Transcript of the Hearing of

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Case: SITING COUNCIL - DOCKET 192B

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STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Docket No. 192B

CPV Towantic, LLC, Motion to Reopen and Modify the June 23, 1999 Certificate of Environmental Compatibility and Public Need Based on Changed Conditions Pursuant to Connecticut General Statutes §4-181a(b) for the Construction, Maintenance and Operation of a 785 MW Dual-Fuel Combine Cycle Electric Generating Facility Located North of the Prokop Road and Towantic Hill Road Intersection in the Town of Oxford, Connecticut

Continued Public Hearing held at the Connecticut Siting Council, 10 Franklin Square, New Britain, Connecticut, Tuesday, February 10, 2015, beginning at 11:00 a.m.

H e l d B e f o r e:

SENATOR JAMES J. MURPHY,

Vice Chairman

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Appearances:
Council Members:
DR. BARBARA C. BELL
ROBERT HANNON, DEEP Designee
PHILIP T. ASHTON
DR. MICHAEL W. KLEMENS
DAVID LYNCH

Council Staff:
MELANIE BACHMAN, ESQ.
Executive Director and
Staff Attorney

MICHAEL PERRONE,
Siting Analyst

For CPV Towantic, LLC:
BROWN RUDNICK, LLP
185 Asylum Street
Hartford, Connecticut 06103
BY: PHILIP M. SMALL, ESQ.
FRANCA L. DeROSA, ESQ.

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Appearances (Cont'd.):
For The Town of Middlebury:
LAW FIRM OF STEPHEN L. SAVARESE
103 South Main Street
Middlebury, Connecticut 06470
BY: STEPHEN SAVARESE, ESQ.

Also present for the Town of
Middlebury:
RAYMOND PIETRORAZIO

For the Connecticut Light and Power
Company:
NORTHEAST UTILITIES SERVICE
COMPANY
107 Selden Street
Berlin, Connecticut 06037
BY: JEFFREY D. COCHRAN, ESQ.

For the Town of Oxford:
CONDON & SAVITT, PC
223 Wakelee Avenue
Ansonia, Connecticut 06401
BY: KEVIN CONDON, ESQ.

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Appearances (Cont'd.):
For Greenfields, LLC and Marian Larkin:
CAPPALLI & HILL, LLC
325 Highland Avenue
Cheshire, Connecticut 06410
BY: EDWARD S. HILL, ESQ.

Also present:
LEN DEJONG,
Pomperaug River Watershed Coalition

KEVIN ZAK,
Naugatuck River Revival Group

EDWARD EDELSON,
Town of Southbury

JEFF RUHOLFF,
Naugatuck Valley Audubon Society

WAYNE McCORMACK,
Naugatuck Resident

KATE TRUINI,
Westover School

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THE VICE CHAIRMAN: Ladies and gentlemen, I'd like to call to order this Tuesday, February the 10, 2015, this meeting of the Connecticut Siting Council. My name is Jerry Murphy. I'm Vice Chairman of the Siting Council, and I'm here today in the absence of our Chairman.

This hearing is held pursuant to the provisions of Title 16 of the Connecticut General Statutes and of the Uniform Administrative Procedure Act upon a motion to reopen the final decision on the Certificate of Environmental Compatibility and Public Need held by CPV Towantic, LLC, for the construction, maintenance and operation of a 785 megawatt dual-fuel combined cycle electric generating facility located north of the Prokop Road and Towantic Hill Road intersection the Town of Oxford, Connecticut.

On November 13, 2014, the Council, pursuant to a request filed by CPV Towantic, LLC, and the provisions of Connecticut General Statutes Section 4-181a(b), reopened the final decision we

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rendered in this docket.
On June 23, 1999, the Council considered and approved granting a certificate to CPV Towantic, LLC's predecessor for the construction, maintenance and operation of a 512 megawatt natural gas-fired combined cycle facility located north of the Prokop Road and Towantic Hill Road intersection in the Town of Oxford, Connecticut. On March the 1st, 2001, the Council considered and approved final site plans for this facility. The certificate for this facility is scheduled to expire June the 1st, 2016.
A verbatim transcript will be made of this hearing and deposited with the town clerk's office in the Oxford and Middlebury Town Halls for the convenience of the public.
We will proceed in accordance with the prepared agenda, copies of which are available here.
And just so, before we start, we understand the wavelength for today, it's basically as of the last hearing, which was

