correct.
MR. SILVERMAN: Okay. And this may be, I don't know if this is an issue for you or for the landscaping witness, but is there any reason that the fence going to be pushed back? Is that a security issue? Is it a, a, a, underground where, where things are going to be placed issue? Or, or is it just that's how you did it all around?
MR. BOTCHWAY: I think the landscaping expert will, better suited to answer that for us.
MR. SILVERMAN: Okay. Oh, I wanted to just ask another question too about the, about the sound/noise issue. You testified that, you know, with the walls and other soundproofing measures, it should be within, what is it, 55 decibel limit?
MR. BOTCHWAY: That's correct.
MR. SILVERMAN: Okay. And, and you also stated that it would be at the property line, the closest point probably about 20 or 30 percent lower than that. Is that my, what I wrote down correct?
MR. BOTCHWAY: No. That'll be, that's how we, we, we always try to achieve that.
MR. SILVERMAN: Okay.
MR. BOTCHWAY: But that, that's, and we don't try to meet exactly the 55. Just all in good faith of being good corporate citizens.

MR. SILVERMAN: Sure. And, and just so I, I, for curiosity, if I was actually taking a, a sound measurement from inside of the structure, how, how loud are those things, the transformers?
MR. BOTCHWAY: It would be close to that 55.
MR. SILVERMAN: It would, so --
MR. BOTCHWAY: So we're very confident that it will be much less at the property line.
MR. SILVERMAN: Okay. And you also testified that bringing down the size of the, the wall surrounding the structure would allow more sound to, to come out. Is that, is that correct?
MR. BOTCHWAY: I don't recall.
MR. SILVERMAN: Or no? If it, it was a lower, if you lowered say the, the structure from 48 to say 35, as, as the, the structure in Travilah, would that have a significant impact or a negligible impact on sound?
MR. BOTCHWAY: If I lower the structure?
MR. SILVERMAN: Yeah. The, the wall, the height of the structure. Yeah.
MR. BOTCHWAY: It depends upon where you, you, the sound propagates outwardly up and over. So if you lower the wall, if you are within close proximity, I will assume that you will get to hear the sound a little bit more intensity, more so than walls that are much higher.

MR. GROSSMAN: How high are the transformers themselves?
MR. SILVERMAN: Yeah, that was my next question.
MR. BOTCHWAY: Transformers themselves are about, I would say they're about 12, 15 feet.
MR. SILVERMAN: Okay.
MR. GROSSMAN: So what, within the wall, what's the highest structure that's inside of the wall?
MR. BOTCHWAY: Inside the wall, the, the equipment, what it, the equipment is, we have situated where we have switch gears on one side of the wall. Inside the wall, there are two levels. The transformer area is only one level on the grade because we cannot put it elevated floor. We have to put them on ground because of the size and weight.
MR. GROSSMAN: Right.
MR. BOTCHWAY: Next to the transformer area where we have the roofed area, there are two levels. We have an upper level where the, the conduit goes into a cubicle, what we call switch gear cubicles. And then from the cubicles, then we, those are a total floor. And then it goes through the floor, back of the, back through the floor to the basement to what we call a cable room where then we lay the cables for the district. That's the, those are the, those are the secondary feeders that goes into the neighborhood to

service the neighborhoods. So --
MR. GROSSMAN: Well --
MR. BOTCHWAY: -- that side have two elevations.
MR. GROSSMAN: Okay. So you have two, two heights there. But two heights ordinarily would be two stories. You still, that, that doesn't explain exactly why you need a 48 foot wall, is my question.
MR. BOTCHWAY: As I indicated, clearance issues, when you go into the open yard area also we have, we have equipment and then we have conductors. The conductor spacing and equipment, you have to maintain certain space between them.
MR. GROSSMAN: Right.
MR. BOTCHWAY: Those are clearances that should say is living higher by the Electric Safety Code requirements.
MR. GROSSMAN: Okay. Well, again, and I don't know if you have another witness that will address this, this question, but the question is can that wall be lowered? Maintaining all the same equipment and meeting your Code requirements, can the height of the wall be lowered and still meet that? I mean --
MR. WALLACE: I think you can, we do have another witness who will, I think that would say the same thing, but if you would like to --

MR. GROSSMAN: Well, well, I'm just --
MR. WALLACE: Yeah.
MR. GROSSMAN: I, I'm still not sure of the answer to my question though. My question is can that wall be lowered and still maintain the Code requirements of clearances and so on with that same equipment?
MR. BOTCHWAY: No. They will not, it will not be possible to, for us not violating the Code.
MR. WALLACE: Yeah. I thought I'd heard a response to that earlier that, that was a no, but you've heard, you've asked directly now and I think you heard it again.
MR. GROSSMAN: Okay. Well, it's just that it, the description of the height of the transformers on the ground and they're, they don't get very high so you have, the witness testified that he has two levels in the front of the building in the covered, the ceiling area.
MR. WALLACE: Right.
MR. GROSSMAN: Two levels does not necessarily mean 48 feet ordinarily in two stories anyway.
MR. WALLACE: In a, in a --
MR. GROSSMAN: So I, I'm, I'm not familiar --
MR. WALLACE: -- residential office structure. Right.
MR. GROSSMAN: -- with what's inside of the

transformer housing or a --
MR. BOTCHWAY: If I may elaborate a little bit.
MR. GROSSMAN: Yes.
MR. BOTCHWAY: We have certain clearances between transformer and conductors.
MR. GROSSMAN: Right.
MR. BOTCHWAY: If a transformer is 15 with bushings on top, the height of a transformer tank is 15, 13 feet. There are also what we call post link (phonetic sp.) bushings.
MR. GROSSMAN: Right. Right.
MR. BOTCHWAY: That sits on the transformer. And then the conductors take off from that. From the top of the bushings to the conductor, that is going to take it to the switch room. There are clearance requirements that we have to maintain. And that's what shoots it up to that level and cuts across.
MR. GROSSMAN: I understand. I mean the question arises because you have another facility at Darnestown and Travilah where you have 35 foot wall and presumably you have similar kinds of equipment inside of that substation. Is that correct?
MR. WALLACE: Mr. Morton.
MR. BOTCHWAY: He can much more elaborate to that.
MR. GROSSMAN: Okay. So I mean that's, that's

what raises the question. So I think that that's a fair area to be addressed --
MR. SILVERMAN: Oh, absolutely. And we intend to address it. Yes.
MR. GROSSMAN: -- by community concerns about the size of the building. Okay. So we'll wait for Mr. Morton to address that.
MR. WALLACE: Okay.
MR. SILVERMAN: I've got just one more very brief line question that may end up going to the next witness or the land use person, too. I just want to enter this here. This is an example of a neighborhood barn house.
MR. GROSSMAN: Okay. We'll call this, this will be Exhibit 60. Let's see if there's a second page in this. All right. So there's 60A and B. 60A is picture and description of farmhouse. Where is this located?
(Hearing Exhibit Nos. 60A and 60B were marked for identification.)
MR. SILVERMAN: This is located 15021 Dufief Mill Road, which is about two and a half miles or so from the property.
MR. GROSSMAN: At 15021 Dufief Mill Road, which is, you said two and a half miles?
MR. SILVERMAN: Approximately two and a half miles

from the Darnestown substation.
MR. GROSSMAN: Two and a half miles away. I'm not sure what relevance that has, but we marked it, that 60A. And 60B is an aerial, is that an aerial photo of that farmhouse?
MR. SILVERMAN: The second photo is an aerial photo and the first photo is, is the street view there.
MR. GROSSMAN: A farmhouse and 60A. And what's the relevance of a farmhouse two and a half miles away?
MR. SILVERMAN: Well, the, PEPCO has testified that this, you've, you've drawn up the plans here as a, an agricultural, to look like an agricultural use that fits into the history of the community. That your testimony, it's in harmony with the neighborhood and that's what the community had showed its preference to be. Correct?
MR. BOTCHWAY: Correct.
MR. SILVERMAN: And this is one of the closer farmhouses. I think it's representative of other farmhouses in the, in that very community. It's a little bit to the east, but it's, you know, relatively nearby. Are you familiar with this? Have you seen this on, it's, it's right down the road.
MR. BOTCHWAY: No, I haven't.
MR. SILVERMAN: Okay. Well, the dimensions of this building as shown on, it's for sale right now, is this,

the footprint of the building is 10,000 square feet. Do you, do you see that on the listing? It's highlighted.
MR. WALLACE: Since it's not obvious, maybe you could point to this --
MR. SILVERMAN: The top, just above the photo. Just below the photo.
MR. PANDYA: It's highlighted in yellow.
MR. SILVERMAN: Highlighted in yellow.
MR. BOTCHWAY: Above the photo?
MR. SILVERMAN: Yeah. Just below the photo.
MR. BOTCHWAY: Just below.
MR. WALLACE: Above or below?
MR. SILVERMAN: Below.
MR. GROSSMAN: That's the main level. It says 10,000 on the main level is what you --
MR. SILVERMAN: Total 17,000 square feet. That's two levels. 10,000 on the main level.
MR. BOTCHWAY: Okay.
MR. SILVERMAN: So did, when you were designing this structure, I mean you testified earlier that you were primarily driven by operational concerns, but that you were attempting to make this in harmony with the neighborhood. Did you, did you look at the dimensions of other farmhouses in, in the Darnestown area when, in designing the scope of this project?

MR. BOTCHWAY: I will call my --
MR. WALLACE: We, we have an architect who will be speaking.
MR. BOTCHWAY: -- other architect who can look, look into that for you.
MR. SILVERMAN: Okay. Well, we'll hold off on that question then. That's all I have.
MR. PANDYA: Can I ask a couple of questions?
MR. GROSSMAN: Okay. Mr. Pandya, did you have one additional question?
RECROSS EXAMINATION
MR. PANDYA: Yes. This noise that you are referring to, it may be within the 55 decibels that's allowed. But what is the nature of it? Will it be a constant humming noise? It might be within the decibels allowed, but will we be an annoyance to the residents that if we are in the backyard, we'll be hearing constant humming?
MR. BOTCHWAY: In my opinion, you will, you will not be hearing any noise in your neighborhood, in your town, in your place where you live.
MR. PANDYA: Not even in the backyard?
MR. BOTCHWAY: In your backyard you will not be hearing that.
MR. PANDYA: Okay. Will there be any impact on

cellular phones or any other electronic equipment because of this high voltage lines nearby?
MR. BOTCHWAY: I think not.
MR. PANDYA: You think not or you know for sure?
MR. BOTCHWAY: No one can know for sure what's going to happen, but --
MR. PANDYA: Why not?
MR. BOTCHWAY: We design, we haven't had any instances in any other substations, any substation we have built that have interferences with cell phones. None of our substations have we had any interferences with substations.
MR. PANDYA: Okay. The other question, sir, might not be pertaining to this gentleman, but I'll make it quick.
MR. GROSSMAN: Well, let's hold off because you, actually I gave you a second chance to ask one additional question, but --
MR. PANDYA: Sure. Thank you.
MR. GROSSMAN: Any redirect of this witness?
REDIRECT EXAMINATION
MR. WALLACE: Mr. Botchway, from a, from a point of view of the operations, what you're trying to achieve when you build a substation, does it matter what the outside appearance is? Whether it looks like a barn or a house?
MR. BOTCHWAY: No.
MR. WALLACE: Okay. Again, from a point of view

of the requirements of the building codes that, that are, govern construction of substation, could the, the building structure, the walls be any lower and still, still have the equipment that's proposed for this substation at this location?

MR. BOTCHWAY: I think our, our architect expert could testify to that, but for operations use, it, it couldn't be any lower than what we have.

MR. WALLACE: That's what, from operational point of view --

MR. BOTCHWAY: Operational point of view.

MR. WALLACE: -- what's your, right. The electric transmission and distribution pumps into the station. It cannot be lowered.

MR. BOTCHWAY: It cannot be.

MR. WALLACE: Okay. No further questions on redirect.

MR. GROSSMAN: Any recross just on those two questions?

MR. SILVERMAN: (No audible response.)

MR. PANDYA: (No audible response.)

MR. GROSSMAN: No. Okay. All right. Thank you, Mr. Botchway. Appreciate it.

MR. BOTCHWAY: Thank you very much.

MR. GROSSMAN: I guess before our next witness,

we'll take a five minute break.

(Off the record.)

(On the record.)

MR. GROSSMAN: All right. Back on the record. You may call your next witness.

MR. WALLACE: Thank you. My, our next witness is Zinn Morton.

MR. GROSSMAN: All right. Mr. Morton, would you state your full name and address, please? Your business address is fine.

MR. MORTON: My full name is B. Zinn Morton. My business address is 701 9th Street, Washington, D.C. 20068, Suite 8606.

MR. GROSSMAN: Would you raise your right hand, please? Do you swear or affirm to tell the truth, the whole truth and nothing but the truth under penalty of perjury?

MR. MORTON: I do.

MR. GROSSMAN: All right. You may proceed, Mr. Wallace.

MR. WALLACE: Okay.

DIRECT EXAMINATION

MR. WALLACE: Mr. Morton, could you please state your occupation? Your current occupation.

MR. MORTON: I am an engineering supervisor in the Distribution Planning Department at Potomac, PEPCO Holdings,

Incorporated, in the Asset Strategy Department.

MR. WALLACE: And I do have a resume for Mr. Morton.

MR. GROSSMAN: Okay. Thank you.

MR. WALLACE: And could you please review your professional, educational background and professional background?

MR. MORTON: I, I graduated from Virginia Tech in 1982 with a Bachelor of Science in electrical engineering. I am a registered professional engineer in Virginia and in Maryland. I'm a senior member of IEEE.

MR. WALLACE: Which is?

MR. GROSSMAN: What's that stand for?

MR. MORTON: Of the, oh, boy.

MR. BOTCHWAY: Institute.

MR. MORTON: Institute of Electrical, Electric and Electronics Engineers.

MR. WALLACE: That's the three E's. Okay.

MR. MORTON: Yes. Since January 2005 I've been a senior supervising engineer in the Distribution Planning Department. Between March 1999 and December 2004, I was an engineering supervisor in the Electric System Planning Department of PEPCO before the merger and in PEPCO Holdings afterwards. And since then I have, or previous to that I had held various levels of experience from ground floor on

up.

MR. GROSSMAN: I've marked Mr. Zinn's resume, Mr. Morton, I'm sorry, your resume as Exhibit 61.

(Hearing Exhibit No. 61 was marked for identification.)

MR. WALLACE: And with that testimony and with Mr. Morton's resume, I'd move as admission expert in electrical engineering and also substation design, construction and operations.

MR. GROSSMAN: All right. Electrical engineering and substation design and operations. All right.

Mr. Pandya or, and/or Mr. Silverman, any questions regarding this witness's expertise?

MR. SILVERMAN: No objection, sir.

MR. PANDYA: No.

MR. GROSSMAN: All right. Based on his experience, qualifications I, I take it you haven't testified as an expert previously?

MR. MORTON: I have not.

MR. GROSSMAN: Okay. I accept him as an expert in electrical engineering and substation design and operations.

MR. WALLACE: Just in advance of my questions, I, there will be some repetition. I try to avoid it, but obviously given the nature of it, hopefully the repetition does help people understand.

MR. GROSSMAN: All right.
MR. WALLACE: Could you please describe the scope of the project in terms of purpose and capacity for electric power transmission?
MR. MORTON: The purpose and, of the substation is to help enhance the distribution system, provide another point where the electricity from the higher level voltages can be put into the system. The existing infrastructure has some limitations in this area. And by installing the substation at this location, we'll be able to relieve issues that we, that we predict will occur in the coming years.
MR. GROSSMAN: Okay.
MR. WALLACE: Could you maybe better describe --
MR. MORTON: Yes.
MR. WALLACE: -- what the conditions in this area of the County are in terms of electric facilities and capacities?
MR. MORTON: We have --
MR. WALLACE: And this is, this is not in the record. I would, it's a, a plan of the, of the vicinity, of Darnestown vicinity.
MR. GROSSMAN: Okay. So Exhibit 62 is, it's a map. It looks like.
MR. WALLACE: It's like a, yeah --
MR. GROSSMAN: Are you referring to the colored

map?
MR. WALLACE: Yeah. I'm sorry. A map.
MR. GROSSMAN: Okay.
MR. WALLACE: Yeah. A colored map.
MR. GROSSMAN: So it's a map of Darnestown and surrounding areas.
MR. WALLACE: Yeah. I don't know that's going to be necessary to have it introduced into the record, but it is helpful.
MR. GROSSMAN: Well, if you're going to refer to it in the --
MR. WALLACE: That's fine. Yeah.
MR. GROSSMAN: We will, we will use it that way. And by the way, I do need electronic copies of all of the exhibits that you have submitted.
(Hearing Exhibit No. 62 was marked for identification.)
MR. WALLACE: Okay.
MR. MORTON: All right. The, the need for the substation is being driven by two of the area's substations. The substation, we have a 13,800 volt substation at our Quince Orchard facility. That is a distribution station on the property of a much larger substation that serves multiple functions. We also have the substation that we've already discussed at Travilah Road. We, we call that our

Hunting Hills Substation. That, those two substations are reaching the, their capacity. We have approximately, we have word from developers that, in the area that want to put in approximately 24 MVA worth of additional load and that will be added in, in these areas.
MR. GROSSMAN: MVA? Or MBA. What did you say?
MR. MORTON: MVA.
MR. GROSSMAN: V- as in Victor?
MR. MORTON: Yes.
MR. GROSSMAN: And --
MR. MORTON: It's, essentially it's a very, it's an electrical demand term.
MR. GROSSMAN: And the term stands for, MVA stands for? Megavolts?
MR. MORTON: Megavolt amperes.
MR. GROSSMAN: Okay. Megavolt amperes. Okay.
MR. MORTON: Right. Now it's, it's --
MR. GROSSMAN: Can you just say megawatts?
MR. MORTON: It corresponds to megawatts. Yes.
MR. GROSSMAN: Okay.
MR. MORTON: Okay. So essentially with these two stations reaching their, their capacity, we evaluated what alternatives we had for serving, reducing the load on those stations by transferring things to other stations. We started off looking at our existing substations. We have,

we've reached a point in this, in this area where none of the stations nearby can adequately serve the, the loads. The, where we have capacity, we're constrained with feeder crowdings and, and we just can't get the feeders where we need them to relieve the two substations that we predict will be overloaded.
MR. GROSSMAN: Yeah, I don't, I don't think the zoning ordinance requires a showing of need for this type of conditional use. There's a, there are two types of, there are a number of types of conditional uses for which the zoning ordinance requires an actual showing of need and some, and one provision need in the neighborhood and in another need in the County, I don't believe that, that a utility structure is among those. Is it?
MR. WALLACE: Well, it's not, but I'm looking at the requirement to show that it's necessary for public convenience and service.
MR. GROSSMAN: I see. So in the, in the --
MR. WALLACE: Yes.
MR. GROSSMAN: -- specific listings.
MR. WALLACE: For public utility structures.
MR. GROSSMAN: Okay. All right. I take that all back.
MR. WALLACE: Well --
MR. GROSSMAN: All right.

MR. MORTON: So with --
MR. GROSSMAN: I was thinking more globally of the general sections. That --
MR. WALLACE: The old gas station requirement. Yeah.
MR. GROSSMAN: Right. Right. Well, gas stations and others that, but, okay. Go ahead, sir.
MR. MORTON: So essentially it's our, our, we try not to build substations that we don't really need to build.
MR. GROSSMAN: I would think --
MR. MORTON: But aside, aside from that after evaluating where we had, that we had no place that we could transfer this and we began a process of identifying a site to place a substation. We evaluated seven sites and for our engineering purposes this site is the, the one that far and away met our needs. Four of the sites were just we couldn't even use. The other two sites it would have had some of the same issues as we're having here in other locations, but indeed, indeed this one actually was the vast preference.
MR. WALLACE: Can you explain what the benefits of the, of this location for the substation are?
MR. MORTON: What this, this substation is near to where we had identified the load center. It is also near to our 230 kV right-of-way that would traverses the, the County going into D.C.

MR. WALLACE: Actually, Zinn, here's one of them.
MR. MORTON: Oh, okay. We have the 230 kV right-of-way, the load center is in this area here.
MR. GROSSMAN: This area here being?
MR. MORTON: Essentially Darnestown Road, the, near the, near the Safeway, near the high school.
MR. GROSSMAN: Okay.
MR. MORTON: So we were close to that area.
MR. WALLACE: And do you want to point out where the, the, the large easement area for PEPCO overhead lines is? Overhead area.
MR. MORTON: Yes. It follows, on this, on this sketch, it follows down from the upper right-hand corner down to, down the Darnestown Road, the right-of-way actually shifts a little to the south and then comes off at the bottom of the page.
MR. WALLACE: And that right-of-way is approximately how far from the site?
MR. MORTON: It's roughly a tenth of a mile from some of the information that I've seen.
MR. WALLACE: And what's the benefit of locating a substation in close proximity to an existing overhead right-of-way lines like that?
MR. MORTON: It allows for better, it allows to get the transmission supplies into the substation and it

also helps get the distributions lines from the substation out to the surrounding community.
MR. WALLACE: Does it provide any benefits in terms of enhanced reliability in case of disruption in, in a line, other benefits to having it in such close proximity for bringing the power back on?
MR. GROSSMAN: A super leading question. Generally speaking, leading questions are not permitted or at least are frowned upon on direct examination. You like to hear it come out of the witness's mouth. They're fine. And, and we usually prefer it on cross-examination. We're a little more relaxed here because we essentially want to get them, get the information out.
MR. WALLACE: Could I have one per hour? How about that? One per hour.
MR. GROSSMAN: One per hour. Sounds fair.
MR. MORTON: To, specifically, in the design that we're using here, that does provide a significant improvement in reliability. And I can speak to that as we get a little further in to it.
MR. WALLACE: Okay. You talked, there is a system of lines that, that feed and lead the site. Can you describe the transmission lines that will be feeding and just being distributed from the sites?
MR. MORTON: All right. I think that, that brings

it in. Let's, starting off with the supply feeders to the site. The, I had earlier discussed the Quince Orchard Substation as a larger facility. It also has the sub-transmission substation, as we refer to it, where this substation and many other substations in the area are supplied from. One of the feeders that comes out of that substation comes down the right-of-way, on the edge of the right-of-way, and goes right in front of the substation site. That will be one of the supplies use. The, the overhead structures are there. We may need to add a pole. We may be able to use one of the existing poles to bring that supply into the, into the bus work that Ebe was talking about. The other two we're going to bring down the right-of-way. And I believe this has changed from our earlier discussions with the neighbors. We had originally intended to bring them down Riffle Ford Road. And with their concerns and in an, our further review, we, we concurred that that would not be the appropriate way to bring these new supplies to the substation. So we're bringing the supplies down the center of our 230 kV right-of-way on a steel, avian steel tower.
MR. GROSSMAN: KV stands for?
MR. MORTON: KV is kilo, in this case, kilovolts.
MR. GROSSMAN: Okay.
MR. MORTON: So. The, the, the three voltages

that we have in the areas, we have the 2,300 volt, 230,000 volt lines that go on down and supply the substations in the District of Columbia and, and other substations along the way. The 69 kV is the voltages that we use to serve our distribution substations in this area of Montgomery County. And then we take, from there we transform the, the voltage from 69,000 volts to 13,800 volts and run that out to the community.

MR. WALLACE: And, Zinn, before you start going out, just back with what's going in.

MR. MORTON: Um-hmmm.

MR. WALLACE: Three transformers, three feeder lines.

MR. MORTON: That's our initial configuration. We do have as, as Ebe alluded to, a, a spot where we could store a transformer. We could also make use of that transformer in the future if, if the load grows and the area dictates.

MR. WALLACE: And those transmit the, the feeder lines will except for new poles within the existing 100 and, large right-of-way. I, 150 feet right-of-way? Or 250?

MR. MORTON: I don't have that number in front of me.

MR. WALLACE: The, the existing transmission line right-of-way, approximately 200 feet. Other than new poles

within that right-of-way, will there, any additional poles be required for the feeder lines?

MR. MORTON: There would be some additional distribution poles required. We would take one new, brand new line south out of, out of here approximately four miles to pick up some load down in the River Road area.

MR. WALLACE: Those are within the right-of-way though? Outside of the right-of --

MR. MORTON: They're in, in the right-of-way.

MR. WALLACE: I'm sorry. Outside, to be clear. Outside of the right-of-way will there be any new poles?

MR. MORTON: In, at the point in time of the construction of the substation we do not anticipate any major extensions other than that. I, I can't say that we wouldn't need a new pole somewhere. That would all be identified and, as we get --

MR. WALLACE: But the magnitude would be one pole, two poles?

MR. MORTON: Yes.

MR. WALLACE: Yes. If there were new ones required.

MR. MORTON: Yes.

MR. WALLACE: Okay. Now you can take us outside --

MR. GROSSMAN: Well, before you --

MR. WALLACE: -- of the --

MR. GROSSMAN: -- you go further. When I interrupted you to ask you what you meant by kV, you were saying that you had decided that having poles along Riffle Ford Road was not what you wanted to do and you were going to do something else, but you didn't finish that.

MR. MORTON: Okay. We, and in our, some of our earlier conversations, the first meeting and perhaps the second meeting, I don't know that we had actually formulated a plan by then, we had anticipated that we would bring two of the supply feeders down Riffle Ford Road to serve the, the facility. And as we got into looking at Riffle Ford Road, as, as highlighted by, by the, the neighbors, we, we saw that that was really not the appropriate way to, to bring in these supplies.

MR. GROSSMAN: So how are you going to bring in the supplies?

MR. MORTON: The supplies are coming down in, in between our two 230 kV lines.

MR. GROSSMAN: And how do they get from the 230 kV line area into the subject site?

MR. MORTON: We will transition to an underground supply and take them and essentially with the third feeder that is already overhead in front of it.

MR. GROSSMAN: All right. So that they would be

underground.

MR. MORTON: For approximately a tenth of a mile going into the facility.

MR. GROSSMAN: Yeah. I mean my, the reason for my question is I would think a concern of the neighbors about having overhead lines in their area, in the area of home and court. And you're telling me they will not be?

MR. MORTON: It is not our intent to put additional construction near the substation, overhead construction.

MR. GROSSMAN: Well, that's a bit of a waffle and I'm a little bit concerned --

MR. MORTON: Okay. Let me rephrase, but --

MR. WALLACE: And actually, if, if I could. Mr. Grossman's question is very clear. Will there be new poles in the Hallman Court area?

MR. MORTON: There will not be new poles in the Hallman Court area.

MR. GROSSMAN: All right. And, and what about the, you were about to respond to the, my question about the waffle. It's not your intention to do that. What gives you pause to indicate that it's not your intention, but?

MR. MORTON: At, at some point in the future, it, we are initially bringing out eight circuits, but we have, we are designing with the capability of bringing out 16

circuits ultimately. So there, at some point in the future, there may be some extra construction.
MR. GROSSMAN: Extra construction of what and where?
MR. MORTON: Overhead construction.
MR. GROSSMAN: Of what?
MR. MORTON: Over, overhead construction.
MR. GROSSMAN: And why would that be necessary if you're having underground access?
MR. MORTON: Well, that, it would be further out in the community actually.
MR. GROSSMAN: Where are you talking about in the community then?
MR. MORTON: Further along Darnestown Road in the direction --
MR. GROSSMAN: Can you point on your, on that map? Exhibit 55, is it?
MR. MORTON: I don't believe I can point to a, a future requirement that, that hasn't yet been identified.
MR. GROSSMAN: Well, you have an, you apparently have an idea of where you're talking about so I just want to get an idea if it's going to affect the defined neighborhood here. Is it going to --
MR. MORTON: I don't, it, it's my, we, we will have some underground conduit coming out this way and coming

back to the right-of-way.
MR. GROSSMAN: This way, the, heading eastward on Darnestown Road?
MR. MORTON: Head, heading east, heading eastward on Darnestown Road and back to the right-of-way and any overhead construction of any major extent would be beyond that, that, that zone.
MR. GROSSMAN: I'm not sure what beyond that zone means. Can you tell me, what I'm trying to get at is --
MR. MORTON: Yes.
MR. GROSSMAN: -- we have a specific, we define a specific neighborhood as the, as the area that's most affected here.
MR. MORTON: Right.
MR. GROSSMAN: I'm trying to find out if there is a future plan here that would further affect this defined neighborhood.
MR. WALLACE: And, and maybe it will be helpful, Mr. Morton, the, the concept of the defined neighborhood is more of a planning concept so, but the defined neighborhood in our case is a 2,000, essentially 2,000 foot radius around the site.
MR. MORTON: 2,000 feet.
MR. WALLACE: And so if you take that out to 2,000 feet, roughly a scale drawing, let's see. Something that

would give us a sense of where 2,000 feet is. The Planning Staff Report.
MR. GROSSMAN: Well, you can look at the, at page 4 --
MR. WALLACE: Yeah.
MR. GROSSMAN: -- of the Staff Report.
MR. WALLACE: That's where I was going.
MR. GROSSMAN: And there's a, a radius drawn there. If you want to look at this copy, you can.
MR. WALLACE: Yeah. I appreciate, yours is more handy than mine.
MR. GROSSMAN: And that --
MR. WALLACE: Okay.
MR. MORTON: I would anticipate that we would not have further overhead construction in the eastern part of this, east of our zone. I would anticipate that we would have further overhead construction over the years along our right-of-way and I do not foresee a need for additional construction going out towards the river beyond our right-of-way.
MR. GROSSMAN: Out towards the river being in what direction?
MR. MORTON: West.
MR. GROSSMAN: West. Okay. But actually the, the, the subject site is east of your right-of-way.

