In The Matter Of:

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Docket No. 483

July 24, 2018

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STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Docket No. 483

Application from The United Illuminating Company for a Certificate of Environmental Compatibility and Public Need for the Pequonnock Substation Rebuild Project that entails construction, maintenance, and operation of a 115/13.8 kilovolt gas insulated replacement substation facility located on an approximately 3.7 acre parcel owned by PSEG Power Connecticut, LLC at 1 Kiefer Street, Bridgeport, Connecticut

Continued Hearing held at the Connecticut Siting Council, Ten Franklin Square, New Britain, Connecticut, on Tuesday, July 24, 2018, beginning at 1:02 p.m.

H e l d B e f o r e:

ROBERT STEIN, Chairman

A p p e a r a n c e s:

Council Members:

ROBERT HANNON,
Designee for Commissioner Robert Klee
Department of Energy and
Environmental Protection
LARRY P. LEVESQUE, ESQ.,
Designee for Chair Katie Dykes
Public Utilities Regulatory
Authority

ROBERT SILVESTRI
DANIEL P. LYNCH, JR.
DR. MICHAEL W. KLEMENS
MICHAEL HARDER

Council Staff:

MELANIE BACHMAN, ESQ.
Executive Director and
Staff Attorney

Siting Analysts:

MICHAEL PERRONE
IFEANYI NWANKWO

A p p e a r a n c e s: (Cont'd.)

For the Applicant:

MURTHA CULLINA LLP
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BY: BRUCE McDERMOTT, ESQ.
SAMUEL R. VOLET, ESQ.

THE UNITED ILLUMINATING COMPANY
180 Marsh Hill Road
Orange, Connecticut 06477
BY: NICHOLAS CICALE, ESQ.

THE CHAIRMAN: Good afternoon. I'd like to call to order this hearing of the Connecticut Siting Council today, Tuesday, July 24, 2018, at approximately 1 p.m. My name is Robin Stein. I'm chairman of the Siting Council.

This evidentiary session is a continuation of the public hearing held on June 14, 2018 at the Council Chambers of Bridgeport City Hall in Bridgeport. It is held pursuant to the provisions of Title 16 of the Connecticut General Statutes and of the Uniform Administrative Procedure Act upon an application from UI for a Certificate of Environmental Compatibility and Public Need for the Pequonnock Substation Rebuild Project which entails construction, maintenance and operation of a 115/13.8 kilovolt gas insulated replacement substation facility to be located on an approximately 3.7 acre parcel owned by PSEG Power Connecticut, LLC, at 1 Kiefer Street in Bridgeport. This application was received by the Council on April 26, 2018.

A verbatim transcript will be made of the hearing and deposited with the City Clerk's Office in the Bridgeport City Hall for the convenience of the public.

We'll proceed in accordance with the prepared agenda, copies of which are available over by the door.

I wish to call to your attention those items shown on the hearing program marked Roman numeral ID, Items 1 through 91.

Does the applicant or intervenor have an objection to Items 17, 18, 41, 42, 63, 68, 81 highlighted in the hearing program that the Council has administratively noticed?

MR. McDERMOTT: No objection.

THE CHAIRMAN: Hearing and seeing none, the Council hereby administratively notices these items.

We will begin the hearing with the appearance of the applicant, UI, to swear in their new witness, Beth Quinlan, and verify new exhibits marked as Roman numeral II, Item B-5 and 6 on the hearing program.

I guess we'll start by swearing in of Ms. Quinlan, if you'd please rise.

E L I Z A B E T H Q U I N L A N,

called as a witness, being first duly sworn by Ms. Bachman, was examined and testified on her oath as follows:

MS. BACHMAN: Thank you.

THE CHAIRMAN: Attorney McDermott, would you verify the new exhibits, please?

MR. McDERMOTT: Thank you, Mr. Chairman. Bruce McDermott from Murtha Cullina. I'm joined by Sam Volet, also of Murtha Cullina, and Nick Cicale from UIL Holdings Corporation.

So the company has two new exhibits, as you noted.

D A V I D B R A D T,

R O N A L D R O S S E T T I,

R O B E R T S A Z A N O W I C Z,

R I C H A R D P I N T O,

T O D D B E R M A N,

called as witnesses, being previously duly sworn, were examined and continued to testify on their oaths as follows:

DIRECT EXAMINATION

MR. McDERMOTT: Mr. Pinto, regarding Applicant Exhibit No. 5, which is the company's responses to the Council's second set of interrogatories, dated July 17, 2018. As the project manager, did you oversee or prepare the responses to those interrogatories?

THE WITNESS (Pinto): Yes, I did.
MR. McDERMOTT: And do you have any changes to the responses that were submitted to the Council?
THE WITNESS (Pinto): No, I do not.
MR. McDERMOTT: And do you adopt those interrogatories?
THE WITNESS (Pinto): Yes, I do.
MR. McDERMOTT: And Ms. Quinlan, Applicant's Exhibit 6 has been identified as your resume that was filed with the Council on July 17th as part of the Council's prehearing submission. Are you familiar with that Exhibit No. 6?
THE WITNESS (Quinlan): Yes.
MR. McDERMOTT: And do you have any changes or revisions to it?
THE WITNESS (Quinlan): No, I don't.
MR. McDERMOTT: And do you adopt it here today?
THE WITNESS (Quinlan): Yes, I do.
MR. McDERMOTT: Thank you. With that, Mr. Chairman, I'd move that Applicant's Exhibit 5 and 6 be admitted into evidence.
THE CHAIRMAN: Okay. Does the

intervenor have any objection?

(No response.)

THE CHAIRMAN: Well, I don't see any objection. I'm not sure who it is I'm supposed to be looking for.

MR. McDERMOTT: I will say for your ease that they're not here so --

THE CHAIRMAN: Okay. So the exhibits are admitted.

(Applicant's Exhibit Numbers 5 and 6: Received in evidence - described in index.)

THE CHAIRMAN: Attorney McDermott, do you have any, before we go on to cross-examination, anything based on the assignments we have given from the last session?

MR. McDERMOTT: Yes, Mr. Chairman. Thanks. We can take care of a few of the, as I like to term them, homework assignments that we were given. And Mr. Chairman, as part of those assignments, we thought it necessary to add Ms. Quinlan to the panel to help answer some of the interrogatories, but also, I'm sure, some of the fall-on questions that the Council will have today. Ms. Quinlan is a project scientist at Black & Veatch with 40 years of experience

specializing in coastal flooding, storm surge and wave run-up, sea level rise, and environmental permitting, so we think she'll be helpful in answering some of the questions that the Council has about some of the elevation issues or concerns with the substation.

I'll also mention that her recent work for the company included the post Sandy and Irene evaluation of flooding potential of the coastal substations that the company undertook using the NOAA storm surge model to determine the maximum water levels under various hurricane scenarios, as well as looking at the potential for wave activity to increase the flood depth. So Ms. Quinlan is here to help, like I said, address some of the flooding questions, or the potential flooding questions that the Council had.

MR. McDERMOTT: So Ms. Quinlan, just as background, did you participate in the company's flood mitigation analysis that took place following Storm Sandy and Irene; and if so, can you describe for the Council what you did in connection with that analysis?

THE WITNESS (Quinlan): Yes. Good afternoon, first of all. I started work with UI

after Sandy -- or after Irene. Sorry. That was first. After Irene. There was concern that Irene would hit Connecticut as a tropical storm and not a hurricane and caused significant flooding. There was a concern about, well, what happens if we get a category 2 hurricane or worse, what could potentially happen. So I started looking at various scenarios of hurricanes and what kind of flood elevations we would get from that.

Then, the second year, the next year, we had Sandy, which, again, hit Connecticut. It was not a hurricane at that time, but caused a significant amount of flooding. So we looked at that, looked at what kind of storm surge we got from that, how much worse it could have been if the storm surge had been coincident with high tide, which in Connecticut it was not. So again, looking at that and looking at scenarios for planning what should we be planning for, what is the design condition that we should be planning for.

Then, the following year, FEMA came up with new flood maps for the area for all of coastal Connecticut. And in some of the substation locations, the flood elevations rose by

2 to 4 feet at the Pequonnock station, the flood elevation, the 100-year elevation, or 1 percent annual chance flood elevation rose by 4 feet. So we were looking at that and what do the new maps mean and how did they come up with those elevations and what was considered and doing a lot of research into that.

Subsequent to that, we also did an investigation of sea level rise. There are a lot of different projections of sea level rise. So we were looking at different scenarios that could be used, looking from the basic just what would sea level rise be based on what's happened in the past, to looking at different kinds of scenarios where you're incorporating climate change.

So we looked at a lot of different cases and, you know, thinking about is there some other situation or scenario that should be the design condition, but really what it came down to is there's no guidance for that. There's no guidance that says you need to design for a certain type of a category 2 hurricane or whatever. So it really comes back to the FEMA maps. I mean, that is the sort of the official flood elevation. So the FEMA maps, plus some

extra, has been adopted, but that's been my role so far.

MR. McDERMOTT: Thank you.

THE CHAIRMAN: We just have a follow-up.

Mr. Lynch.

CROSS-EXAMINATION

MR. LYNCH: Just to follow up to the flooding part of it, what part, if any, does wind play, excessive winds play in all this?

THE WITNESS (Quinlan): Wind is included indirectly. The first factor that goes into looking at the flood maps is to look at the historical tide gauge data. So when you get winds and you get storm surge, that raises up the water level. So to get the stillwater elevation for the 100-year or the 500-year, they look at the gauge data and extrapolate it out to 100-year. So if you are getting those surge events, they are part of calculating --

MR. LYNCH: So you say it's already incorporated?

THE WITNESS (Quinlan): Yes.

MR. LYNCH: Thank you.

Thank you, Mr. Chairman.

THE CHAIRMAN: Apparently you sparked a whole host of interest by the Council. Mr. Hannon and then Dr. Klemens.