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held here. We will break for lunch at approximately one o'clock, and that break will be for 45 minutes. And 45 minutes will be the limit of the duration of that, and we will come back and we will proceed and go no later than five o'clock. And depending how things are working, we may leave somewhat earlier than five because of the weather conditions and traffic, but we'll play that by ear. But initially we'll be here until approximately one for the lunch break.
First off, the Council received a joint request from Raymond Pietrorazio and the Town of Middlebury for the Council to extend the deadline for public hearings and submission of testimony until 90 days following the conclusion of review by DEEP and FAA, received January 16, 2015.
Before the Council takes this up, I would ask legal counsel and acting executive director to comment on this matter.
MS. BACHMAN: Thank you, Mr. Vice Chairman.
As we determined in the last hearing on this matter on January 29th, we

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did have a few other requests for extensions. And we had granted a 30-day extension to the requesting entities to March 3rd for submission of prefiled testimony and responses to any interrogatories. That extension was meant to apply across the board to all parties and intervenors, including the certificate holder. We also have a pending request from the Naugatuck Valley Audubon Society for a 30-day extension.
So, to make it clear, and we will follow up with a memo tomorrow after the hearing, an extension for 30 days is granted to all parties and intervenors to submit interrogatories to the certificate holder or any other party or intervenor on or before February 24th, and that responses to the interrogatories and any additional prefile testimony by any party or intervenor is due on or before March 3rd.
THE VICE CHAIRMAN: Thank you, Attorney Bachman.
What's the Council's pleasure on this request?
MR. ASHTON: Move approval of

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the extension.
DR. BELL: Second.
THE VICE CHAIRMAN: Discussion?
DR. KLEMENS: The only piece of discussion I have on it is, you know, I have asked for some biological data, and that biological data cannot be collected before March 3rd. I mean, so that will effectively preclude the ability to collect any kind of biological, particularly on vernal pool and vernal pool use, this spring. I'm happy to go along with the Council, just as long as they're aware that that basically eliminates that potential.
THE VICE CHAIRMAN: Okay.
Phil, was your motion to approve their 90-day or what was outlined by --
MR. ASHTON: What was outlined by the acting director.
THE VICE CHAIRMAN: Well, the question before us is on the Town of Middlebury and Mr. Pietrorazio's request.
MR. ASHTON: I would embrace

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that in the spirit of what the director said.
THE VICE CHAIRMAN: Which means that would be denied because we're giving everybody 30 days.
MR. ASHTON: Right. Right. Otherwise, this thing is going to keep on going on and on like waves breaking on the shore.
THE VICE CHAIRMAN: Okay. So the motion before us, who seconded it?
DR. BELL: I did.
THE VICE CHAIRMAN: As I understand it, the motion before us is to deny the request for the 90 days by these co-applicants; is that correct?
MR. ASHTON: And approve the 30-day, as the director outlined.
THE VICE CHAIRMAN: We'll get to that.
MR. ASHTON: Okay. Do you want to take it in two pieces?
THE VICE CHAIRMAN: Yes.
MR. ASHTON: All right. I'll rephrase my motion to deny the request for extensions.

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THE VICE CHAIRMAN: Okay. We're only acting on this one first.
MR. ASHTON: Okay.
THE VICE CHAIRMAN: Second?
DR. BELL: Yes.
THE VICE CHAIRMAN: Discussion on that?
DR. KLEMENS: My discussion, as I said, is that if we don't allow anything after that -- but that's just we won't get that data that I've asked for and asked the Applicant for -- we do that knowing that.
MR. ASHTON: Yes.
DR. KLEMENS: We feel we can make the decision without that data.
THE VICE CHAIRMAN: Further discussion on the motion to deny the request for 90 days?
All those on the Council signify by saying aye.
MR. ASHTON: Aye.
DR. BELL: Aye.
MS. BACHMAN: Aye.
MR. HANNON: Aye.
THE VICE CHAIRMAN: Those