MR. MORTON: That's correct.
MR. GROSSMAN: So you're saying that, that you would or would not anticipate further over --
MR. MORTON: I would not need any overhead between our substation site and the right-of-way. And I, I would possibly need some going up and down our right-of-way.
MR. WALLACE: Within the right-of-way.
MR. MORTON: Within the right-of-way.
MR. GROSSMAN: Okay. Okay.
MR. MORTON: And to the west, I think we, we reach that 2,000 foot limit before --
MR. GROSSMAN: All right.
MR. MORTON: -- we would need any overhead construction.
MR. GROSSMAN: Okay.
MR. WALLACE: So to be clear. No overhead construction anticipated within the defined neighborhood?
MR. MORTON: Outside of the --
MR. WALLACE: Outside of your right-of-way.
MR. MORTON: Outside of the right-of-way.
MR. WALLACE: All right.
MR. MORTON: Okay. Yes.
MR. GROSSMAN: Okay.
MR. WALLACE: I, I think you were talking again about the, the transmission, the lines into the site. I

don't know that we really got --
MR. MORTON: Well, that, that crossed over to the distribution.
MR. WALLACE: Right.
MR. MORTON: I, I was talking about the distribution at that point.
MR. WALLACE: Would it be helpful to run through the distribution again because I think it would be?
MR. GROSSMAN: Well, are we talking about distribution --
MR. WALLACE: I'm sorry. The --
MR. GROSSMAN: What comes out of the --
MR. WALLACE: Out of. Yeah.
MR. MORTON: Yes.
MR. GROSSMAN: Is it, okay.
MR. WALLACE: I'm going to use my terms, in and out. What comes out? Let's review what goes out.
MR. GROSSMAN: All right.
MR. MORTON: Okay. Initially, we, we intend to extend eight feeders from that site. They will transition to overhead poles and pick up existing overhead infrastructure.
MR. WALLACE: So when you say --
MR. MORTON: Except for one feeder that, that is extended down the, the right-of-way.

MR. WALLACE: When the lines leave the structure, are they --
MR. MORTON: They'll be underground.
MR. WALLACE: Underground.
MR. MORTON: And then they will, at a, at a distance out from there --
MR. GROSSMAN: At what distance out --
MR. WALLACE: And you'll estimate that distance.
MR. MORTON: That, that is the, some of them will be within the 2,000 feet and some of them will be just beyond the 2,000 feet.
MR. WALLACE: But will they be on existing poles within the 2,000 feet?
MR. MORTON: They will transition through again perhaps a single or, or multiple poles of maybe seven poles would be added. That would be the extent of what we're requesting.
MR. GROSSMAN: And where would they be added?
MR. MORTON: Along Darnestown Road for the most part.
MR. GROSSMAN: Well, what about the not most part?
MR. MORTON: On the right-of-way.
MR. GROSSMAN: I don't care about on the right-of-way.
MR. MORTON: Right. Okay. We do have a line that

comes down Riffle Ford Road. We, it is our plan to bring the feeder up overhead and on Darnestown Road and pick that up Riffle Ford Road. And then --
MR. GROSSMAN: We're talking about a, I'm not interested, if you're going to use poles that exist already. I'm, I'm not --
MR. MORTON: Well, then --
MR. GROSSMAN: I'm just trying to --
MR. MORTON: Well, we're --
MR. GROSSMAN: What I'm trying to determine is what will be the impact of this facility on the neighborhood? So if a pole exists already, it's not --
MR. MORTON: Right.
MR. GROSSMAN: It's not an issue for me.
MR. MORTON: Right.
MR. GROSSMAN: If it's in your right-of-way, it's not an issue for me. I'm trying to figure out what is the impact in the community in addition to what is there now.
MR. MORTON: There, there will be very little off the right-of-way in, in the community. And I --
MR. GROSSMAN: Well, I'm just trying to get a number for what very little means because that's not --
MR. MORTON: Seven.
MR. GROSSMAN: And, all right. And the seven you said, but, but if, where are the seven located is my, my

question?
MR. MORTON: I, I think --
MR. GROSSMAN: That are not, the ones that are not in the right-of-way.
MR. MORTON: But they will all be along Darnestown Road.
MR. GROSSMAN: All along Darnestown Road. Okay. All right.
MR. MORTON: Okay.
MR. WALLACE: Is, and Zinn, is seven an upper end of what you would expect? It could be less.
MR. MORTON: It, it's very possible we can use a pole to transition these feeders, replace a pole to transition these feeders. That, that, and that would be, so seven would be an upper end.
MR. GROSSMAN: Okay.
MR. WALLACE: Okay. Let's, let's go into the station now a little bit.
MR. MORTON: Okay.
MR. WALLACE: You can, I think the floor plans would be, well, it's up to you.
MR. MORTON: Okay. Here it is.
MR. WALLACE: I think --
MR. MORTON: Okay.
MR. WALLACE: And we've, we've heard obviously

some testimony about this. We'd like, if you could explain the more technical nature of the equipment and how it is arranged within the stations and to, mainly to drive a better explanation of the height, of what drives the height of the building.

MR. MORTON: All right. The feeders will be coming into the substation. They'll, they'll be coming in something like through here. And there is these termination structures --

MR. GROSSMAN: You meant through here is kind of the western or southwestern --

MR. MORTON: Yes.

MR. GROSSMAN: -- side of it.

MR. MORTON: Coming in from the southwestern side near the back side of the facility, close to the Hallman Court area.

MR. GROSSMAN: But they're underground.

MR. MORTON: They're coming in underground and then they transition to these termination structures in, in, in the facility. The, the advantage that we're getting with this facility over the existing or the previous type of substation that we've built is we have bus work in the, in the back here. These, each of these terminations feed back into this bus work with, with switching allowed so that if, if we were to lose one of these transformers and, or one of

the supply feeders we could more readily transfer a, a transformer to, to a different supply feeder. And that's, that's the value that we're getting out of this if we, if we're down a supply feeder and we're down a different transformer than we're, we're telling our neighbors that we can't serve all of them. We'll, we'll have to drop a, a lot of the customers. So with that we'd be able to match, energize feeders with transformers that are capable being energized. When the transformer fails, it can take up to two months to, to replace it. So it's, it's not, it's not a very short period of time and we have had cases where while we were in the process of moving a transformer around that we had issues with the feeders that supply some of the other transformers. And we're trying to guard against that with this concept.

MR. GROSSMAN: Well, does this, I mean I don't think anybody is against the idea of having a spare handy. I think that the issue here is not so much a technical one as a size issue. And that's --

MR. MORTON: And, and that's what's driving the size.

MR. GROSSMAN: Is this different in design from the one at Travilah and Darnestown?

MR. MORTON: That, that's how it's different in design is that what, what we get from having the space back

in here is that capability --

MR. GROSSMAN: Back in here being on the, the, the --

MR. MORTON: Towards the Hallman Court side in the, in the 69 kV high, high voltage transfer bus side of the substation.

MR. GROSSMAN: Okay. Kind of to the back.

MR. MORTON: Right. Towards the back.

MR. GROSSMAN: All right. The back half. So, yes. And that's different from what you have --

MR. MORTON: That's different than what we've had and that's what drives this, the, the area difference.

MR. GROSSMAN: All right. And what about the height difference?

MR. MORTON: And the height difference as we're, we, we have also incorporated, and, and this is necessary from, from the design here, we've incorporated a, a driveway inside the facility which provides a lot of advantages, but one of the, one of the concerns that it raises is for our trucks. We have to have adequate clearance over the trucks so that we can clear, so that we don't run, have any possible contact between the trucks and the, and the lines.

MR. GROSSMAN: Well, that's not an area where you have a roof so I don't understand why that's --

MR. MORTON: Well, we do have the, the screening.

And, and the screen, the screens have to be connected at, at the, at the proper wall. We, we, I mean we, we didn't believe that it would be, and this part I could speak --

MR. GROSSMAN: Wait, are you --

MR. MORTON: -- have, pass to the architects, but I, I wouldn't think you'd want a birdcage showing up over the, the substation.

MR. GROSSMAN: No, no. I'm, I'm not suggesting that. I'm just asking are you saying that you need the 48 foot height in order to have clearance for trucks? That trucks would extend over, up to 48 feet?

MR. MORTON: It, it, it's not 48 feet from the, the truck of course is taller than, than the man and you need adequate space for the 69 kV feeders above that to insure that there's no possibility that the, the energy could transfer down. You don't have to touch these high voltage lines directly to, to be impacted by them. You, you have to maintain the, the clearances. The specific clearances others could speak to better than I.

MR. GROSSMAN: I'm not suggesting that you do anything that would in any way jeopardize safety or --

MR. MORTON: Right.

MR. GROSSMAN: -- or violation of the distances you're required to have. I'm just trying to find out what it is that drives the height because I, you've now, I think,

sufficiently explained to me why what has driven the size expansion beyond the other substations in terms of the area. But I haven't heard an explanation yet that fully explains why you need 48 feet of height rather than 35 feet of height.

MR. MORTON: Okay. As we're --

MR. GROSSMAN: Where apparently the other substation works at 35 feet.

MR. MORTON: On the other substation we, our driveway is open to the, to the sky. And what we do if there's a problem in the other substation, we have panels that we take apart to pull the transformer out to load and then we load it up on the driveway that's in, in air. In this, in this structure, with the lines coming over, we need to, we need those clearances to be able to pull the transformers out, load them up and, and pull them where, where we have to have the lines coming over to go to the transformers.

MR. GROSSMAN: All right. Perhaps, and I think I understand that explanation a little bit better, but perhaps what would be helpful if, is there a silhouette or, that would show the height of these different things in your, what you've submitted yet?

MR. WALLACE: It is to --

MR. MORTON: We have --

MR. GROSSMAN: Something that would show an elevation, I guess, would be, of an internal elevation.

MR. WALLACE: Internal --

MR. MORTON: I don't know if we have something here, but we, we do have those documents. Do we have one around?

MR. GROSSMAN: I can't recall if I've seen one. That's the outside.

MR. WALLACE: I don't think so unless you brought something separate.

MR. MORTON: I, I didn't bring, I didn't bring something like that.

MR. GROSSMAN: So we just want to have an understanding.

MR. MORTON: Right.

MR. GROSSMAN: If an, if this is, since the height as well as the size is somewhat of an imposition on the community --

MR. MORTON: I think it's --

MR. GROSSMAN: -- as they, they feel it is, it would be helpful to have something that would explain why it's necessary if it is.

MR. MORTON: This got cut off. It's, it's close, but it, it got cut off.

MR. WALLACE: Well, let me see if I have it

someplace.

MR. MORTON: I don't, I don't think anything that I brought has this, sir, where it shows the elevation. It shows the, the spacing requirements.

MR. GROSSMAN: Maybe when you break for lunch, when we break for lunch you can obtain that if, if that exists.

MR. WALLACE: We, it, it definitely exists.

MR. GROSSMAN: Okay.

MR. WALLACE: It's just a matter of getting it.

MR. MORTON: Yeah.

MR. GROSSMAN: All right. So let's go on and, and we'll wait until after lunch to, for a further explanation of that.

MR. WALLACE: Okay. The, obviously the, the testimony now may be a little jiggered, but we'll try to get some of, as much as we can in. Are you aware of the concerns raised by some of the residents near the substation as to the impact of the, and particularly the installation of distribution and, and feeding lines to the site as to how it will impact traffic along Riffle Ford Road and Darnestown Road?

MR. MORTON: Yes.

MR. WALLACE: And does represent it in the, the letter in the record, a letter, Exhibit 51. Can you, do you

discuss how the, the construction lines, the installation lines will affect traffic along Riffle Ford and Darnestown?

MR. MORTON: Yes. Okay. So I've talked a little bit about how we're going to put the, the supply feeders in. That, that will obviously impact Darnestown Road. There'll be a lane closure required as, as that work progresses. I understand that that will take approximately nine months for, for all of the overhead or the underground construction. The, to, to speak more to the 13 kV feeders, the distribution feeders coming out, they will come down to Darnestown Road and there will be an additional conduit built for the 13,800 volt distribution feeders. And it is our intent to, we will go around staying on our property, coming to Riffle Ford Road and then we'll have for probably out through this, this stretch, we will have a, a new underground construction being built out to essentially around the high school.

MR. GROSSMAN: All right. So just for clarity of your testimony that you said this stretch to the high school. What's the distance using whatever the map, I don't know what the scale is on that map. But what's the distance between the subject site and the, the stretch that you're talking about?

MR. MORTON: It is approximately, based on the circle that you just showed me, it's about 2,000 feet,

perhaps 2,500 feet.
MR. GROSSMAN: Okay. So pretty, almost a half a mile or so.
MR. MORTON: Yes.
MR. GROSSMAN: And just, but you haven't really addressed the traffic, construction traffic question, which is what, what the community was asking about.
MR. MORTON: That's right.
MR. GROSSMAN: I mean to be clear in advance, I'm not going to stop a project because there's going to be some additional traffic during construction because that's not, you know, that's not really within my purview. But, but whatever can be done to reduce the amount of traffic during construction and that's what I would ask you to address. Is there something that PEPCO can do that would minimize any traffic disruption during this period of time?
MR. MORTON: The, I think one of the primary concerns that the residents voiced was closing Riffle Ford Road. And we anticipate that we can come across on Darnestown Road. There will be some disruption as we do that, but that we can do that one lane and then cross over to the other lane to help keep traffic flowing on Riffle Ford Road. Darnestown Road will be impacted and we will do what we can to minimize that impact, but it, there, there will be some impact as we're building the, the duct lines

out.
MR. WALLACE: And, and Mr. Morton, from your initial plan for, for the layout of the lines, you know, in listening to what the community had to say, did that change in your, in your layout and designs what it currently is, lessen the impact along Riffle Ford Road?
MR. MORTON: It did as far as the transmission circuits as, as I'd already discussed. We had had concerns about the, the community has shared concerns about the, the extension of feeders down Riffle Ford Road. We believe that we can operate with the single feeder that's on Riffle Ford today. We believe that we can access that feeder, transition to that feeder from Darnestown Road without any impact to Riffle Ford Road itself.
MR. WALLACE: Would the work that's required along Darnestown Road be required no matter where you put the substation in the Darnestown area? In other words, if you put it in a different location, would you have similar work required along Darnestown Road?
MR. MORTON: This is, the, this work would be required wherever we put the substation that, that would improve the, the reliability to the community.
MR. GROSSMAN: Okay.
MR. WALLACE: I think that I would have to stop at this point. I, given where we're going to be going with

Mr., with the exhibit we hope to achieve. I don't know that it makes much sense to go further and get into some of the ultimate questions that I would have for Mr. Morton. If that makes sense.
MR. GROSSMAN: Okay. Well, in other words, do you want me to open that up to cross-examination now or do you want to call another witness and then --
MR. WALLACE: It, it really depends on when you were thinking timewise. I'm looking --
MR. GROSSMAN: I usually break about 1 o'clock for lunch. They serve food in the cafeteria until 2:30, but it'll kind of run out if we don't break at around 1:00 at least unless you might want to break at a different time. I can break earlier if you want. What's, what's your pleasure everybody?
MR. WALLACE: If you would like to begin --
MR. SILVERMAN: I, I anticipate relatively few questions for him if you, if you want to not do that now, but --
MR. WALLACE: Okay. Why don't we begin the questioning of Mr. Morton?
MR. GROSSMAN: Okay.
MR. WALLACE: And then we'll see where we're at.
MR. GROSSMAN: All right. Mr. Pandya, do you want to --

MR. PANDYA: Go. Proceed, please.
MR. GROSSMAN: Okay. Mr. Silverman.
MR. SILVERMAN: Okay.
CROSS-EXAMINATION
MR. SILVERMAN: I wanted to head back to the site selection just a little bit. You had testified earlier that there were seven sites that you looked at potentially for locating this and there are, you know, benefits to having it along the right-of-way there. Did you consider any sites, you know, running north up Riffle Ford Road still along the right-of-way? There's a lot of, you can see a little of it that map there, but there's a lot of undeveloped land there. It's designated, I believe, R-200 which allows for more dense development. Was there any options up there? Or that, for one reason or another, just didn't work?
MR. MORTON: No. Further, we were looking at Darnestown Road pretty, pretty hard and the reason for that is because the load, the load center is along Darnestown Road. There is a lot of room in places that we didn't need a substation. And, and that's been part of the, always part of our problem is, is it, it takes a tremendous amount of time and effort to run circuits that most would have to go underground from a site that's far away from where you need the load to, to where you need the load. And, and therefore, what we will, when we asked our real estate

department to purchase a site, we, we just find a boundary for them to, to look in. And so the sites that, they, they found sites, some of the sites might not have been right in the boundary, but they offered them up to us and essentially when they were too far from the load center, we, we discounted that site. The other type of issues that we had were the ability to route the feeders in and out. We had sites with relatively small frontages and it was just too much to try to get the, the feeders in and out of the, of, of a site like that. But the Darnestown site was very well set for, for getting the circuits in and out the, the sites that we selected.

MR. SILVERMAN: Just, these are, I wanted to make sure I was clear on a few things. You, you have now from the version we had seen earlier at one point at least, the, there was lines coming down Riffle Ford Road and those have not been shifted to be in the very center of the right-of-way.

MR. MORTON: That's right.

MR. SILVERMAN: Okay.

MR. MORTON: Per, per the discussions that, that we've had over the, over the months. We went back and took a look and we, we, essentially we concurred that that wasn't the appropriate way to bring those circuits in and then we found another routing.

MR. SILVERMAN: Okay. And, and the lines now entering into the substation from the right-of-way, how do those, they're going to be underneath Riffle, underneath Darnestown Road is, and --

MR. MORTON: Yes.

MR. SILVERMAN: -- and come up into it so there won't be any cutting across the Hallman Court properties. Is that --

MR. MORTON: No, no. They won't cut across.

MR. SILVERMAN: Okay.

MR. MORTON: They'll go all the way down to Darnestown Road. They will go underground in Darnestown Road in the right-of-way and then cross into the property and come in as, as I was showing earlier, essentially in through here to where they can terminate to the, to the structure. They will obviously come up overhead at that point, but that'll be inside the, the building.

MR. SILVERMAN: Okay. Okay. The, the concerns that were expressed in, in the neighborhood's letter regarding traffic were, as, as mentioned before, primarily related to what we thought was going to be likely construction along Riffle Ford Road. So that is now, it seems, alleviated, you know, with the changes being, and, and Riffle Ford Road is, is a one lane road. Now I believe that area of Darnestown Road that is going to --

MR. GROSSMAN: One lane in each direction I think.

MR. SILVERMAN: One lane in each direction. Sorry. Yes.

MR. MORTON: Thank you. I was going to say I've been up it, up and down it both sides.

MR. GROSSMAN: There are a few one lane roads around, but that's the --

MR. SILVERMAN: That area that's going to be affected now I'm trying to recall of Darnestown Road, you know, running, I guess it's west of, of Riffle Ford, I believe that's two lanes any, is it two lanes or one that --

MR. PANDYA: It's one lane each direction.

MR. SILVERMAN: It strings, it's one lane in each direction too.

MR. MORTON: It, it drops to one lane once you get to the right-of-way roughly, right? It's a little before that from what I've seen.

MR. GROSSMAN: That's what it looks like on the aerial photo.

MR. SILVERMAN: Yeah, I think there's a --

MR. MORTON: So there, there could be a little bit of a constriction --

MR. WALLACE: There's a taper and then I think it goes --

MR. MORTON: -- there. That'll be, could be dealt

with, I think, in a relatively quick period of time.

MR. SILVERMAN: Okay.

MR. MORTON: But I, I couldn't specifically, it wouldn't be the whole nine month period that we'd have issues with, with the other construction.

MR. SILVERMAN: Okay. Well, I don't have any other questions. Do you have any?

MR. PANDYA: I just have few.

CROSS-EXAMINATION

MR. PANDYA: Just to make sure again. This might be repetition.

MR. MORTON: Sure.

MR. PANDYA: There will not be any underground work. If there are any, you will be using the existing poles along the Riffle Ford for any, any new lines. Right?

MR. GROSSMAN: One, one moment. You mixed two things there. Let's take one at a time.

MR. PANDYA: Yeah.

MR. GROSSMAN: There will not be any underground work, what? Well, I, I --

MR. PANDYA: No underground work. Correct? Along Riffle Ford.

MR. GROSSMAN: Start that question from the beginning because I, I spoke over you. Start your, state your question again because I --

MR. PANDYA: Yeah. My question is I heard you that you are going to use the existing poles around Riffle Ford line, Riffle Ford Road. Right? For any new lines.
MR. MORTON: We would use the existing poles as they stand today to take a feeder back up, up, up Riffle Ford Road to pick up some, some load up that way. But --
MR. PANDYA: Will that be high voltage lines? That's what I'm, I want to find out.
MR. MORTON: But no new construction. It'll be the same circuit that's up there. We would just simply clip it and turn it the other direction.
MR. WALLACE: Same voltage?
UNIDENTIFIED MALE: Same wires, same voltage.
MR. MORTON: Same, same voltage.
MR. PANDYA: Same voltage. Okay. The fourth transformer, you said that you, it might be in use sometime so it's not an exact spare transformer, right? You will be using that fourth transformer in case you need it.
MR. MORTON: Well --
MR. PANDYA: So there will be four transformers operational. Because I heard earlier that it's just for storage.
MR. GROSSMAN: All right. You asked your question. Don't, don't, don't, I understand. I, I agree with your distinction.

MR. MORTON: Okay. The, we have, in our standard substation design, we have the capability of serving four transformers from this facility. And we will build conduit to allow that to happen. We have not identified how we would do that. The scenarios that we would do that are, I, I think there would be a complete change in the area before we would really need to do that. We believe this substation will be capable of serving this, this area unless there's some major changes to the way Montgomery County plans their system.
MR. GROSSMAN: Serve, in other words, you plan to use only the three transformers, but the fourth is number one, a spare and number two, possible use if the load demand increases significantly.
MR. MORTON: That's correct.
MR. GROSSMAN: Okay.
MR. PANDYA: Okay. There are chances in future when the load goes up you'll use that. Will you notify us because the sound might go higher than 55, all these other factors? How will you notify? Just trying to be safe.
MR. MORTON: Ebe, would we commit to a second sound survey at a point where we add a fourth transformer or do we have a --
MR. PANDYA: I don't --
MR. WALLACE: I'm sorry.

MR. MORTON: I'm, I'm not supposed to ask other people.
MR. WALLACE: I don't have a problem with it. It's either you ask it or I'm going to --
MR. GROSSMAN: All right. We can, we can make that a condition if we, if it's granted.
MR. WALLACE: I was about to, I was, I was waiting for the word to proffer. We're proffering.
MR. PANDYA: Considering all of our opposition here, can PEPCO or have you guys looked into having similar smaller substation that, like the one you have at Travilah at multiple locations? Just to address the neighborhood's issues. That this is really a monster. Have you looked into that?
MR. MORTON: We have settled on this design. We, we believe that the, that the design that we have moved to our, our new substation design provides benefits that outweigh the, the sizing issues from, from our standpoint.
MR. PANDYA: I'm assuming that's only the economical benefits not the concerns of the neighborhood?
MR. MORTON: Well, it's essentially the reliability benefits to the, it, it does cost more to, to build it like this, but it, we believe that the benefits will outweigh the, the costs in the long run.
MR. PANDYA: But now listening to this opposition

here, can you request or is it possible that you can, is it physical to have this? Can you go back and do the study? I'm, I'm asking this very honest question here.
MR. MORTON: That's not my decision to make so I, I can't --
MR. GROSSMAN: When you say can you do it, do you mean are they able to do it?
MR. PANDYA: Can, can, can it be, no. Can it be, can this be scraped and can they look into that? There is a concern. Is it possible to have two or three similar smaller transformer substations like this? Is it possible? Is it, can you guys do that? Relook at this thing because there is a concern.
MR. GROSSMAN: Well, well, hold on one second. One, hold on one, hold on, hold on one second.
MR. MORTON: One of the, one of the issues that we have --
MR. WALLACE: Well, before you answer, wait. No, please.
MR. GROSSMAN: There were kind of two questions mentioned.
MR. PANDYA: Yes. Maybe.
MR. GROSSMAN: The first question is can it be done? Can you use multiple substations of a smaller size rather than one larger one? And the second part of that

question is can you look into it? So the can you look into it, of course, they can look into to. The, the more direct question is can it be done? Can you, is that feasible to have two smaller substations, one presumably located on this subject site and one elsewhere to accommodate this additional load that you are addressing?

MR. MORTON: The concern that that raises is that we begin to impact more of our community, more of the community. If, if we're building one here or if we're building one here and we're building one somewhere else, then, then all of a sudden other folks are impacted as well.

MR. GROSSMAN: Well, I guess the question is, I mean, that's, there may be other locations that don't impact residences. I don't know. I haven't done the study. And so the question, first of all, is it feasible to do two substations of smaller size, such as the size of the other one that was depicted in the aerial photograph rather than one very large one?

MR. MORTON: The, I, I would suggest that it's not feasible and that the reason that it's not feasible is that you're just increasing the impact to the community of putting this in. We, as, as I said, we, we found, selected, we identified seven sites. We were only really able to boil it down to one good site for a substation. I would say with that it would be difficult to find a site in, in this area

that would allow us to, to, to do that.

MR. GROSSMAN: Well, I guess you're mixing in the question of impact on other communities and I guess I want a more direct, technical answer as to whether or not you can accomplish the PEPCO end with two smaller substations rather than one large one? If this one cannot be reduced in size with the present equipment.

MR. WALLACE: I have to ask about that question because are you saying can power be served or are you saying can PEPCO's overall plan for serving this area of the County be served because, I mean, technically --

MR. GROSSMAN: You can answer both of those if you want.

MR. WALLACE: I mean, I would say you've got two questions maybe before because --

MR. GROSSMAN: Okay.

MR. WALLACE: -- one's a very specific. I mean can you plop these things everywhere and we'll serve people. But then do you have an overall plan as to how you want to serve this County in a way that is cost efficient for your, your rate, your rate payers, et cetera.

MR. GROSSMAN: Well, let, let, let's not, let's not make a speech that puts words in his mouth.

MR. MORTON: Okay. Well, let, let's, we, we do have and, and the two gentlemen here are, are rate payers as

well.

MR. GROSSMAN: Yes.

MR. MORTON: That would add a tremendous amount to the cost. It would, I would anticipate that you, the, the size of the substation or the size of the facility is only part of the cost. It, it wouldn't cost double, but it would certainly, and it might cost double depending on what the cost of the other site is. We'd have to get supply feeders to it. We'd have to run the feeders out of it. We would reach a point of, of very high expense very quickly, I think. And it, it could wind up doubling the cost of, of what it takes to serve these folks.

MR. GROSSMAN: And now addressing the more technical question of other than cost, can it be done? Can you serve, can you achieve it, achieve the end of supplying the necessary power by having two substations? That's a more, more in the technical aspect of it.

MR. MORTON: Technically I can't deny that, you know, if you can build one, you can build two. I, I can't deny that.