MR. HANNON: Thank you. I just want to try and get it on the record. The 100-year flood elevation is 14 feet?

THE WITNESS (Quinlan): Yes, at the Pequonnock site, yes.

MR. HANNON: 500-year flood elevation is 15.3 feet?

THE WITNESS (Quinlan): We estimate it at 15.9 feet.

MR. HANNON: Okay. Thank you. That's all I have at this time.

THE CHAIRMAN: Dr. Klemens.

DR. KLEMENS: These elevations, do they also include the proximity, the problem you also have from rivery flooding simultaneously? You have a view of several different rivers, creeks that are coming in there. In a high storm event, they're going to be discharging water. Do these calculations take into account that water coming off the land at the same time incoming tide and storm surge. How do you account for that?

THE WITNESS (Quinlan): Essentially,

during the 100-year flood or during the 500-year flood, the elevation is such that the surge from Long Island Sound would reach at least to the Connecticut turnpike, and the effect really is that Long Island Sound is pushing back the river water upstream. So that's how it's taken into account. This area is no longer -- there's really no longer any floodway of the Pequonnock River during this storm. The floodway is all to the north of -- or upstream of the Connecticut turnpike.

DR. KLEMENS: Interesting. So you're saying the fact that it's near the Pequonnock River there, it's actually being held back considerably upstream --

THE WITNESS (Quinlan): Yes.

DR. KLEMENS: -- to this flooding upstream, but it's not affecting these calculations. And then when the water goes out when the tide recedes, obviously it's going to be lower water, not higher. Correct?

THE WITNESS (Quinlan): Yes.

DR. KLEMENS: Very interesting. Thank you.

MR. McDERMOTT: Ms. Quinlan, actually

to follow up on a question that Dr. Klemens asked at the June hearing, he asked also what the effect would be of the enclosed area, and I think by that he meant the PSEG facility because he identified, Dr. Klemens, a large structure within that area. And the question was, what would the effect of that enclosed area, that island, as the water moves around it, would you artificially raise the water levels around your structure? Do you have a response to Dr. Klemens' June question?

THE WITNESS (Quinlan): Yes. I think really that given the site that's at the waterfront location, flooding to adjacent properties really would not occur because of this project, and that's because the water level really is controlled by Long Island Sound and ultimately the Atlantic Ocean. So this site being there is not removing flood storage capacity, which is a concern you would have if it was more upstream and rivery.

DR. KLEMENS: You're talking about the PSEG site or your site?

THE WITNESS (Quinlan): I'm talking really specifically about the Pequonnock site, but I think that same would for the PSEG site.

DR. KLEMENS: I think the question was basically you have this enclosed structure just below this one with a 20 foot concrete wall. Would it in any way exacerbate flooding of your site, or is it such a de minimis amount of water displaced that it makes no difference? That's the question.

THE WITNESS (Quinlan): I think it makes no difference because, again, its flooding from Long Island Sound that is controlled by a much bigger area than just that one little site, yes.

DR. KLEMENS: Thank you.

MR. McDERMOTT: Mr. Bradt, in Ms. Quinlan's response to my first question, she noted that there was no kind of existing guidance, I believe her term was, to help determine the appropriate level for the substation. And one of the Council member's questions in the June hearing was about the efforts that the company made to identify a guidance. Can you follow up and elaborate on those efforts, please?

THE WITNESS (Bradt): Yes. So after we established the needs that we had along the coast that were the substation flood risk that we had

between Bridgeport and New Haven, we proceeded to talk about what design standard are we going to use in our solution so we know what the issue is, what criteria are we going to use. And historically, the design standard used by the industry was essentially the 100 plus 1, 100 year plus 1. And in our research and investigation that's what we found that virtually all utilities that we reached out to and polled on this issue was the 100 year level plus 1.

We wanted to make sure that we -- that we understood this was going to be a substantial undertaking. We wanted to make sure that whatever standard we applied was reasonably conservative but still defendable. We had cost recovery consideration. So we polled a lot of utilities, Northeast Utilities specifically. We actually traveled to some different utilities in the northeast that were impacted by Sandy. We spoke with our New England peers, New England states. We actually worked with the State of Connecticut, the Deep. We worked with DEEP, had multiple meetings with DEEP. And ultimately we were able to -- our proposal was accepted.

What our proposal was after all this

research is that we have a design standard that was recently developed, this ASCE 24 design standard, that said for these class -- an electrical substation is actually -- there's a footnote in that standard that actually says it should be deemed, this, I'll call it, the highest criticality facility, which is a design class 4 facility, and that is because this particular substation supplies emergency facilities, and that's what makes it a design class 4 facility in our interpretation. So we said, okay, we have this. This makes it the highest flood class, so it deserves that highest level of protection. And then, of course, we got into the issue of sea level rise. That standard does not take into account sea level rise.

So we sought guidance on that. We actually engaged Ms. Quinlan. And ultimately we found that their predictions were -- there was a lot of variation in the predictions for sea level rise. And we had concern, since we were already deviating from a standard that had been historically 100 plus 1, how much higher could we go where we would be accepted, our design standard would be accepted as reasonable and not too

conservative. So we found this FEMA document that said, well, recognizing that some predictions are from inches to several feet, we said, well, FEMA says you should at least use -- you should at least provide 1 foot if you don't have a site specific sea level rise prediction.

So we use that language as our defense to add at least another foot to this ASCE standard. So we came to this 100 plus 3 standard, which is a significant deviation from the historic 100 plus 1. Again, we worked with our New England stakeholders. Of course, we need their buy-in, we need their acceptance. We need the state's acceptance when it comes to the cost recovery issue. And ultimately it was accepted as being prudent. And we never got an official document. From New England actually there's a later process. There's a transmission cost allocation process that comes in down the road. But ultimately in preparation for that we wanted to make sure that we were transparent with our selection of a design criteria. And ultimately we got -- we essentially gained consensus from all the stakeholders.

So with 100 plus 3 being a deviation, being substantially more conservative than what we

had done in the past, we also found that in our research that we're on the leading edge of conservatism for flood design for electric utilities. We did not find any electric utilities that were designing above 100 plus 3. It doesn't mean they're not out there. It's just that's what our research found. So we landed on that, and, of course, that included the 1 foot of sea level rise.

So that all said, if ordered, we are willing to go up an additional 1 or 2 feet beyond our proposal. So I just wanted to make that point. We don't have an objection to going up an additional 1 or 2 foot on the site.

THE CHAIRMAN: There's several more questions.

THE WITNESS (Bradt): Sure.

THE CHAIRMAN: Why, if you're being conservative -- and sometimes I'm not even sure what that means anymore in this day and age -- but why aren't you using the 500? Why are we using the 100? Am I correct then if you're talking about 100 plus 3 -- I saw the numbers. You mentioned 500 plus 1 plus, is that --

THE WITNESS (Bradt): That's a good

opportunity for clarification. The ASCE standard that I referenced actually says you should use the greater of the 100 plus. For this design class 4 facility, it uses both the 500 year and 100 year flood elevation. And it says that you should use the one that is most limiting. So for this design class 4 facility, it's the 100 year plus 2 feet or the 500 year plus 0, the 500 year flood level.

So in our case, the 100 year plus 2 at Pequonnock is approximately equal to the 500 year flood level. So for simplicity, we've been just referencing the 100 year reference point, 100 year plus 2, which is approximately equal to the 500 year plus 0. So essentially, we are meeting that 500 year elevation level, and we're still adding a 1 foot of sea level rise to that. That is equivalent to the 100 year plus 3.

Is that clear?

THE CHAIRMAN: Yes.

MR. McDERMOTT: Mr. Bradt, I don't know if you mentioned it, but "ASCE"?

THE WITNESS (Bradt): American Society of Civil Engineers, I believe.

THE CHAIRMAN: I'll start with Mr. Lynch.

(Whereupon, Mr. Harder entered the hearing room.)

MR. LYNCH: Mine is more of a curiosity question. In your discussion with other utilities, I guess, throughout New England, did you ever run across -- did they ever tell you about a situation that they had where 100 plus 1 was not sufficient?

THE WITNESS (Bradt): So I would say I don't remember any specific conversations on whether or not 100 plus 1 was not sufficient. But we went in having concerns about it, obviously, with the FEMA maps changing substantially. So, no specific conversations I can remember about anyone saying that it was not sufficient.

MR. LYNCH: Ms. Quinlan, do you know of anything that wasn't sufficient throughout the US or from FEMA?

THE WITNESS (Quinlan): I'm not --

MR. LYNCH: I'm thinking mainly of Katrina and down in that area.

THE WITNESS (Quinlan): I'm not aware. I haven't worked in that area as much, so I'm not aware of anything.

MR. LYNCH: Thank you.

Thank you, Mr. Chairman.

THE CHAIRMAN: Mr. Hannon.

MR. HANNON: Thank you, Mr. Chairman.

I'm looking at this issue more from a numbers perspective. And we got on the record earlier that the 100-year flood elevation is 14, and I believe you said that the 500-year is 15.9. If I'm not mistaken, I believe that Senate Bill 7 that was passed this year talks about anticipating a 2 foot rise in water levels between now and 2060. So using the numbers that we have, if we happen to have a 500-year flood, which I think is probably more like a 100-year flood now, because the 100-year flood, we seem to get three or four a year, that puts the elevation at the site at 17.9 feet. And 14 plus 3 is 17, so you could theoretically be a foot below flood level just based on numbers whether what you presented or what the Legislature was telling people to calculate when they're looking at flooding. So I'm just kind of curious how you reconcile that.

THE WITNESS (Bradt): Do you want to take that?

THE WITNESS (Quinlan): I think that's more in your area.

THE WITNESS (Bradt): So, let me just make sure I understand what you're getting at. Is it that you believe that more than -- we've only accounted for 1 foot of sea level rise. Is your question around why did we not account for 2 foot of sea level rise?