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opposed?
(No response.)
THE VICE CHAIRMAN: The second item we have is a request from the Naugatuck Valley Audubon Society for an extension to file evidence and testimony received February 5th, and that's for 30 days.
MR. ASHTON: I move the approval.
THE VICE CHAIRMAN: For 30 days?
MR. ASHTON: Yes.
DR. BELL: And I'll second.
THE VICE CHAIRMAN: Any discussion on that?
DR. KLEMENS: Is it the 30-day that's tracking the other ones or a different 30-day?
MS. BACHMAN: That's 30 day to March 3rd.
DR. KLEMENS: Okay. So it's not -- okay. It's for the same one as everybody else?
MS. BACHMAN: Correct.
DR. KLEMENS: Thank you for

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the clarification.
THE VICE CHAIRMAN: Further discussion?
All in favor will signify by saying aye.
MR. ASHTON: Aye.
DR. BELL: Aye.
THE VICE CHAIRMAN: Opposed?
(No response.)
THE VICE CHAIRMAN: Motion to grant for 30 days for the Naugatuck Valley Audubon Society is granted.
Phil, did you want to make a motion in line with what our executive director outlined for 30 days?
MR. ASHTON: Yes.
Mr. Chairman, I would like to make that motion, the 30-day extension, which will embrace all the other that have been requested.
THE VICE CHAIRMAN: Is there a second to that?
DR. BELL: Yes, I'll second that.
THE VICE CHAIRMAN: Second by

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Dr. Bell.
Any discussion?
Your comments again, I assume, would be included?
DR. KLEMENS: Yes --
THE VICE CHAIRMAN: All those in favor will signify by saying aye.
MR. ASHTON: Aye.
DR. BELL: Aye.
MR. HANNON: Aye.
MS. BACHMAN: Aye.
THE VICE CHAIRMAN: Opposed?
(No response.)
THE VICE CHAIRMAN: We will return to the appearance of the certificate holder.
Do you have additional material?
MR. SMALL: We do. First of all, I'm pleased to announce that Mr. Gustafson is with us this time, and I'd like to have him sworn in.

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DEAN GUSTAFSON,
called as a witness, being first duly sworn by Ms. Bachman, was examined and testified on his oath as follows:
FREDERICK SELLARS,
LYNN GRESOCK,
ANDREW BAZINET,
JON DONOVAN,
DANIELLE POWERS,
TANYA BODELL,
having been previously duly sworn, were examined and testified further on their oaths as follows:
MR. SMALL: Mr. Gustafson, would you introduce yourself to the Council, full name, title, your place of employment?
THE WITNESS (Gustafson): My name is Dean Gustafson. I'm a senior wetland scientist, professional soil scientist, with All-Points Technology Corp.
MR. SMALL: And Mr. Gustafson's resume is in the prior filing.
Mr. Chairman, we have two additional exhibits to provide. They've been

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premarked 11 and 12 on the hearing agenda. Eleven is the -- I'm sorry, my apologies, 12 and 13. Twelve is the CPV Towantic's responses to Council interrogatories, and 13 is CPV Towantic's second late-filed exhibits.
Each member of the panel is listed as a witness for one or more of these interrogatory responses, so I'm asking the entire panel were these responses prepared by you or under your direction?
THE WITNESS (Sellars): Yes.
THE WITNESS (Gresock): Yes.
THE WITNESS (Bazinet): Yes.
THE WITNESS (Donovan): Yes.
MR. SMALL: Are there any changes or corrections? Ms. Gresock?
THE WITNESS (Gresock): The figure that was included in the response for Interrogatory CSC-14 should also have been attached in the response for the late-filed Exhibit 2H.
MR. SMALL: Are there any other changes or corrections? With those, do you adopt the late-filed exhibits and the interrogatory responses in Exhibits 12 and 13

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as your testimony here today.
THE WITNESS (Sellars): Yes.
THE WITNESS (Gresock): Yes.
THE WITNESS (Bazinet): Yes.
THE WITNESS (Donovan): Yes.
MR. SMALL: Thank you. I believe the witnesses are available for additional cross-examination.
THE VICE CHAIRMAN: Is there any objection to the documents being admitted?
(No response.)
THE VICE CHAIRMAN: Hearing none, they're so admitted.
(Exhibit II-B-12 and Exhibit II-B-13: Received in evidence - described in index.)
THE VICE CHAIRMAN: Moving to cross-examination, Jay Halpern?
(No response.)
THE VICE CHAIRMAN: I believe last time the Town of Middlebury, did you conclude for your purposes at this stage?
MR. SAVARESE: Chairman, I thought that with Mr. Gustafson here, it

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would return to the Council Members first doing the cross-examination -- Dr. Klemens and Dr. Bell may have had questions -- and that this witness, having been absent from the prior two proceedings, I believe the protocol dictates that the Council Members go first.