MR. GROSSMAN: And I do have to, to address the opposition on this. The role that the Hearing Examiner plays here is not to require and applicant to choose different sites to make their, their plans, to substitute, you know, a plan for what they have. It's rather to review

the plans that they have submitted and see if they comport with the zoning ordinance requirements. So I ask these questions because, you know, if there's an easy answer, that would be acceptable to everybody. Well, you know, that's a why not do it. But, that they have a right to have the plans that they have submitted reviewed just as they are and they could be denied if they don't do certain things. And, and I can impose conditions to minimize impacts or I can deny it if I think it's not going to meet the zoning ordinance. But, but I can't require them to move to a different site or have a second, you know, split it up and have a second site. It is something worthy of being considered obviously if it can be done feasibly. But I also would say to the applicant, and, and I'd ask you to look at it over the lunch hour as to whether or not there is some way to accommodate the size issue, especially the height because it appears to me that you can't cut back much on the overall size. And I don't think it's so much the overall square footage as it is the height that's more imposing here. So if there's a way to do it, you know, even if it's a matter of reducing it five or eight feet or something, that would be a significant help in terms of compatibility. So you ought to look at that issue from the technical standpoint. If it can't be done, as I said, you're entitled to have your plans reviewed as they are. So, anyway, any

redirect as a result of, are you finished, Mr. Pandya?
MR. PANDYA: No. One last question.
MR. GROSSMAN: One more. Okay.
RECROSS EXAMINATION
MR. PANDYA: Sorry. When was, and maybe this is not the question for you. When did you guys, when did PEPCO contact DCA first time? Darnestown Civic Association. When were they notified first?
MR. MORTON: That wouldn't be a question for me. I don't know the answer.
MR. PANDYA: Okay. I would like to get that answer somehow because where I'm going to this, where I'm going with this is January 8th is the, that first meeting. We had heard from DCA, directly from them about two or three weeks before that. There was no direct kind of correspondence, nothing from PEPCO before that. Even today. There is one email I have received and I don't know whether I need to, I distributed this, but this is an exhibit. I don't know whether I can give later on or right now, but we had sent, and the reason I'm getting to this and all these questions whether there can be two or not or they could have answered this, but there was no correspondence, no response from PEPCO. And DCA does not necessarily represent everyone in the Darnestown area. So why did PEPCO not being a good business people in this area not contact these neighborhood

directly. Some of these questions could have been addressed. And that is not, that's what I'm going to, when did you guys first approach DCA because we were not privy of any other correspondence.
MR. GROSSMAN: Okay. Well, you've, you've asked the question. Let him, let him answer it if he can. Do you know why?
MR. MORTON: That wouldn't be my area of expertise.
MR. GROSSMAN: Okay. Let me just say something about that. I think it's always wise if any applicant contacts a community and, and works out any concerns that can be worked out. It's not technically part of my review. I mean my review is to look at the zoning ordinance and see if they have complied with the zoning ordinance. Part of that includes a notice that goes out to the community and we send, duly send out that, that notice of this hearing, as we have done. And the posting of the property so people know when they can look into it and they can attend the session we, with, with the Planning Board if they want, then they can attend this public hearing at which you're given a lot of latitude to ask questions and so on.
MR. PANDYA: Yes, sir.
MR. GROSSMAN: But it's not part of, it's not part of my review to see if they've made the intelligent choice

to contact community and try to work things out. I can understand your concern about that, but it's not technically a zoning ordinance issue so we don't want to go too far afield. I'm going to let you put that in.
MR. PANDYA: No, it's --
MR. GROSSMAN: Because they, you know, it raises some legitimate concerns and questions, some of which are being addressed here and I will certainly let them address those points too. I think that it would be, first of all, the letter that was sent in by Mr. Silverman and signed by you and others very well sets out all of your concerns. So I think they have, they can certainly respond to all of those concerns here.
MR. PANDYA: I have no further questions. Thanks.
MR. GROSSMAN: Okay. Any redirect at this point?
MR. WALLACE: Just a couple quick ones.
REDIRECT EXAMINATION
MR. WALLACE: Mr. Morton, you mentioned a nine month period. That, that wasn't for construction along Darnestown, or affecting Darnestown, that wasn't meant to say, well, could you say whether that was nine months right in front of the site or was that nine months as you work your way down?
MR. MORTON: That's nine months total construction of the underground getaway, as we call it, the, the duct

line in, in Darnestown.
MR. WALLACE: So, so not --
MR. MORTON: It will be a, a moving --
MR. WALLACE: Yeah.
MR. MORTON: -- type work.
MR. GROSSMAN: I always think of the getaway more as a trip to Florida, but --
MR. WALLACE: And then Mr. Morton, did you actually participate in a meeting in September 2015, September 17th, with the Darnestown Citizens Association?
MR. MORTON: Yes, I did.
MR. WALLACE: So that's, by my estimate, three meetings with the Darnestown Citizens Association that PEPCO has participated in? January, we heard testimony about a January one, a May one and now a September one.
MR. BOTCHWAY: That's correct.
UNIDENTIFIED MALE: He's correct.
MR. MORTON: I --
MR. GROSSMAN: If you recollect? If you don't recollect --
MR. MORTON: At least, at least, I, I recall three meetings and I'm not sure there wasn't a fourth.
MR. WALLACE: Okay. And at that September meeting, were the, the plans presented at that meeting in terms of the size, the mass and the rendering, et cetera, of

the building of substantially the same if not exactly the same as what's being presented today?
MR. MORTON: I would say by that time our, our design had coalesced and it, it is the same as we're presenting today.
MR. WALLACE: Okay.
MR. MORTON: So --
MR. WALLACE: And do you remember at that meeting whether there was an offer made to meet with any citizens separately in another meeting if anyone wanted to talk further? That, that PEPCO was open to such a meeting.
MR. MORTON: Yes. I believe we did make that offer.
MR. WALLACE: Thank you.
MR. MORTON: And I believe that was perhaps, the fourth meeting was with the residents across the road.
MR. WALLACE: Okay. And I'm sorry. Right. I wasn't part of that so I couldn't speak to it.
MR. MORTON: Um-hmmm. So thank you.
MR. GROSSMAN: Any recross just on those few matters that were just mentioned?
MR. PANDYA: Yes.
RECROSS EXAMINATION
MR. PANDYA: After that meeting on January 8th, I wrote this email to Mr., Mr. Washington, Jr. Do you guys

recall or do you, have you seen this email from us?
MR. GROSSMAN: Let's mark that since it's now been referenced a couple of times. And thank you, sir. And this is Exhibit 63. And this email of January 9, 2015 from Mr. Pandya to PEPCO with --
MR. PANDYA: The gentleman's name is on the last page, sir. His name is, and he wrote down his email address on the last page. That's in his handwriting. Charles Washington.
MR. GROSSMAN: Right. With, to Charles Washington of PEPCO with questions. Okay. Now you may ask your question.
(Hearing Exhibit No. 63 was marked for identification.)
MR. PANDYA: Yeah. Have you seen this email, sir?
MR. MORTON: I do recall seeing the drawing. And I'm, I do recall seeing the drawing.
MR. PANDYA: Did you or anyone else that you know responded to my email since January 9th? Since the day you receive it.
MR. MORTON: I think we prepared and responded to it in the presentations that we had developed and, and since had, we were there.
MR. PANDYA: No. I had, did you respond to my email to me because that's what I asked?

MR. MORTON: I did not.
MR. PANDYA: I don't think this was presented in any other DCA meetings, if I recall specifically these questions. Because there are several questions here. So.
MR. GROSSMAN: Well, all right. You, this is not, you can't make a speech here.
MR. PANDYA: No, I understand.
MR. GROSSMAN: You can just ask questions. So he's answered that question. He did, his response was not to you directly, but at a meeting at DCA.
MR. MORTON: Right. At, right.
MR. GROSSMAN: He has responded to, that was your --
MR. WALLACE: Which, which this gentleman attended.
MR. GROSSMAN: Right.
MR. PANDYA: Just for the record, sir.
MR. GROSSMAN: Well, we're going to let you for the record --
MR. PANDYA: Okay. Fine. All right.
MR. GROSSMAN: -- make, you're going to be able to testify about it under oath and say what, whatever is on your mind about it. Okay.
MR. PANDYA: I'm, okay. I'm done. Thank you.
MR. GROSSMAN: Okay. Any, well, anything further,

Mr. Silverman?
MR. SILVERMAN: No, thank you.
MR. GROSSMAN: Okay. All right. So we'll break for lunch now. We'll come back at 1:45. And hopefully, when we return, is that sufficient time?
MR. WALLACE: We did, we actually have the exhibit in question. We had it on hand.
MR. GROSSMAN: Great. Would you share a copy with, with the opposition, please, so they can get a chance --
MR. WALLACE: We may only have our one copy.
MR. GROSSMAN: Okay. And, and then see if you can address, have somebody address that question of, of whether or not there is some way to reduce the height of this facility. Okay. So we return at 1:45. In recess.
(Off the record.)
(On the record.)
MR. GROSSMAN: Back on the record. I see that Mr. Morton has returned to us. So we have more?
REDIRECT EXAMINATION
MR. WALLACE: Mr. Morton, could you explain what the exhibit is that's been posted on the board?
MR. MORTON: This exhibit is an elevation of the electrical equipment in the substation that defines the, the height requirements of the structural part of the, of the

building.
MR. WALLACE: And so this would be --
MR. GROSSMAN: Can we mark that as Exhibit 64?
MR. WALLACE: Yeah.
MR. GROSSMAN: 64 is elevation of internal equipment.
(Hearing Exhibit No. 64 was marked for identification.)
MR. WALLACE: If you could walk through this exhibit and, and show what the equipment is, what the height of the equipment amounts to and, and how it drives the height of the structures involved.
MR. MORTON: All right. Looking at Section AA of this sheet, I want to say two-thirds to the right side of the elevation, we see the circuits being brought up out of the ground and they're going into a, a disconnect switch. And they, as you're going up from the ground level to the, to the ceiling you run into a bus structure here. The circuits go back into the, to the back towards the far wall near, near the customers' homes. Then it goes into a, a bus with another set of disconnect switches. And that allows for the, the supply feeder to be changed out with, with another supply should the supply feeder be out of service or, or and a transformer, a different transformer being out of service.

MR. GROSSMAN: Well, well, first.
MR. MORTON: This is one of four.
MR. GROSSMAN: Are we looking at, which direction are we looking, where, are we looking through the side of the building? Are we looking through the front of the, what are you looking at?
MR. WALLACE: Yeah. Orient the elevation in terms --
MR. MORTON: The way this oriented is you would be looking at it from the, the side.
MR. GROSSMAN: Okay. From the --
MR. MORTON: From, from the east --
MR. GROSSMAN: -- the north --
MR. MORTON: Well, yes. From the --
MR. GROSSMAN: Northeast side.
MR. MORTON: -- northeast side into the, into the structure.
MR. GROSSMAN: Okay. So, all right. So we put that down again. So now --
MR. WALLACE: So you're standing on the northeast side of the structure and you're looking straight forward.
MR. GROSSMAN: Okay. And so, on the left of that diagram, is the front of the, the front of the building.
MR. MORTON: Right. This is the front of the building on, on the left.

MR. GROSSMAN: And so that --
MR. MORTON: Towards Darnestown Road.
MR. GROSSMAN: And so from the front of the building, the first major piece of equipment we see, that's a transformer?
MR. MORTON: The, the, inside the structure, we have switch gear. We have, we have switch gears on the second level, as, as Ebenezer, Mr. Botchway told us. And the distribution feeders are brought out of the bottom of those and then they go in a conduit out. So this, this structure is under a roof.
MR. GROSSMAN: Right.
MR. MORTON: This structure here is, it, the rest of the structure is under the bird screen. This is a transformer.
MR. GROSSMAN: All right. That's the first thing you run into after you get out of the roofed section?
MR. MORTON: Yes. After you get out of the roofed section, you, here's the transformer. Here's the driveway. And this is a circuit breaker that, this is a 69 kV circuit breaker. The, the switch gear line-up contains 13 kV circuit breakers.
MR. GROSSMAN: All right.
MR. MORTON: But they're, they're far smaller than, than this.

MR. GROSSMAN: All right. That's, and that's centrally located on that diagram. This is the top diagram.
MR. MORTON: Essentially that is in the center of the, of the structure.
MR. GROSSMAN: Okay. And now going up from there, on top of that centrally located circuit breaker.
MR. MORTON: Okay. On the circuit breaker, we have another set of disconnect switches on one side, a removable link on the other side. And then we --
MR. GROSSMAN: What's the height of those switches?
MR. MORTON: The switches are centered at 22 feet.
MR. GROSSMAN: Okay. What --
MR. MORTON: According to the drawing as it's laid out here, to, to the ground level.
MR. GROSSMAN: And now the next thing up from that looks like some other structure on the top. What are those, what are the, what's this structure on top of that? It's at the very top underneath the bird screen.
MR. MORTON: This, this structure?
MR. GROSSMAN: No. What, well, all right. Let's take that structure. Right on top of that one. What is that?
MR. MORTON: I'd probably have to defer to one of my --

MR. GROSSMAN: All right. What's on top of that? The, you see --
MR. MORTON: Is the bus structure. This is bus and then this is insulators where the bus is, is being hung from the steel beam up over the entire line of the equipment.
MR. GROSSMAN: Okay. So I guess the question is can the bus be dropped to a lower level?
MR. MORTON: The issues --
MR. GROSSMAN: To allow the, the roof and the, and the screen to be dropped.
MR. MORTON: The issues as I had indicated earlier is we have a concern over the driveway because of trucks. We also have concern over the, the clearance that these switches, each of these switches when they turn, they turn from a 90 degree angle to an essentially horizontal angle. And that has to be of a given distance away from the, from the circuit above. The --
MR. GROSSMAN: What is that, what is that given distance?
MR. MORTON: The drawing here shows a, the, the exact distance I, I don't have. It's a --
MR. GROSSMAN: So I, and once again, again it comes down to that, that question. You said of a given distance. Has to be a given distance. I'm just asking is,

can the distance be smaller than you've decided to plan it in this building? Can the distance be shorter?
MR. MORTON: And the answer is the, the, as they designed the building, they designed the building to meet the, the minimum requirements. To, to take any more away would be to give an opportunity for an issue to occur that could cause a problem in the substation.
MR. GROSSMAN: All right.
MR. MORTON: So it's designed with a minimum safety set.
MR. GROSSMAN: Okay.
MR. WALLACE: And then could you just explain what the minimum, what agency or what code generates the minimums?
MR. MORTON: That would be out of the National Electric Safety Code.
MR. WALLACE: NESC Code. So to summarize, the clearances, the structure, the separation conforms to the requirements of the National Environment, Electric --
MR. GROSSMAN: I, I think it would satisfy everybody's concern about that if you would just cite what those specific provisions are in the Code that cause those distances. And then it's, it's a moot point at that point because nobody is going to require you to, to have a distance that's not, does not meet the requirements.

MR. WALLACE: And we may or may not have that with us today.
MR. BOTCHWAY: The distances? Yes.
MR. WALLACE: The requirements of the NESC.
MR. BOTCHWAY: We don't have it here, but we can make it as, we can bring it as a record.
MR. GROSSMAN: All right.
MR. WALLACE: So, so this, this layout of the equipment generates a height of what from the ground floor to the top of the bird screen?
MR. MORTON: This is, that was 40 feet, per our discussions earlier. That's, raises it to 40 feet.
MR. WALLACE: Okay. Can you explain where the, the height of 48 feet is generated? Or maybe actually walk around the building, please, if you could.
MR. MORTON: Okay.
MR. WALLACE: And explain where this 40 foot section extends to. Maybe use the building footprint. So what, what section of the building is built to this 40 foot requirement because this 40 foot, because of the equipment requirements?
MR. MORTON: The, the 40-foot section is essentially the, the part of the structure that is covered by the bird screen.
MR. GROSSMAN: Okay. So that only goes up to 40

feet.
MR. WALLACE: Right.
MR. GROSSMAN: Okay.
MR. MORTON: And then the 48 feet comes in in the, in the gable of the roof structure that we've put over the --
MR. GROSSMAN: Okay. So I guess then the question comes down to why do you need the extra eight feet in that area? Because if the whole thing can be 40 feet that would be an improvement.
MR. MORTON: Well, I turn that question over to our architect.
MR. WALLACE: I would explain what the equipment is. If you could explain the --
MR. GROSSMAN: The equipment.
MR. WALLACE: -- equipment within the enclosed structure. What it is.
MR. MORTON: The, the equipment in the enclosed structure is, this, this is at the 40-foot level as well. This is, this is even across everything.
MR. WALLACE: Okay.
MR. MORTON: So the space above that --
MR. WALLACE: Is --
MR. MORTON: Is --
MR. WALLACE: The architect will explain what the

space above it is.
MR. MORTON: Yeah.
MR. GROSSMAN: Okay. All right.
MR. WALLACE: If you could, explain what about this equipment is different than your old substations that, that adds the height. What is the component that's different so everyone understands what it is?
MR. MORTON: Okay. The sub, the, our previous design did not include high side breakers. It didn't include the high transfer bus and the driveway was outside of the facility. And therefore, as you see here, we, we had the capability of, of coming in at a lower location where the, where the cables were coming up. We didn't have to go as high up because they were able to tie off at a, at a lower footage, about, I want, seven feet or so. Five, five to seven feet.
MR. GROSSMAN: Well, you had done, you just use your own knowledge.
MR. MORTON: Okay.
MR. WALLACE: And, again, this is new technology. Going forward with substations in, in Montgomery County is, is PEPCO's intent to use this type of substation, this design of substation, this size of a substation for future electrical service in Montgomery County?
MR. MORTON: Yes.

MR. WALLACE: Okay.
MR. GROSSMAN: By the way, I still don't understand what the, the truck point because I haven't seen a 40-foot tall truck that you would use, but --
MR. WALLACE: It --
MR. GROSSMAN: So, and I'm still not sure why you, why the internal --
MR. WALLACE: Can you explain why, well --
MR. MORTON: There are other, there are other elements that, that lead to the height. It's --
MR. WALLACE: Can you walk through what those elements are?
MR. MORTON: The, again --
MR. GROSSMAN: No. I know those elements.
MR. MORTON: Yeah.
MR. GROSSMAN: I'm talking about the truck. You mentioned the truck, the driveway being internal now a number of times and indicate that that somehow drives the height. And I don't see how that could drive the height.
MR. WALLACE: What crosses, Mr. Morton, what crosses the height, the, the truck driveway? Overhead.
MR. MORTON: 69,000 volt bus structure.
MR. WALLACE: Okay. And --
MR. MORTON: It has to be down a little bit from the, it's held in place by insulators that are tapped into

a, a steel beam that's at the, essentially the 40 foot height.
MR. WALLACE: So there is --
MR. MORTON: The, the 40 foot height has to be common across the, the structure to, for that to work.
MR. GROSSMAN: And how does the truck height impact on that? That's my question. I'm, I'm going to wait for the, the NESC rules to tell me what justifies the rest of the height difference, but, and maybe it becomes a moot point depending on the architect for the other eight feet, but I, I still, you still haven't told me how a truck issue is created for height. I don't know why that's an issues.
MR. WALLACE: Mr. Morton, did, I thought I heard you explain that the structure has to be consistent at a 40 foot height from the, from the transformers all the way to the back.
MR. GROSSMAN: Right.
MR. MORTON: That's correct.
MR. WALLACE: Okay. Because of --
MR. GROSSMAN: Well, no. Not because of. I'll accept that.
MR. WALLACE: Yes.
MR. GROSSMAN: It has to be consistent all the way across.
MR. WALLACE: Okay.

MR. GROSSMAN: It's at the 40 feet. How does that impact a truck, which is a lot lower than that?
MR. MORTON: Well, the, the truck also will be bringing in pieces of equipment. The truck may have a bucket on it and it, it may not be a simple semi rig. It, it may have some --
MR. GROSSMAN: May extend up to that 40, or somewhere close enough to the 40, but --
MR. MORTON: Not, not fully, but, but somewhat above.
MR. GROSSMAN: I see.
MR. MORTON: To, to a point where you really wouldn't want to take a, a risk.
MR. WALLACE: And --
MR. GROSSMAN: Okay. All right. That's all I was asking. That's it.
MR. WALLACE: Actually there is a little bit more. Is, is there also a requirement for the type of structure that's extending across that driveway? Is there a clearance requirement for Code purposes for vehicles operation underneath it?
MR. MORTON: I would have to defer back to --
MR. WALLACE: Okay.
MR. MORTON: -- another on that, that part of it.
MR. WALLACE: There is.

MR. GROSSMAN: And that's probably insignificant. It's just been, it's been mentioned several times, the truck, and I just didn't understand how the truck, most trucks don't have a height like that. For, so --
MR. MORTON: But the kind we use, some of them do.
MR. GROSSMAN: But he's explaining to me he could have some that, that, that are, do require it so I'll accept that.
MR. WALLACE: And we're, okay.
MR. GROSSMAN: I don't need further explication on that.
MR. WALLACE: Then, and there are Code requirements that, the truck may not be 40 feet high but --
MR. GROSSMAN: No, I understand.
MR. WALLACE: Yes.
MR. GROSSMAN: But you could have a certain amount of clearance. I just, it was hard to understand why a truck would need 40 feet plus clearance. So, but --
MR. WALLACE: Okay.
MR. GROSSMAN: I'll accept his explanation of that and I guess we'll wait for the architect to tell us about the extra eight feet.
MR. WALLACE: Okay. Great. Thank you. I think with that, we actually did have two more points we wanted to just raise.

MR. GROSSMAN: Okay. Sure.
MR. WALLACE: Back to a previous question.
MR. GROSSMAN: Yes.
MR. WALLACE: And then I do have, I do have to get back into a couple more. But, and let me, just to, just to go back through your, to the course of your testimony. In your opinion, is the proposed structure at this location selected necessary for public convenience and service?
MR. MORTON: Yes. It is. We, we need, for the public we need to be able to provide the electricity through the community and this is the best location for, for that.
MR. WALLACE: In your opinion, will the proposed structure at this location cause any undue harm to the health, safety or welfare of neighboring workers, residents or visitors or substantially impair or prove detrimental to neighboring properties?
MR. MORTON: In my opinion, it will not. We, we are operating a secure facility. There is equipment inside that should be kept away from the public and we have taken the steps it takes to make that happen.
MR. WALLACE: You were asked earlier if you could do two smaller stations in the planning area. If you went ahead and did that at this point in time, would it significantly delay your ability to bring in the necessary power service for the, the dates that you've established

that existing facilities would be exceeded in terms of their ability to produce and provide power?
MR. MORTON: We, we believe that it would impact that and that we would not be able to meet the requirements that we, we predict we need. In addition, we anticipate that reducing the size of the substation so that there were two of them in place of one would really not impact at least the length of the facility. It would be similar in length and perhaps a little less wide, but --
MR. WALLACE: And similar in height?
MR. MORTON: And the same as height.
MR. GROSSMAN: Okay.
MR. WALLACE: Thank you. That's all for Mr. Morton.
MR. GROSSMAN: Any further cross-examination questions, gentlemen?
MR. SILVERMAN: (No audible response.)
MR. PANDYA: (No audible response.)
MR. GROSSMAN: No. All right. Well, thank you, Mr. Morton. Appreciate it. And your next witness, sir?
MR. WALLACE: One procedural matter just to ask how, if you have any preferences on how to handle it. You had asked earlier to address fire and you used the word explosion. Fire and explosion.
MR. GROSSMAN: Right. If there was any risk of

explosion or fire, whatever.
MR. WALLACE: It happens to be that Mr. Botchway would be the best witness to testify as to those two points. I can bring him on now to testify as to that and then we can take care of --
MR. GROSSMAN: Sure, sure. That's, if that's --
MR. WALLACE: I call back Mr. Botchway.
MR. GROSSMAN: You look familiar, Mr. Botchway.
MR. BOTCHWAY: Last time I checked I'm the same guy.
MR. GROSSMAN: You're, you're still under oath, sir.
MR. BOTCHWAY: Yes, sir.
MR. GROSSMAN: Have a seat.
REDIRECT EXAMINATION (Resumed)
MR. WALLACE: Could, could you just explain the fire suppression systems that are, that would be provided in the building and any protections what, for explosive events?
MR. BOTCHWAY: Yes. I can. By designing this building according to National, NFPA, National Fire Protection Association, Life Safety Code 5100, this station as a facility will have to make what is called the, the two and three hour fire rating. So on first goes the protective material around the building of, for the transformer which is the high hazard area are brick. Brick has been

determined to have three hour fire rating. We have a brick and then a block. We have brick, 12, 12 inches wall which is eight inches block and 4 inches brick as what they call a façade treatment. So that 12 inches give you a three hour fire rating. That is in the perimeter of the building. So if anything at all happen inside the station, it stays inside the station. Beyond that, the most high hazard, fire hazard locations are the transformer locations. We have yet another fire protective wall around it, which is another three hour fire rating.

MR. GROSSMAN: Around each transformer?

MR. BOTCHWAY: Around each transformer. Each transformer they have total protection around it. So if anything happens, it will stay within that transformer area. We don't want to lose two or three transformers when one transformer goes off, having a kind of accident or fire. So we isolate each transformer in a base. Yes, another point comes into it that transformers need to be ventilated. Even the louvers that we provide for ventilation on these transformers are fire rated. So we won't have any kind of projection. And what we do also have with those louvers is what we call a fusible layer. If, in case of a fire and the temperature rises to about 100, 120, 130 degrees Fahrenheit, this fusible layer will melt and automatically will shut. We have two different louvers, one fixed and one movable.

The, the adjustable louver will immediately close so there's no feed in of fresh air to the transformer compartment so then that, that also helps in quenching the fire at once. Each transformer location also what we have, is what we have, is we have a sprinkler system within the high hazard area. So that we have almost like three different, four different levels of fire protection.

MR. GROSSMAN: You sprinkle water on, on this?

MR. BOTCHWAY: And we sprinkle water, believe it or not.

MR. GROSSMAN: Right. I thought maybe it would be some kind of other retardant, but I'm surprised to hear you just --

MR. BOTCHWAY: We've, we've, we've, we've tried different colloidal, colloidal materials, but all in all we have found the water to be a little bit more, more effective. Not only that that it's effective, it saves the customer by, the colloidal materials that are covering the outside in the light, what it do is yes, they help in quenching the fire almost the same like the water. But after the, the fire is quenched, the material is of no use because it, it creates a protective cover around the equipment then it becomes unusable. So we've got the --

MR. GROSSMAN: It's just that we always hear not to use water on an electrical fire. This seems to be a

super electrical but --

MR. BOTCHWAY: Yeah. This is not really water, but what we call mist. If, if you throw water, you can redirect the current through there. So we have a water colloidal system, what is almost like a mist that we, we introduce in to quench the --

MR. GROSSMAN: What about explosions? We've all probably heard transformers blow and it makes a loud noise. Sounds like a lot of force. Is that a risk?

MR. BOTCHWAY: We haven't had a situation of an explosion with a transformer. Normally what we do, have noticed in all our substations is, is a spontaneous combustion.

MR. GROSSMAN: Yeah. I don't mean these, these big ones. I'm talking about the local ones in residential areas where you see, you hear a big bang and you know the transformer is blown. What --

MR. BOTCHWAY: Yeah. Normally, those are what they call the street type transformers. They are small in nature. They are not as big as this one. So they, and they are pretty much in a confinement. So when you have any kind of short in the system, which is, you know, it can happen, then because of their close proximity, it gives you a sealed containment. So when you, when you hear it, it, it, that's noise propagates. It makes it really loud like an, big

explosion, but you won't get that in this location.

MR. GROSSMAN: And they're not prone to explode at all? Is that, the bigger --

MR. BOTCHWAY: No. Not in my 35 years' experience, we haven't had a transformer in a substation explode.

MR. GROSSMAN: Okay.

MR. BOTCHWAY: We have had spontaneous combustion, but not so much to explosion.

MR. GROSSMAN: All right. And then when you had some spontaneous combustion, was it contained within the structure?

MR. BOTCHWAY: It's contained within the structure. We have a two hour fire rating among, around every transformer. Beyond that, we have, that's one reason why we have an indoor type. We have another brick wall around it of another two or three hour fire rating.

MR. GROSSMAN: And when you have had a fire, it has been contained?

MR. BOTCHWAY: It has been contained.

MR. GROSSMAN: Okay.

MR. BOTCHWAY: And the system, we have a console unit inside the station which communicates with our 24/7 Control Center. That as soon as that we have that kind of emergency, the communication goes to them. They first of

all send somebody or if it's, it can determine, they send a dispatcher which we have them running around all, in the city all the time. If this, if there's a catastrophe, fire situation we will call the fire service right away. If not, we have a sprinkler system that is designed to quench any fire within the transformer containment before even the fire marshal shows up. So, on that note, I think we have a fail, pretty much close to a failsafe fire situation in this building.

MR. GROSSMAN: If you've ever seen the movie Failsafe, you don't want to say that.

MR. BOTCHWAY: Not on --

MR. GROSSMAN: All right. Any other questions of this witness, Mr. Wallace?

MR. WALLACE: (No audible response.)

MR. GROSSMAN: No. Cross-examination questions?

MR. SILVERMAN: (No audible response.)

MR. PANDYA: (No audible response.)

MR. GROSSMAN: No. Thank you. Thank you very much for returning.

MR. BOTCHWAY: Thank you very much.

MR. WALLACE: Thank you. My next, my next witness is Harry Ross with CORE Architects.

MR. GROSSMAN: Good afternoon, Mr. Ross.

MR. ROSS: Good afternoon.

MR. GROSSMAN: Would you state your full name and your work address, please?

MR. ROSS: Harry Paul Ross, Jr., 1010 Wisconsin Avenue, N.W., Suite 405, Washington, D.C. 20007.

MR. GROSSMAN: All right. Would you raise your right hand, please? Do you swear or affirm to tell the truth, the whole truth and nothing but the truth under penalty of perjury?

MR. ROSS: I do.

MR. GROSSMAN: All right. You may proceed, Mr. Wallace.

MR. WALLACE: I was trying to be efficient with the time with the next witness, but --

DIRECT EXAMINATION

MR. WALLACE: Mr. Ross, if you could state your occupation?

MR. ROSS: I'm an architect, licensed architect.

MR. WALLACE: And your employer is?

MR. ROSS: CORE Architecture in Washington, D.C.

MR. WALLACE: And how long have you been with CORE?

MR. ROSS: About two and a half years.

MR. WALLACE: And can you please review your professional, or educational and professional background?

MR. ROSS: I have a BA in French international

business from the University of Maryland and a Masters of architecture and planning from the Catholic University in D.C.

MR. WALLACE: And are you a member of any professional organizations for architecture?

MR. ROSS: Yes. I'm a member of the AIA, American Institute of Architects and I'm NCARB certified.

MR. WALLACE: Okay. And Mr. Ross's resume is in the record as Exhibit 21D.

MR. GROSSMAN: Okay.

MR. WALLACE: And I would move to admit Mr. Ross as an expert in architecture.

MR. GROSSMAN: All right. Any questions regarding this witness's expertise? Mr. Silverman?

MR. SILVERMAN: Just be curious, have you ever designed substations before?

MR. ROSS: I worked with PEPCO on the waterfront substation in Southwest D.C.

MR. SILVERMAN: Thank you.

MR. GROSSMAN: You worked with them. Did you design the, the substation?

MR. ROSS: We, we, we designed the exterior. Yes. The façade or the façade design.

MR. GROSSMAN: We being the --

MR. ROSS: CORE, CORE.

MR. GROSSMAN: Okay. And you worked on that?

MR. ROSS: Yes, I did.

MR. GROSSMAN: All right. Any other questions?

MR. SILVERMAN: (No audible response.)

MR. PANDYA: (No audible response.)

MR. GROSSMAN: All right. Based on Mr. Ross's background in architecture and his, I take it you haven't testified as an expert before?

MR. ROSS: I have for --

MR. GROSSMAN: Oh, you have.

MR. ROSS: -- BZA Case in Washington, D.C., but not in Montgomery County.

MR. GROSSMAN: And were you sworn in as a, as a witness?

MR. ROSS: Yes, I was.

MR. GROSSMAN: And were you certified as an expert in architecture?

MR. ROSS: At that time I do not believe I was.

MR. GROSSMAN: Okay. What happened?

MR. ROSS: The case went very smoothly and they didn't need any testimony from me.

MR. GROSSMAN: I see. Okay. So you didn't actually testify?

MR. ROSS: No, but I was present at the BZA hearing.