MR. HANNON: No. I'm saying based on Senate Bill 7 this year where the Legislature said state agencies are supposed to be looking at 24 inches of sea rise between now and 2060.

THE WITNESS (Bradt): Okay.

MR. HANNON: I'm saying that if you use the 500 year flood elevation, which is 15.9, should you have that situation, and add the 2 feet of increased water height, you're now at 17.9 feet. What's being proposed at this site is 17 foot elevation for the equipment and the building.

THE WITNESS (Bradt): Right.

MR. HANNON: So I'm just asking how you reconcile that difference because you may be building a plant that should we get a 500 year flood, which I think is more common that one would think, and you have that 2 foot rise, you're already building into the site maybe a foot below water level. So how does that tie in with the

design if this is such a critical facility?

THE WITNESS (Bradt): So does anyone have any familiarity with that bill?

MR. McDERMOTT: I think you can answer the question without regard to the bill.

THE WITNESS (Bradt): Okay. So I'm still interpreting this as is that we're essentially 9 inches or point .9 feet below. So I think from your math, 17.9 feet is a design standard that could have been used. We're currently, our proposal is at 17 feet. So we are .9 feet below where we might be according to this bill.

So, I previously explained how we got to where we are and that we are also willing to go higher, but this is over the -- this discussion that I had has really occurred over the period of the last two to three years.

MR. HANNON: Understood.

THE WITNESS (Bradt): So there's a lot of history behind it, but this is newer information from what I understand this senate bill.

MR. HANNON: The bill was just passed, what, in May, like May?

MR. McDERMOTT: Mr. Hannon, and I have found the right person to address the bill. I'm sorry I failed to look behind me.

THE WITNESS (Berman): Well, although Dave captured it perfectly in his last phrase, one of the reasons for a little bit of a perceived disconnect is the timing. Right? So the information was developed over 2016 and 2017. The CIRCA study, Dave O'Donnell study, wasn't even published until 2018. Right? So it's sort of incorporating the newest and latest information on a perpetually, you know, on a moving target, and I think Dave captured it. That's sort of how the original design elevation and how they connect to Public Act 18-82. That's the reason why there may be a gap.

MR. HANNON: But I think the key point that was raised is that there appears to be an amenable solution on this in that if we need to go up perhaps one more foot or something like that. I mean, again, this is all sort of pie in the sky numbers, I realize that, because nobody can predict what is -- I've seen other numbers. They're talking 34 inches by 2060. So we have something that the Legislature has sort of

dictated.

And just looking at what the circumstances are on the site, I just want to make sure that what's being proposed, we're not going to have an issue in 20 years saying, hey, we've got a foot of water outside, it's salt water, it's creating all kinds of problems with the equipment. That's kind of where I'm coming from. So just trying to make sure that with the resiliency that we're trying to build into the state system that we do that.

THE WITNESS (Rossetti): So as Mr. Bradt alluded to, the company is willing to, as you mentioned, go up an extra foot or two, if directed to do so.

MR. HANNON: Thank you very much. I appreciate that.

THE CHAIRMAN: I mean, I think -- and I don't know the details of this senate bill which is passed by the Legislature and signed by the Governor -- but I think if that's the policy for state facilities, as a state regulatory agency I think we would be derelict if we didn't require the same thing. And I'm gathering that obviously it would be somewhat more costly, but it's not

beyond the realm of possibility for UI to meet that. So I just want to make sure that's on the record.

Mr. Silvestri.

MR. SILVESTRI: Thank you, Mr. Chairman.

Mr. Quinlan, from both Irene and Sandy, I know flooding occurred in areas of Atlantic Street and Russell, Main Street, Whiting Street area, southern areas of Broad Street, and a number of buildings, commercial and otherwise, and areas were flooded out during those occasions.

Do you know if these were the result of flooding from Long Island Sound or flooding from the City of Bridgeport storm sewer system?

THE WITNESS (Quinlan): My understanding is that it was -- I'll put it this way: The tide gauge measurements, which are out in Bridgeport Harbor, showed elevations high enough to flood those areas. With Irene, it was unfortunate that the peak of the storm surge occurred coincident with high tide. With Sandy it was not, so Sandy could have been worse. There could have been maybe a couple more feet in that area.

MR. SILVESTRI: So this would be from water coming into the storm sewer system?

THE WITNESS (Quinlan): I'm sorry. I didn't understand that.

MR. SILVESTRI: The flooding that occurred for those areas, that would be from water that's coming in through the outfalls of the storm sewer system?

THE WITNESS (Quinlan): My understanding was that it was flooding from the Sound.

MR. SILVESTRI: So as a follow-up, could such flooding affect the Kiefer Street location at some point in time in the future from a similar or worse storm?

THE WITNESS (Quinlan): I'm not really familiar with the Kiefer -- that's the new site. Sorry. Sorry. Well, as we've talked about, the flood elevation now, the FEMA maps have the flood elevation at 14 feet. The flooding we saw previously from those other storms was well below 14 feet. And then the design is 17 feet, and that's NAVD88. So I don't think, you know, if we had those similar storms at this new design elevation, we would not have flooding of the

building, equipment, anything like that.

MR. SILVESTRI: What I'm trying to get at is we're thinking in previous questions and answers of water coming in from Pequonnock or from the bend where you have Long Island Sound. What I'm looking at is water coming in the opposite direction from the roads behind it, if that's a possibility.

THE WITNESS (Quinlan): Through the -- I'm sorry, I'm just not visualizing this. You're talking about just water coming down the streets, things like that?

MR. SILVESTRI: Yes.

THE WITNESS (Quinlan): I would say at that point, the flood that we're talking about, the water level was already above the streets.

MR. SILVESTRI: Let me try to simplify it more. In your opinion, is the current grade for streets like Main, Broad Whiting, Atlantic, are they at 14 feet or thereabouts? Do you know the elevation at all?

THE WITNESS (Quinlan): I do not know the exact elevation, but if you look at the FEMA flood maps, that whole area appears to be submerged during the 1 percent annual chance

flood.

MR. SILVESTRI: Again, what I was trying to get at, if you're protecting one side, if you will, but you get a rise in water that's coming from inland area, could that water eventually affect where you're going to build the substation?

THE WITNESS (Quinlan): I think that that whole area around the site that we're talking about is during this flood that we're talking about would be in Long Island Sound, essentially, or under the influence of Long Island Sound because there's also waves that are included in the flood. And that goes quite aways inland so --

THE WITNESS (Rossetti): Mr. Silvestri, we have a witness that might be able to help answer that question.

THE WITNESS (Sazanowicz): Hi. We did do some preliminary investigation of the areas around Main Street. And there are, you know, based on rough contours that are available in the Bridgeport GIS, those streets range anywhere from 8 to 12 feet in elevation. So just to confirm her suggestion that that is part of the 100 year flood zone, and we do expect that that area would be

under water.

MR. SILVESTRI: Great. Thank you.

MR. McDERMOTT: Mr. Chairman, if I may? It took Mr. Volet and me a few minutes to catch up on Mr. Hannon's questions on Senate Bill 7, which I now realize is Public Act 18-82. And perhaps I'll save this for the brief, but I would like just to mention that in the DEEP letter to the Council of June 6, 2018, DEEP at least made a determination that the proposed substation design is consistent with and, in fact, exceeds the design requirements of Section 9 of Public Act 18-82, which I believe is what Mr. Hannon was referring to. But rather than engage in a back and forth with, Mr. Hannon, we'll save that for the brief. And I think we know what he was driving at, and we'll address it, but I wanted to note that for the record.

MR. LYNCH: Mr. McDermott, are you going to make that an exhibit?

MR. McDERMOTT: This is the letter that the DEEP sent the Council in response to the application request.

THE CHAIRMAN: Dr. Klemens.

DR. KLEMENS: Now I'm really confused.

Because hearing Mr. Hannon's discussion, you're about a foot below what is required. And now you're saying you have a letter from DEEP saying it complies with that standard?

MR. McDERMOTT: So again, I was trying to avoid this, but I'm happy to have the discussion. So the Council received comments from DEEP on the application. So it is part of the record. And if I may, "Though the recently enacted Public Act 18-82, An Act Concerning Climate Change, Planning and Resiliency, is applicable to the facilities, hazard mitigation plans and evacuation plans of municipalities, we note that the proposed substation design, which elevates all substation components 3 feet above the base flood elevation of 14 feet, is consistent with, and in fact exceeds, the design requirements of Section 9 of Public Act 18-82," which I believe is what Mr. Hannon was referring to.

So I perhaps erred in bringing this up, but I just wanted to note that it was in the record. And as I said, I was going to try to address some what I feel you're suggesting maybe some inconsistencies in the brief but --

DR. KLEMENS: Well, actually what my

question was, assuming that following Mr. Hannon's extra foot, which made sense to me, I know we're talking about 2060. And as I understand it, we're almost at 2020. So we have something that's looking to 2060, which is 30 years of a substation with a design life of half a century. Correct? So I'd like to know what's happening in those additional 20 years from 2060 to 2080. What are the predictions? Is sea level rise supposed to continue? Is it tapering off? Because where I'm going with, being very conservative, is that if you're willing to go 2 feet, maybe there's another foot there for the precautionary principle for the next two decades beyond 2060 with this station will be operational. So maybe you can enlighten me as to what's happening after -- I mean, as we all know, this is all very hypothetical, but I would like you to talk about the precautionary principle and what would be achieved as it relates to that next 20 years.

MR. McDERMOTT: Okay. And since we're not talking about the Public Act 18-82, I'll turn it back to the witness. Ms. Quinlan can answer that, I believe.