THE VICE CHAIRMAN: Our Executive Director tells me that the memo that was sent out indicated to the contrary, that we were going through the Intervenors. I was not -- this is not your last chance because there will be more information coming in. And my recollection, when you finished at our last hearing, you indicated that you were reserving questions for later on.

MR. SAVARESE: Correct, but --

THE VICE CHAIRMAN: And I'm asking you because you're next on the list.

MR. SAVARESE: I understand that, your Honor. I was expecting to sit through the cross-examination by Dr. Bell and Dr. Klemens.

THE VICE CHAIRMAN: Well, but we will get to them, hopefully, after. You

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can listen to that, and we will get to you at a future date.

MR. SAVARESE: Well, then I'm going to pass at this time.

THE VICE CHAIRMAN: All right.

MR. SMALL: Mr. Chairman, Mr. Savarese's comments reminded me of something. I need to have Mr. Gustafson adopt the interrogatory responses that he filed when he was not available to adopt them.

Mr. Gustafson, there were a number of interrogatory responses, both to the Council and to parties and intervenors, where you were the responsible witness; is that correct?

THE WITNESS (Gustafson): That's correct.

MR. SMALL: Were those prepared by you or under your direction?

THE WITNESS (Gustafson): They were.

MR. SMALL: Do you have any changes or corrections to any of those?

THE WITNESS (Gustafson): No.

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MR. SMALL: And do you adopt those as your testimony?

THE WITNESS (Gustafson): I do.

MR. SMALL: Thank you. So those are already part of the record, but I just wanted to make sure we closed that loop.

THE VICE CHAIRMAN: Any objection to the admission of those interrogatory responses which Mr. Gustafson was responsible for?

Hearing none, they're so admitted.

MR. SAVARESE: Further, for the record, Mr. Gustafson still has open questions, a granted extension of time to February 16th for certain of the wetland questions to be answered. We're still waiting to see --

THE VICE CHAIRMAN: That's why we can't cut anybody off being final because we don't have everything before us to cross-examine.

MR. SAVARESE: Exactly.

THE VICE CHAIRMAN: That's why

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you're really waiting not too much because you'll get a crack at the apple later on.

MR. SAVARESE: We're waiting to hear the evidence.

THE VICE CHAIRMAN: Connecticut Light and Power?

MR. COCHRAN: We have no questions.

THE VICE CHAIRMAN: Mr. P., over there, do you have any questions at this time or yesterday?

RAYMOND PIETRORAZIO: Yes, I do.

THE VICE CHAIRMAN: Go ahead.

CROSS-EXAMINATION

MR. PIETRORAZIO: Good morning. Mr. Chairman, I have 14 questions for CPV this morning, and they have to do with largely with the stacks. And question number one would be: Is buoyancy the dominant factor for plume rise above stacks?

THE WITNESS (Sellars): Buoyancy is among the factors that affects the plume rise. Plume rise is dictated by the mass flow rate and the temperature, as

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well as the velocity, but the flow rate and temperature are the dominant terms.
MR. PIETRORAZIO: Does the temperature -- is one of the ingredients to the buoyancy factor?
THE WITNESS (Sellars): That's correct, the flow rates and the temperature.
MR. PIETRORAZIO: So would you say that the buoyancy is the dominant factor?
THE WITNESS (Sellars): I'd say if you looked at the combination of mass flow rate and temperature, then those are the factors, correct.
MR. PIETRORAZIO: And what is the difference in exit stack temperature between this plant, the new 785 plant, and the previous 512 megawatt plant, the difference in exit stack temperature?
THE WITNESS (Gresock): We don't have all of the information about the previous plant scenarios, but as we reported last time, the 2012 MITRE model that addressed the previous configuration had an exhaust exit temperature of 201 degrees Fahrenheit, and our current project would