MR. GROSSMAN: At, all right. Well, based on your stated qualifications and your resume, I accept you as an expert in architecture. I used to, by the way, ask architect witnesses what they thought of the Clinton Library.
MR. ROSS: Oh.
MR. GROSSMAN: Because I had a certain opinion of that, but it's not really a fair question. But --
MR. ROSS: I worked at that firm too.
MR. WALLACE: Oh. Is there, is, we don't need to, you know, ask you to recuse yourself at this point?
MR. GROSSMAN: No, I, I wouldn't, I can't, I can't really, it's not fair so I won't do it. Okay.
MR. WALLACE: Thank you. Mr. Ross, what has your role with the project been in terms of the Darnestown substation?
MR. ROSS: I was a façade designer for the Darnestown substation.
MR. WALLACE: Okay. And can you explain your overall design concept for the property?
MR. ROSS: So the overall design concept was to have a massing and a, and a, use a series of materials that invoke and are referential to the agrarian, agrarian barn style building. And it's been added to over time.
MR. WALLACE: And can you explain, you know, how

did the design concept evolve over time? Did you work on an initial design concept for the project?
MR. ROSS: When CORE became involved, we, in discussions with Planning and also with PEPCO, it evolved from the townhouse or residential design to this agrarian barn design due to the size of the, of the substation.
MR. WALLACE: And when you say Planning, you mean Planning Staff at, at Montgomery County Planning Board --
MR. ROSS: That's it.
MR. WALLACE: -- Staff, Technical Staff?
MR. ROSS: Yes.
MR. WALLACE: Okay. Using the elevation is probably the best just to kind of walk through, and if you walk through what you're, what the design elements are, what the materials are?
MR. GROSSMAN: What are the exhibit numbers on the elevations again?
MR. WALLACE: I'm sorry. Yeah. And this is Exhibit --
MR. ROSS: 7 and 7 --
MR. WALLACE: And 7, they might be both 7 actually.
MR. ROSS: They're both labeled as 7.
MR. GROSSMAN: Let's see. I'll tell you in a second if it has --

MR. WALLACE: 7A, 7, he's going to start with 7A.
MR. GROSSMAN: Okay.
MR. WALLACE: And then move on to 7B, I believe.
MR. GROSSMAN: Okay.
MR. ROSS: So this is the south --
MR. WALLACE: And just, yeah, you'll say, you'll orient us.
MR. ROSS: Yeah. Yeah. Yes. The southeast orientation facing Darnestown Road. So this is the longer and taller of the, of the massing. There are louvers and a, what's called high pressure laminate rain screen system which looks a little bit like barn wood, but has the added benefit that it, it can be wider than typical wood construction and so very durable and a handsome product. There's also a metal panel system that invokes this kind of silo. It's a vertical element that is intended to look as though a silo that's been attached to the building. And then there's a stone base that's pretty consistent as it wraps around to kind of ground the building. Moving to the, to the northeast elevation. So this is --
MR. GROSSMAN: So that top one is the front of the building?
MR. ROSS: So this is the front facing Darnestown?
MR. GROSSMAN: Right.
MR. ROSS: And then the other front facing Riffle

Ford.
MR. GROSSMAN: Okay.
MR. ROSS: So this is where you have, so the Darnestown portion of that elevation turns the corner. You have this large louvered vent structure openings. They aren't really openings, but --
MR. GROSSMAN: Would you do me a favor and move those other diagrams so they aren't blocking my view? Thanks. Thank you.
MR. ROSS: So a series of louvered openings and then one thing that we always, we noted about the agrarian structure is that, that there is this, there's depth to those. So trying to, trying to find ways to combine entrances into a single architectural feature to try to minimize the appearance of what would be just essentially a wall, a straight wall. So we started to develop this pinwheel effect of the plan as it moves around the, the, the, what is the equipment courtyard. So moving down, you have a similar material with a standing seam roof, a series of --
MR. GROSSMAN: So what does a standing seam roof mean?
MR. ROSS: It is a metal roof that is, it's lapped in such a way that you have a series of seams that give shadow play and it also allows for, it's installed in a

sequence and it's, it's a lapped kind of construction.
MR. GROSSMAN: Okay.
MR. ROSS: So, once again, the stone base. It's, it's a different stone than the other so to give some variety and some visual interest. And you'll also note that the, the overall height relative to the Darnestown frontage drops down as you move towards, down Riffle Ford towards the cul-de-sac.
MR. GROSSMAN: Okay.
MR. ROSS: So this is the kind of main entrance to the substation. And that was some secondary entrances for service and, and convenience. So then moving to the northwest elevation, you can see the, the roofline of the Darnestown massing all the way, 150 some feet to the, to the northeast. Again, a different kind of metal panel and the same kind of high pressure laminate system, but with some, some variety and some articulation that we felt would allow for that portion to actually recede. And you just have the expression of the, this kind of barn-esque structure that's, that's, that's appended to that, what is a flat wall.
MR. GROSSMAN: Okay. And that's the part that's opposite Darnestown Road?
MR. ROSS: Correct.
MR. GROSSMAN: Okay.
MR. ROSS: So this, this fronts the, the Hallman

Court.
MR. GROSSMAN: Okay.
MR. ROSS: And then as you move around to the southwest elevation, a similar composition and the Darnestown Road massing expressing itself on the, on the end.
MR. GROSSMAN: Okay. Now I, I notice on the, the top of that diagram, it, that's, is that the screen across the top that I'm seeing? Right across the top.
MR. ROSS: So the screen is actually at this level.
MR. GROSSMAN: Oh, it's the lower level. Okay.
MR. ROSS: Yeah. So what we, what we did was, it's, it's a little bit of a, a, trick to, to have the, the, the gable of the roof start at the high, at the required highest point which is the 40 feet. So we didn't want to introduce any additional height, especially considering the neighbor and the neighboring residential buildings to the south and southwest. So over on the Darnestown side to get that variety in the height, is, that's the gable end, which you see here and this view actually looks into --
MR. GROSSMAN: Okay. So the, so what I'm seeing looking from the back of the building, in effect, the, the Hallman Court side, is I'm seeing a 40 foot height. And at the very, and looking the length of the building --

MR. ROSS: Well, the, yes.
MR. GROSSMAN: -- there at the other end, I'm seeing the 48 foot extension, the gable.
MR. ROSS: The gable side.
MR. GROSSMAN: Okay. So it is lower at the side of the, of the residence that we're talking about here.
MR. ROSS: Yes.
MR. GROSSMAN: Okay.
MR. ROSS: We were, that's one thing, one, one of the design elements that we were really concerned about. (A) just being a good neighbor, and (b) I think if those, to reinforce that, the idea that it is an agrarian structure that's added to over time, it offered an opportunity to do something that was more interesting to look at on the residential side than actually on the Darnestown side.
MR. GROSSMAN: So, all right. So assuming that's a plus, what, what is the reason why you have that gable reaching up eight feet?
MR. ROSS: It was, so since we couldn't impinge on the, on the --
MR. GROSSMAN: The 40 foot.
MR. ROSS: -- on the 40 foot height --
MR. GROSSMAN: Right.
MR. ROSS: -- it had to be additive. So to, to achieve the massing and the profile that's common in, in

barn structures. And you'll note that it's a little, it's not, it's a little unclear but the big, the actual roofed enclosure only extends about that far. And the gable end is actually just the façade extending up above the, the actual enclosure of the, of the substation property.
MR. WALLACE: Can you, it may help to go through some renderings which to, to show this a little bit better.
MR. GROSSMAN: Right. When you say only extends that far, what do you, what do you, what to that? How far is that far?
MR. ROSS: So in, in the plan, the portion of roof is limited to that side and where they have the, the clearance requirements for the transformers, we didn't add roof there.
MR. GROSSMAN: Right.
MR. ROSS: So --
MR. GROSSMAN: So it extends --
MR. ROSS: As far --
MR. GROSSMAN: It may be a fifth of the distance of the building, into the building or so.
MR. ROSS: Correct.
MR. GROSSMAN: That's what, okay. All right. Okay.
MR. WALLACE: You want to, and walk through all the renderings maybe --

MR. ROSS: Okay.
MR. WALLACE: -- take one at least and that'll help walk around it showing some of the detail a little bit better. The prospectus in there.
MR. GROSSMAN: So if I gather correctly, the, the reason for the extra eight feet in the front is essentially stylistic. It doesn't, it could be a flat roof there.
MR. ROSS: Yes.
MR. GROSSMAN: But you were trying to make it look like a barn and so you added a gable in front.
MR. WALLACE: Correct.
MR. WALLACE: And --
MR. GROSSMAN: That brought it from 40 to 48 feet.
MR. WALLACE: -- as you're walking through this, oh, Harry, could you please, or Mr. Ross, can you please explain what, what you could do with the roof to bring the height down without compromising the height and not compromising too much your, what you're, what you're trying to achieve in terms of the, the agricultural design aspects? What could you do with the roof if, if desired?
MR. ROSS: Yeah. So this is the view from the corner of Riffle Ford and Darnestown.
MR. GROSSMAN: Is that an exhibit in the record?
MR. WALLACE: Oh. Yeah. I'm sorry. It is not. It, it is part of the Staff, I believe, in the Staff Report,

but, Exhibit 60. I show 65.
MR. GROSSMAN: It would be 65. So Exhibit 65 is architect's rendering.
MR. WALLACE: Titled PRES 3.
MR. GROSSMAN: PRES 3, from, where is that from?
MR. ROSS: Darnestown Road and Riffle Ford Road.
MR. GROSSMAN: Okay. Darnestown and Riffle Ford. Okay.
(Hearing Exhibit No. 65 was marked for identification.)
MR. ROSS: So as you can see, the composition as it, as you move down Riffle Ford and down Darnestown Road, the idea was that you had this kind of older structure that then the other structures kind of wrap around so going back to that design concept that is an agrarian farm that's been added to over time. One of the, one of the options is to actually lower the pitch of the, of the additive portion. We felt, we, we kind of went back and forth as to the, to the, to the appropriate pitch because I think that if you look at what is typical in agrarian structures, it's typically a higher pitch or it's a mansard where in, in, in flux one, one time. But, you know, a lower pitch is definitely technically feasible so.
MR. GROSSMAN: How much height could you save by a lower pitch and still maintain the --

MR. ROSS: It's something we could, we would have to study, but it's, it's feasible you could save two or three feet.
MR. GROSSMAN: Okay. I'm not sure that gains that much, but we'll hear from the testimony of the opposition and see if, if that's really helpful. I mean it doesn't have a huge pitch as it is, so, you know, I don't know that that's that helpful, but, okay.
MR. ROSS: So the other, the other portion is the, is the amount of landscape screening and the distance of setback from all the frontages. I think the, as you would see in protected buildings in the County, typically there's, you know, they're respected in such a way that they're, you have the development happening around them so it kind of, once again, goes back to the idea that it's a structure that may or may not have been here before all the other developments had proceeded. So taking advantage of trees that are existing on site and then complementing them with the, with the screening. The idea being that you kind of manage the views of the building, especially the pedestrian level. I think that's the other, other portion of the, of the, in terms of the scale. Understanding that the perception of it, it's set back so far and managed in such a way that the screening and the layering of the vegetation, it actually helps with the scale of the --

MR. GROSSMAN: What am I seeing over here? What is that?
MR. ROSS: So that, that is, this is the top of that, of the, of the equipment area so, so that this view is essentially here looking that way.
MR. GROSSMAN: Yes.
MR. ROSS: So this, these are the, the termination structures and the, all the kind of equipment that's outdoors and uncovered. So we have a, a bit of a thin wall that returns that still gives you the appearance of a gable or complete roof, but it's not a complete roof.
MR. GROSSMAN: So I, so you're saying there's a roof along here?
MR. ROSS: Along the edge.
MR. GROSSMAN: Along the edge?
MR. ROSS: Yes.
MR. GROSSMAN: All right.
MR. WALLACE: And that's, just to be clear, that's the Riffle Ford edge?
MR. ROSS: Yes. This is the, this is Riffle Ford Road.
MR. GROSSMAN: Right.
MR. ROSS: And this is the, the entry into the substation.
MR. GROSSMAN: All right. Well, somehow I didn't

realize that. I thought, I thought from the prior testimony that there was no roof back here at all. It was only --
MR. WALLACE: Oh, no, no, no. Oh, I'm --
MR. GROSSMAN: It was only a roof in the front.
MR. WALLACE: Just to be --
MR. GROSSMAN: And the rest of it was just a screen.
MR. WALLACE: It's a, it's a --
MR. ROSS: It's, it's not, it's not a roof in the sense that it covers and protects the area below from weather. It's an extension of essentially the wall that's extending horizontally.
MR. GROSSMAN: Okay. And so what height, what height does that wall extension go to?
MR. ROSS: So this is to 40 feet. So that's how we, that's how we achieved, without adding additional height that wasn't necessary on the residential side, letting that govern the, the top of the --
MR. GROSSMAN: I'm not sure I understand. Is that, so you're saying that's only 40 feet or is that 48 feet as well?
MR. ROSS: This is 40 feet.
MR. GROSSMAN: That's 40 feet. To the top of that?
MR. ROSS: Yes.

MR. GROSSMAN: Okay. So it's only 48 feet in front here?
MR. ROSS: Correct.
MR. GROSSMAN: Okay.
MR. ROSS: And just to clarify, that's based on the zoning calculation and the building height measuring point from the curb line.
MR. GROSSMAN: Okay. Well, are you implying that it's actually higher than 40 feet?
MR. ROSS: It, it's, based on the measuring height, it's measured to the, to the mid-point between the peak and the, and the gable, the lower end of the gable.
MR. GROSSMAN: So what's, what is the total height up to the tip of the, of the front?
MR. WALLACE: It's 50, 52 to the, to the peak. You had testified though that the 48 feet is based on the Montgomery County Code requirements for measuring height.
MR. ROSS: For measuring height.
MR. WALLACE: Right.
MR. GROSSMAN: So it's within the, based on the Montgomery County, is that under the current Code height? I think they did change the height definition a bit in, in the, the December 21, '15 effective amendments. I'm not sure if they changed that portion of it.
MR. ROSS: I have no --

MR. GROSSMAN: But there was some. There was discussion of it.
MR. ROSS: Okay. I haven't revisited that issue.
MR. WALLACE: It didn't cross my radar to cause any concerns, but that doesn't mean it didn't happen.
MR. GROSSMAN: Yeah. Well, just look at that section --
MR. WALLACE: We'll confirm --
MR. GROSSMAN: -- to make sure you're, you're still kosher. I didn't, I, I just don't recall, I know it was discussed on whether or not there would be some change in height, the way it was defined and I just can't recall if it made it into the final, the final bill. But, okay. All right. Thank you.
MR. WALLACE: Oh, would you like to, I was going to say continue with the --
MR. ROSS: This is, hasn't been introduced as an exhibit.
MR. GROSSMAN: Okay. This will be --
MR. ROSS: Do you want to do 65 --
MR. GROSSMAN: Yeah, let's make the previous one, the rendering --
MR. ROSS: A.
MR. GROSSMAN: -- was A, 65A. And 65B is --
MR. ROSS: Riffle Ford Road looking back towards

Darnestown Road.
MR. GROSSMAN: Okay.
MR. ROSS: And then there'll be a third, which is 65C.
MR. GROSSMAN: All right. So this was from Riffle Ford Road looking towards Darnestown Road. And C?
MR. ROSS: Is from Hallman Court cul-de-sac.
MR. GROSSMAN: From Hallman Court cul-de-sac. Okay. Can you put up, is that --
(Hearing Exhibit Nos. 65B and 65C were marked for identification.)
MR. ROSS: This, so this is 60, so this is from Riffle Ford looking back.
MR. GROSSMAN: Right.
MR. ROSS: Towards Darnestown. Once again, trying to get the variety of a, of a building that had been kind of modified and so that too --
MR. GROSSMAN: Right.
MR. ROSS: -- and you have a variety of the materials both in coloration and also material types. There's some metal panel and the, the kind of what we're calling like almost a barn board material. And then you can see the, the Darnestown massing up on Darnestown Road.
MR. GROSSMAN: Right.

MR. ROSS: And then Exhibit 65C. So this is the view from Hallman Court and once again, deploying this, the landscape as well as architecture, trying to create that, that buffer that, that frames the views as they, you know, our assumption and, and the screening requirements through Montgomery County, you know, set up some good, great opportunities for, for managing that, this, this view from Hallman Court. So layering, layering lower scale vegetation with taller trees beyond --

MR. GROSSMAN: So those, those trees do not exist currently. You're going to be planting them.

MR. ROSS: So what you're seeing in the, in the, in the background, in the mid-ground.

MR. GROSSMAN: Yes. Right.

MR. ROSS: Is, is the, the landscape planning.

MR. WALLACE: Above the rendered planning.

MR. ROSS: Is the landscape planning along this edge.

MR. GROSSMAN: Okay.

MR. ROSS: And then there are --

MR. GROSSMAN: This edge being the --

MR. ROSS: The, the edge facing Hallman Court.

MR. GROSSMAN: Kind of northwestern edge?

MR. ROSS: Yes.

MR. GROSSMAN: Okay.

MR. ROSS: So facing Hallman Court you have a, a landscape buffer and then there are four existing trees that were also included in the foreground. With the building beyond --

MR. GROSSMAN: Okay. So some of the trees are existing.

MR. ROSS: Yes.

MR. GROSSMAN: And --

MR. ROSS: So the trees that are ghosted essentially are existing.

MR. GROSSMAN: The reason I ask is, of course, when you plant trees, you don't plant them at their full height that they, you intend them to reach. What's the height at which you, you plant those trees?

MR. ROSS: I would have to defer to the landscape architect on that one.

MR. GROSSMAN: Okay. All right.

MR. ROSS: But I know that the, the images were generated that showed the growth potential of the trees. So.

MR. GROSSMAN: Right. That's why I say, I mean, but it would be years before they reach that full potential. But I know there's also, you can't plant a tree that's too large initially if you want it to take. So I know there are all kinds of issues with that. But.

MR. WALLACE: And Mr. Ross, are you aware that, I believe you are aware, but that subsequent to the creation of these prospectus that additional screening landscaping along the rear property has been proposed by PEPCO? Or has been planned by PEPCO.

MR. ROSS: Yes.

MR. WALLACE: Okay. So --

MR. GROSSMAN: In addition to that prospectus?

MR. WALLACE: Yes.

MR. GROSSMAN: Okay.

MR. WALLACE: So we the other two. So with, with these designs, the design you've achieved, you've proposed here and, and created here, do you feel it achieves compatibility with the surrounding development and the, the neighborhood?

MR. ROSS: I do. I think that a large site such as this, the subject site where the substation is planned, it would, if it were planned as a, a residential structure, I think it would be very out of place. So I think that going, going down the track of designing a, an agrarian structure was, was the right design.

MR. WALLACE: And a residential structure would be out of place because?

MR. ROSS: The scale and the typology, I think, you know, it's a generally single family homes and some

townhomes. And at the scale of a structure like this it would be very out of place.

MR. WALLACE: Are you familiar with the recommendations with the Potomac Master Plan for development on sites that are along transportation corridors?

MR. ROSS: Yes.

MR. WALLACE: Okay. Can you kind of talk through a little bit how this design addresses the, the master plan recommendations in this regard?

MR. ROSS: So I guess a better view up here. So the notion that it's a corner site and rather prominent site trying to establish the building as a sort of gateway without calling too much attention to it so it's a balance of, with PEPCO's deeds and, and the, the desires, I would hope, of, of Montgomery County, so the idea that it's a, it's something that, it's a structure that has a lot of articulation that you typically wouldn't see in this type of buildings. I rarely see in this type of building. So, yes, I think it's compatible.

MR. WALLACE: Does a corner lot relate differently to its surround, to, to the development around it than say a lot within a, more centrally located within a neighborhood?

MR. ROSS: Yes. I think that you have to address both frontages equally. And, and also consider your, the neighbors you share your lot lines with on the, on the other

two sides of your property. So, you know, every effort was made to, in terms of the building location as well as the massing and the strategy to, to do a lot with a little is probably the best way to say it. So an economy of, of materials. So not a lot of variety of materials, but it still has some dynamism in the, in, in how those materials they're expressed. So.

MR. GROSSMAN: All right.

MR. WALLACE: No further questions for Mr. Ross.

MR. GROSSMAN: Before I cross-examine, two of the suggestions made for potential conditions from the opposition involve (1) moving the fence inward. Does that, you're going to address that through this witness or through your landscape --

MR. WALLACE: Our landscape architect is probably better at that.

MR. GROSSMAN: Okay. And the other one was planting, actually planting trees on Hallman Court.

MR. WALLACE: And --

MR. GROSSMAN: That's, I guess, off the PEPCO site is what was intended.

MR. WALLACE: Right. With a little clarification. We'd be happy to answer that question, but again, not necessarily Mr. Ross.

MR. GROSSMAN: Okay. All right. Then, cross-

examination, gentlemen?

MR. PANDYA: Thank you.

CROSS-EXAMINATION

MR. PANDYA: You said that in this view the height from the grade, if I understand right, to the top of the mansard roof is 56, 54 feet?

MR. ROSS: 52.

MR. GROSSMAN: 52 feet is --

MR. PANDYA: 52 feet. Okay. If you can now go back to the view from the Hallman Court, please. Do you know the grade difference between the earlier view where the Riffle Ford and Darnestown Road, the meet, and where the Hallman Court is?

MR. WALLACE: Does it show up on the front of that?

MR. ROSS: This is an exhibit.

MR. WALLACE: Well, oh, actually, does it show up on the second --

MR. ROSS: It's also on the, it's also on the landscape plan over there. I, we don't have the elevation at Hallman Court, but at the edge of the site. Hey, let's look at the, the back of this one. That doesn't show Hallman Court.

MR. PANDYA: Why don't you just tell me the difference between --

MR. ROSS: Yeah. So 430 down on the, towards Hallman Court. And then up on the --

MR. PANDYA: Not the intersection. Where you showed 52 feet. Yeah. From there or, from that view. Yes.

MR. ROSS: It's approximately 440, 446.

MR. PANDYA: So 446 and you said earlier what? 430?

MR. ROSS: 430.

MR. PANDYA: So it's 16 feet difference there.

MR. ROSS: There's a delta?

MR. PANDYA: So if I am standing on the Hallman Court, I need to add 16 feet to that 52 feet?

MR. ROSS: To do what?

MR. PANDYA: In my view? If I'm looking at it, I'm looking at a structure that is no longer 52 feet from that corner. From our cul-de-sac it will look like 68 feet tall?

MR. WALLACE: I'd prefer you to specify exactly where you're standing in the cul-de-sac.

MR. PANDYA: I'm standing right in the corner at the cul-de-sac.

MR. WALLACE: Well, again, if you --

MR. PANDYA: And even if I'm standing here where 4, where this elevation is 432. Right there.

MR. GROSSMAN: He's at the --

MR. PANDYA: There's a 16 feet difference. So this rendering --

MR. WALLACE: He's making statements. I don't know what he's talking about. So.

MR. PANDYA: I'm, if you listen to me you'll understand. If I'm standing here.

MR. WALLACE: That --

MR. PANDYA: So this will not be 52 feet. It will be much higher than 52 feet.

MR. WALLACE: Well, no, you're --

MR. PANDYA: That's --

MR. WALLACE: Again, you're stating things that --

MR. PANDYA: No, the, the contours are physically --

MR. WALLACE: Are you asking --

MR. PANDYA: -- contours are showing clearly --

MR. GROSSMAN: No, I think, I think the point is that you're allowed to ask questions.

MR. PANDYA: Yes.

MR. GROSSMAN: Not testify at this point.

MR. PANDYA: No, I understand that. But I'm --

MR. GROSSMAN: But you're going to be given an opportunity to testify. But I think your, your question is if you're standing at the, right at the property line at Hallman Court on the western side of this property and

looking towards the, the PEPCO facility will the, will it be viewed as something that because of the difference in grade that is not just 52 feet high, but an additional 16 feet. Will it be viewed that way by somebody standing at that point? Did I capture that, Mr. Pandya?

MR. PANDYA: Yes, sir. Thank you.

MR. ROSS: The height is indisputable. Yes. I, I, I, I mean, well, minus your, minus your --

MR. GROSSMAN: I guess it's a question of perception. I mean you're, the height is the --

MR. PANDYA: No, I'm just --

MR. ROSS: But you're, but you're over 300 feet away.

MR. PANDYA: We are, and I understand the distance, but if I'm standing there, that structure is 68 foot tall. It's not 52 feet tall. It's the perception.

MR. GROSSMAN: Well, it's, it's 68 feet above --

MR. PANDYA: Right.

MR. GROSSMAN: Above your feet.

MR. PANDYA: Right. I understand.

MR. ROSS: Yes. But, so minus your height.

MR. PANDYA: I understand.

MR. GROSSMAN: I mean, to be, but in terms of, in terms of how you would perceive it at 300 feet, that may be something different. So.

MR. PANDYA: I understand. Can you please go back to the sections that you had here. Sections, yes. So, maybe I'm lost here a little bit, but the 40 feet is throughout, right?

MR. ROSS: Correct.

MR. PANDYA: The 40 feet that you need. Now can you back to your other elevation that you had. The elevation from, well, you can, you can, yes. Yes. Is it possible, and again I don't know the, if the question I'm asking, is it possible to lower the entire structure, the whole thing, lower by two, three feet or four feet. Maybe --

MR. ROSS: You mean below ground?

MR. PANDYA: Below grade with a slope. Just I'm asking. So that you can meet your height requirement. Is it possible that the trucks can go at a slope as well? And the, the entire, the perception, the building, there might be some added costs for excavation of things. But is it possible to lower the structure down? Entire structure.

MR. ROSS: That idea is something that we studied early on in the process. And given the equipment and the slopes --

MR. PANDYA: Yes, sir.

MR. ROSS: -- of the trucks that need to extract said equipment, it, it doesn't work for the operations. But

I can't speak 100 percent to that.

MR. GROSSMAN: It's a clever, clever idea though.

MR. WALLACE: But I think it's been studied and answered.

MR. GROSSMAN: I see. Okay. Okay. All right. Mr. Pandya, are you finished?

MR. PANDYA: I done.

MR. GROSSMAN: Okay. Mr. Silverman.

CROSS-EXAMINATION

MR. SILVERMAN: You, you, first, thank you for your, your work on this. It's, it's, obviously it's a challenge in a prominent place as you mentioned in your testimony. You had mentioned at the very beginning of your testimony, I wrote down that the, the design of the, of the structure had, in your words, evolved due to the size of the substation from a residential to an agrarian type of, of design. Your initial, you know, work on this project, you were, you, does that mean that you were initially looking at the, at a residential concept because you initially were under, operating under sort of a design that was smaller than what we're looking at now or significantly smaller or did I misunderstand?

MR. ROSS: No. It was, it was a, I think it was a narrow reading of the Montgomery County Code that led us down that path.

MR. SILVERMAN: Okay.

MR. ROSS: Where they say that it should be residential in character.

MR. SILVERMAN: Right.

MR. ROSS: And then as we studied the project and, and some of the challenges of it, we realized that doing residential didn't make sense.

MR. SILVERMAN: Um-hmmm. Okay. Okay. In designing this structure did you look to, how did you conduct your research in terms of looking to what a farmhouse ought to look like? Is there something that you've done, well, I'll leave it at that.

MR. ROSS: What --

MR. SILVERMAN: How did you, how did you --

MR. ROSS: Our process?

MR. SILVERMAN: -- figure out the, the elements that you've incorporated here? Did you look at other farmhouses? Did you pull, did you look at what was actually in the neighborhood surrounding it? Did you look at historic pictures? Where did you, where, how did you come up with this design, is what I'm trying to understand?

MR. ROSS: So it's a mix of different precedents and rather than try to invoke a, a fake facsimile of an existing barn or maybe an existing roofline or massing, the idea was to reinterpret it in a contemporary way. So

understanding that the, you know, typically in agrarian structures that are added to over time, you do have a primary barn. That was the first structure that was there. So knowing that, then that kind of set the table for all the other design moves to work with the scale and, and reduce the height of the overall massing as you move down towards the residential, the residential neighborhoods.

MR. SILVERMAN: Were there any, are you aware of any, any farmhouses in the area that, that are of this general size that you've proposed here that you can point me to?

MR. ROSS: No.

MR. SILVERMAN: Okay. I, I introduced earlier with the prior, first witness, but we didn't get into it, a, you know, just a, a copy of the, of a farmhouse that was about two and a half miles away and I think it's --

MR. GROSSMAN: Exhibit 60A.

MR. SILVERMAN: 60A. And it seems, you know, significantly smaller than the full footprint here, I guess, of, of the structure. Would you agree with, that this is a smaller farmhouse compared to what you've put together there?

MR. ROSS: Smaller in height?

MR. SILVERMAN: Well, smaller in, in footprint. I'm not sure what the height is of this thing. But it, it

is certainly I think probably less than 30 feet, but, but I don't have, I'm not positive on that.

MR. WALLACE: I, I, they've, they've claimed it's 10,000 square feet based on a real estate listing.

MR. ROSS: I don't know that, but I can explain why we didn't design it like that, if that's what you're asking.

MR. SILVERMAN: Okay. I, sure. Yeah, I'd like to hear that.

MR. ROSS: So understanding the kind of technical requirements of the space that it had to enclose and also not wanting to introduce a roof element that was shaped in such a way similar to the exhibit, because that would introduce additional square footage on the site. Because if this is the controlling dimension, in terms of the height and the space that that has to enclose, then we're building out from there. So we would be encroaching further on to Darnestown Road and pushing the structure back further towards the, towards the neighborhoods which we didn't want to do.

MR. SILVERMAN: Okay. Can you go back to the, the rendering from Hallman Court is? What I'm trying to understand there and the whole grading issue is this is, I guess this view that I'm looking at here, is this, this is supposed to be if you're, as if you're standing on the

court, I guess?

MR. ROSS: A little higher, but yes.

MR. SILVERMAN: A little higher. And, and it's, it's harder to see through the fake trees that aren't going to be there for a long, long time, but would I be able to see from this view the top part of the roof from the Darnestown Road side or is that going to be because it's, you know, so far away and you're at that level, is that not supposed to be visible?

MR. ROSS: So there is one small portion of that --

MR. SILVERMAN: Okay.

MR. ROSS: -- which is visible right there.

MR. SILVERMAN: Uh-huh.

MR. ROSS: And you'll note that given the, the depth of the substation, that the, the lower portions are the, are the visible ones.

MR. SILVERMAN: Um-hmmm. Okay. Okay. And I guess if I'm looking out, out of my front windows from my second floor, I'm probably going to see it a lot more than, than what you can see here, I would assume. If I'm at, if I'm looking out my bedroom window, which is about at this sort of placement from, you know, whatever it might be, 15 feet up, am I, am I going to be looking inside of the, of the substation, is what I'm trying to figure out?

MR. WALLACE: Before you answer that question, does it, does it depend on which house you're looking out from?

MR. SILVERMAN: I'm sure it does. And my, my house is about at this view so that's what I'm trying to understand.

MR. GROSSMAN: You're asking whether you could see over the top of the --

MR. SILVERMAN: If I look out my, my front window from the second floor, am I actually going to be looking into the inside of the substation because the Darnestown side roof is eight feet taller than the side that's on Hallman Court. Not that that's a bad thing, but, but if I'm looking into that, am I going to be seeing the inside of the roof structure from my window. That's what I'm trying to understand.