THE WITNESS (Quinlan): Yes. I have

looked at the work done by UConn in the most recent study that they published looking at sea level rise, specifically for Connecticut. And if you look up to 2070, I believe is what we're talking about, 2070, so 50 years, sea level rise is predicted to be just over 2 feet. There are different scenarios, and what I'm looking at there is not the highest one and not the lowest one, but the middle two scenarios that sort of come together. And they just so happen to be almost identical at 2070, and it is just a little over 2 feet is what's predicted.

DR. KLEMENS: What is the worst scenario because I'm a pessimist? What is the worst scenario going to give us?

THE WITNESS (Quinlan): The worst scenario, I don't remember the number right offhand. All of the scenarios that are used, typically different groups use, the worst scenarios assume that all of the glaciers on earth melt, so everything is gone. That's the basis of that worst case scenario. That's the one where people talk, you know, 7 feet in 2100 or something. I think most groups, at least most of the groups that I have been working with, and most

other groups that are looking at incorporating sea level rise are kind of looking at some intermediary. And they still include the effects of climate change. It's not strictly based on what's happened in the past will just continue on. It's looking at increases in greenhouse gas emissions and then possibly tapering off, different scenarios, different models. But the UConn study says that by 2070 we're expecting a little bit over 2 feet of sea level rise.

DR. KLEMENS: A little over 2 feet?

THE WITNESS (Quinlan): A little over 2 feet. I think it's 2.2.

DR. KLEMENS: So as a follow-up to that, what is the actual cost differential? I'm making people that are pessimistic or conservative happy. What is the -- oh, it's in there. That's the cost differential? No, it's not. That's 100 year. We're talking 100 year plus 6 feet now; are we not? We're doing a 100 plus 4 now. Right?

THE WITNESS (Quinlan): We're doing 100 plus 3 now.

DR. KLEMENS: Okay. It's in there. I see it's in the interrogatory.

MR. McDERMOTT: Exactly. And you also

asked us 100 year plus, if you go up an additional 1 and 2 feet, and those are those numbers.

DR. KLEMENS: Thank you, Mr. Chairman.

MR. McDERMOTT: For the record, Ms. Quinlan, if I could, if the company were to go to 2 feet, how does that compare to the elevation of the Pequonnock Substation to the PSEG generating facility?

THE WITNESS (Quinlan): If we were at base foot elevation plus 4, is that what you're asking?

MR. McDERMOTT: Yes.

THE WITNESS (Quinlan): Okay. Sorry. That would put us at 18 feet at NAVD88, and the PSEG is 18.5 NAVD88.

MR. McDERMOTT: Thank you.

Mr. Chairman, I had some more kind of homework assignments that are not necessarily related to the elevation. And I wonder, rather than stopping the momentum of this discussion, I'll just save those questions for redirect, and we can deal with things like SF6 and bird issues and some other unanswered questions at the end rather than taking away from the pretty, I think, enlightening discussion we're having here.

THE CHAIRMAN: Okay. We can do that. What we'll do then is just go through starting with staff. Are there any additional questions?

MR. PERRONE: Thank you, Mr. Chairman.

Mr. Bradt, earlier you mentioned how the proposed substation would supply emergency facilities. Specifically, what type of facilities?

THE WITNESS (Bradt): We considered firehouses, police stations, hospitals, all those emergency facilities.

MR. PERRONE: And back to the Public Act 18-82, I understand we have the DEEP comments that says the project would comply, and at the last hearing UI testified that they agree with that. Could you tell us specifically how it complies; in other words, would compliance rely on the UConn's marine scientist division forecast?

THE WITNESS (Bradt): I'm not familiar with that.

THE WITNESS (Berman): So one of the tricks whenever we're comparing compliance to the UConn standard, there has to be a temporal component. Right? Because the correspondence from UConn could indicate for the next 40 years

it's going to be, you know, it complies with their model, but at some point in the future, you know, at 80 or 100 years out, it might trip out. So whenever we're talking about compliance with the Public Act 18-82, we have to put a time stamp on it to understand what compliance with that standard means. That's all.

MR. PERRONE: And UConn forecast data that's associated with that, is the data that you relied upon is it draft or final?

THE WITNESS (Berman): To the best of my knowledge, that data is still draft.

MR. PERRONE: And just a quick --

THE WITNESS (Berman): And let me clarify that.

MR. PERRONE: Sure.

THE WITNESS (Berman): To the best of my knowledge, the report from CIRCA it's still in draft. It has not been finalized yet.

MR. PERRONE: And that approximately 2 feet of sea level rise by 2070, did that come from that source as well?

THE WITNESS (Quinlan): That came from that source, yes, the UConn report.

MR. PERRONE: And that's draft data?

THE WITNESS (Quinlan): Yes.
MR. PERRONE: I understand that the projected service life of the substation is 40 years. What does UI think would be an appropriate end point, if you will, to use for sea level rise data?
THE WITNESS (Bradt): So we've been floating the 50 year typical substation life, so that's generally what we use.
MR. PERRONE: So if we round to say 2020, you're close to 2070?
THE WITNESS (Bradt): 2070.
MR. PERRONE: I'm going to turn to the ISO New England presentation. It's in the second set of interrogatories under response to question 34. On page 7 of the ISO presentation, it mentions that the International Building Code refers to the ASCE 24. My question is, how does the Connecticut State Building Code play into this? Does that refer to the IBC, or is it silent on flood design?
THE WITNESS (Rossetti): It is related. The Connecticut codes are related to that ASCE 24 standard -- IBC standard.
MR. PERRONE: So, as proposed, would

the proposed project comply with the state building code?

THE WITNESS (Rossetti): Yes, it would.

MR. PERRONE: And we'll turn to page 8 of the ISO presentation. Would the proposed project comply with ISO's recommendations with regard to flood design?

THE WITNESS (Bradt): Yes.

MR. PERRONE: And also towards the bottom of that page, the discussions about the control house floor and bottom of transformer, so when we say 17 feet for top of concrete, just to be absolutely clear, we're looking at the tops of any foundations of freestanding structures and the floors of any buildings?

THE WITNESS (Bradt): Yes.

MR. PERRONE: So it's fair to say that the bottoms of any equipment, as proposed, would be at about 17 feet?

THE WITNESS (Bradt): Correct.

THE CHAIRMAN: Mr. Hannon.

We're continuing to play musical chairs without the music. If one of you wants to sit over there.

MR. McDERMOTT: I will exile myself to

the island.

MR. HANNON: My question ties into this subject matter, because I think one of the issues I raised at the initial meeting is that some of the diagrams that are depicted in the plans actually only show a foot, but there are others where it's 3 feet of concrete. So I had a question as to is there consistency on those. Because if you're talking about a 14 foot elevation on the ground and then only 1 foot of concrete, you're looking at 15 feet. So I just want to, so if you can, when you answer, tie in with the diagrams that are also in the plans. Thank you.

THE WITNESS (Sazanowicz): So I can clarify both those questions actually. When we talk about design elevation of the substation, we're generally talking about the finished floor elevation of the enclosures, the GIS enclosure and the power distribution center enclosure. So the intent of the top of the concrete elevations, for example, for the GIS enclosure, will be essentially the same because the finished floor is the top of the concrete elevation.

For the power distribution center,

which I believe is the question going back to the last hearing that you had, on that particular sketch that you were looking at, we unfortunately were a little bit confusing with what we showed. The base of that, since that is a prefabricated building, it's a prefabricated metal building, or anticipated to be so, the base of that is actually steel channel. And what was shown on that drawing was actually the anticipated 1 foot width steel channel that would be a part of that prefabricated enclosure.

Now, that would actually then be sitting on top of a concrete foundation. So in that case, for example, the top of the concrete of that elevation would be potentially around 2 feet above grade. The steel channel would be an additional 1 foot above that. And the finish floor of that enclosure would then be at the plus 3 feet, in that area. Of course, this can vary as the grade elevation of the stone around the equipment may not be exactly at that same elevation in all locations.

When we design to that proposed flood elevation, we are looking at making sure that all of our equipment is protected. Any potential

piece of equipment, so there's a control cabinet on the switch or on a transformer, it needs to be elevated above that limit. So we talk about it in terms of having one elevation, and that is the proposed site elevation, and that means that we are making sure all of our equipment and our enclosures are above that margin, whatever we determine it to be.

THE CHAIRMAN: Mr. Silvestri has a follow-up.

MR. SILVESTRI: I need to visualize this better. Let's assume that the floor in front of us is Kiefer Street right now. You need to raise that up to whatever you're proposing for your level, which would be 100-foot flood plus 3. How would you do that?

THE WITNESS (Sazanowicz): So if we were inside the GIS enclosure, I believe is what you're asking?

MR. SILVESTRI: No. Looking at the floor, this is the Kiefer Street lot right here.

THE WITNESS (Sazanowicz): Okay.

MR. SILVESTRI: What would be the first step to try to raise that up?

THE WITNESS (Sazanowicz): So the first

thing that we would look at is can we add fill and raise the grade, the base grade of the site. So the design elevation of the station, when we're talking about that, that is the floor elevation of the enclosures or essentially the lower limit of the equipment elevations, any equipment that's outside, like the transformer, the control cabinets on the transformer.

MR. SILVESTRI: That's where I've got to stop you there. So you're not necessarily going to raise the floor up to 100 plus 3?

THE WITNESS (Sazanowicz): Correct. Outside the stone, for example, will not be at 100 plus 3.

MR. SILVESTRI: Okay. So it could be lower?

THE WITNESS (Sazanowicz): Yes.

MR. SILVESTRI: But what you're saying is that the tops of your foundations would be at 100 plus 3?

THE WITNESS (Sazanowicz): For the enclosures. For the GIS enclosure, that's correct. For the power distribution center enclosure, the top of concrete would likely be somewhat below that because then there's a steel

channel that sits on top of that which is between the floor of the enclosure and the concrete.

MR. SILVESTRI: So if I understand correctly, there would be a possibility that the area could still get flooded, but your equipment would be high enough on the tops of the foundations that it wouldn't --

THE WITNESS (Sazanowicz): That it wouldn't be harmed, correct.