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have a comparable exhaust exit temperature of 183.29 degrees Fahrenheit.
MR. PIETRORAZIO: And those are for natural gas?
THE WITNESS (Gresock): Those are natural gas, yes.
MR. PIETRORAZIO: Question three would be: This would make the exit stack temperature closer to the ambient temperature than the previous 512 megawatt plant. Correct?
THE WITNESS (Gresock): It is a lower temperature, yes.
MR. PIETRORAZIO: And question number four: Is a plume called buoyant because of the difference in temperature between the hotter plume and the ambient air temperature?
THE WITNESS (Sellars): Yes, sir.
MR. PIETRORAZIO: Question number five: Is it correct to say the higher the stack, the better the dispersion of pollutants?
THE WITNESS (Sellars): In

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most instances, the taller stack would allow for additional dispersion before the plume would reach ground level, correct.
MR. PIETRORAZIO: Question six is: The optimum height of the previous stack design for the considerably smaller 512 megawatt plant, the optimum design was 160 feet. Correct?
THE WITNESS (Sellars): I didn't do the modeling for the prior design, but in reviewing the record, they looked at a number of different scenarios, including 160 feet and as low as 146 feet, and I believe there was a 10 or 12 percent difference in those two scenarios in terms of ground level concentration.
MR. PIETRORAZIO: But you're familiar with the finding of fact from the 1999 --
THE WITNESS (Sellars): I am.
MR. PIETRORAZIO: And isn't it true that the finding of fact stated that the optimum height of the chimney was 160 feet?
THE WITNESS (Sellars): The development and management plan that was

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filed subsequent to the finding of facts included additional modeling analyses that reflected the 150-foot stack.
MR. PIETRORAZIO: Well, this is an important question. Forgive me. What I'm driving at here is it was termed the optimum height, obviously the most favorable height, and I'm asking if you agree with that description of 160 feet?
THE WITNESS (Sellars): Again, I was not involved in the projects in 1999. I know from the modeling that we've done for the proposed configuration of the project right now, stack height of 150 feet results in compliance with all ambient air quality standards and, in fact, is a small percentage of that. So the optimal height really balances a number of factors, not just dispersion, but also, as you're well aware, interference with aircraft navigation and FAA approval, as well as the visibility of the stack from the locations. So, ideally, when one selects a height of the stack as optimal, it balances a number of those factors together.

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MR. PIETRORAZIO: Thank you. It takes me to my next question. The stack height, 160 feet, was reduced to 150 feet because of concerns for aviation. Correct?
THE WITNESS (Sellars): Yes. Again, I was not involved in the project at that time, so given that the FAA approval, the most current one, was for 150 feet, it's fair to assume that that was a factor, yes.
MR. PIETRORAZIO: Will a stack having a wider -- I'm sorry. Question number eight: Will a stack having a wider diameter but the same height have a reduction of exit velocity assuming the input is the same?
THE WITNESS (Sellars): Yes.
MR. PIETRORAZIO: Question Number 9: Would this reduction of exit velocity improve or diminish plume dispersion?
THE WITNESS (Sellars): Additional exit velocity would enhance plume dispersion, but again, as a buoyant stack, it is a less important factor than the mass flow rate and temperature would be.
MR. PIETRORAZIO: So the

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converse of your answer would be -- the question was the reduction. So the reduction would -- of the exit velocity would diminish plume dispersion. Correct?
THE WITNESS (Donovan): But the input is not the same. That's the key factor. The stack diameter has increased, but the input has changed because the exit velocity --
MR. PIETRORAZIO: That depends on the firing rate of the equipment at any particular time?
THE WITNESS (Donovan): Correct. But with the current configuration, the proposed configuration, the exhaust flow has increased, so the velocity isn't decreasing. Correct?
THE WITNESS (Gresock): No.
THE WITNESS (Sellars): The velocity, I believe, for the current project versus what was analyzed in 2012 for the MITRE model has gone down slightly, but the flow rate is, because it's a wider diameter, the overall flow rate has increased.
MR. PIETRORAZIO: Question