MR. GROSSMAN: The inside of the roof structure or the equipment inside the building?

MR. SILVERMAN: Well, I don't think if the, if, I, I don't think I'm going to see it at the 40 foot level, but am I going to see it from that 40 to 48 feet. Is that going to be visible from, from looking out my window?

MR. ROSS: I, I don't, I don't know the location of your home, but I know that's the extent of the screen wall.

MR. SILVERMAN: Right.
MR. ROSS: Extends up and you would never see the, the equipment.
MR. SILVERMAN: I know you wouldn't see the equipment. I understand that.
MR. GROSSMAN: But if, he, he's saying, he's asking will you see the eight foot frontage along Darnestown Road? Will he be able to see that, the rear end of that from his second floor window?
MR. WALLACE: Oh, you're talking about the back of the roof basically?
MR. GROSSMAN: Right. The back of the --
MR. SILVERMAN: Exactly. Yes.
MR. ROSS: Oh, this, this portion.
MR. SILVERMAN: That. Yes.
MR. ROSS: That portion.
MR. SILVERMAN: Yes, but, but, but the entirety of it. Not just a little piece that you see from the street, but if I'm now 15, at the same exact place, but 15 feet higher, what am I going to be looking at? That's what I'm just wondering. Am I going to see a lot of that piece of roof?
MR. ROSS: I don't think I can answer that without, without know the --
MR. GROSSMAN: You can do a cross section that'll

tell you that with a site, a site line, but --
MR. ROSS: Yeah.
MR. SILVERMAN: Yeah.
MR. ROSS: Without knowing the location of your home, I don't think I can answer that.
MR. SILVERMAN: Okay. Okay. Anything else? No, I don't think I have anything else.
MR. GROSSMAN: All right. How tall is your home, Mr. Silverman? And do you have a photo of it?
MR. SILVERMAN: I think it's about 35 feet would be my guess. I don't know precisely.
MR. GROSSMAN: Is there a photo of the homes in the Hallman Court?
MR. ROSS: No. I don't think we do have one of those.
MR. GROSSMAN: And you said your home is how tall?
MR. SILVERMAN: I think it's about 35 feet.
MR. GROSSMAN: Okay.
MR. SILVERMAN: Yes.
MR. GROSSMAN: All right. Okay. Any redirect?
MR. WALLACE: No. I, I do, I would like to just ask the, the, as you mentioned the constraint in the zoning ordinance about conditional uses and having a residential appearance wherever practical, this location, this size, do you think it is practicable to have it and still maintain a

residential appearance --
MR. ROSS: I don't know.
MR. WALLACE: Thank you. I don't know if that was clearly answered, but let's. No further questions for Mr. Ross.
MR. GROSSMAN: Okay. Any, any recross on that one question?
MR. PANDYA: (No audible response.)
MR. SILVERMAN: (No audible response.)
MR. GROSSMAN: All right. Thank you, Mr. Ross.
MR. ROSS: Thank you.
MR. WALLACE: My next witness, Luis Gonzalez.
MR. GONZALEZ: Good afternoon.
MR. GROSSMAN: Good afternoon, Mr. Gonzalez. Would you state your full name and business address, please?
MR. GONZALEZ: Luis Fernando Gonzalez, 3 Bethesda Metro Center, Suite number 140, Bethesda, Maryland 20814.
MR. GROSSMAN: Would you raise your right hand, please? Do you swear or affirm to tell the truth, the whole truth and nothing but the truth under penalty of perjury?
MR. GONZALEZ: I do.
MR. GROSSMAN: All right. You may proceed, Mr. Wallace.

DIRECT EXAMINATION

MR. WALLACE: Could you please state your

occupation and how long you have been engaged in that occupation?
MR. GONZALEZ: I am a landscape architect and an urban planner for Streetsense. I've been practicing for over 13 years and I was formally with Soltesz.
MR. WALLACE: Okay. And your educational and professional background?
MR. GONZALEZ: I have a Bachelor's in landscape architecture from the University of Maryland. I am a licensed landscape architect in Maryland and Virginia, and I'm also a certified planner by the American Institute of Certified Planners.
MR. WALLACE: And are you a member of any professional societies or organizations in the field of land planning/landscape architecture?
MR. GONZALEZ: I'm a member of the American Society of Landscape Architects, a member of the Council of Landscape Architectural Registration Boards, a member of the American Planning Association, a member of the American Institute of Certified Planners and a member of the Urban Land Institute.
MR. GROSSMAN: You must pay a lot of dues.
MR. GONZALEZ: I do.
MR. WALLACE: And could you just review your work experience --

MR. GONZALEZ: All right.
MR. WALLACE: -- in the field of land planning and landscape architecture.
MR. GONZALEZ: Over 13 years, I've been working at various multi-disciplinary, multi-disciplinary design firms as well as in the public sector and taught at the university level. I've worked on institutional, commercial, transitory and mixed used residential, public and environmental projects. My tasks included land entitlements, current planning, neighborhood planning, master plans, site design, urban design, landscape design, lighting design, rooftop terrace design, environmental site design, site engineering, construction detailing, contract administration, site inspection, writing design guidelines and producing feasibility studies.
MR. WALLACE: Mr. Gonzalez's resume is in the record as Exhibit 21A and I would move him as an expert in land planning and landscape architecture.
MR. GROSSMAN: All right. Any questions about this witness's expertise as a land planner and landscape architect?
MR. PANDYA: No.
MR. SILVERMAN: No.
MR. GROSSMAN: All right. Have you testified as an expert before?

MR. GONZALEZ: I have not, but I am considered an expert in the industry. I am an exam writer for the Landscape Architecture Registration Review exam. I've also taught at the university level and I've --
MR. GROSSMAN: What, what university?
MR. GONZALEZ: University of Maryland and I've also brought in, been brought in by Catholic University to help with consultation work. I've also spoken at both the ASLA and AIA conferences.
MR. GROSSMAN: Yeah. Well, based on your background as you've testified and on your resume, I accept you as an expert in land planning and landscape architecture.
MR. WALLACE: And I promise the next witness I will ask if they have ever been, but since he had that's why I skip it.
MR. GROSSMAN: It's a useful question, but that's --
MR. WALLACE: Thank you. So, at this point, you --
MR. GROSSMAN: Now you can say, after today you will have --
MR. WALLACE: You have qualified.
MR. GROSSMAN: -- have that notch on your belt.
MR. WALLACE: No more dues, right? Assume you are

--
MR. GROSSMAN: Right. Well, I was thinking maybe that we could fund some, but no, no. No more dues.
MR. WALLACE: You are familiar with the subject property, the surrounding area in the conditional use application that's being reviewed today?
MR. GONZALEZ: Yes, I am.
MR. WALLACE: And can you explain your involvement in the application and the project?
MR. GONZALEZ: I worked on both the landscape design as well as the land planning report. And I also participated in the, the last community outreach.
MR. GROSSMAN: Okay.
MR. GONZALEZ: And that was in September 2015.
MR. WALLACE: Correct. Okay. And you're familiar with the Potomac Master Plan and its recommendations for the subject property?
MR. GONZALEZ: Yes, I am.
MR. WALLACE: And the area and conditional uses in the region?
MR. GONZALEZ: (No audible response.)
MR. WALLACE: Okay. And you're familiar with the requirements of the zoning ordinance with respect to conditional uses, public, the general requirements for conditional uses, the specific ones for public utility

structures plus the general development standards?
MR. GONZALEZ: Yes.
MR. WALLACE: Okay. Could you please review the findings and conclusions of your land planning analysis?
MR. GONZALEZ: Do you want me to go ahead and give a broad overview of the site as though --
MR. GROSSMAN: Any way your, your, the attorney wishes to handle it.
MR. WALLACE: We were going to go into more of a narrative form and, and provide it that way. Obviously with any questions you have. Okay.
MR. GONZALEZ: Okay. So the --
MR. WALLACE: Oh, this aerial.
MR. GONZALEZ: And I'm sure this will be redundant for the, the residents since they're already familiar with the site. The property is located at 16010 Darnestown Road in Gaithersburg, Maryland on the northwest corner of the intersection of Darnestown Road and Riffle Ford Road. It was formally, the legal description of the property is Lot 1, Evangelical Formosan Church, and it was approved as part of Preliminary Plan No. 120020180. In the master plan it is identified as being part of the Ancient Oak North Subdivision in Darnestown. And that's part of the Potomac Sub-Region Master Plan. It is also zoned R-E1. The area here is approximately 2.645 acres. It's, it appears

unapproved with exception of two driveway entrances that come off of Riffle Ford Road. The site slopes from the intersection here back towards abutting residential lots.
MR. GROSSMAN: Sixteen feet.
MR. WALLACE: As we know.
MR. GROSSMAN: And as we have been described. Yes.
MR. WALLACE: Approximately.
MR. GONZALEZ: Approximately 16 feet. The slopes are gentle and then they increase as they, you get down to the residential lots. The property contains no forested wetlands, no regulated waters of the U.S., no stream mounted buffers, no 100 year flood plains per Montgomery County flood stream maps. There are significant, there are no significant and specimen trees on site. There are no Champion trees on site. The property is not on any location on that list and index of historical sites or in a special exception area.
MR. GROSSMAN: How about primary management area?
MR. GONZALEZ: It is not.
MR. GROSSMAN: Okay.
MR. GONZALEZ: For the purposes of the analysis, we're going to look at the neighborhood as being 2,000 feet surrounding the, the property, which is in Figure 2 of the Technical Staff Report.

MR. GROSSMAN: Right.
MR. GONZALEZ: The neighborhood which is included in the 2002 Potomac Regional Master Plan is primarily composed of single family detached residential estate lots, some religious, agricultural, commercial and institutional uses. The area is transitional from suburban to rural neighborhood. More commercial and density back towards Quince Orchard Road and Darnestown Road.
MR. GROSSMAN: In other words, towards the east.
MR. GONZALEZ: Towards the east. And going towards the west and becomes more rural in character. The property abuts three single family homes.
MR. GROSSMAN: Now is that rendered plan --
MR. WALLACE: I was about to say.
MR. GROSSMAN: -- in the record?
MR. WALLACE: That rendered plan, I don't believe is in the record. Is it?
MR. GROSSMAN: All right. Let's --
MR. GONZALEZ: It's not, no.
MR. WALLACE: Yeah. Right.
MR. GONZALEZ: It wasn't in the record.
MR. GROSSMAN: Let's mark it.
MR. GONZALEZ: Would you, but I can pull the site, if you prefer.
MR. WALLACE: Whatever you want to use. We're

going to have it in there eventually so.
MR. GONZALEZ: Okay. That's fine.
MR. GROSSMAN: Okay. All right. So this will be Exhibit 66. And is that your rendered conditional use plan or is it a rendered something else? What, what exactly is it?
MR. WALLACE: That is a rendered landscape --
MR. GROSSMAN: Okay.
MR. WALLACE: -- plan.
MR. GROSSMAN: Rendered landscape.
(Hearing Exhibit No. 66 was marked for identification.)
MR. GONZALEZ: So this is the plan that the community has seen. The community had expressed some concerns so we're, that's what been adjusted and revised. And I have that exhibit.
MR. GROSSMAN: Okay.
MR. GONZALEZ: In here.
MR. GROSSMAN: So you're saying that the rendered landscape plan has been changed? And that's Exhibit 66 as now changed.
MR. GONZALEZ: Correct. The change is that there's more landscaping now.
MR. WALLACE: And we have a plan that shows that.
MR. GROSSMAN: Okay. All right.

MR. WALLACE: And which will be talked about in, shortly.
MR. GROSSMAN: But I suppose this, does the other one show the, the homes the way this one does?
MR. GONZALEZ: So the other one doesn't show the homes.
MR. GROSSMAN: Okay.
MR. WALLACE: So --
MR. GROSSMAN: So this is useful to see, to get a sense of the proximity.
MR. WALLACE: Yeah, I do, I do like this one because it does have the, the homes. The other one doesn't show it. Okay.
MR. GROSSMAN: Right. Right. Mr. Silverman, can you identify, and Mr. Pandya, your homes on, on this map, plan?
MR. PANDYA: Should we go ahead?
MR. GROSSMAN: Yes. Go ahead.
MR. PANDYA: It's, it's right across this, west of this round house and 700 Hallman Court.
MR. GROSSMAN: Okay. So you don't exactly border it. You're across the street from that.
MR. PANDYA: No, no. We are across the street.
MR. GROSSMAN: Okay.
MR. SILVERMAN: And I'm right below that, except

off the chart there. Right there. Yeah.
MR. GROSSMAN: Okay. So you're also across the cul-de-sac.
MR. SILVERMAN: Right.
MR. GROSSMAN: But, but in that same general area as Mr. Pandya.
MR. SILVERMAN: Um-hmmm.
MR. GROSSMAN: Okay. Just, just off to the west of the rendered landscape plan.
MR. GONZALEZ: So the existing driveways that come off Riffle Ford Road, one is here and the other one is here. The placement of the building --
MR. GROSSMAN: But just for clarity of the record, here and here?
MR. GONZALEZ: Sorry. One is on Riffle Ford Road close to, I believe that --
MR. GROSSMAN: The northwest corner?
MR. GONZALEZ: The northwest corner. And, well, both of them are off of Riffle Ford Road. One is closer to Darnestown Road and one is closer to the court.
MR. GROSSMAN: Okay.
MR. GONZALEZ: The placement of the building was done such that we pushed it over towards the intersection of Darnestown Road and Riffle Ford Road as close as the zoning ordinance would allow, which is 50 feet, to provide more of

an area and separation between the abutting lots.
MR. GROSSMAN: More of a cushion.
MR. GONZALEZ: Correct. It also minimizes the length of what that driveway length would have to be, which helps to bring down the imperviousness for the site. If we refer back to what was previously approved, it was probably twice as, twice more impervious area than we're currently proposing. So this design is actually more environmentally friendly than it was previously approved.
MR. WALLACE: And by previously approved, just to clearly state, it was a --
MR. GONZALEZ: It was a church.
MR. GROSSMAN: You're talking about the, the preliminary plan that exists today.
MR. GONZALEZ: Correct.
MR. GROSSMAN: Which I, I don't think went through my process, but --
MR. WALLACE: No.
MR. GROSSMAN: -- but, okay.
MR. GONZALEZ: There is a landscape buffer provided all the way around the edges. Now the, there's a theory in putting a design around the perimeter of the landscaping, which I think this is important to share. So going back to the gradings heritage of the, of Darnestown as well as it being in the middle Atlantic, the landscaping was

reflected to speak of the vernacular of this area. So you have a mix of perennials, grasses, shrubs and trees. It is highly intense and a lot more so than what you see in the surrounding neighborhood. It's so intense that if you were to come down Darnestown Road, you would actually help set and frame Darnestown Road. Speaking of, or before I speak about buffers, the reason why it was layered was so that you have a three-tiered forest effect essentially. You have your canopy, your understory and your ground plain. It also has texture, color and movement. So if the wind blows, the grasses move. If the winter comes along, there's still some type of seasonal interest. In the spring, flowers come out. In the fall, the colors change. There was a question about the height and size of the plant materials when they go in. The trees will be approximately 12 to 14 feet tall. So they're not coming in at five feet tall.
MR. SILVERMAN: So could large trees be put in?
MR. GONZALEZ: The issue with that is you could spade in larger trees, but when you spade in larger trees you cut off the root systems which makes it harder for them to grow. What we want to do is, you want to provide enough room for them to grow in and start becoming an ecosystem.
MR. GROSSMAN: So when you put them in they'll be 12 feet. Is that what you're saying?
MR. GONZALEZ: The trees. Yes.

MR. GROSSMAN: Okay.
MR. GONZALEZ: And we're also putting evergreen trees. So not just deciduous trees, but evergreen trees. And those evergreen trees will be six feet tall. Shrubs range from height of 24 inches to approximately 36 inches. Some of them grow faster than the others. The grasses pop up tall really quickly. So they'll go in about 24 inches and by the end of the growing season to be up to 36 to 48 inches. Perennials wind along Darnestown Road and Riffle Ford Road which will always come back every single year, will be about 24 inches tall. So you have swaths of color on Darnestown Road and Riffle Ford Road. So you're not looking at just shrubs. Not just looking at trees. But it's a mix of, of combination of trees, shrubs, grasses and flowering trees. Along the back, there is a buffer. So in the zoning ordinance, the buffer has, it gives you two options. Either an eight-foot buffer or a 12-foot buffer. In this case, we provided a 15-foot buffer all along the back. There is a security fence that goes all the way around the perimeter. That security fence is a clean, streamlined black aluminum fence. It's decorative in nature. It's the same kind that you'll see around a country club pool house or a country club pool. It has brackets on top and on the bottom so that it's not just pickets. There will be no barbed wire or spikes sticking up on top.

MR. GROSSMAN: I take it no concertina wire also.
MR. GONZALEZ: No, no. It was placed in such a way that there's landscaping both in front and behind the fence. With the rate of the growth of the landscaping, some of the shrubs getting up to six to eight feet tall along the corners, those get up to 10 to 12 feet tall, that fence will disappear because it's being integrated with the landscape.
MR. GROSSMAN: You said that fence will not disappear?
MR. GONZALEZ: No. It, it will, it will appear that it disappears because it's being mixed in.
MR. GROSSMAN: One of the questions that have been raised in their letter of the opposition was whether or not the fence could be moved inward to make it, to have it further away from the, the homes.
MR. GONZALEZ: So the fence is actually set in 15 feet away from the property line. So one of the, one of the questions was could that be pushed back 15 feet. It already has been pushed back 15 feet. And what that does is it allows us to put the landscaping first and then the fence. So you do have that buffer area before you get to that fence.
MR. GROSSMAN: You actually said setting it back, the fence 15 to 20 feet from the, the property line. So you're saying it is already 15 feet.

MR. GONZALEZ: Correct.
MR. GROSSMAN: In the planning. Okay. What about the idea of planning what you say you, you're going to have plantings on the outside of the fence as well. Correct?
MR. GONZALEZ: Um-hmmm. So the fence goes along this edge, so as you can see from this exhibit, there's landscaping on the inside and outside of the fence.
MR. GROSSMAN: Okay. What about the, the request from the opposition about planting some trees on Hallman Court property. And I'm not sure if I understood from the opposition. They're not representing an association. You're not part of an association. So whose property are you going to stick it on? If you're, you're not right on the edge, who's consenting to have something planted on their property?
MR. SILVERMAN: It would be the individual neighbors would meet with PEPCO and, and come up with a plan for that. So, yes.
MR. WALLACE: Well, again, we have some, request some clarifications on that. Along the lines of what you're asking, did you mean plantings on someone's lot?
MR. SILVERMAN: It could be a mix of both. Being on public space or on lots. I think we were also interested in, in whether there would be trees along that fence line, but on the Hallman Court side of the fence lines.

MR. GONZALEZ: So --
MR. WALLACE: So on --
MR. SILVERMAN: But whichever property that falls on.
MR. GONZALEZ: With, with this aerial you can see that there's already trees along this fence line. There are trees here and trees along here. We're not touching these trees at all. Those trees remain and they're mature.
MR. GROSSMAN: These trees, when you say the ones that aren't being touched or on the southern end.
MR. GONZALEZ: They're on, on the --
MR. GROSSMAN: They're all on the west, but they're the southwest, the very extreme southwest there are some trees you said they're not, you're not touching.
MR. GONZALEZ: Correct. So there's mature trees already that are not on our property. That are either straddling the property or right off our property. So there are already mature trees that exist there. So we're supplementing that with an additional buffer and then adding the fence at another line of trees behind it.
MR. GROSSMAN: One of the concerns I'd have, I don't know if the, any of the signatories on the letter that you sent, which is Exhibit 51, are, are owners of the property along, directly along that fence line, but if not, you know, they're not, they haven't participated at all in

the process here and I certainly can't commit them to having a tree planted on their property.
MR. SILVERMAN: That letter includes every property owner on the block, including the ones along that fence line.
MR. GROSSMAN: Okay. So --
MR. WALLACE: It's PEPCO's position that if an individual property owner, if, if they want to discuss with PEPCO, PEPCO planting of a tree or two that makes sense, I mean, and once the typical maintenance. Usually there's a two year maintenance that's provided for the, for the provider of the tree. That's, PEPCO would not assume any responsibility after that for the maintenance of that tree. I think PEPCO is willing to engage in that conversation with the, a property owner who wanted to do it and would be willing to let the planting happen.
MR. GROSSMAN: Right.
MR. GONZALEZ: Yeah.
MR. GROSSMAN: I mean it's not unheard of to have a condition. I've imposed a condition on the rare occasion that calls for some activity off-site, a fence or a tree, but I've always had the owner in front of me at the time that made sure that they were, that's what they wanted to, wanted and, and both sides were consenting to it when it makes sense. Occasionally it makes sense. I'm not sure

here that that's necessary or going to, going to help the situation, but if they were before me, I would be willing to talk about it, but --

MR. GONZALEZ: Now I do have another exhibit that I can show --

MR. GROSSMAN: Yes.

MR. WALLACE: This one.

MR. GONZALEZ: -- at this point.

MR. WALLACE: And so this would be a new exhibit into the record.

MR. GROSSMAN: And this is?

MR. WALLACE: Exhibit 67?

MR. GROSSMAN: I'd have to start a new page. You guys have caused me to run out of paper on my exhibit list on both sides.

MR. WALLACE: And --

MR. GROSSMAN: All right. Let's see. So we're talking about Exhibit 67.

MR. GONZALEZ: Updated landscape plan.

MR. GROSSMAN: All right. So this is the current landscape plan now?

MR. GONZALEZ: Correct.

MR. GROSSMAN: That you're proposing.

MR. GONZALEZ: This addresses the Staff Report.

MR. GROSSMAN: Right.

MR. GONZALEZ: And addresses the letter.

MR. GROSSMAN: Okay. So current landscape plan.

MR. WALLACE: And if Mr. Pandya or Mr. Silverman want to take a look at, a second to look at or a few minutes to look at it, that's fine.

MR. GROSSMAN: I'll actually call it amended and current landscape. And before I forget, you'll need to submit a copy of this and a copy, in fact, of all of the amended plans and other exhibits to Technical Staff, not just the electronic copies to me, but also electronic and hard copies to them so during that 15-day period they can take a look and see if they have any additional comments.

MR. WALLACE: Absolutely.

MR. GROSSMAN: All right. So amended and current landscape plan is Exhibit 67. And you did write that on there I see. Okay. Good.

(Hearing Exhibit No. 67 was marked for identification.

MR. GONZALEZ: So in between where there are some gaps between deciduous trees, additional evergreen trees were added. So now you do have one complete solid wall of landscaping at different heights. So you have one, two, three, but four layers of landscaping.

MR. WALLACE: Mr. Gonzalez, would you, would you, in your opinion, is the landscaping proposed and now as

supplemented, is it more than you would typically see for a residential subdivision, a commercial property, and does it exceed the Code requirements for screening?

MR. GONZALEZ: This plan exceeds the Code requirements for planning. It also is very expensive. You would not see this in your typical residential or commercial property because of the, the sheer price just to install it. Let alone maintenance. And, and PEPCO has already mentioned that they're going to have maintenance people over here taking care of it. So this isn't something that they're just planting and walking away from. This is something that's going to be maintained. And the plant pallet that was selected was some as known that's also native to the area. So it'll, it will be acclimated and it won't need a lot of maintenance. If there's a concern that, oh, maintenance activities may, may be detrimental to, to, to the residents, it won't. Because it's, it's more of a conservation type of landscaping.

MR. GROSSMAN: And this meets or exceeds the, the Division 6 requirements in the new zoning ordinance?

MR. GONZALEZ: It should.

MR. WALLACE: Yes. The, and there's a, the table which will be updated to show that. Okay.

MR. GONZALEZ: Yeah. So the original plan already exceeded the buffering requirement. Now we're adding even

more landscaping. So we're, we're far pass it.

MR. GROSSMAN: Did you also design the site plan? Did you draw the site plan for this as well as the, and the conditional use site?

MR. GONZALEZ: I worked with, with, with the planners for that. I worked with the planners.

MR. GROSSMAN: Who are the planners you're talking about?

MR. GONZALEZ: The site plan.

MR. WALLACE: I'm sorry. I was --

MR. GROSSMAN: The conditional use plan.

MR. WALLACE: Yes.

MR. GROSSMAN: Who, who?

MR. WALLACE: Soltesz was the engineer on that.

MR. GROSSMAN: Okay.

MR. WALLACE: And Mr. Gonzalez was with, was with Soltesz at the time that --

MR. GONZALEZ: Yes.

MR. GROSSMAN: I just wanted to thank somebody for having the north pointing up because I'm in the middle of a case now where they have it pointing in two different directions and, and there's a, gets to be a lot of confusion in the course of the hearing. Even from the people who designed the plan when they do that. So. I appreciate north being up. That's the way we think about it.

MR. GONZALEZ: Well, Soltesz rules is that north always faces up and when I worked on the plan I didn't even have the option to turn it.
MR. GROSSMAN: I'm glad. I can't tell you how much confusion that creates. But anyway, so go ahead.
MR. GONZALEZ: You want me to speak about lighting?
MR. WALLACE: Just forest conservation briefly and then on to lighting.
MR. GONZALEZ: So forest conservation, the preliminary plan that was approved prior to, to this plan required .55 acres of afforestation. At the time a fee in lieu payment was made and fulfilled to satisfy that requirement. This new plan would require .4 acres of afforestation which is less than the .55 acres so it's already been met. Now Staff had mentioned that they wanted to have the corner of the site closest to Darnestown Road and Riffle Ford Road. They wanted to have that area cleaned up and have an invasive species management plan done for it. Basically removing all of the invasive species and cleaning up and, and removing the litter. The new amended landscape plan does show that. There will be invasive species suppression and additional landscaping added to it to fulfill Staff's concerns.
MR. GROSSMAN: Right. The November plan had

included removal of the invasive species and the cleanup but Staff said they also wanted to show the additional plantings which you say you now have done on that plan.
MR. GONZALEZ: Correct.
MR. GROSSMAN: Okay.
MR. WALLACE: And you can see those plantings in red on the plan.
MR. GROSSMAN: Okay.
MR. WALLACE: And now lighting.
MR. GONZALEZ: Okay. Lighting. One of the concerns that neighbors usually have when a new development happens that's, that's not residential is how much lighting is going to occur in the site. Aerial lighting, there are only two pole lights that are, are, that are placed closest to the Riffle Ford Road entrance. And that's solely for safety of, of driving and security of, of the parking and driving into the substation. There are no pole lights, the pole lights or lights anywhere beyond that. So there will be, so the plan does fulfill the lighting requirement as far as spillage over to the adjacent properties and as far as the type of pole lights, there are shoebox type lights that are dark skies compliance directional so there will be no spillage up. There will only be spillage out.
MR. GROSSMAN: Okay. And this is, they are at the driveway?

MR. GONZALEZ: Yes. And, of course, 13 feet tall.
MR. WALLACE: And there is, of course, a lighting plan in the record that shows no, no foot candle at the property lines.
MR. GROSSMAN: Okay.
MR. GONZALEZ: To fulfill the lighting requirements of the entrances, there will be wall packs that are directional so they face down, but don't face up. They don't spill out.
MR. GROSSMAN: Okay.
MR. WALLACE: Mr. Gonzalez, the, you had stated earlier that you're familiar with the recommendations of the Potomac Master Plan. Are there any specific recommendations in the master plan for this property? For the use of it.
MR. GONZALEZ: Specifically being called out?
MR. WALLACE: Yes.
MR. GONZALEZ: No.
MR. WALLACE: Okay. What are some of the, summarize the general recommendations for development in the master plan and how this project meets those recommendations?
MR. GONZALEZ: So one of the recommendations is protecting major transportation corridors and residential communities from incompatible designs. So as we discussed of the nature of the use of the substation, it's going to be

unmanned. So you're not going to have traffic in and out at all hours of the day. It's on scheduled maintenance that will be one to two times a month. So as far as maintaining the traffic corridors, that will be maintained. As far as maintaining the, the, the character of the neighborhood, the design of the, the structure itself, the intense amount of landscaping, of placing of the building, all corresponds with, and, and we're trying to meet the, the character of the, of the neighborhood.
MR. WALLACE: Let me ask you a question. How would you describe Hallman Court and, and the houses along that? What's their orientation relative to our site? The PEPCO site. And, and orientation meaning where are their activities focused? Where are their use focused?
MR. GONZALEZ: So these buildings that, the residences all face their backs. So these face their backs. These face their backs. So everyone's back is facing the, the structure itself. As well as these uses here. So everyone is pretty much putting their backs towards the substation itself.
MR. WALLACE: And is that, is that an element that, that allows the, a better relation between the uses in this case by, by focusing that way?
MR. GONZALEZ: So as far as what you'll see, the view, most of the activities happen in front. The sidewalks

are in front. The driveways are in front. So everyone is looking out in front of their houses not so much in the back. If you look at as far as ratios of, I know there's concern with massing. If you look at ratios of the houses, these houses are about roughly 30 to 40 feet apart from each other. That's about a one-to-one ratio. The ratio between the closest house to it is about three-to-one. So as far as compatibility and interference with regular activities, I see there being very minimum --

MR. GROSSMAN: Three-to-one distance between the, the --

MR. GONZALEZ: The ratio is height so, so there's, in, in planning there's a ratio of whatever the height of the structure, there should be a setback. So if a structure is 35 feet tall, then the next structure should be 35 feet away. That has a sense of enclosure. You start to get closer to that, you start feeling more and more enclosed in those spaces.

MR. GROSSMAN: And how do you, how are you applying that to this?

MR. GONZALEZ: So, and I'm, 28 feet height, do three-to-one roughly, the, we can just, just call it 120 since we're talking about 40 feet. The closest point from this end to this end is 120.

MR. GROSSMAN: All right. You say this end to

this end.

MR. GONZALEZ: I'm sorry.

MR. GROSSMAN: You're talking about the point closest, of the closest home --

MR. GONZALEZ: The closest home on the court which from the abutting lots --

MR. GROSSMAN: Yes.