MR. SILVESTRI: So if I compare it to a beach front property, you're kind of putting it on stilts?

THE WITNESS (Sazanowicz): In a way, yes.

MR. SILVESTRI: Okay. Now I have it. Thank you.

MR. PERRONE: And before I move on, I know we have a lot of clarification on the building elevations, but this would also include freestanding structures like transformer pads?

THE WITNESS (Sazanowicz): (Nodding head in the affirmative.)

MR. McDERMOTT: I think the record should reflect a head nod there.

THE WITNESS (Sazanowicz): Sorry. I

apologize. For the transformer specifically we would ensure that the sensitive locations on that transformer, such as the control cabinet, would be elevated. So, in other words, the base of the transformer, the very bottom of it, that could be submerged, but we don't believe that would cause undue harm to that piece of equipment.

THE WITNESS (Bradt): Can we just talk for one second?

(Off the record discussion.)

MR. McDERMOTT: I feel like the umpire that goes over to push the pitcher and the catcher along.

THE WITNESS (Bradt): And I'll just let you know that this subject of confusion is, in the ISO presentation there's discussion about existing NU facilities. So this clarification that we just talked about was this is a new facility, so the base of the transformer will be dry at 100 plus 3.

MR. PERRONE: Great.

THE WITNESS (Bradt): Okay. There is a different discussion for existing facilities so --

MR. PERRONE: As far as the transmission interconnections, I understand we have some overhead connections and underground

connections. Just looking at the FEMA map, is it fair to say that all of the transmission interconnections would be in the 100-year flood zone?

THE WITNESS (Pinto): That is correct.

MR. PERRONE: Is flooding a concern for the overhead structures, or do you have to design anything differently for that?

THE WITNESS (Pinto): Those structures are roughly 80 to 95 feet tall. The foundations, you know, it's okay for them to sit in water.

MR. PERRONE: What about the underground lines, are there any flooding concerns for the underground interconnections?

THE WITNESS (Pinto): No. The manholes typically retain water, so that would be the same scenario here.

MR. PERRONE: And lastly, back to the substation itself, I understand buildings and structures are all elevated. Do you have any concerns about your access drives being flooded or you can't get trucks to it during a storm?

THE WITNESS (Pinto): We had trucks and vehicles during Sandy and Irene at our facilities. We managed to get through the water to get there.

MR. PERRONE: So you have trucks that could make it across the access, even if the access roads were flooded?

THE WITNESS (Pinto): If UI doesn't, we have National Guard and everybody assisting us to get us there.

MR. PERRONE: Okay. I understand the draft circuit data of 2 feet, but I do need to ask about a couple of other sea level rise models for the record. In the FEMA document, which is included in the second set of interrogatories, there is on page 8 there is a sea level rise projection for The Battery in New York. Are you familiar?

THE WITNESS (Quinlan): I have not seen that paper.

MR. McDERMOTT: Mr. Perrone, maybe you can just give her a second.

MR. PERRONE: Absolutely.

THE WITNESS (Quinlan): Okay.

MR. PERRONE: I understand it's for New York, but would that be a reasonable approximation for this area of Connecticut?

THE WITNESS (Quinlan): This is based on a NOAA projection of sea level rise. I have

not read all of this, but NOAA does do sea level rise projections for many locations with tide gauges. And they have done them also for Bridgeport. And at Bridgeport right now it's about 4 millimeters per year, just based on the historical trend. That is consistent with what is also in the UConn report.

MR. PERRONE: Okay. I'll move on from that.

And lastly, one other sea level rise model. In the Quadrennial Energy Review -- and this was administratively noticed, ad min notice Item No. 9. And I'll pull that up -- on page 2-10, there are some predictions of, if we use 2060, of 32 inches. I was wondering, would this be applicable to this area, or would it be more related to the gulf coast or the nation in general?

THE WITNESS (Quinlan): I think that because we have the UConn study, and it is looking at the -- it starts with some of the international models and the national models and looking specifically at situations in Connecticut, that is probably the better one to use. They all are somewhat interrelated. They all look at different

scenarios that different agencies have developed and different models that other agencies have done, but I think that one is probably the better one to use, yes.

MR. PERRONE: Okay. A couple other conceptual questions. For a given hypothetical sea level rise, let's say 2 feet, would that translate into a certain rise of the 100-year flood elevation and 500, or is that an oversimplification?

THE WITNESS (Quinlan): I believe that that is how most people are looking at it, exactly like that.

MR. PERRONE: And looking at the FEMA document, it appears that they took the 100 and the 500 for what it is and then recommend 1 foot or more of freeboard on top of that. In your opinion, is it more appropriate to leave the 100 and 500-year elevations alone, not try to project them into the future, and just do freeboard on top, or does it make sense to try to project those into the future?

THE WITNESS (Quinlan): If I understand what you're asking correctly, I don't think we can really project the 100 and 500 very easily into

the future. So I think that what FEMA is doing -- well, FEMA is not really looking at sea level rise as much as some other agencies. But what most agencies are doing is they're looking at the level for whatever the storm is and then adding you can call it an allocation for sea level rise, which would be like a freeboard type of allocation.

MR. PERRONE: My last question on that thought. If you tried to project the 100 and the 500 into the future based on some sea level rise, and then you had sea level rise freeboard on top of that, would you be double counting in a way?

THE WITNESS (Quinlan): Yes. I think if you looked at projecting the flood elevation with sea level rise and then adding it on top, yeah, I think you would be double counting.

MR. PERRONE: I understand, if approved and if required by the Council, UI could go up 1 foot or 2 feet. Do you have any numbers on how much more fill you would need to go up 1 or 2 feet? If you don't, it's okay.

THE WITNESS (Sazanowicz): I don't have those numbers with me right now. It would be a combination of additional fill and additional concrete.

MR. PERRONE: That's okay.

And lastly, in the high pressure gas filled cables, do you have a cooling system for the nitrogen? How do you deal with the heat from the cables?

THE WITNESS (Pinto): There is no cooling system on the nitrogen. There is today an existing forced cooling system that just blows cool air through a spare pipe in between the two existing, but when we relocate we'll be disassembling and abandoning that type of cooling system.

MR. PERRONE: Thank you very much. I'm all set.

THE CHAIRMAN: Now we'll have questions from the Council. Mr. Silvestri.

MR. SILVESTRI: Thank you, Mr. Chairman.

Going back to raising the elevation, if the substation were to be constructed at -- I called it the 500-foot plus 2 foot elevation, which I guess would be 100 plus 4, pretty close?

THE WITNESS (Quinlan): Correct.

MR. SILVESTRI: Okay. What effect would that have on the retaining walls that were

proposed on the north and south sides?

THE WITNESS (Pinto): The retaining wall --

MR. McDERMOTT: You're talking about UI's retaining walls or the PSEG?

MR. SILVESTRI: The proposed retaining walls for this new substation.

THE WITNESS (Sazanowicz): So I'd like to clarify one thing. With the additional 1 foot or 2 foot elevation, we would have to engage in some redesign of the site versus what is shown in the application. We expect there would be additional retaining walls within the site itself, and the retaining walls there would potentially be, you know, equal distantly higher to the grade, so potentially 1 foot or 2 feet, depending on where we are. It all depends on our ability to grade up to those locations.

MR. SILVESTRI: So potentially if they have to go up, your slopes that are on the east and west side would have to go up as well?

THE WITNESS (Sazanowicz): Correct.

MR. SILVESTRI: So the related question, is the footprint of the property sufficiently large enough to accomodate the

additional slopes, if you will, to get equipment in and out?

THE WITNESS (Sazanowicz): Yeah. So with redesigning the site to accomodate the additional elevation, we would essentially be leaving the access drive at basically a maximum elevation of around 12 and a half feet. And then we would be utilizing a combination of additional fill and retaining walls to bring the transformer and PDC location and the GIS enclosure location up to that higher level.

MR. SILVESTRI: So you're going to access from Ferry Access Road, and I forgot what the other one was, I guess Kiefer itself would still be feasible if you had to raise it up?

THE WITNESS (Sazanowicz): That's correct.

MR. SILVESTRI: Counsel, I'm going to go back to some of the blanks that we missed last time because they're on my list.

MR. McDERMOTT: Okay. I'll follow along and make sure you get them all.

MR. SILVESTRI: We mentioned SF6. The question that remained was, we talked about approximately 20,000 pounds based on, I believe,

the Grand Avenue Substation that you currently have. And the follow-up question I had on that, would that amount trigger any special regulatory reporting or planning such as tier 2, risk management plans, release response measures, et cetera?

THE WITNESS (Berman): So following up on the internet, I did go back and look at that. So SF6, sulfur hexafluoride, it's not reportable under any of the risk-based programs, EPCRA, CERCLA, 112(r) of the Clean Air Act. However, it is reportable under 40 CFR Part 98, Subpart DD, relating to greenhouse gas.

MR. SILVESTRI: Thank you. The other follow-up, or another follow-up I had, was going back to the diesel generator. We thought that might be about a 250 kW?

THE WITNESS (Sazanowicz): Yes.

MR. SILVESTRI: Okay. And the question I had related to that was approximate size of what you saw for a fuel tank.

THE WITNESS (Sazanowicz): So based on a similar generator that we had at another substation, we anticipated that the size of that tank to be 700 gallons.

MR. SILVESTRI: Thank you.

Mr. Pinto, you mentioned that the tank would the self-contained. Could you explain what that means?

THE WITNESS (Pinto): Yes. Our existing back-up service generators, they sit on a foundation with a steel enclosure frame, and the fuel tank sits below this frame and the generator is on top. So basically a fuel tank surrounded by a steel frame and then the mechanical goes to the generator sitting on top of the tank.

MR. SILVESTRI: So the frame kind of acts as secondary containment?

THE WITNESS (Pinto): It's part of the fuel tank.