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Number 10: When a plume exits a stack and then immediately falls to the ground because of insufficient exit velocity, called downwash, would concentrations of pollutants be increased at ground level?
THE WITNESS (Sellars): Okay. When a plume exits a stack and immediately goes all the way to the ground, that would be called fumigation, not downwash. Downwash has a downward influence on the plume, but a plume that would go all the way to the ground, it would be a fumigating plume. So yes, downwash does affect the dispersion.
MR. PIETRORAZIO: Well, stack downwash and terrain downwash and building downwash could all create the same effect of a plume with a fair wind with that plume immediately, as soon as it comes out of the stack, begin to fall to the ground.
THE WITNESS (Sellars): The plume would have less plume height with downwash regardless of the cause the downwash, but all of those factors are on the basis of the air quality dispersion model analysis that was performed. So it included

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consideration of building and stack induced downwash, as well as the influence of terrain in the modeling. So all of those factors are represented in our modeling analysis.
MR. PIETRORAZIO: Yes, but the question is would the concentration of pollutants be increased under those conditions?
THE WITNESS (Sellars): If a stack were -- the taller the stack relative to the buildings around it, the less downwash, and therefore, one would expect that the concentrations with less downwash would diminish.
MR. PIETRORAZIO: I'm sorry, sir. It doesn't answer my question.
When you have the downwash and you have a plume immediately and changing course and going to the ground, does that cause the pollution deposition to be greater?
THE WITNESS (Sellars): If you have a downwash situation, the concentrations would be greater, yes.
MR. PIETRORAZIO: Thank you.
THE WITNESS (Sellars): But

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for the plume to go immediately to the ground would be more than downwash. That would be severe. That would be fumigation.
MR. PIETRORAZIO: Thank you. Question 11: Would this cause deposition of pollutants on the ground, on the ground itself?
THE WITNESS (Sellars): There will be deposition of pollutants on the ground regardless of the amount of downwash, and those are factored into, again, factored into our air quality impact analysis.
MR. PIETRORAZIO: Thank you.
Question 12: If there were wetlands in the area of this downwash, would there be deposition of pollutants on the wetlands?
THE WITNESS (Sellars): There is deposition of pollutants everywhere, including on wetlands, and that again is factored into our air quality analysis, as well as our soil and vegetation impact analysis which examine the degree of deposition as well as uptake by plants and the influence on soils. So, all of those

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factors are accounted for in our air quality analysis.
MR. PIETRORAZIO: Question Number 13: Are the effects of pollutant depositions on wetlands cumulative?
THE WITNESS (Sellars): To the extent that they're not removed by other factors in the environment through like other fake transport processes, it would be cumulative, yes.
MR. PIETRORAZIO: Thank you.
My last question for 14: CPV has submitted the expected amounts of pollutant emissions measured in tons per year from this plant. How many of these tons of pollutants will be deposited in the wetlands of Oxford and Middlebury from this plant?
THE WITNESS (Sellars): The deposition analysis that is done for the soil and vegetation, impact analysis, indicates that all of the deposition rates are considerably less than EPA screening criteria for protection of deposition to soils and vegetation uptake. So, it's all very, very low levels and lower levels than what was

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approved in the 1999 scenario.
MR. PIETRORAZIO: Thank you. That's all I have, Mr. Chairman. Thank you.
THE VICE CHAIRMAN: Middlebury Land Trust?
(No response.)
THE VICE CHAIRMAN: Town of Oxford?
(No response.)
THE VICE CHAIRMAN: The Naugatuck Valley Chapter of Trout Unlimited?
(No response.)
THE VICE CHAIRMAN: The Naugatuck River Revival Group, Inc?
(No response.)
THE VICE CHAIRMAN: The Pomperaug River Watershed Coalition?
For the Reporter, would you identify yourselves?
LEN DeJONG: I will. Mr. Chairman, members of the Council, my name is Len DeJong. I'm executive director of the Pomperaug River Watershed Coalition.
On behalf of the coalition, including its board of directors, staff,

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volunteers and supporters, I would like to thank the Council for allowing our participation in these proceedings.
As a newcomer to the Council process, I would especially like to recognize Attorney Bachman for the outstanding administrative guidance that she has provided to the coalition, but I'd also like to recognize the Applicant, in particular, Mr. Bazinet, who introduced the revised application to the coalition and subsequently met with us to discuss the information developed pertaining to the facility water demands. I'd also like to acknowledge the Heritage Village Water Company for meeting with us in what were very informative discussions.
As a brief reintroduction, the coalition is a nonprofit 501(c) organization with a mission to protect the water resources in the Pomperaug River Basin. Those resources include public water supply and river flow for aquatic health. The two are indisputably linked. The coalition was a party to the 1999 proceedings, and through

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our current testimony, has attempted to update the Council on our research and findings and underscore the continuing issues of concern. It is hoped that, in some way our engagement in these proceedings will serve as a helpful tool to both the Council and the Applicant in determining the best path forward in matters pertaining to water resources.