MR. GONZALEZ: To the closest corner of the structure.

MR. GROSSMAN: Okay. And that, that distance is?

MR. GONZALEZ: Is approximately 120 feet.

MR. GROSSMAN: Okay. And so, by your statement, you would want it to be at least 48 feet. Is that what you're saying?

MR. GONZALEZ: No. What I'm saying is if, if, if it was 48 feet, which is the one-to-one ratio that you see along the, the other homes --

MR. GROSSMAN: Right.

MR. GONZALEZ: That's where you could have that concern where, okay, this, this feels too massive to be close to me. But that ratio is actually increased to three-to-one so the perception of there's a huge mass right on top of me is, is not going to be there because I know that's a lot of concerns that --

MR. GROSSMAN: Okay. Right.

MR. GONZALEZ: -- this huge mass of building is, is next to me. That would make sense if it was plopped right next to them, but because there's such a distance provided, it won't feel that way. So it's all about experience. And your, your concern is that your experience is going to be, there's this mass right behind me. And what I'm saying is the distance that's on the site will mitigate that experience or address that experience.

MR. WALLACE: Okay. So to conclude, in your opinion, will the proposed use comply with the applicable standards of the RE-1 zone and the standards for conditional uses and the general development standards of the zoning ordinance?

MR. GONZALEZ: Yes.

MR. WALLACE: And, in your opinion, will the proposed conditional use cause any objectionable noise, odors, dust, illumination or physical activity?

MR. GONZALEZ: No.

MR. WALLACE: And in your opinion, will, will the proposed conditional use be harmonious with the character of the surrounding neighborhood?

MR. GONZALEZ: Yes.

MR. WALLACE: In your opinion, will the proposed conditional use cause undue harm to the use, peaceful enjoyment, economic value or potential development of

abutting and confronting properties or in the general neighborhood?

MR. GONZALEZ: No.

MR. WALLACE: In your opinion, will the proposed conditional use cause any undue harm to the health, safety or welfare of neighboring residents, visitors or employees?

MR. GONZALEZ: No.

MR. WALLACE: And in your opinion, will the conditional use in and of itself or in combination with other existing uses affect adversely or change the character or future development of the surrounding residential community?

MR. GONZALEZ: No.

MR. WALLACE: And in your expert opinion as a land planner, is the proposed conditional use suitable for this site and compatible with the surrounding neighborhood?

MR. GONZALEZ: Yes.

MR. WALLACE: Thank you. No further direct.

MR. GROSSMAN: Okay. Cross-examination? Mr. Pandya?

CROSS-EXAMINATION

MR. PANDYA: Thank you, Mr. Gonzalez. This was much more comforting than the previous ones. Very good presentation. A couple of quick questions. The 12-foot trees that you are planning to plant, the tall trees.

MR. GONZALEZ: Correct.
MR. PANDYA: Can you point them on your drawings? Specifically on the Hallman Court side.
MR. GONZALEZ: So all these larger trees --
MR. PANDYA: Yes.
MR. GONZALEZ: These larger circles that are shown.
MR. PANDYA: Yes.
MR. GONZALEZ: Those are all 12 foot.
MR. PANDYA: Okay. And when they mature fully, what will be the height?
MR. GONZALEZ: They'll range between 40 to 60 feet.
MR. PANDYA: Okay. The, you mentioned that those two houses will have the backside towards the, the PEPCO structure. But the other four homes around cul-de-sac, you realize that they will be facing, from the front yard, they will be looking at the structure. Is that correct?
MR. GONZALEZ: That's correct.
MR. PANDYA: Okay. So, okay. There, nothing is, the buffer zone, the 15, the four layers of buffer zone that you mentioned before. There are four, can you point them out? I mean are they, so is, is that completely going to cover that 15 feet area or it will go beyond that or what will be the total landscape buffer zone?

MR. GONZALEZ: So, so it actually goes beyond. So the 15 feet which encompasses two layers of landscaping.
MR. PANDYA: Uh-huh.
MR. GROSSMAN: Perhaps if you could step to the side, I can give you a, a laser pointer if it helps.
MR. GONZALEZ: Okay.
MR. GROSSMAN: And then you could --
MR. GONZALEZ: Be glad to.
MR. GROSSMAN: I could see as well. Little button will do it. Don't point it at a helicopter.
MR. GONZALEZ: So it is kind of hard to see from back there. So here's the property line. Here's the fence line. In between the property line and the fence line, there is 15 feet. Within that 15 feet we have evergreen trees, large shrubs, medium shrubs and small shrubs. That's your first three layers. The fourth layer is right behind the fence line, which are the shade trees and additional evergreen trees.
MR. PANDYA: Okay. So that is the total depth of the buffer zone?
MR. GONZALEZ: So 15 feet is the first buffer. So behind it, there's another 10 feet.
MR. PANDYA: Okay.
MR. GONZALEZ: Of landscaping. So in total we're talking about 25 feet.

MR. PANDYA: Okay. Last question. The renderings that we saw earlier, in your rough idea, when will we start looking at the landscape area that is mature? Or I understand that other trees are tall and they can take longer time, but I'm trying to visualize that in five years it could look comparatively all buffer area filled up so that we will have less view of the, so, in your, in your opinion, how long will it take?
MR. GONZALEZ: So the creative thing about this design was that the main concern, a lot of people think, okay, if I add trees, that'll provide the buffer that I need. In actuality what provides the buffer is what's in the ground plan because that's what you're seeing. So the shrubs that are placed along, will grow six to 10 feet tall within three to five years. Once you get to the 10 year range, you're talking about 12, 15 feet tall. The trees are already going in at 12 feet tall.
MR. PANDYA: Right.
MR. GONZALEZ: Depending on what the growing conditions are, the soils and how much water they're getting and there's a whole micro climate involved, it could grow anywhere between one to even three feet a year. So depending on, on, on that growth rate is what you'll see in maturity. So to say oh, by X amount of years you'll have this, this exact height, I can't say that conclusively.

MR. PANDYA: I understand that. Yeah. Thank you.
MR. GROSSMAN: All right. Mr. Silverman, do you have any questions?
MR. SILVERMAN: Yes.
CROSS-EXAMINATION
MR. SILVERMAN: So can you give me a little bit more detail? The change from the prior plan to this plan, how, how many, what, it's hard for me to tell, how many, what have you actually added? How many trees is it?
MR. GROSSMAN: I think all the ones in red. Is that correct?
MR. SILVERMAN: Are those trees or shrubs or what?
MR. GROSSMAN: Mr. Gonzalez, is it all the ones in red?
MR. WALLACE: Yes, it is all the ones in --
MR. GONZALEZ: Yes.
MR. SILVERMAN: So just along this side?
MR. GROSSMAN: The west side?
MR. GONZALEZ: Right.
MR. SILVERMAN: The west side.
MR. GONZALEZ: There's 30 extra evergreen trees.
MR. SILVERMAN: Thirty extra trees.
MR. GONZALEZ: So we're not talking about shrubs here. And, and mind you, as I explained prior to this, we had already exceeded the buffer requirement.

MR. SILVERMAN: And those trees, I'm still not positive I understand what's on one side of the fence versus the other. Those are on both sides of the fence? Is that how they --

MR. GONZALEZ: They're on the, the back side of the fence.

MR. SILVERMAN: They're on the, on the substation side?

MR. GONZALEZ: Correct. So there's evergreen trees on front, in front of the fence and behind the fence.

MR. SILVERMAN: Um-hmmm. Okay. So what does that bring your total, now I don't want you to have to count, count them all, but, but not including existing trees, about how many are you, are you actually planning on planting? Oh, you, do you have it there?

MR. GONZALEZ: We have six --

MR. WALLACE: So you need to add the 30.

MR. GONZALEZ: -- plus five, plus five.

MR. WALLACE: Okay. Thirty to that.

MR. GONZALEZ: Yeah. So five, 10, 12, 22 plus 30. Right. So 22 plus 30. We're talking about 55.

MR. SILVERMAN: A question I don't think anyone has touched on. I understand that you're going to be using the existing driveway for servicing the station. What about the second driveway? What's your plan for that on, on

Riffle Ford?

MR. GONZALEZ: That will remain.

MR. SILVERMAN: It's going to remain? Will it serve any purpose or is it just going to stay there?

MR. GONZALEZ: Removing it would cause more disturbance.

MR. SILVERMAN: Okay. Okay.

MR. WALLACE: Just to clarify. So by remain, do you remain and be connected in through an extension of the driveway into the site or just the, the driveway apron remain?

MR. GONZALEZ: The driveway apron remains.

MR. SILVERMAN: Will it be just a, but will there be an opening in the gate there or will it just be just a solid --

MR. GONZALEZ: No. It just doesn't extend into the, in, into the opening in the gate.

MR. SILVERMAN: Okay. Okay. Did you, did you tell us what, I, I understand that the, the growth rate, you know, is going to vary, but will you tell us what the, the maximum height of the different types of trees were and what, what kind of trees they are aside from the evergreens?

MR. GONZALEZ: Forty to 60 feet will be the height, and that's because of the, it's going to be more towards the 60 feet because it's a landscape setting. The

trees that we have there are thornless honeysuckle, the sweet gum, southern magnolia, northern red oak and boulevard linden. Those are just the canopy trees. Aside from canopy trees, we also have understory trees and evergreen trees, understory trees. We have Allegheny serviceberry, eastern redbud, fire and dogwood, evergreen trees, American holly, burn Serbian spruce and arborvitae.

MR. GROSSMAN: Thank you.

MR. SILVERMAN: Okay. Yeah. Nothing, nothing, I don't have anything else. No. Thank you.

MR. GROSSMAN: Any redirect, Mr. Wallace?

MR. WALLACE: No. But one of the comments in the citizens' letter was also to do cleanup, removal invasive, et cetera on the corner of Riffle Ford and Hallman Court. To the extent it's on PEPCO's property, I don't believe it's an issue to do that cleanup, but off-site again, it sort of depends on whose property it is, et cetera. So I don't --

MR. SILVERMAN: Yeah. Okay. Yeah, I'm not positive what side of the property that, that is on. It's not as, as large of an issue as it is at that corner that was identified there, but it has some of the same issues.

MR. GROSSMAN: Mr. Wallace, how many additional witnesses do you have?

MR. WALLACE: We have three witnesses. I expect we'll go fairly quickly through them relatively.

MR. GROSSMAN: That's Dr. Bailey?

MR. WALLACE: That's Jeff Retterer for civil engineering.

MR. GROSSMAN: Okay.

MR. WALLACE: I expect Jeff's testimony will, direct at least will go fairly quickly.

MR. GROSSMAN: Okay.

MR. WALLACE: I expect Dr. Bailey's direct, again, will go fairly quickly. And then we have a witness to testify regarding the noise study which is in the record, but it is a witness that we, we'll be bringing in. His name is Gabe Weger. And so those are the three. And again, his direct testimony I expect will go very quickly.

MR. GROSSMAN: How do you spell his last name?

MR. WALLACE: W-E-G-E-R.

MR. WEGER: Correct.

MR. GROSSMAN: Okay. And before we take a five minute break, let me ask the Court Reporter if we have to go over, can you stay a little later?

THE COURT REPORTER: Sure.

MR. GROSSMAN: Okay. Because I'd like to finish today if we can. So, okay. Then we'll take a five minute break. Come back to five to 4:00.

MR. WALLACE: Thank you.

(Off the record.)

(On the record.)
MR. GROSSMAN: All right. Back on the record. Your next witness, sir.
MR. WALLACE: My next witness is Jeff Retterer.
MR. GROSSMAN: All right. Mr. Retterer, welcome. Would you state your full name and address, please?
MR. RETTERER: Certainly. It's Jeffrey Brian Retterer. I work for Soltesz. I am located at 2 Research Place, Suite 100, Rockville, Maryland 20850.
MR. GROSSMAN: Would you raise your right hand, please? Do you swear or affirm to tell the truth, the whole truth and nothing but the truth under penalty of perjury?
MR. RETTERER: I do.
MR. GROSSMAN: You may proceed, Mr. Wallace.
DIRECT EXAMINATION
MR. WALLACE: Mr. Retterer, can you state your occupation, please?
MR. RETTERER: I'm a professional civil engineer.
MR. WALLACE: And your educational and professional background?
MR. RETTERER: I'm a Bachelor of Science degree from the University of Maryland at College Park in civil engineering.
MR. WALLACE: And have you ever testified as an expert witness in the field of civil engineering before any

Montgomery County body or --
MR. RETTERER: Yes, I have.
MR. WALLACE: Okay. And that would include the --
MR. RETTERER: Hearing Examiner, Board of Appeals, courts of law, Planning Board.
MR. GROSSMAN: What case before us?
MR. RETTERER: Before us, I did the Garden of Remembrance Cemetery out in Comus.
MR. GROSSMAN: Who was the hearing examiner on that?
MR. RETTERER: I don't recall.
MR. GROSSMAN: All right.
MR. RETTERER: I've testified in front of Phil Tierney on --
MR. WALLACE: Wow.
MR. RETTERER: -- a drive-thru bank in Darnestown and a special educational facility on Falls Road.
MR. GROSSMAN: Okay.
MR. WALLACE: Mr. Retterer's resume is Exhibit 21B. I'd move him as an expert in civil engineering.
MR. GROSSMAN: All right. Any questions of this witness as to his expertise in civil engineering?
MR. PANDYA: No, sir. Thanks.
MR. SILVERMAN: (No audible response.)
MR. GROSSMAN: Based on your prior testimony as an

expert before this body in civil engineering and your resume, I accept you as an expert in civil engineering.
MR. WALLACE: Mr. Retterer, you are familiar with the subject property, the surrounding area and the application that's before, that's been, being reviewed today?
MR. RETTERER: Yes, I am.
MR. WALLACE: And have you analyzed the suitability of the property for the substation as proposed from a civil engineering standpoint?
MR. RETTERER: Yes, I have.
MR. WALLACE: Could you please, we've already heard about the existing conditions, topography and other elements. I'd, for the sake of time, move on to a couple of the other items that we want you to talk about. Can you describe the existing public facilities on the site in terms of the existing improvements, such that they are, and any other aspects of public facilities that serve the site?
MR. RETTERER: The existing improvements that serve the site are the two driveway entrances off of Riffle Ford Road. There is a waterline on Riffle Ford Road along with fire hydrants for fire service protection. The storm drain, it's a unique position for the property in that --
MR. WALLACE: And, sorry to interrupt, but you are referring to something that is not in the --

MR. RETTERER: Oh, I'm sorry.
MR. WALLACE: But this is what we'd like to --
MR. RETTERER: It's called a Fire Access Plan.
MR. GROSSMAN: All right. That's Exhibit 68.
(Hearing Exhibit No. 68 was marked for identification.)
MR. WALLACE: And this Fire Access Plan has been approved by the Fire Marshal's Office?
MR. RETTERER: Yes. It was approved by the Fire Marshal's Office.
MR. WALLACE: And there is an approval letter that accompanies that?
MR. RETTERER: Yes. There is an approval letter.
MR. WALLACE: And we will be submitting that into the record as well when we do our Omnibus submission.
MR. GROSSMAN: Okay.
MR. WALLACE: And the approval, I'm sorry, was dated?
MR. RETTERER: It was dated 1/5/16.
MR. WALLACE: Okay. I'm sorry to interrupt.
MR. RETTERER: That's quite all right.
MR. WALLACE: Please proceed.
MR. RETTERER: The Riffle Ford Road is a drainage divide in that the water to the north side drains north. The water to the south side drains north. Darnestown Road

is equally a drainage divide. Water on the northwest side drains northwest and down the State highway and water on the other side. So there's no storm drainage system at the upper portion of, of the property.

MR. WALLACE: What's the proposed storm water management plan for the, and the status of it for the substation?

MR. RETTERER: We have a storm water management concept plan approved by Montgomery County Department of Permitting Services that complies with the latest MDE regulations for water quality structures and enhancements of micro bio-retention facilities. We have analyzed, have had the soil analyzed on site and it has an infiltration rate that exceeds the minimal acceptable. And due to the lack of impervious area or minimization of it, we'll be retaining most of the initial flush in the micro bio-retention facility as required by County Code. Any overflow water will be discharged into the State highway drainage system. The ditch along the side of the road.

MR. GROSSMAN: Is the DPS approval letter in the record yet?

MR. WALLACE: The storm water management plans are in the record as Exhibit 10A through C. The approval letter is --

MR. RETTERER: It should be in that package.

MR. WALLACE: -- should be as part of that, those materials. I believe it's also attached to the Staff Report. I know it's attached to the Staff Report for Park and Planning. So one way or the other I believe it is in the record.

MR. GROSSMAN: All right.

MR. WALLACE: Just to, to be clear where the, where the drainage, storm water management facility's, the SD measures will be on the site?

MR. RETTERER: It'll be located in the western portion of the site.

MR. WALLACE: The existing drainage, existing run-off from the property runs into, at least a portion of it goes on to adjacent properties. That's existing condition?

MR. RETTERER: Yeah. The existing conditions on here. I need to spread out this guy. I'm referring to Exhibit 66, the slope in the drain. As previously determined, there's a 16 foot fall going this way.

MR. GROSSMAN: Going east or west?

MR. RETTERER: We're picking the water up from this facility, collecting it here. Infiltrating it into the ground and then the overflow will come out this way into the State highway right-of-way.

MR. GROSSMAN: So will your proposed storm water management plan reduce the flow of storm water off the site?

MR. RETTERER: It's intended to reduce the flow of storm water off the site.

MR. WALLACE: Yes.

MR. RETTERER: Yes.

MR. GROSSMAN: There's a little waffle in that?

MR. RETTERER: Yes. There is no waffle in that.

MR. GROSSMAN: Okay.

MR. RETTERER: The infiltration rate is very, very, very good on this property.

MR. GROSSMAN: All right. The infiltration rate being what you infiltrate into the --

MR. RETTERER: The perforability.

MR. GROSSMAN: -- into the ground.

MR. RETTERER: Into the soil. That is correct.

MR. GROSSMAN: Rather than running off onto the neighbors.

MR. RETTERER: That is correct.

MR. GROSSMAN: Okay.

MR. WALLACE: Is the, the project in compliance with the applicable fire and rescue requirements?

MR. RETTERER: Yes, it is.

MR. WALLACE: And that's with the plan approval?

MR. RETTERER: That's with the plan approval.

MR. WALLACE: Okay. There is an approved record plat for the property. That's Exhibit, that's Exhibit 4 in

the record. Have you reviewed that record plat?

MR. RETTERER: I have.

MR. WALLACE: And is that record plat applied for all, all the dedication required under the preliminary plan approval that's been discussed before?

MR. RETTERER: Yes, it does.

MR. WALLACE: And that's the preliminary plan of approval for the church site. Have you reviewed the locations for the access driveway?

MR. RETTERER: I have.

MR. WALLACE: And is that location in a safe and, is safe and adequate for the intended use?

MR. RETTERER: Yes, it is.

MR. WALLACE: And those are existing driveway aprons?

MR. RETTERER: Those are existing driveway aprons.

MR. WALLACE: And so that means they were, they were approved and have been constructed?

MR. RETTERER: They have been approved and constructed.

MR. WALLACE: Okay. We've reviewed through previous witnesses the compliance of the project with applicable development standards of the RE-1 zone. Are you in agreement that the project as proposed meets the standards of the RE-1 zone?

MR. RETTERER: Yes.
MR. WALLACE: Okay. In your opinion, will the proposed substation be served by adequate public services and facilities?
MR. RETTERER: Yes.
MR. WALLACE: Okay. In your opinion, will the proposed substation cause any undue harm to the neighborhood as a result of any inherent or non -- I'm sorry. Strike that question. Will affect the use of peaceful enjoyment, economic value or development potential to abutting and confronting properties for the general neighborhood?
MR. RETTERER: It will not harm.
MR. WALLACE: And will it cause any harm due to traffic, noise, odors, dust, illumination or lack of parking?
MR. RETTERER: It will not harm.
MR. WALLACE: And will the proposed project cause any impacts, and adverse impact on the health, safety and welfare of neighboring residents, visitors or employees?
MR. RETTERER: It will not harm.
MR. WALLACE: Okay. I have no further questions for Mr. Retterer. Again, is somewhat condensed given the previous testimony, but certainly can answer any questions on it.
MR. GROSSMAN: No objection to condensation. Any

questions?
MR. PANDYA: Yes, sir.
CROSS-EXAMINATION
MR. PANDYA: The open area where the high voltage lines are. Is that, what is underneath there? Gravel or is it a pervious area? Is that, the water is going to go down the ground there? I'm not clear about that issue. If you can just clarify that?
MR. RETTERER: It's a gravel area inside the open bird fenced area. Yes.
MR. PANDYA: Okay. And all that will go to that storm water management on --
MR. RETTERER: It will infiltrate into the ground.
MR. PANDYA: Okay.
MR. RETTERER: It might not get into the storm water management area.
MR. PANDYA: Understood.
MR. RETTERER: The County did not allow us to account for that in our calculation rates for the --
MR. PANDYA: Okay.
MR. RETTERER: -- storm water management management.
MR. PANDYA: Are there more chances of run-off coming towards our cul-de-sac because of this structure and the existing, the water run-off?

MR. RETTERER: Not by what the County has required us to design to for the storm water management facility. And then coupled with the forested buffer that we're planning, landscape buffer, I would think that that micro bio facility that Luis was discussing will be enhanced by the infiltration.
MR. GROSSMAN: I don't quite understand that answer in conjunction with the question, the answer to the question I asked. Would this reduce the, the storm water run-off on to the nearby properties? I thought the answer was yes unequivocally.
MR. RETTERER: Yes.
MR. GROSSMAN: It doesn't sound like an unequivocal yes.
MR. RETTERER: I was further explaining it that not only the storm water structure, but with all the planting material absorbing water and nourishing themselves.
MR. GROSSMAN: So the answer is that the storm water run-off will be lessened by this project. Is that your answer?
MR. RETTERER: That's my answer.
MR. GROSSMAN: Okay.
MR. PANDYA: No other questions.
MR. GROSSMAN: Mr. Silverman?
MR. SILVERMAN: Nothing for me. No. Thank you.

MR. GROSSMAN: Any redirect?
MR. WALLACE: I have no redirect.
MR. GROSSMAN: All right. Thank you, sir.
MR. RETTERER: Thank you.
MR. WALLACE: My next witness will be Dr. William Bailey.
MR. GROSSMAN: Dr. Bailey, would you state your full name and business address, please?
DR. BAILEY: I'm William Hayes Bailey. 17000 Science Drive, Suite 200, Bowie, Maryland 20715.
MR. GROSSMAN: Would you raise your right hand, please? Do you swear or affirm to tell the truth, the whole truth and nothing but the truth under penalty of perjury?
DR. BAILEY: I do.
MR. GROSSMAN: All right. Mr. Wallace, you may proceed.
DIRECT EXAMINATION
MR. WALLACE: Please state your current occupation?
DR. BAILEY: I'm a research scientist and consultant.
MR. WALLACE: And for?
DR. BAILEY: The firm of Exponent.
MR. WALLACE: Okay. And in, as part of your work, as part of your work includes evaluating health effects of

electromagnetic fields, in particular, those produced at electric substations?

DR. BAILEY: That's correct.

MR. WALLACE: Okay. Can you please describe the professional societies or organizations to which you belong?

DR. BAILEY: I'm a member of the Health Physics Society and I'm the editor of its journal, Health Physics, a member of the Society of the Society for Risk Assess, Risk Analysis, the International Society for Exposure Analysis, the Bio-Electromagnetic Society, the Institute of Electrical and Electronic Engineers, Engineering and Medicine and Biology Society, and the Council International de Grande Risoux Le Creek (phonetic sp.).

MR. WALLACE: Thank you. Have you written any articles or professional journals or authored any books related to the subject of the health effects associated with electromagnetic fields, and at this point we can refer to it as EMF. That's acceptable?

MR. GROSSMAN: All right.

MR. WALLACE: Okay.

DR. BAILEY: I've written a, or presented approximately 100 papers or presentations. Most of these involving the topic of electric and magnetic fields at various frequencies.

MR. WALLACE: In particular, including the, those

generated by electric substations and overhead transmission lines?

DR. BAILEY: That's correct.

MR. WALLACE: Okay. Have you been an advisor to help in government agencies on EMF research?

DR. BAILEY: Yes. I've, because of my background and experience, I've been asked to advise numerous State, Federal and international agencies. These include the Maryland Public Service Commission, the Maryland Department of Natural Resources, the Vermont Department of Public Service, the New York State Department of Environmental Conservation, the National Institute of Health, the National Institute of Environmental Health Sciences, the Department of Energy, the Federal Railroad Administration, other agencies, also include the World Health Organization and the International Commission on Non-Ionizing Radiation Protection.

MR. WALLACE: And I apologize. I missed, skipped over your academic credentials. Could you just briefly review those?

DR. BAILEY: I have a Bachelor's degree from Dartmouth College, a Master's degree from the University of Chicago in business administration, a Ph.D. from the City University of New York in neuro-psychology, and I completed two years of post-doctoral training and neuro-chemistry at

the Rockefeller University in New York.

MR. WALLACE: And have you ever testified as an expert witness in the field of health as it's associated with EMF, particularly occurring from the operation of substations and overhead lines?

DR. BAILEY: Yes. I've testified in local, State and Federal venues.

MR. WALLACE: I'd offer Mr., Dr. Bailey's resume into the record.

MR. GROSSMAN: All right. That'll be Exhibit 69, Resume of William Bailey, Ph.D. All right.

(Hearing Exhibit No. 69 was marked for identification.)

MR. WALLACE: Dr. Bailey, could you please explain, I'm sorry. I'd move him as an expert in health effects of EMF.

MR. GROSSMAN: Okay. Any questions regarding this witness's expertise?

MR. SILVERMAN: I have just one or two. Dr. Bailey, are you affiliated with a university or professor at this, at this current time?

DR. BAILEY: I'm a visiting scientist at the Cornell University Medical School in New York.

MR. SILVERMAN: Oh, very good. My father used to teach there. Are you, have you testified for, for PEPCO on

other substation matters?

DR. BAILEY: I have.

MR. SILVERMAN: You have. Do you work with them frequently?

DR. BAILEY: I or my colleagues have been called to provide technical expertise to inform people about the status of research on this topic, yes.

MR. SILVERMAN: Thank you. No objections.

MR. GROSSMAN: Have you ever been called by the opposition in an attempt to, by an electrical company to install power lines or similar equipment to what's being suggested now?

DR. BAILEY: I have been contacted by people opposing facilities. I have not been hired, I think largely because of the rates we charge.

MR. GROSSMAN: All right. I --

MR. WALLACE: In addition, is it fair to say that it would contrary to most of the research you've done to testify in opposition?

DR. BAILEY: If, if someone wanted to find out what the status of scientific research is in this field, I would have no difficulty in testifying about the status of that research whether it was PEPCO or people like yourselves. I also do a lot of work with Federal and State and international agencies and they are also users of my

opinions.
MR. GROSSMAN: All right. Based on your background, experience, prior testimony as an expert in the field of health effects of EMF, I accept you as an expert as such.
MR. WALLACE: Just very briefly for the record. Can you just explain what EMF is?
DR. BAILEY: EMF is an acronym usually referring to electric and magnetic fields. In this context, it refers to the 60 Hertz alternating electric and magnetic fields associated with our power system. The fields at this frequency are produced by anything that is connected to our electric system, including substations.
MR. WALLACE: Is an EMF a regular part of everything around us, our daily experience?
DR. BAILEY: Everything that conducts or uses electricity will be producing these fields associated with their operation. So all of the electrical equipment in this room, the lights, all the devices and everything are all sources of fields at 60 Hertz.
MR. WALLACE: What produces EMF at an electric substation?
DR. BAILEY: The main components of electric substation as described earlier in testimony, its purpose is to transform the voltage from a, a higher voltage to a lower

voltage for distribution in the local community. And so, that equipment primarily consists at substations. And there is control equipment and bus work that connects to various switches to the transformers.
MR. WALLACE: Is the EMF that this equipment produces different than the EMF generated by other buildings, uses, equipment?
DR. BAILEY: No. It's the same.
MR. WALLACE: Are you familiar with the conditional use application that's being reviewed today?
DR. BAILEY: Yes.
MR. WALLACE: Okay. And you've heard the testimony of the previous witnesses?
DR. BAILEY: I have.
MR. WALLACE: And are you familiar with the subject property in the surrounding area?
DR. BAILEY: Yes.
MR. WALLACE: Okay. Have you had an opportunity to study the, the substation that's the subject of the application with respect to EMF that would result from the operation of it?
DR. BAILEY: Yes. The research on electric and magnetic fields has been going on at a, at a good pace over the last 40 years. Examining exposures from sources including appliances, wiring, scientific and medical

devices, substations, transmission lines, distribution lines. So it is a well-studied subject. And this research has been reviewed by many agencies for the Government and scientific agencies. None of these agencies has concluded that electric and magnetic fields are levels we typically encounter in our everyday environment or a cause of any adverse effect on our health. And in the case of substations, they're specifically designed to function efficiently to contain electric and magnetic fields within the equipment. And so the fields from these sources in the substation diminish with distance very quickly. And so at the boundaries of the properties it's typically the case that these values are no different than what are found in the surrounding community from other sources that are outside our houses like a distribution line.
MR. WALLACE: So does, does the weight of the scientific evidence regarding EMF indicate that exposure to the levels that would be expected to be generated from this substation, would that have any adverse effect on animals or humans?
DR. BAILEY: No. It does not.
MR. WALLACE: Okay. And does your review or knowledge of the exposures to EMF from substations like the one proposed indicate that the fields from the substation would exceed any recommended limits for exposure for the

general public?
DR. BAILEY: No. In fact, they're, you know, in orders of magnitude below recommended levels of exposure for the general public.
MR. WALLACE: And so, in your opinion, would, in terms of EMF from the substation, would the location of the substation at this, at this, on this property cause any undue harm to the health, safety and welfare of the surrounding residents, the general community, any employees to the site or visitors to the site?
DR. BAILEY: No, it would not.
MR. WALLACE: The, are you aware of a letter of, written by residents, some residents adjacent to the site expressing some opposition to the project, in particular concerns about radiation, their phrasing, assuming that means EMF, radiation from the substation?
DR. BAILEY: I, I heard Mr. Grossman's --
MR. WALLACE: Mr. Grossman.
DR. BAILEY: -- paraphrasing of, of that letter. Yes.
MR. WALLACE: And one of the, that letter also suggested that if you could move the transformers from their proposed location, it would reduce the impact of EMF from the substation. Is that the case, in your opinion, that it wouldn't have any impact?