MR. SILVESTRI: Okay. I think the last follow-up I had goes back to the petro barriers. And the two questions that were still open was, where will the water be drained to, and if a permit was required.

THE WITNESS (Berman): So, right now United Illuminating in all -- this is referring to the rainwater that might be collected in a secondary containment vessel. Am I understanding that correct?

MR. SILVESTRI: Yes.

THE WITNESS (Berman): So right now UI deploys multiple different technologies and systems, but the cornerstone of the system is based on frequently inspecting those sumps for the presence of any hydrocarbons and then pumping out any water associated with that. But there are either mechanical or filter barriers to keep any of the hydrocarbons from mixing with the water.

MR. SILVESTRI: But where does the water go?

THE WITNESS (Berman): The water is typically discharged out to the substation ground.

MR. SILVESTRI: And is a permit needed to do that?

THE WITNESS (Berman): It's not currently done pursuant to any permitting standard, and that's the same standard for all substations.

MR. SILVESTRI: I would think that there would be something to cover a discharge to the ground, a general permit, or stormwater, or something to that effect.

THE WITNESS (Berman): Well, all the construction-related activities would be obviously

covered under the stormwater construction general permit.

MR. SILVESTRI: This would be operational?

THE WITNESS (Berman): Right. The operational component, that has typically not been done pursuant to a permit.

MR. SILVESTRI: I'll talk with Mr. Hannon afterwards.

I want to change gears for a couple minutes. And I'd like to talk about 375 Main Street which is one of the alternate sites that you mentioned. If I read correctly, the property is probably the same grade or so as the Kiefer Street property so, in effect, you'd have to raise that up if you were going to use that property. Correct?

THE WITNESS (Sazanowicz): Correct. It's either at the same grade or we believe in some cases at some portion of the site lower.

MR. SILVESTRI: If you were to build there, would the 115 kV tap occur right in the vicinity of 375 Main Street to the railroad lines, or would you have to bring the 115 down near the building at Ferry Access Road where you're

proposing that Kiefer Street will be tapped into?

THE WITNESS (Pinto): Are you referring to the existing underground 115 or the overhead?

MR. SILVESTRI: Overhead on the railroad lines.

THE WITNESS (Pinto): Yeah. So the ones that currently terminate coming from the east at Pequonnock would have to be extended down the railroad to get to 375 Main Street, and the ones that are coming from the west would actually be cut back and then swung into 375 Main Street. So, in essence, the proposed property we'd just move it a block and a half to the west. So anything coming from the east would be extended that far and then coming from the west would be shortened up by that much.

MR. SILVESTRI: Okay. And then if I read correctly, with the cost estimates in Interrogatory 2-30, if the substation were to be built at 375 Main, the estimated costs you have don't include architectural enhancements. Is that correct?

THE WITNESS (Pinto): There are some enhancements that would be included in that estimate.

MR. SILVESTRI: In the estimate they have the 190 --

THE WITNESS (Pinto): The 195?

MR. SILVESTRI: Yes.

THE WITNESS (Pinto): There's Footnote 3. In Footnote 3 it says the estimated additional costs would include the HPGF extensions, XLPE rebuild, site development, some architectural enhancements, distribution duct line extensions, and additional complexities due to construction crossing the 345kV duct banks. So that's included in that number.

MR. SILVESTRI: Then how much of a concern is the underground connections to the cross river lines that you have going from 375? You said there might be other lines that are in the way?

THE WITNESS (Pinto): Well, we would have to cross extending the 115kV HPGF. Those are the ones that actually cross the harbor. Those would have to cross the existing 345kV XLPE duct banks that run north and south up Main Street.

MR. SILVESTRI: Okay.

THE WITNESS (Pinto): Along with the existing 115kV XLPE that currently ties into the

existing Pequonnock. That would be rebuilt. So we may be able to avoid that one, depending on how we bring it into the new site, but we definitely have conflicts with the 345kV that's currently in Main Street.

MR. SILVESTRI: Conceptually would you go down Kiefer Street to --

THE WITNESS (Pinto): Likely the shortest path would be straight down Kiefer Street if there's no obstructions in there. We'd have to look at the underground surveys that we did and find the best route to get there.

MR. SILVESTRI: And the overlap, if you will, with the 345 is heat a concern?

THE WITNESS (Pinto): One is heat and two is depth. So we'd either have to go -- we'd probably likely go below them. And if I recall correctly, from putting those 345 kV cables in, they're pretty deep already. So it just makes construction a lot more difficult. But we would evaluate that and determine what would be the best way to go, either above or below.

MR. SILVESTRI: That's all I have, Mr. Chairman. Thank you.

THE CHAIRMAN: Thank you. Mr. Hannon.

MR. HANNON: Thank you, Mr. Chairman. I do have some questions, and they're pretty much all related to drawing PEQ-PR01. That's the preliminary concept preliminary plan that shows some of the grading on site.

THE WITNESS (Pinto): Okay.

MR. HANNON: I may have missed it, but I didn't see anything in the document regarding erosion and sedimentation control plans, diagrams with any type of structures that may be used, things of that nature. Did I miss it, or is it not there?

THE WITNESS (Pinto): Erosion control during construction?

MR. HANNON: Yes -- not so much during construction, but typically there might be diagrams which would show -- for example, what I'm more concerned about or interested in are the slopes. You're showing a 3 to 1 slope, grades anywhere from 9 feet up to 14 feet in a couple different areas. There is no detail in terms of how those slopes will be dressed. There's nothing in the narrative that identifies how those slopes will be dressed. So, for example, are you proposing to go in and put in like erosion control

mats and soil and seed it that way, or are you proposing to go in and put in some type of heavier riprap?

THE WITNESS (Pinto): Right. The details of that erosion control would be developed in our detailed engineering and also included in our D&M plan.

MR. HANNON: Here's my concern. I get complaints from lake owners that they get a lot of erosion on their property because of motor boats going by. Here I have no clue what you're proposing to do on the slopes where we could have wave action from the ocean, which to me is a lot more significant than a single motor boat going up and down the lake. So I'm just trying to get a better understanding as to how you plan on stabilizing the site.

THE WITNESS (Pinto): Right. The site will not be lawn. It's crushed rock and stone, you know, that's our typical substation yard.

MR. HANNON: I understand that for the flat surface. That's standard. But I'm getting at the slopes. So are you proposing that you're going to put in some type of larger riprap so that the slopes are stabilized that way? That's kind

of where I'm going. I just want to make sure that we're not going to have any type of wave action, which might start undermining the slopes, which might start undermining the equipment. So I'm just trying to make sure that we have a nice stable site.

THE WITNESS (Pinto): We don't have those drawings with us.

MR. HANNON: But you have some idea what you're proposing to do. That's all I'm asking. I understand you don't have the drawings here but --

THE WITNESS (Pinto): From an engineering perspective, I believe it would be, you know, our typical substation yard is created with, I don't want to call riprap, but some bigger stone getting up into some more finer grade -- not grades, but, you know, 1 inch, 2 inch type trap rock. So it would start off, the top layer would be 2 inch trap rock, and then as you get deeper, it's larger type trap rock to stabilize the trap rock from moving around. We actually roll it as well to compact it.

MR. HANNON: So if I understand what you're saying, should this project go forward and

there is a D&M plan that comes in to the Siting Council, then at that point in time we should be showing arbored slopes on this site so that it is not going to be subject to severe erosion based on sea level waves and whatnot.

THE WITNESS (Rossetti): We will make sure that when we submit the D&M plan, we will make sure we have the proper erosion controls necessary so that we don't have that type of erosion, especially on the slopes. We will do that.

MR. HANNON: That's my primary concern.

MR. McDERMOTT: What Mr. Rossetti meant was yes.

MR. HANNON: That's how I took it. Thank you. I have no more questions.

THE CHAIRMAN: Mr. Lynch.

MR. LYNCH: Yes. Just a couple of clarifications on questions I could not hear at the original hearing because of the acoustics and stuff. And the first one is just a clarification on the DEEP in their letter was talking about the nesting of peregrine falcons and other coastal birds. How are you going to address this?

THE WITNESS (Berman): I'm not sure.

Could you -- I'm disconnected a little bit. So you sort of started with bird -- or you ended with the bird question. Could you reask again, please?

MR. LYNCH: The DEEP, in their letter to us, addressed the fact that they had the nesting birds in that area, you know, and they specified the falcon. My question is, why is or is that not a problem?

THE WITNESS (Berman): Oh. Well, we certainly -- we acknowledge that the falcon has been identified as a species of special concern. We've had correspondence back to -- back and forth with DEEP and have come up with a plan to make sure that we're not going to impact any falcons. It includes utilizing an ornithologist to come out and consult. There are special protocols should a nesting falcon be identified within -- I think it's 500 feet of the site. So we have a very robust dialogue with DEEP on protection and mitigation plans for potential interactions with peregrine falcons.

MR. LYNCH: Would that also include other birds that are coastal birds?

THE WITNESS (Berman): Well, to clarify, we do not have any protocols set up with

DEEP relating to any other coastal species. The National Fish and Wildlife Service flagged the Red Knot to us as part of the record, but in that same correspondence they indicate that on our site there's no habitat that's suitable for the species, and it's not -- we don't really need to take it into account.

MR. LYNCH: Thank you. It's probably a question I should have left to Dr. Klemens.

DR. KLEMENS: You can do it.

MR. LYNCH: Now, I also want to get a clarification on cost. Because, again, I didn't hear much of what -- if you go to the interrogatory, and it's Siting Council 2-30, you outline all the different costs. And my question is, I'm still confused. You've got 171 and 269 million. Which one is the total on the project?

THE WITNESS (Pinto): Item A in that table is the proposed solution. That's what we've been talking about. And that is the $171.3 million.

MR. LYNCH: All right. Then what's --

THE WITNESS (Pinto): The 269, which is Item B on there, is one of the alternatives that the company looked at that was rebuilding on site.

That was essentially trying to replace or rebuild the facility on the existing site with trying to keep it energized and reworking and rebuilding on that existing site.

MR. LYNCH: Now I understand it. Thank you. The 171, that includes the total construction cost, upgrading, so on and so forth?

THE WITNESS (Pinto): I didn't catch the last part of that.

MR. LYNCH: The 171, that includes the upgrade to the site, as well as any construction costs?

THE WITNESS (Pinto): That is total project cost.

MR. LYNCH: Now, explain to me, too, why the project -- and if it's in there and I didn't get it -- why it isn't socialized and why the ratepayers are bearing the cost, the total cost?

THE WITNESS (Bradt): Right. So, in New England the way that transmission is paid for, the transmission is paid for based on since it's an interconnected grid, that the entire grid for New England benefits from --

MR. LYNCH: I understand.

THE WITNESS (Bradt): So for transmission specifically that serves the bulk electric system, ISO New England will evaluate transmission project costs, and they'll check first that it has no adverse impact to the system, and secondly that it truly benefits the entire New England grid. If they rule that it does benefit the New England grid, then they allow it to be socialized across all New England ratepayers.

MR. LYNCH: So essentially you're saying this isn't going to impact all of New England?

THE WITNESS (Bradt): No. Actually, we're saying that about three-quarters of -- the majority of the costs of this project of the 171 million, 128 million of it is considered transmission, and we believe that it benefits all of New England. So we are expecting ISO New England to rule that that 128 million does benefit New England and therefore it should be socialized. So, of course Connecticut will pay its share of that socialization but --

MR. LYNCH: How long before the ISO makes their decision on socialization?

THE WITNESS (Bradt): It could be --

it's going to be at the point that we have a plus minus 10 percent quality estimate, which is a much further, much more refined detailed design.

And I would ask one of the project folks to estimate when that would be but --

THE WITNESS (Pinto): Typically we wouldn't file a TCA with the ISO until we have contracts in place with specific vendors, whether, you know, the GIS vendor, the civil contractor, the electrical contractor. Until we've got a good handle on numbers, we don't want to go to the ISO and request a number that's not valid. I believe there's a bandwidth on, you know, what we've proposed a number to the ISO, there's a bandwidth on that. And if we're outside of that bandwidth, then we'd have to start the process all over again.

MR. LYNCH: So the bottom line is there's a possibility that some of this project would be socialized?

THE WITNESS (Pinto): It's very likely. There's no guarantees. But like David said, we believe that, like he said, the reference $128 million, we believe that was in the ballpark of what we anticipate to be socialized.

MR. LYNCH: Thank you.

Thank you, Mr. Chairman.

THE CHAIRMAN: Thank you. Dr. Klemens.

DR. KLEMENS: Thank you, Mr. Chairman.

A lot of my questions have been answered. But now looking at this diagram that Mr. Hannon got me looking at, I have more questions.

First is, I notice that we have these two raised areas, one at 14, and one at 12. And the 12 foot transformers that are at 12, they're going to be elevated above the base flood still, correct, plus?

THE WITNESS (Sazanowicz): That's correct.

DR. KLEMENS: So they're going to be higher. All right. I get that. So tell me, I'm looking at these swinging gates that you have to access your site. How do those gates work when you've got, looking at the elevations there, 842? I'm looking at elevations that are, you know, 6, 7 feet of water potentially. How do you open those gates to get to your facility if you need to get there in times of high water?

THE WITNESS (Pinto): Those gates,

they're not solid gates. Those are, you know, fence gates.

DR. KLEMENS: Correct.

THE WITNESS (Pinto): The elevation is the same, you know, for the swing of the gate. I believe what you're getting at is water on both sides of the fence, how do they open it up?

DR. KLEMENS: That would be right, 6 feet of water, how do you get into your site? Are they automatic gates? Does someone get out and walk through the water or take a boat and pull it, or how do you get in?

THE WITNESS (Pinto): Right. Most likely we would not have to access the site. We would not try to access the site unless we really had to with that kind of water. We would wait for the storm surge to recede and then access the property.

DR. KLEMENS: But you had testified earlier that you have equipment that could get up the roads to the site.

THE WITNESS (Pinto): I said --

DR. KLEMENS: Through water you said.

THE WITNESS (Pinto): We have large vehicles, trucks that --

DR. KLEMENS: And you said the National Guard.

THE WITNESS (Pinto): And we've also utilized the National Guard.

DR. KLEMENS: How do you actually open up a chain-link gate that's submerged in 6 feet of water and get inside if you need to?

THE WITNESS (Pinto): I don't anticipate a problem opening up a chain-link gate. The water will flow through the gate. It's not like it's a solid wall.

DR. KLEMENS: I understand that.

THE WITNESS (Pinto): You unlock the gate, and you proceed and pull it with a winch on the truck, if had you to, or you push that gate. Our typical gate is on rollers.

DR. KLEMENS: It wouldn't make sense to have a gate that raised then, is what you're saying. You can get in with all that weight? I understand that water goes through the chain-link, but there's still, to move the structure of the gate -- oh, you're saying they roll laterally?

THE WITNESS (Pinto): They typically, either they swing like these are being shown, or we also have other fences where they slide on

rollers.

DR. KLEMENS: I can see the sliding on the rollers.

THE WITNESS (Pinto): On the rollers, you know, on the length of the fence.

DR. KLEMENS: Which is it, swinging or rollers?

THE WITNESS (Pinto): This design right now is showing gates that swing open, but we've incorporated both of them depending on the property.

DR. KLEMENS: I understand.

THE WITNESS (Pinto): We'll take that into consideration and evaluate whether a rolling gate would be beneficial, and we could change that design.

DR. KLEMENS: If you were to raise it 2 more feet, would we start to see -- and I know you testified that it will be a combination of concrete and fill. But we could see a grade line going to 15 feet here? That would be one possibility. This mound would get taller.

THE WITNESS (Sazanowicz): That is possible. With respect to the access gates and the access drive, we believe realistically due to

limitations on the site and with the equipment that we would need to be able to maintain access through there with. We would probably have a capped height of that driveway around 12 and a half feet. And the methods used to further raise the enclosures or the transformer area, that could be a combination of additional fill, additional retaining walls, or, you know, more robust foundation for those enclosures that's taller as well.

So we would look at a site redesign once we identify what the final elevation is that we're going to design to, and we'll essentially make the best determination using good engineering practice to find how we're going to get to that point.

DR. KLEMENS: But even now you are planning to raise the driveways higher than their elevations?

THE WITNESS (Sazanowicz): Not shown here. Not at the current height. We would probably be up near -- I think we're showing a 10 foot elevation on this sketch currently. The gray elevations are the existing site elevations that are kind of hidden beneath those, so you can see

where -- even where the driveway is, there is some grading that will take place throughout the whole site.

DR. KLEMENS: And I guess just more of a comment is that I would, you know -- I know you can create all these designs for the erosion control in the D&M plan. I sure would like to see -- I'd like to have something before the D&M plan. Personally I hate the idea of saying -- we had an application like that -- well, we're going to solve all of that in the D&M phase. I mean, I'd like to see that this actually can be engineered and not wait till the D&M phase to say, gee, oh, we can't do that structurally.

Can this be done structurally with riprap and addressing Mr. Hannon's concerns of stability? Is engineering feasible, you just haven't shown it?

THE WITNESS (Sazanowicz): We have confidence that this is a feasible design.

DR. KLEMENS: How is that confidence -- from, what, just from engineering practice?

THE WITNESS (Sazanowicz): Yes.

DR. KLEMENS: Okay. No further questions, Mr. Chairman. Thank you.

THE CHAIRMAN: Okay. Mr. Perrone.

MR. PERRONE: Thank you, Mr. Chairman. Staff has one or two questions left.

As far as the cost total of about 171 million, does that include decommission of the old substation, or no?

THE WITNESS (Pinto): No, it does not.

MR. PERRONE: Do you have a rough estimate of the decommission costs?

THE WITNESS (Pinto): At this time we had not looked at and nailed down numbers for decommissioning.

MR. PERRONE: But at any rate, you would expect it would still come out out less than that of a rebuild?

THE WITNESS (Pinto): Correct.

MR. PERRONE: Or the other two alternatives?

THE WITNESS (Pinto): Correct.

MR. PERRONE: Thank you. One more staff question.

MR. NWANKWO: I would like to ask, has ground settlement been considered in the design of the foundation of this facility and the base for the elevation?

THE WITNESS (Sazanowicz): We believe that is the case, yes.

MR. NWANKWO: Thank you. No more questions.

THE CHAIRMAN: Mr. Levesque.

MR. LEVESQUE: If you had to design it for 100 year plus 4 feet or 100 year plus 5 feet, can you make the argument to the ISO that some of that would be pool transmission facilities?

THE WITNESS (Bradt): We'll go through the transmission cost allocation, TCA, process with New England. And part of the form that we have to fill out, they will ask us if we were directed to do anything based on local siting authority. So we will, if anything is added, there's just a line item that we report on, and then ultimately they take that away. And we basically give the rationale for whatever additional costs there were, and they'll put it out there to stakeholders, get feedback, and then ultimately they'll give us an answer. So we don't know what their answer will be. We will submit the entire cost.

MR. LEVESQUE: Because one of the arguments would be future sea rises which --

THE WITNESS (Bradt): If sea level rise were that additional cost, we would explain why we were ordered to add, that were the case, and we would see what their response would be.

MR. LEVESQUE: Thank you.

THE CHAIRMAN: Mr. Harder.

MR. HARDER: Thank you, Mr. Chairman.

One question -- I guess two questions, actually, one a follow-up. I'm assuming it's safe to say that the extra cost you've indicated that would be associated with raising the elevation of the facility would be almost all due to the physical materials, the physical requirements to bring it up, fill, concrete, stone, maybe some steel, whatever, the physical stuff required to actually raise it up, whatever, 1 foot, 2 feet. Is that correct?