DR. BAILEY: It, it's doubtful. The, the reason is that the transformers are designed to contain the magnetic flux around the core. And so, well, right at the surface of the transformer the field level may be very high. The field diminishes with the cube of the distance. So the, the field from a, a transformer is much like the field from a hair dryer. The field can be very strong at the surface of the hair dryer, but you go, you know, 10 feet away and you'll barely be able to measure anything. And that same principle applies to the transformers in substations. And so that, you know, once you get 15 feet away from a transformer, the fields are quite low. And so we're talking about a distance over which the fields would diminish far greater than that.

MR. WALLACE: So, in your opinion, the transformers are already in a location that's safe in terms of EMF?

DR. BAILEY: In which the, the levels of magnetic fields from the transformers would not impinge to any significant extent at the boundary of the property.

MR. WALLACE: Okay. No further direct questions.

MR. GROSSMAN: You mentioned it diminishes at the, as the cube of the distance. My vague recollection from 50 years ago in college physics is that the magnetic induction field would reduce as the square of the distance that you'd

have an enumerator of that equation. You have a unit vector and then it's over R-squared not over R-cubed. Am I remembering that incorrectly?

DR. BAILEY: It depends upon the nature of the source. So a, a device like a transformer or hair dryer, the fields will diminish as one over the cube of the distance whereas a, a transmission line would, the field from that would diminish as one over the square of the distance. You are correct on that.

MR. GROSSMAN: Okay.

DR. BAILEY: So it depends upon the characteristics of the source is the, the general rate at which it diminishes with distance.

MR. GROSSMAN: All right. I'll open to cross-examination.

MR. PANDYA: Sure. Thank you, sir.

CROSS-EXAMINATION

MR. PANDYA: You talked about the EMF generated by the transformers. What about the, the EMF generated by the other components that are in the open well area? How do they compare with the, the, and I'm not using the right term maybe, the field level or, is there a difference?

DR. BAILEY: The, the other components of the substation are generally not important contributors at the boundaries of the site. You have currents that are flowing

on the, on the bus work, but again, these are, these are short connecting pieces of, of conductors. And so the general experience is from measures at many substations that those components also are not important contributors outside the boundary of the substation.

MR. PANDYA: So the components that are in the open well area, they're, they're exposed to the screen and open to the sky. That one.

DR. BAILEY: Right. The other thing as I point is that, I mean there, when we use the term EMF, we're talking about two components, the electric field and the magnetic field. The electric field is related to voltage and the magnetic field is related to current flow. And so electric fields are quite effectively blocked by conducting materials and so all those electric fields that are produced with conductors or bus work, open to the air, would be completely blocked by the, the building surrounding the, the substation.

MR. PANDYA: What is the general level and whatever the unit is that that is considered harmful to humans and animals? Is there a number like 60, 50 that is harmful to the humans and animals?

DR. BAILEY: Well, electric and magnetic fields like anything else in our environment at sufficiently high levels can pose some degree of harm. So research has been

done and standards have been set to protect both employees and the general public from exposure to inordinately high levels of electric and magnetic fields. So at, at very high levels, we're talking about levels that are like 50,000 times or more higher than what would be found in a home. With the magnetic field and the electric field you can have some mild electro stimulation. So in the case of magnetic fields that perception is exactly the same as if you close your eyes and, and press on your eyelid, you'll have a faint visual sensation. That's called a phosphene. And when you're in extremely strong magnetic fields, it will produce visual phosphenes. And that is not harmful, but that is the lowest, that is the biological effect at the lowest level of exposure which is, might be, over a long period of time, might be considered to be harmful and so that's the basis for the standard. And then exposures for workers and the general public are set below that so that there is no possibility that that would occur from people in the vicinity of the substation or even workers within the substation would experience that.

MR. PANDYA: Again, is there a range and what I'm getting to is if we take measurements at the property line, what should we expect?

DR. BAILEY: Well, that, that's a different question.

MR. PANDYA: Okay.
DR. BAILEY: The question that I, that I thought you were asking was at what level do these adverse effects occur.
MR. PANDYA: Right. And I --
DR. BAILEY: And I think, I think that the simplest way to say is the, the level, the standard for exposure to the general public from one international agency is 2,000 milligauss. And the other is 9,040 milligauss. Now that is a level in which you're guaranteed not to experience adverse effects from electrical stimulation. You, it's possible that you could have exposures considerably higher than that if it could be shown by dosimetric modeling that you would not have, you would not exceed the biological threshold for these effects.
MR. PANDYA: Okay. Again --
MR. GROSSMAN: So what, in the context of that question, what level of milliguass would you expect at the fence line of this proposed use?
DR. BAILEY: It, well, I haven't done an, an, or my engineers haven't done any specific modeling of the substation, but in our experience these levels could be in the single or double digits. You know, sort of in, in, in a range of anywhere from two milliguass to 20 or so milliguass.

MR. GROSSMAN: And if I --
DR. BAILEY: In that order of magnitude.
MR. GROSSMAN: Versus what you've testified that it would take by some agency 2,000 milliguass to be at the danger, or a danger, the level at which you would start to have some health concern?
DR. BAILEY: That's correct.
MR. GROSSMAN: Okay.
MR. PANDYA: You said you have not done a specific study for this site. Correct?
DR. BAILEY: That's correct.
MR. PANDYA: Okay. So, so I guess you don't know whether we should expect 2,000 or 3,000 or less than 2,000 because there is no study is done by you on behalf of PEPCO?
DR. BAILEY: Based upon the design and characteristics of the substation, you would not be able to produce levels approaching 2,000 milliguass at the boundary. And this is a, this is a very large site. And we have done studies around the substations in a variety of locations in some, in rural areas, some in downtown New York City where the substation abuts up to an apartment building, and you would, the values that I quoted you are in the range of what, what we've seen in these other substations of varying sizes.
MR. PANDYA: Those studies that you had done, how

comparable they are with this situation here? The same size, same surrounding, same openness or was that all enclosed?
DR. BAILEY: No. Substations are typically not totally enclosed. And that, that enclosure really has no impact on the levels of, of EMF. For instance, if you didn't have a building around the, the substation, the electric field would still be largely blocked because of the metal fence and the trees and shrubbery, so whether that, that shielding was coming from trees and shrubbery and a metal fence or whether it was coming from a building, it would be the same reduction in electric field.
MR. PANDYA: Some of these trees in the buffer zone area will not be that dense for quite a while. Five, 10 years. If we measure the, whatever that unit is, for 2,000, will it, will we find it less than 2,000 in the beginning or, or what should, I mean if, you said you haven't done the study, but --
DR. BAILEY: It, it's not going to be anywhere close to 2,000.
MR. PANDYA: I see.
DR. BAILEY: So we're talking about, you know, levels that are, you know, a hundred-fold lower than that.
MR. PANDYA: Even in the beginning of the, when the project is done?

DR. BAILEY: That's correct. The, the, the distances between the equipment and the site boundary are quite large. And so, there is ample distance for field levels to diminish to the levels that you would encounter from other sources on the street.
MR. PANDYA: Have you ever in your study encounter that this EMF has caused any, I mean in previous studies of the substation, has any long-term impact ever on any individual, any animals, anything, have you come across that?
DR. BAILEY: Well, scientists have been looking at this question for the last 40 years. And the weight of the evidence does not suggest that exposures at levels below the standards that I quoted of 2,000 milliguass or 9,040 milliguass have any adverse effect on health. And the World Health Organization has indicated that compliance with these guidelines is protective of public health.
MR. PANDYA: So not even long-term impacts on, on health?
DR. BAILEY: Right.
MR. PANDYA: No impact.
DR. BAILEY: If you go to their website, their website has their conclusion that says, quote, despite extensive research to date there is no evidence to conclude that exposure to low-level electro-magnetic fields is

harmful to human health, end quote.
MR. PANDYA: And which study is that?
DR. BAILEY: That is on the World Health Organization's website. If you type in who+electromagnetic field in Google, you'll come up with their website and they have a whole, pages of explanation about electric and magnetic fields and that's the conclusion that they have currently.
MR. PANDYA: Study done, done on behalf of WHO, right? Not for someone.
DR. BAILEY: This is their, this is, WHO does not itself conduct research.
MR. PANDYA: Okay.
DR. BAILEY: It evaluates scientific research published around the world and issues its conclusions.
MR. PANDYA: So that study may have been done by whoever did this study on behalf of another electrical company --
DR. BAILEY: No.
MR. PANDYA: -- or --
DR. BAILEY: That, that conclusion is the conclusion of the World Health Organization based upon their review and assessment of the literature of research on electric and magnetic fields and health.
MR. PANDYA: Thank you. No further questions.

MR. GROSSMAN: Mr. Silverman?
MR. SILVERMAN: Okay.
CROSS-EXAMINATION
MR. SILVERMAN: Dr. Bailey, there's a submission by PEPCO in the, it's, I don't know it's been put in as a separate exhibit, but it's in the Planning document as Attachment C-3. It's labeled Substation EMF and it's a, like a factsheet on, are you familiar with that document?
DR. BAILEY: Yes.
MR. SILVERMAN: Did you help draft it or --
DR. BAILEY: Yes.
MR. SILVERMAN: Okay. So that states, it largely restates what you've said today and it includes the statement about the World Health Organization saying that despite extensive research to date, there's no evidence to conclude that exposure to low-level electromagnetic fields is harmful to human health. Is that, maybe, it sounds like a very blanket statement there and no, there's no research whatsoever that, that there's any health impact from EMF?
DR. BAILEY: I don't, I don't necessarily, I, I know that the, you know, to a non-scientist that, that may be the, the, the, the lay reading of that, but what they're referring to is it, from a scientific perspective one can go out and collect, do all kinds of experiments and it's rarely the case that the experiments whether you're taking a

measurement in a laboratory, whether you're taking measurements in the field, whether you're dealing with physical entities like the speed of light or you're dealing with the response of a, of a rat or a mouse or a cell to electric and magnetic fields, it's rarely the case that if you do 10 experiments that you get the 10, the same result from 10 experiments. So in evaluating and performing health risk assessments, one looks at all of the data and then draws a conclusion as to what is the weight of the evidence from those findings, taking into account the, the quality of the studies, the number of subjects who were involved and, and particularly if these findings are replicated. So the gold standard of science is not, you know, somebody runs in the room and said, you know, I've discovered something. As scientists we don't accept that until other scientists have been able to replicate that finding under similar circumstances. And so what the WHO is referring to is that we do not have confirmed evidence of harm to people from, based upon this record of evidence that they examined.
MR. SILVERMAN: Okay. I, earlier today, submitted for the record. It hasn't been accepted. There was some objection to including it. A report that I wonder if you're familiar with since you --
MR. GROSSMAN: Well, I haven't, you haven't submitted it to me.

MR. SILVERMAN: Oh, I'm sorry. I didn't?
MR. GROSSMAN: Thank you. This will be Exhibit 70. Once again, it's being marked. It doesn't mean it's being admitted and we can deal with that in a minute or two when we get to that point. Exhibit 70 is an October 2006 Status Report on, I'm just going to say, I'll abbreviate it, Human Health Effects of EMF. All right.
(Hearing Exhibit No. 70 was marked for identification.)
MR. SILVERMAN: You had mentioned I think in discussing your, your experience that maybe you had done some consulting or you had worked with the Public Service Commission of Maryland at some point in time.
DR. BAILEY: I was an expert witness for the Public Service Commission in a case involving questions about health and safety of a high voltage transmission line.
MR. SILVERMAN: Okay. So this appears to be a, a report, it's not an independent study. It's just a report, a literature review much like, you know, some of the other ones that you've referred to today that looked at the state of the science at this time. It's a few years old. And it included and I'll, I'll just, if there's no objection, I'll just direct you, I don't expect you to read this whole thing if you're not familiar with it, but, you know, as a good non-scientist I jumped to the conclusions. And there is

references to at least two studies in there that, you could see the highlighted section, talks about leukemia risks particularly in children as a result of EOF magnetic fields. I'm curious as to what your response is to, you know, a, a, you know, concerned citizen that sees this online coming from our own Maryland Public Service Commission and wonders, has small children living 120 feet away, whether there should be some concern here?

DR. BAILEY: Well, I, I certainly credit you with doing some homework to try and find out more information about this topic. And it's good that you've, you've gone to a, a Government agency for your information rather than the kind of general sources on the Internet. I know both of the authors of this report and I point out that it covers the period 2001 to 2006 so they just looked at publications within that period, pulled a few of those out and then directed our attention to those studies. They are, this report is not the same as the over 360 page report of the World Health Organization that was issued a year later after this. And a report of similar size and depth and comprehensiveness to the WHO report was released by the Committee of the European Commission in 2015. So my, my, I would direct you to look at the more current and comprehensive sources. And if you do that, a couple of things will come out. The first thing is, turning to the

question about studies have shown increased risk for childhood leukemia associated with ELF magnetic fields. It's on page 3 of the Executive Summary. A statistical association has been reported in a number of studies in the early years between measures that attempt to estimate exposure to magnetic fields and various health conditions, including childhood leukemia. The ways of estimating exposure have been counting the number of wires that are handing on poles and their apparent thickness, measuring the distance from transmission lines to residences, taking spot measurements of magnetic fields in the house, calculating magnetic fields at residences in a variety of techniques to characterize the exposure of people in residences to electric and magnetic fields. And in a study that was reported in 1979 by Ed Leeper and Nancy Wertheimer, they reported an association between the type of wiring outside the home and childhood cancers, particularly childhood leukemia. And a number of studies were published after that, reported a similar statistical association. Now the way these studies are done is a so-called case control design, and you'll see that discussed in this memo, in the case control design you take a group, I'll describe it for these particular studies, you take a group of children who has a disease. In this case, childhood leukemia. And then you take a group of children in the same community, the same

age group, same sex, and that do not have leukemia and you compare their exposures. So if the exposures of the children with leukemia are the same as other children without leukemia, we say that there is no association. If the exposures of the children with leukemia appear to be higher, then we say that there is a statistical association. Or if the exposures of the children with leukemia were lower, we would also say there was a statistical association. And when you go through these studies, you can find within studies that sometimes compute hundreds of associations. Associations that will suggest that there is no association, that there is a positive association. That is, children with leukemia have higher exposures than other children. And also association suggesting that children with leukemia have lower exposures to magnetic fields than other children. So these human epidemiology studies are observational in nature. So they are very difficult to prove causation because there are lots of other factors that could influence how this association came about. So if you go to current research, people have been trying to better characterize exposures and for a longer period of time in these epidemiology studies and so they have done so. And the, one of the studies you, you mentioned, has done a particular good job of following through on, for many years. So I'd first point out when we're talking about these

statistical associations, epidemiologists all will say that there is a risk, but actually this association we're talking about in these studies cannot be interpreted directly as a risk. It is a difference in exposure. So if, if we have an association between estimates of exposure to magnetic fields in childhood leukemia, it is a difference in their exposure. Now if we followed a population of people and we had people who had high exposures to magnetic fields and people who had low exposures to magnetic fields and we followed them forward in time and we found that there was more cancer occurring in the exposed population, then we could truly say both from a scientific and an everyday sense that there was a risk associated with that exposure. But risk in this sense is an epidemiology shorthand for statistical association. We would need other evidence in order to conclude that such a difference in exposure actually was replicable and also represented a causal relationship. And that's why we rely on two other parts of, of science to, to help us understand such data. And those are laboratory studies of animals and also of isolated cells and tissues. Now in the 1990s, the National Institute of Environment Health Science was, was asked by Congress to investigate the question about whether high voltage transmission lines might be a cause of cancer or other health effects. And they said into this, this national research program one important

aspect of that national research program is the ASTA National Toxicology Program that does lots of assessments for the Federal Government of cancer to do studies in which animals were exposed of two types over their entire lifetime to magnetic fields ranging in intensity from 200 milligauss to 10,000 milliguass. And with the possibility that there might be a difference between continuous exposure and intermittent exposure, they had the fields turned on and off in an intermittent fashion over their lifetime. At the conclusion of the experiment, they sacrificed the animals and examined about 50 different tissues of the body under the microscope and looked to see is there a difference in the incidence of cancer in the animals who were exposed to magnetic fields versus the control group. And there was not. And there was no dose related change in the, in the pathology of the animals based upon the intensity of the magnetic fields.

MR. GROSSMAN: Well, I take it that, that in all of the studies you've referenced the question is whether the correlation that is found is a cause and effect relationship you criticized the earlier study cited in this report because they are, I guess, retrospective rather than prospective of the, the studies you're, you're citing. But it's always a question of whether or not the correlations they find are cause and effect is it not?

DR. BAILEY: Right. That, that's the question, but we're trying to answer, but we can't answer just by doing more correlational studies.

MR. GROSSMAN: I also noticed that the term ELF, extremely low frequency, was used here in this highlighted conclusion as opposed to EMF. Is there a difference between EMF that we're talking about and ELF?

DR. BAILEY: Essentially no. The extremely low frequency range or ELF range is, goes from let's say one hertz, one cycle per second to 300 cycles per second.

MR. GROSSMAN: So it covers the EMF that we're discussing?

DR. BAILEY: And the primary frequency that we would be exposed to from our electrical, common electrical sources would be at 60 hertz in the U.S., 50 hertz in Europe. On the other hand, you can go to particularly newspaper articles and things on the Internet that use EMF to refer to the static magnetic field of the earth, radio frequency fields from cell phones and other sources. So these fields, the different frequencies have different properties because they interact with materials, including biological organisms, differently so they, they have to be separately evaluated. So when I use the term EMF, I use it only to refer to essentially 60 hertz electric and magnetic fields. If I want to refer to fields from the earth, I'll

use the term static fields because they have essentially a, almost zero hertz frequency or if I'm talking about fields from, let's say a mobile phone, I'd be talking about radio frequency fields or microwave fields.

MR. GROSSMAN: Would, would the people in the neighborhood around this proposed substation be exposed to EMF at any greater levels than exist in the general background as a result of this proposed substation?

DR. BAILEY: No.

MR. GROSSMAN: Okay. Seems to me that whether or not EMF can be a harm or not, you can, whether you look back at the old studies or you look at the new ones, isn't that the critical question? If the proposed substation will not create any greater level of EMF in the neighborhood than what is in general background, how could it be considered a harmful addition?

MR. SILVERMAN: Well, one additional question along those lines is have you considered in, in looking at the amount of EMF or ELF or whatever we want to call it that we're also within a few yards of the PEPCO right-of-way with, with towers there with emissions and also have power lines running along Darnestown and Riffle Ford Roads so we're surrounded pretty much on about three sides of our property. And this is in addition.

DR. BAILEY: If I recall the, the testimony this

morning that it was that the station site was about a 10th of a miles from the 230 kV transmission line right-of-way.

MR. SILVERMAN: That's right. Yeah.

DR. BAILEY: So that, that's, that's quite a fair distance and so I would expect that those fields would be diminished long before they got to, to the site. There are transmission lines and distribution lines throughout our society. I mean whether they are overhead or underground, these are contributors to the fields that we experience. So as we go out, throughout our daily life we're continually going in and out of fields from a variety of sources. And some of those sources we can be very close to. Like an appliance or wiring in your home or something like this. And others were much further away because they're up in the air or on a right-of-way or contained in a large site.

MR. SILVERMAN: If the residents wanted some assurance after this is built that this is not, this is emitting, as, as you say you, something in the two to 20 milliguass range or something very nominal, how easy or hard is it to get a reading on that, to do a study and find that out?

DR. BAILEY: I think almost every electric utility in the United States offers free readings of magnetic fields for residents upon request. And, and PEPCO does this. So, you know, all you have to do is to contact PEPCO and, and

say I would like to have magnetic fields measured at my residence and, and they'll come out and, and take readings.
MR. GROSSMAN: Probably get your own gauss meter. You can do it.
MR. SILVERMAN: I might get one of those. Great.
MR. GROSSMAN: I don't think they're that expensive.
MR. SILVERMAN: No, no further questions. Thank you.
DR. BAILEY: Thanks.
MR. GROSSMAN: Any redirect?
MR. WALLACE: No.
MR. GROSSMAN: All right. Thank you, Dr. Bailey.
MR. WALLACE: Thank you.
DR. BAILEY: Okay.
MR. GROSSMAN: All right. Next.
MR. WALLACE: My final witness, at least I anticipate, is Gabe Weger.
MR. GROSSMAN: Mr. Weger, would you state your full name and business address, please?
MR. WEGER: Yes. Gabriel David Weger at 9400 Ward Parkway, Kansas City, Missouri 64114.
MR. GROSSMAN: You came a long way to testify.
MR. WEGER: I did.
MR. GROSSMAN: All right. Well, we'll swear you

in anyway. Would you raise your right hand, please? Do you swear or affirm to tell the truth, the whole truth and nothing but the truth under penalty of perjury?
MR. WEGER: I do.
MR. GROSSMAN: All right. Mr. Wallace, you may proceed.
DIRECT EXAMINATION
MR. WALLACE: Could you please state your occupation?
MR. WEGER: I am an air and noise permitting specialist with an environmental engineering degree from the University of Missouri.
MR. WALLACE: And your current employer is?
MR. WEGER: Burns McDonnell.
MR. WALLACE: And as part of your position with Burns McDonnell do you perform noise analysis, modeling and determination of regulatory compliance with noise emissions?
MR. WEGER: Yes, I do.
MR. WALLACE: Okay. And you stated already, but just repeat your educational background.
MR. WEGER: A civil environmental engineering degree from the University of Missouri.
MR. WALLACE: Okay. And how long have you been with Burns McDonnell in this position?
MR. WEGER: Three years.

MR. WALLACE: Okay. What's, is Burns McDonnell's involvement with the project? What is it?
MR. WEGER: They're the EPC contractor.
MR. WALLACE: EPC is?
MR. WEGER: Engineering, procurement, construction.
MR. WALLACE: Okay. So they're designing and building it?
MR. WEGER: Yes, they are.
MR. WALLACE: Okay. Thank you. And Mr. Weger's resume.
MR. GROSSMAN: Thank you.
MR. WALLACE: And I would offer Mr. Weger as an expert in noise analysis, modeling and regulatory compliance.
MR. GROSSMAN: All right. Noise analysis, monitoring --
MR. WALLACE: Modeling.
MR. GROSSMAN: Modeling. I'm sorry. Modeling and?
MR. WALLACE: Regulatory compliance.
MR. GROSSMAN: Regulatory compliance. All right. And this, his resume is Exhibit 71. Have you ever testified as an expert before?
(Hearing Exhibit No. 71 was

marked for identification.)
MR. WEGER: I have not.
MR. GROSSMAN: All right. And are you familiar with regulations in Montgomery County, Maryland?
MR. WEGER: I am.
MR. GROSSMAN: Okay. Gentlemen, do you have a question regarding this witness's expertise?
MR. SILVERMAN: No.
MR. GROSSMAN: All right. I'm looking for your, this is regarding, you're being called regarding noise I take it. Is that correct?
MR. WALLACE: Yes.
MR. WEGER: I believe the first half of that resume is noise. I also do air permitting.
MR. GROSSMAN: Yeah. I happened to look at the back of it first. All right. So you did noise, modeling for the main power reliability project.
MR. WEGER: Yes. That was several substations throughout Maine.
MR. GROSSMAN: All right. And then Fitzwilliam Substation receiving noise complaints.
MR. WEGER: Yes.
MR. GROSSMAN: In Fitzwilliam --
MR. WEGER: That was a post-construction substation.

MR. GROSSMAN: What happened in that case?
MR. WEGER: It is still ongoing.
MR. GROSSMAN: And did your readings show a noise problem with the substation?
MR. WEGER: They showed that noise was measurably. There are no noise regulations in Fitzwilliam or the State of New Hampshire. So we are currently working with the neighboring residents to take care of their complaints.
MR. GROSSMAN: And what did the noise level measure at the perimeter?
MR. WEGER: At the perimeter of the substation?
MR. GROSSMAN: Yes.
MR. WEGER: I, I do not know exactly. I know it was well below, I believe it was below 55 at the fence line of the substation. Their property extends on further down and butts up against the right-of-way where it was down in the low 30's.
MR. GROSSMAN: So 55 in terms of decibels?
MR. WEGER: Yes. DBA.
MR. GROSSMAN: DBA. Well, since you mentioned DBA, I, I take it that substations don't have isolated impact kind of decibel pressures. They just have average, or am I wrong about that?
MR. WEGER: Substation, the transformers at substations emit a low frequency kind of a hum that's

measured generally in the 120 hertz. With that you get times where you can hear the substation, but it is not necessarily overly loud or overbearing. You can pick it out when traffic subsides and different things like that.
MR. GROSSMAN: Okay. All right. Well, based on Mr. Weger's resume and his background, I'll accept him as an expert in noise analysis, modeling and regulatory compliance. All right. You may proceed.
MR. WALLACE: Are you familiar with subject property, the surrounding area and the applications that we have been reviewing today?
MR. WEGER: Yes.
MR. WALLACE: Okay. And you've described generally your firm's involvement with the project. And did you also have PEPCO conduct a noise analysis as to the expected noise levels after the project, if the project is constructed?
MR. WEGER: Yes.
MR. WALLACE: Okay. And that noise analysis is in the record as Exhibit, I'm looking for it in the record as Exhibit, it's Exhibit 44B.
MR. GROSSMAN: Okay.
MR. WALLACE: Okay. And so, are, you've already been asked and answered, but are you familiar with the Montgomery County Noise Control Ordinance?

MR. WEGER: I am.
MR. WALLACE: Okay. Can you explain the purpose of the noise analysis that you did?
MR. WEGER: What we did, the purpose was --
MR. WALLACE: And the methodology.
MR. WEGER: Yeah. The purpose for the noise analysis was, was to insure that it would not be in violation of any of the County regulations after construction. The way we went about that was we have already gone out and taken an ambient sound survey around the property. With that information we then go into our modeling software, which is Kadin A (phonetic sp.), and developed the entire site in our noise model. It's a 3-D noise model. We can build the structures inside it, the transformers, the heating ventilation and air conditioning equipment, which is HVAC. All of those sound sources are put into this model. The terrain is brought in for the area. There is a slope to this substation, different elevations where sound would go up and over the walls themselves because it is enclosed. And so we model the entire site to see what the substation's impact is at its property line and the nearest receiving property lines, which would be the residences to the west of the substation itself. With that information, we then compare the expected sound levels post-construction to the regulations. And

insure that they are going to be below the limits. If they are not, we would then build in attenuation telling the client that they would have to install certain things to bring down the sound levels. In this case, they were below the, the County limits.
MR. WALLACE: Can you just show the location of the readings that you did? I'm just trying to think --
MR. WEGER: Yes. If you want to look at this figure here.
MR. WALLACE: And that's Exhibit 68?
MR. WEGER: Yes. Exhibit 68. We took seven measurement points around the substation. None of this is here right now. But we took a point at the entryway, the farthest north, coming off of Riffle Ford Road. Took a second point at the second entryway closer to Darnestown Road. We took a point at the intersection of Darnestown Road and Riffle Ford Road. Another measurement point about half-way down the property line close to Darnestown Road. And then three additional points along the property line in the back.
MR. GROSSMAN: In the west?
MR. WEGER: Yes. On the west side of the property.
MR. GROSSMAN: Okay.
MR. WEGER: To give an all-encompassing review of

what sound is like prior to building the substation that we can then compare to post-construction and insure that the substation is not dominating second levels at any of the locations we looked at.

MR. WALLACE: And your assessment showed at the nearest receiving property lines what would the expected predicted DBA to be?

MR. WEGER: We've looked at them. The County Code says 55 DBA.

MR. WALLACE: And that's at, at nighttime?

MR. WEGER: Yes. For the nighttime. We --

MR. WALLACE: Which is the most, most --

MR. WEGER: We designed the substations because they operate throughout the day and night to the most strict limit of any daytime or nighttime limit. So even during the day it's still going to be below the nighttime limit because the sound doesn't fluctuate that much. So we look at the nighttime limit, which is 55 DBA at the nearest receiving property lines and in addition to that there is potential for a pure tone to be measured. It doesn't happen a lot, but in the absence of any other sound in the area, say all traffic stopped, all the birds start chirping, stop chirping, there is no, no wind.

MR. WALLACE: Crickets?

MR. WEGER: Yes. Crickets. In the event that all

of that stops, there is the potential for this pure tone because of the way the transformers operate. So we then take that five DB penalty which is in the County Code to knock the 55 DB limit down to 50 DB. And ensure that with the substation operating it is still below that 50 DBA limit.

MR. WALLACE: And did your assessment account for four operating transformers?

MR. WEGER: Yes. We went ahead and did all four because the substation has the potential to add that fourth one in as a conservative measure. So the modeling showed that it was still below 50 DBA at the nearest receiving property lines.

MR. WALLACE: So in your opinion and based on the assessment that you did, the, your conclusion is that the substation --

MR. GROSSMAN: Well, let him, let him state his conclusion.

MR. WALLACE: Okay.

MR. WEGER: Our conclusion with the sound study that we did was that even after the substation is built, it will not be in violation of any of the County codes with regards to noise.

MR. WALLACE: And therefore this substation will not cause any undue harm as a result of noise to the

surrounding properties, residents, workers?

MR. WEGER: It will not.

MR. WALLACE: Okay. No further direct questions.

MR. GROSSMAN: All right. Any cross-examination?

MR. PANDYA: Yes.

CROSS-EXAMINATION

MR. PANDYA: Will, and I understand that it will be within the compliance of the County requirement, the decibels. I had asked this earlier, but again, as an expert, I'm asking you. Will there be constant humming or any such effect even if it is below the decibels?