THE WITNESS (Sazanowicz): Yes, the materials, as well as the construction costs.

MR. HARDER: So there's nothing significant in terms of the station equipment that would go on top of that fill or go along with that fill that would be required as a result of the whole thing going up in elevation?

THE WITNESS (Sazanowicz): The

additional heights, it could require an increase in steel, for example, for platforms for access, the entryways, or it could also mean an increase in the amount of concrete used in the foundation for that enclosure. But we don't anticipate any major changes to the GIS equipment or the transformers, if that is your question.

MR. HARDER: Yes. So you indicated, I think, the 1 foot of elevation increase added cost was about 1.2 million; 2 feet was about 1.7 million, so at least those two figures, anyway, are no more than 1 percent of the estimated cost of the whole facility. For whatever reason, whether it was something the Council required or your own decision, if you increase the elevation more than that, would you anticipate that the cost would roughly increase along the same line, or would it get to the point where you'd see a significant ramping up of cost because it just -- as a kind of an outgrowth of that added elevation?

THE WITNESS (Pinto): Right. We believe once you go above the 2 foot additional elevation there that the cost would significantly go up. There's a lot more complications. On that property, you know, once you start to go up above

2 foot, referring to what Rob said, the concrete, more concrete, more steel, raise in elevation, slopes, grading, all those things need to be taken into consideration. It would be likely a total redesign of what we already have on paper.

MR. HARDER: So can you give us an idea? Do you have an idea of if you went to 3 feet or something higher, based on what you were just saying, could you give us at least a ballpark of what that increased cost would be?

THE WITNESS (Pinto): I'm not sure I could put a number on it, you know, but it would likely require a complete redesign of what we have today, just because of the slope, the elevation, the size of the property, east to west width, you know, trying to get to a higher elevation. So you're talking 6 or 7. That's pretty significant.

MR. HARDER: Does it get to the point at some point --

THE WITNESS (Pinto): I don't know where that curve is, you know, but it will escalate rather quickly.

MR. HARDER: I'm just wondering if you have a feel for, if it gets to the point where your choice for this location becomes infeasible,

or, you know, you have to look seriously at something else, I mean, would that be 3 feet or 4 feet, or are you only talking -- you know, you're still within the ballpark, more expensive, granted, but within the ballpark, you know, much higher than that.

THE WITNESS (Pinto): I don't think it's all about cost. I think it's about operational issues as well, you know, trying to -- you know, you may end up getting to a point where you start needing ladders and stuff like that to get into your facilities and significant steps. And, you know, with the width of the property and the staircase, to actually get to that elevation, you've got to get workers and equipment in and out of the building, you know, not on a daily basis, but they do go in there and test and monitor and carrying equipment in there. So we try to keep it as accessible as, you know, possible.

MR. HARDER: Okay. Thank you.

Thank you, Mr. Chairman. That's all I have.

THE CHAIRMAN: Mr. Silvestri has one.

MR. SILVESTRI: When Mr. Perrone was talking about decommissioning, a little light went

off in my head. Based on your experience with other substations that you've retired, is the cost of decommissioning kind of a break even, you know, getting rid of equipment that you have to pay for but getting money back in copper or aluminum or steel?

THE WITNESS (Pinto): There are places that will come in and decommission a facility and whether it be a net zero or, you know, you can work out contracts with them where they get the scrap value and they commit to do the decommissioning. You know, we don't make money on it, you know, but it is helpful, you know, there's a lot of contractors out there that do that type of work.

MR. SILVESTRI: Thank you.

THE CHAIRMAN: As long as you're not intending to ship it to China.

THE WITNESS (Pinto): Very true.

THE CHAIRMAN: I just want to make sure we're on the same page because we're starting to throw out a lot of 1 feet, 2 feet, 5 feet, 4 feet. So I just want to make sure everybody has it straight. And using the 100-year flood as a base, you're suggesting 100 foot plus 2. Is that what

you're --

THE WITNESS (Pinto): FEMA plus 3. That's 17 foot NAVD88 elevation.

THE CHAIRMAN: FEMA plus 3. And that's what your proposal --

THE WITNESS (Pinto): Correct.

THE CHAIRMAN: Okay. And we talked about, based on that new legislation, although DEEP either didn't read it or what, talking about an additional foot I think I heard, and then I've heard, you know, 4 or 5 feet. But I just want to make sure, because we have to have findings of fact, and I want to make sure we're talking about the same thing. And your FEMA plus 3 sounds like, although there's additional cost, you could live with up to an additional 2 before it gets really --

THE WITNESS (Sazanowicz): That is correct.

THE CHAIRMAN: -- dicey as far as cost and operational?

THE WITNESS (Pinto): That is correct.

THE CHAIRMAN: Okay. I just want to make sure that's on the record. Okay.

Staff have anymore questions?

MR. PERRONE: No, Mr. Chairman.
THE CHAIRMAN: Oh, you had something on redirect?
MR. McDERMOTT: Unfortunately, Mr. Silvestri did not finish all my questions, so I do have a few. But if I could just have two minutes just to make sure nothing has come up that the panel thinks I should do redirect on, just based on today's testimony, I can probably do it as a rest in place in two minutes, if that's okay?
THE CHAIRMAN: Rest in place. That sounds interesting, but sure.
(Off the record discussion.)
THE CHAIRMAN: Okay.
MR. McDERMOTT: Thank you, Mr. Chairman.
REDIRECT EXAMINATION
MR. McDERMOTT: Mr. Sazanowicz, at the June hearing you were asked by Mr. Perrone about the forecast loading or whether UI had loading on the station forecast numbers for 2017 and 2018. At the time you responded no. Do you now have that information that you can provide the Council?
THE WITNESS (Sazanowicz): I do. So in 2017 and 2018 the original forecast data for both

years was approximately 38.3 and 38.5 MVA. The actual data for -- actual peaks for 2017 and 2018 were 25.5 and 25.9 MVA respectively.

MR. PERRONE: Thank you.

MR. McDERMOTT: And then, Mr. Berman, you were asked by Mr. Perrone about the Stratford Great Meadows to the east. Would that important bird area be impacted by the project and its structures? And you have an update to your answer.

THE WITNESS (Berman): We did go back and look at that, and the Great Meadows, the Stratford Great Meadows National Wildlife Refuge area, is almost a mile to the east, slightly to the south. We do not anticipate any impacts on the bird populations would typically inhabit that area.

MR. McDERMOTT: Thank you. Mr. Berman, you were also asked by Mr. Silvestri, you said the City of Bridgeport maintains stormwater, sewers and catch basins on Main Street and Kiefer Street. Do you know if any of those flow through the proposed project out to the harbor?

THE WITNESS (Berman): In fact, we do. We've done extensive utility surveys at the site.

The existing storm drainage system within and adjacent to Ferry Access Road conveys stormwater from Main Street into Bridgeport Harbor there. Based on the plans currently, the stormwater conduit may be encumbered and likely will have to be relocated. There may be other utilities that have to be located depending on the final layout.

MR. SILVESTRI: Thank you.

MR. McDERMOTT: Thank you. And then today, Ms. Quinlan, we've talked a lot about the recently passed legislation. Based on your review of that bill, does the bill say the sea level rise of 2 feet is above the 100 or the 500-year flood level?

THE WITNESS (Quinlan): It is my understanding that that 2 foot rise is above the base flood elevation, which would be the 100 year flood elevation, which is 14 feet NAVD88.

MR. McDERMOTT: Thank you very much. With that, Mr. Chairman, I have no further redirect for the panel.

THE CHAIRMAN: Before closing the evidentiary record of this matter, the Siting Council announces that briefs and proposed findings of fact may be filed with the Council by

obviously any party or intervenor no later than August 23, 2018. The submission of briefs or findings of fact are not required, rather we leave it to the choice of the parties and intervenors.

Anyone who has not become a party or intervenor, but who decides to make his or her views known to the Council, may file written statements with the Council within 30 days of the date hereof.

The Council will issue draft findings of fact, and thereafter parties and intervenors may identify errors or inconsistencies between the Council's draft findings of fact and the record. However, no new information, no new evidence, no argument, and no reply briefs without our permission will be considered.

Again, copies of the transcript for this hearing will be filed at the Bridgeport City Clerk's Office. And I hereby declare this hearing adjourned. Thank you all for your participation. Drive home safely.

(Whereupon, the witnesses were excused, and the above proceedings were adjourned at 2:51 p.m.)

CERTIFICATE

I hereby certify that the foregoing 89 pages are a complete and accurate computer-aided transcription of my original stenotype notes taken of the Continued Hearing in Re: DOCKET NO. 483, APPLICATION FROM THE UNITED ILLUMINATING COMPANY FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE PEQUONNOCK SUBSTATION REBUILD PROJECT THAT ENTAILS CONSTRUCTION, MAINTENANCE, AND OPERATION OF A 115/13.8 KILOVOLT GAS INSULATED REPLACEMENT SUBSTATION FACILITY LOCATED ON AN APPROXIMATELY 3.7 ACRE PARCEL OWNED BY PSEG POWER CONNECTICUT, LLC AT 1 KIEFER STREET, BRIDGEPORT, CONNECTICUT, which was held before ROBERT STEIN, Chairman, at the Connecticut Siting Council, Ten Franklin Square, New Britain, Connecticut, on July 24, 2018.

Lisa L. Warner, CSR 061
Court Reporter
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I N D E X

A p p e a r a n c e s (Cont'd):

APPLICANT'S EXHIBITS

(Received in evidence)

EXHIBIT	DESCRIPTION	PAGE
II-B-5	Applicant's responses to Council's interrogatories, Set Two, dated July 17, 2018	8
II-B-6	Witness resume, received July 17, 2018, Beth Quinlan	8