MR. WEGER: So with the way transformers operate, there will always be noise. In our case, we have the walls on all sides of these transformers. So it knocks down a substantial amount of that noise. Without those walls there would be more noise at the property line. The way transformers operate is because it's a 60 hertz system operating at alternating current, we realize noise at twice that frequency. So at 120 hertz, you get the transformer contracting and expanding, which pushes against the air and creates a pressure wave which your ear hears. At that 120 hertz, you do hear a slight hum. In the absence of everything else, you may be able to hear it at times. During the initial sound survey, we found that traffic noise dominated the sound levels of that area and there was a

substantial amount of traffic noise both to the Darnestown Road side and from Riffle Ford Road. So yes, there is potential to hear that hum.

MR. PANDYA: Okay. Thank you. No further questions.

MR. GROSSMAN: Mr. Silverman, do you have any questions?

CROSS-EXAMINATION

MR. SILVERMAN: Did you, from the three points you mentioned along the Hallman Court was at the west side of the, of the property that you took, you studied, do you actually have any numeric value that you can tell us? If it's not, it's under 55. It's under 50. Is there a number that you get from your studies as to what it is?

MR. WEGER: For this location, you will get sound that varies along the property line with wherever you go. It's not going to be the exact same along that property line. To the west side, these walls knock down pretty much the majority of the noise from the transformers themselves. Towards Darnestown Road and Riffle Ford Road, there is vents for the HVAC equipment, which create a slightly different sound, but more of a whoosh sound as opposed to the low frequency hum that is going to be slightly more penetrating. So when we took measurements along the west side, we took one fairly close to Darnestown Road about even with where

the transformers are going to be closest to that property line. So directly towards the house that's located down here. That is the potential for the loudest point along that property line, which was still below 50 DBA.
MR. WALLACE: Is this what you're --
MR. WEGER: So --
MR. WALLACE: And then if you turn it over there.
MR. WEGER: We have --
MR. WALLACE: Yeah. Take a look there.
MR. WEGER: So residence 7, that's going to be the point, do you want me to give this to him or --
MR. WALLACE: No. This is, are the noise assessments.
MR. WEGER: So residence 7 on this figure, which if you want to look at it, would show that that sound contour extends slightly out towards this house.
MR. WALLACE: Residence, just for the benefit of the Hearing Examiner.
MR. WEGER: Yes.
MR. WALLACE: Residence 7 is this one?
MR. WEGER: Yes, it is.
MR. WALLACE: Yes. Okay.
MR. GROSSMAN: Okay. So that's at the, at the extreme southern tip of the property.
MR. WALLACE: Right.

MR. SILVERMAN: Right. I understand.
MR. WEGER: And so what we have is this contour. It's hard to tell in black and white, but I have the actual value on the backside.
MR. GROSSMAN: So what did you get at that, at residence 7?
MR. WEGER: Residence 7, worst case scenario was 48.7 DBA.
MR. GROSSMAN: Okay.
MR. WEGER: And that is with four transformers operating at their maximum guaranteed sound level. Generally these transformers operate well under their guaranteed sound level, but the information we're provided states that they will not be, they will not exceed that level so that's what we put in the model.
MR. GROSSMAN: How about the other two locations on the west?
MR. WEGER: It's still the worst case scenario. So we have residence 8 and residence 9.
MR. WALLACE: 8?
MR. WEGER: Yes. 8 and 9.
MR. GROSSMAN: So 8 is about centrally in the western part?
MR. WEGER: Yes. In that corner.
MR. GROSSMAN: And what's your worst case scenario

there?
MR. WEGER: 42.8. And residence 9 is 39.7.
MR. WALLACE: And 9 is at the intersection of Hallman and Riffle Ford.
MR. GROSSMAN: And those are at the property line?
MR. WEGER: Yes. That is at the property line of the facility and the neighboring residences.
MR. GROSSMAN: And can you tell me an equivalent sound level that we all can think of as what would 42.8 DBA be?
MR. WEGER: Do you have the rest of the sound study? Just to be consistent.
MR. WALLACE: And a little falling apart.
MR. GROSSMAN: What makes a 40, what makes a 42 decibel sound?
MR. WEGER: This office --
MR. GROSSMAN: If you say my voice, you're in big trouble.
MR. WEGER: If I have it --
MR. WALLACE: I was going to say mine is a little bit torn apart so I --
MR. WEGER: If you can, I just want to be consistent with what we already put in here. Okay. So in the sound study we have a list of certain things that you would hear and their subsequent environmental sound

modeling. Forty would be a farm field with light breeze and bird calls. Fifty DBA would be considered quiet. Sixty DBA would be an air conditioner at 15 feet or in your highway traffic.
MR. GROSSMAN: Okay. It's a logarithmic scale?
MR. WEGER: Yes, it is log scale.
MR. GROSSMAN: Okay. All right.
MR. SILVERMAN: Does, does your analysis --
MR. GROSSMAN: Well, hold on one second. Are you finished --
MR. WALLACE: I, I think he was answering a question.
MR. GROSSMAN: Oh, they were in the middle. I'm sorry. I --
MR. WEGER: I was already answering questions.
MR. WALLACE: It was a little bit --
MR. GROSSMAN: My brain skipped a beat there as you can understand, but it's after 5:00.
MR. SILVERMAN: Does your analysis also account for the, the landscaping plan? Is there an impact of the trees in there?
MR. WEGER: The landscaping for the substation has not been included. So what we did was took the topography of the land as it is now without any foliage or anything blocking sound between the substation and the property line

to be conservative in a worst case scenario situation. Generally the foliage will help with a visual barrier, but will not do a whole lot for sound until you get 50 to 100 feet of fairly thick trees to make a substantial, which I would consider a five DB drop in sound. So it takes a significant amount of landscaping to knock down that sound level, but it, it will do a little bit. I'm not going to say it's not going to do anything, but it's going to be, you're not going to notice it whether it's there or not.

MR. SILVERMAN: Okay.

MR. WEGER: So to be conservative, we left it out.

MR. SILVERMAN: So the proposed 25-foot buffer even with the additional about 50, 50 trees or so, small impact, but not, not --

MR. WEGER: Small impact.

MR. SILVERMAN: -- not, not a real decisive factor. Okay. I think that's all I've got. Thank you.

MR. GROSSMAN: Any redirect?

MR. WALLACE: No.

MR. GROSSMAN: All right. I take it that that completes your case?

MR. WALLACE: And that --

MR. GROSSMAN: Subject to the documents being admitted?

MR. WALLACE: That, I will just make sure.

Anything else? That completes our case in chief.

MR. GROSSMAN: All right. So let me turn to the opposition. Gentlemen, which one of you wishes to go first?

MR. SILVERMAN: Okay. So are we going to kind of get sworn and do a narrative type --

MR. GROSSMAN: I'm going to swear you in. Yes. I can swear you both in at one time, if you'd like. Would you both raise your hands? Mr. Pandya, Mr. Silverman, do you swear or affirm to tell the truth, the whole truth and nothing but the truth under penalty of perjury?

MR. SILVERMAN: I do.

MR. PANDYA: I do.

MR. GROSSMAN: Okay. You're now sworn in. And whichever one of you wishes to go first.

MR. SILVERMAN: Okay. You want me to go first?

MR. PANDYA: Yeah. Go ahead.

MR. SILVERMAN: Okay.

MR. GROSSMAN: Mr. Silverman, state, just for the record, state your full name and address, please?

MR. SILVERMAN: Sure. Sure. Cary Silverman, 12705 Hallman Court in Darnestown, Maryland. I've been a resident of Hallman Court for about five years. I think I purchased the property about the same time PEPCO purchased their property. Maybe a month or so after or a month or so before. I'm not positive. But I moved to Darnestown from

Washington, D.C. in part because we were attracted to the area because it's, it's not an urban space. It's not quite suburban either, but it's on the border of, of being rural. And our neighborhood has, as you can see there, we've got lots of green space and relatively large lots. And, and since moving to Darnestown, my wife and I have had three children that are now four months, 2 years and 5 years old, a lot to handle. PEPCO has now proposed a substation that, in my view and in the view of my neighbors, will significantly alter the block on which we live and, and, and harm the reason that we moved there. We believe, as, as the evidence has shown today, that the proposed design is out of proportion to the surrounding neighborhood. That it will bring more power lines to an area already saturated with a PEPCO right-of-way and towers on one side and transmission lines on the other. The substation, as the renderings have shown from Hallman Court, will be clearly visible from our home. It's going to be the first thing that I see when I walk out my door in the morning. It will be the last thing I see when I close the kids blinds at night. Given its size and height, even the trees that, you know, will be planted along the property line, and we do appreciate, I appreciate the, the efforts that PEPCO has gone to in adding to what we had initially seen, but they will, we will still have a clear view, we believe, at least for a few years of the

substation and at its present height, I think we'll always have something of a view of that. Even in a decade or more from now. We first learned of PEPCO's plan for a substation about a year ago and, you know, it has, from what we initially heard, it was going to be, you know, a substation that blended into the community. It was going to look like a home. And I think I and, and the other residents, my neighbors thought well, we're not too concerned. We're, we're okay with a substation that's, you know, basically the size of a home or not too much bigger than that tucked away on that large piece of land. But it, it turned out to be, and as my, the emails I've submitted to the record have shown, I think the Darnestown Civic Association was, you know, initially of the same understanding. And they passed that information along to us before the first meeting and again made similar statements before the second meeting. And, you know, that has changed over time. By the second meeting that, that I attended, you know, this was a 120 by 120 square foot substation. And we were already told at that time that this was going to be among the, a larger substation than initially expected. You know, since that time, it has grown from what was, you know, at 120 by 120, 14,000 square feet, to approximately at 150 feet by 160 feet, a significantly larger substation. I think that the evidence we've shown today demonstrates that the current

design doesn't blend into the community. It's, it doesn't resemble a house in an RE-1 zoning. And the footprint of it would actually fit all seven of our houses combined within its walls. As the, you know, Dufief property shows, historic area farmhouses are significantly smaller. I do applaud PEPCO's creativity and efforts in, in trying to make this blend in through this farmhouse design. But given the, the size of it, as PEPCO's own witness has, has, has conceded, there is no other farmhouse of this size in, in the neighborhood. We don't know of any others and, and those that do exist are, are much smaller. So, you know, at best I think we may have a situation here where despite the, the efforts taken to create a, a substation that blends in as a farmhouse will actually be viewed by people passing by as, at best, a curiosity as to what is that thing or if it's not pulled off right, as, as something of a monstrosity. I hope that doesn't turn out to be, but there will be a benefit. When my friends and family come to visit me, I'll just tell them now instead of turning on Riffle Ford Road, just look for the big thing and then turn right. And that's where you'll find Hallman Court. This proposed substation, as we have also shown, is also significantly larger than other area substations, which also gave us further pause as to what we were expecting here. As the Travilah Substation shows a substation can be and has been one-third the

footprint of the Darnestown proposal or maybe slightly more than a third. And 10 to 15 feet lower in height. And that particular substation is on a commercial strip and not right adjacent to homes. This one is. So to sum that up, it's seven times the size of our houses, more than twice the size of area farmhouses and about two and a half times the size of the nearest area substation. Power in our area is, is unreliable. And we understand that. We see the need for additional reliability and service. And when we moved in, the very day, we were greeted by neighbors who were packing up their cars to stay with their family because it was an extended outage. And we experienced that ourselves frequently and sometimes extended outages, which eventually led us to invest a whole bunch of money in buying a generator to partially generate, to partially power our home during those outages. So we understand the need here. But we're concerned that placing such a large substation, and, and this is key, in such close proximity as well to homes is, is inappropriate. It will significantly reduce our, our property values. There are concerns as we've talked today about public health, particularly to children. While the bulk of the research may say that there, those are insubstantiated, those concerns are still out there and whether they're valid or not, they do impact property values and they cause stress on the neighborhood. And I could tell

you that five years ago when we were house hunting had we turned on to Riffle Ford Road and on to Hallman Court and seen what's there as proposed, that Hallman Court was in the shadow of this substation, we may well have just circled around and gone on to the next house. As our letter provides, there's, there's several steps that we hope you'll consider before approving this conditional use application. You know, we certainly would favor this property being placed to a residential use as, as provided under RE-1 zoning or open or park space as envisioned by the Darnestown Planning Area, but if a substation is to be located here, I mean, first and foremost, we'd like to see the scope of the proposal reduced to something more consistent with the size of a neighborhood house or something approaching the footprint of the Travilah substation. Second, we do appreciate the, what has now become a 25-foot buffer zone and the addition of about 55 trees to that Hallman Court barrier, the, the, with the substation property. We think the additional trees will not only reduce the visibility of the substation, but may have some small impact on, on any sound that's emitted and any EMF concerns stemming from the substation. We also hope that we can obtain as a condition as was mentioned earlier today working with PEPCO and its landscaping architect to designate appropriate points along Hallman Court for appropriate species of trees that we might

use to further even reduce the visibility and any other issues somewhat. The, from our initial letter, some of the plans have changed with respect to the disruption on Riffle Ford Road with the, the transfer of power lines, new power lines off of that strip. And the, there doesn't appear to be, according to the testimony from PEPCO, a likelihood of digging up that street or any significant destruction on that street, which is the only way for us to get really out of our houses effectively. We still like the idea of a turn lane being put in there, but given that change, I'm not sure that that's still as important as it once may have been. So, you know, in sum, I, I think as you're considering this, I hope that you'll take into, look very closely at what's being proposed today because as PEPCO has, it will, it will establish a significant precedent not only for Hallman Court, but for Montgomery County as a whole. This is a new type of substation that apparently hasn't been used before in our County and that PEPCO plans on using in the future. It will be the largest substation in our County. It is 50 percent, at least, larger than other substations in our area and, and most importantly, it's within 100 feet of the property line of residential uses. So that's our concern and we hope that we can get them addressed.

MR. GROSSMAN: All right. Thank you, sir. Cross-examination?

CROSS-EXAMINATION

MR. WALLACE: Just one question. And I apologize, I didn't remember. You've lived there for how long?

MR. SILVERMAN: Five years.

MR. WALLACE: Five years. So you, you are aware of the previously approved plans for a, a church location?

MR. SILVERMAN: I learned more about them during this process, right. But I was generally aware that it had a sign on it for a while that it was going to be a church. Yes.

MR. WALLACE: Okay. And the other, and you suggested that from your point of view, residential uses would be appropriate here?

MR. SILVERMAN: Yes.

MR. WALLACE: And of course, the, we are, as your testimony today, you are aware that the height of a residential house could be as tall as the substation. It could be 50 feet.

MR. SILVERMAN: Could be.

MR. WALLACE: And could be of significant massing given the coverage requirements of the RE-a zone. It could be bigger than your house, in other words.

MR. SILVERMAN: Okay. It could, it could not under, under the zoning be a townhouse, but yes, that, it could be a larger house. Yes.

MR. WALLACE: Okay. And you mentioned that it was your opinion that the, that the Potomac Master Plan recommended the site for acquisition for open space?

MR. SILVERMAN: For, for the Darnestown plan for open space or for parkland. That's included in the Planning Commission's report.

MR. WALLACE: And you believe that it was for this particular site?

MR. SILVERMAN: No. For the, the Darnestown, Darnestown plan as a whole. Not for this particular site.

MR. WALLACE: Okay. So, but you're not aware of any attempts for the, from any acquisition from the site, you don't have any.

MR. SILVERMAN: No, I don't.

MR. WALLACE: Okay. Thank you. No further questions.

MR. GROSSMAN: Do you have any redirect in response to those questions?

MR. SILVERMAN: I could redirect myself. No.

MR. GROSSMAN: All right. Okay. Mr. Pandya.

MR. PANDYA: My name is Pranav Pandya. I reside at 12703 Hallman Court, Darnestown. I have been in this property since last 15 years. I don't want to repeat everything that Cary has said. I, I agree with him wholeheartedly and I have the same concerns. But before I

go there, I just want to take a second to thank you and for apologize for asking certain questions. I'm not familiar with this procedure. I hope this is the first and the last time.

MR. GROSSMAN: Well, I want to tell both of you gentlemen and, in fact, everybody who has participated here, you don't have to thank me. I want to thank you for coming down here and sharing your, you've, you've done, both have done an excellent job actually as counsel for the applicant and their experts. So, a very professional job. And, and I always admire members of the community who come down here and especially ones who have organized their thoughts as well as you gentlemen have. So.

MR. PANDYA: Thank you, sir. But on the same line, we want to thank DCA and PEPCO. Believe it or not, we do thank you for the group presentation and we know more about the project than we did before. Having said that, we still have our doubts, our hesitation about this project. Don't need to repeat that. But it is, it is severely going to impact the residents and the properties, the aesthetical value and the environmental impact and health impact, everything. Believe it or not, we tried to sell the property, our property. We wanted to sell it. It has already started to create an impact. We talked with the realtors and they are saying that you need to disclose about

this substation. And we talked to couple of them and they, as soon as they found out, they walked away from it. This is my personal experience. So, and then, and the realtor also told us that you need to lower the price. You need to lower the price. So we are in, we cannot move out of this house. Once it is built, I don't know what will be the major impact, but this is the impact that we have started to face. It's a reality. The letter we submitted to the County has covered almost everything so I don't want to repeat this. I also, one other thing about PEPCO's correspondence. I know they are busy. They are, they are talk to DCA, but this is a small community, seven homes. It does not take that much to talk to us. Somehow contact us. I know this is not the position or this is not the right place to talk about it, but it is, there should be some decency here. I get personally the feeling that they saw that this is a prime area right at the Darnestown intersection. There are seven homes. No homeowner's association. Let's grab this. That's what they're using against us. Maybe I'm wrong. But that's the, that's, that's what I think. That, there is a Goliath out there and we are just seven small residences there. Now maybe I'm wrong, but that's the impression we are getting that we are helpless sort of. The structure is not suitable for the surrounding community. We went through this. I don't want

to go through this. There was a, in one of the meetings, it was said by PEPCO and then this is, I'm quoting here. That the building's aesthetics and architectural features are intended to tie in to the neighborhood setting with the community in mind. That is not the case. And, again, we have gone through this, all this testimony so I don't want to go through this again, but if that was the case, this should have been designed in a different way. I wish PEPCO had talked to us, kept us in the loop so this option which is right now not feasible with the two or three separate smaller substations. Maybe that could have worked, been worked out. Maybe that, and in that way reduce lot of anxiety from the residences in, in our Hallman Court area. In conclusion, I don't want to repeat again what, what Cary said. I just want to ask the people here, and I don't, I don't expect any answers, that is this a community-friendly and caring business entity that is dealing with the, with the, with the residents? How would they feel, put their, put yourselves in our shoes. Would you like to raise your kids and grandkids next to this monstrous, massive structure, that is an eyesore, that is maybe a health impact, maybe environmental impact? And then that is all your blood and sweat you put in your property that you bought, you bought. Now is it drastically going down in value. It is a lose, lose situation for this community. I

don't know whether this testimony is going to impact this, change any decision here, but all in all I ask is when you go to bed tonight, ask yourself whether this is really a good decision as a human being. That's all I need to say, sir. Thank you.

MR. GROSSMAN: Okay. Thank you. Cross-examination?

MR. WALLACE: No. I have nothing.

MR. GROSSMAN: Okay. I, I take it that completes the opposition case. So let me turn to the exhibits. I take it that you would all wish to move all of these exhibits into evidence. That's Exhibits 1 through 71 and their subparts and any other additional files. Were there any other plans that you had modified that have not yet been marked and introduced?

MR. WALLACE: I think we have everything --

MR. GROSSMAN: Okay.

MR. WALLACE: -- that needs, I'm looking at our civil just in case there's a sheet that he's going to have to be changing.

MR. GROSSMAN: Right.

MR. WALLACE: But I think everything --

MR. GROSSMAN: Okay.

MR. WALLACE: -- has been introduced.

MR. GROSSMAN: All right. So I --

MR. RETTERER: Letters from the Fire Marshal.

MR. WALLACE: The, just a, sorry to interrupt. But the, there will be a letter from the Fire Marshal. Actually I do have it.

MR. GROSSMAN: Right.

MR. WALLACE: I can provide it now or I can --

MR. GROSSMAN: Sure.

MR. WALLACE: Sure. Why not?

MR. GROSSMAN: That's, sure. And I did see the DPS letter is in the, is in the record.

MR. WALLACE: I may have spoken too soon. Oh, there we go. Would you like a copy of that letter?

MR. PANDYA: Yes, please. Thank you.

MR. WALLACE: So this is the approval letter that typically accompanies a Fire Access Plan.

MR. GROSSMAN: All right. This will be Exhibit 72. And it's the fire, letter from Fire Marshal approving plan. All right. And if there's anything else that you have to submit pursuant to our discussions here, assuming it's relevant and not objectionable, it'll be admitted as well. I will admit all of the exhibits, Exhibits 1 through 72 and their subparts are admitted. Okay. As I said at the very beginning, since there were plans that would change and so on, I will keep the record open for, is 15 days sufficient? Anybody?

(Hearing Exhibits Nos. 1-72 and Subparts were received in evidence.)

MR. WALLACE: I am sorry. I'm taking a look at a couple of the exhibits that --

MR. GROSSMAN: Yes.

MR. WALLACE: -- you admitted. I just, I may have wanted to ask a question about what they are.

MR. GROSSMAN: Okay.

MR. WALLACE: That, that the, that the, Mr. Silverman, Mr. and Mr. Pandya handed out.

MR. GROSSMAN: Yes. Okay.

MR. WALLACE: And so I, I was trying to, you were going pretty quick. And I --

MR. GROSSMAN: You want me to, you want me to --

MR. WALLACE: I appreciate everyone is, we're running late.

MR. GROSSMAN: Okay.

MR. WALLACE: But I just, my question is this is, this is the exhibit, Darnestown Civic Association Board Meeting Notes, May 28, 2015.

MR. GROSSMAN: You want to know what the number is on that exhibit?

MR. WALLACE: Well, I guess --

MR. SILVERMAN: Those --

MR. WALLACE: -- are you seeking to admit that into the record?
MR. SILVERMAN: Yeah. Those are my personal notes from the, yeah.
MR. WALLACE: Okay. That's, that's what I wanted to confirm. That these are not the official notes of the DCA.
MR. GROSSMAN: Okay. Let's see. Mr., I have it down as 58. Mr. Silverman's notes.
MR. WALLACE: Okay. So it is clear --
MR. GROSSMAN: From the May 28, '15 DCA meeting.
MR. WALLACE: Great. Thank you. And then I would, I think that the answer, same answer, or same question regarding --
MR. SILVERMAN: Those were actually emailed to us by the president of DCA. It's the official notes.
MR. WALLACE: Okay. So these are the notes from them. Okay.
MR. SILVERMAN: Yeah. Um-hmmm.
MR. WALLACE: I can't tell you that we don't, I think we expressed that, that maybe some of the statements that were attributed to PEPCO people were not necessarily recalled and were not, the people who made the statements are, were not here necessarily. I don't, I just want to state that for the record.

MR. GROSSMAN: Okay.
MR. WALLACE: But otherwise, no objections.
MR. GROSSMAN: I mean it's not, yes. I, I --
MR. WALLACE: I, I just wanted to make sure it was stated.
MR. GROSSMAN: Right. I mean not every exhibit, you know, is, is going to be, is not going to sway a decision one way or the other, but it's, I think it's useful and for whatever weight it's appropriate to have. I understand the, the concerns that were raised. Okay. Now we've got to the point of the question about how long to keep the record open. And as I said, I propose to keep it open until Friday, January 22, 2016, close of business, which is 5 o'clock.
MR. SILVERMAN: Will it be possible for us to get copies of all the revised plans to facilitate our potential for additional comments?
MR. GROSSMAN: Sure. Will electronic copies be sufficient for that purpose?
MR. SILVERMAN: Yeah. Yeah. I think that will be fine.
MR. PANDYA: Yeah. As long as they're readable, yes.
MR. GROSSMAN: All right. So --
MR. WALLACE: To one or both of you?

MR. PANDYA: Both of us.
MR. WALLACE: Okay. And --
MR. SILVERMAN: Do you need our --
MR. GROSSMAN: And I have Mr. Silverman's email address from the email he sent. And I forwarded it on to you so you, you should have that.
MR. SILVERMAN: Right.
MR. WALLACE: And I have it. So I have yours, Mr. Silverman.
MR. GROSSMAN: I don't have Mr. Pandya's email address unless it's on the letter and I don't think it was.
MR. PANDYA: Yeah, I gave it to, it's on the card that I submitted.
MR. GROSSMAN: Oh, it's on the sign up list.
MR. PANDYA: Yeah. On the card that I submitted. My business card.
THE COURT REPORTER: I have it.
MR. GROSSMAN: Okay.
MR. PANDYA: Yeah.
MR. GROSSMAN: So we want to --
MR. WALLACE: And can your --
MR. PANDYA: I can give it to you.
MR. WALLACE: And your systems handle fairly large documents?
MR. PANDYA: Yes.

MR. SILVERMAN: Yeah. I should, I should be able to handle that.
MR. WALLACE: I'll ask you to confirm if you got them.
MR. SILVERMAN: Right. Thank you.
MR. PANDYA: Okay.
MR. WALLACE: Because obviously some of them will be plans and those can take up --
MR. PANDYA: If not, I can give you, just let us know. We can give you another email.
MR. GROSSMAN: Are you finished with it or do you need it back?
THE COURT REPORTER: I don't need it.
MR. GROSSMAN: Okay. Thank you. All right.
And let's see. So anyway, we're, January 22, 2016, close of business, the record will close. So if you have any further comments regarding the new plans or, or the amendments to the plans other than what you've already said here, you can submit them. I'm not holding the record open in general for anybody to file any comment about anything because I think that's what the hearing is for and in fairness, both sides have, should have an opportunity to respond at a hearing to any new commentary. Okay.
I'm also going to ask when you submit, submit to Technical Staff asap, hopefully tomorrow, a copy of all the

new things you've submitted today so that they have an opportunity to comment before the record close date. And also on your cover letter inform them that the record will be closing on January 22, 2016 so ask that any comments they have be made before then. Okay.

MR. WALLACE: And just to clarify. You want me to directly send to you, the both of you, any, the revised plans?

MR. SILVERMAN: The, correct.

MR. PANDYA: Yes.

MR. WALLACE: Okay. Okay.

MR. SILVERMAN: The site, particularly the site plan, the landscape plan are the most important, I think.

MR. WALLACE: Those are the ones in particular you'd like. Okay.

MR. GROSSMAN: Okay. All right. I take it that PEPCO has no objection if I were to approve this conditional use to conditions that would call for measurement of gauss at, you know, the, the EMF field at the property line once your operational?

MR. WALLACE: You can tell me what gauss is and I can say yes.

MR. GROSSMAN: Well, measure into the electro --

MR. WALLACE: I'm going to assume it's something. Yes.

MR. GROSSMAN: Okay. And, and to noise for that matter at the property lines once you're operational.

MR. WALLACE: Yes.

MR. GROSSMAN: I mean, frankly, I mean neighbors can, if they think there's a violation of noise ordinance, they can call for Montgomery County environment people and they will come out and measure noise, but in any event. And we know we had another condition that had talked about as well. Yes. That was actually, that earlier one was the sound test consultant and that they wanted to be able to witness it when it was, when it was measured after it's operational. I think that was, they also wanted notification if a, if the fourth transformer is in use. So that would potentially be a condition.

MR. WALLACE: I assume your, your condition would have it limited in the scope of who's getting the notice? I mean is it just the seven houses. I mean --

MR. GROSSMAN: Well, that's a fair question. We could say the, the DCA and those Hallman Court folks.

MR. WALLACE: Okay. I just wanted to make --

MR. GROSSMAN: Yeah. I haven't really formulated it. I'm just going over --

MR. WALLACE: If you were going to, then I would appreciate, yeah --

MR. GROSSMAN: -- the things that were raised as,

as concerns in which, if conditions were imposed.

MR. WALLACE: Right.

MR. GROSSMAN: I'm not, I'm not going to consider, unless you privately or people from Hallman Court privately talk to PEPCO about it and reach an agreement about putting additional trees should this be approved on private property. Since those people are not here that own that property, I don't really think I can consider that at this juncture. Okay. Is there anything else that we should be discussing now? And hopefully, by tomorrow, I'd also get the --

MR. WALLACE: NAC Standards. I --

MR. GROSSMAN: Yes. Standards and, and the, and the electronic copies.

MR. WALLACE: Yes.

MR. GROSSMAN: Thanks. Okay. Also by January 22, we'll have a transcript of the proceedings. We put them on our website for all our cases. And I thank the Court Reporter for staying late. Appreciate that. All right.

Anything else that we should be discussing before we adjourn? Anybody? Once again, I thank you all for a great presentation.

MR. PANDYA: Thank you. Thank you so much.

MR. SILVERMAN: Thank you.

MR. GROSSMAN: I won't say have a nice weekend

because I, it's not Friday yet. Usually I, I don't hold these hearings on Thursday ordinarily so. Oh, by the way, I, my report and decision is due 30 days after the record closes. I have the power to extend it. I don't usually. I usually get them in within that time period. In fact, the last time I extended one it was because I had a 35-day hearing so I needed a little bit more work on it. But, so, and after that, whichever side, any, any aggrieved party at that point can decide they want to request oral argument before the Board of Appeals and you have a, you have to file that within 10 days after the report and decision is issued. You, everybody who participated in the hearing here, both sides in other words, the two opposition witnesses and, and applicant's counsel will receive notice of the, the decision, the report and decision, and that also will be posted on the day I issue it on our website.

MR. WALLACE: Thank you, Mr. Grossman.

MR. GROSSMAN: Thank you.

(Whereupon, at 5:43 p.m., the hearing was concluded.)

C E R T I F I C A T E

DEPOSITION SERVICES, INC., hereby certifies that the attached pages represent an accurate transcript of the electronic sound recording of the proceedings before the Office of Zoning and Administrative Hearings for Montgomery County in the matter of:

Petition of PEPCO - DARNESTOWN STATION

OZAH No. CU 16-04

By:

Consuella Miles, Transcriber

B

D

F

G

P

Q

R

S

U

V

W

Y