With that, I would like to address the following questions to the applicant:

THE VICE CHAIRMAN: Mr. DeJong, would you identify the gentleman with you?

KEVIN ZAK: My name is Kevin Zak. I'm with the Naugatuck River Revival Group.

THE VICE CHAIRMAN: Thank you. Go ahead.

CROSS-EXAMINATION

MR. DeJONG: Thank you, Mr. Chairman. I may be the minority here, but I have still some uncertainty regarding the proposed water demand, so the first

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series of questions are related to the water demands.

In the November 20, 2014, water availability request to the Heritage Village Water Company, which was submitted in response to Pomperaug Interrogatory Number 1, the estimated water demands differ from those stated in Section 4.1.2.1 of the October 2014 environmental overview. Please explain.

THE WITNESS (Bazinet): So, it is correct that the water amounts differ in Exhibit 1 or 2 -- I'm sorry, I don't recall.

MR. SMALL: Exhibit 1.

THE WITNESS (Bazinet): -- Exhibit 1 from the amounts that you referenced. They've been subsequently updated as late-filed exhibits. Exhibit 10, late-filed exhibits filed on January 22, 2015, references the changes to the water supply, which is indicated in Question Naugatuck Number 1 and 3 and attachments to page 19 of the report, Exhibit 10.

MR. DeJONG: I don't have that exhibit with me. Could you summarize the -- perhaps comparing it to what was submitted to

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the Heritage Village Water Company -- the changes were made?

THE WITNESS (Bazinet): So, the service request to Heritage Village cited, during the period April 16th to October 15th, the maximum of 150,000 gallons per day, during other periods a maximum for 218,000 gallons per day, with an average annual projection 66,900 gallons per day. Average flows during those same periods corresponding to the 150,000 gallons would be 77,500. During the period January 1st to April 15th, 68,500, and during the period October 16th to December 31st, 39,500. Those are the values that were submitted on November 20, 2014, and a subsequent commitment letter was granted. I don't have the date handy. I apologize. On December 23, 2014.

MR. DeJONG: Thank you. So we'll use those numbers as the basis for discussion going forward. Thank you.

And that leads to Question Number 2: As presented in the environmental overview, water demands, while using the

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evaporator coolers, are stated to range from 141,408 to 147,168 gallons per day. I'm assuming that the period of operation with the evaporative coolers is between April 16th and October 15th, which corresponds with the dates in the submittal letter to Heritage Village. Please explain why the quantity requested on a daily basis is 77,500 gallons per day?

THE WITNESS (Bazinet): So, the maximum or the peak day usage, the 150,000 gallons a day, is intended to encompass 24 hours of operation during evaporative cooler operation, and that, of course, varies with ambient temperature. So it's -- I don't have handy whether it's a linear sliding scale or not, but as temperature decreases, the need for evaporative cooling water also decreases, and at a certain point -- I believe it's approximately 60 degrees Fahrenheit -- at 60 degrees Fahrenheit the effectiveness of that evaporative cooling goes away, so you don't use any.

So, the 77,500 that you see is

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reflective of average ambient temperatures during those periods and expected dispatch profiles by ISO New England, which would take into consideration periods of nonoperation as well as periods of operation.

MR. DeJONG: Thank you.

Question Number 3: How is the term "average day" being used? Is the 66,900 gallons per day stated as the annual average within the Heritage Village Water Company letter, a true average of all water demands throughout the year, including when peak water demand oil-fired operation is necessary?

THE WITNESS (Bazinet): Yes. It's total annual projected water usage or demand from Heritage Village divided by 365 days.

MR. DeJONG: Next question. There appears to be an inconsistency -- and maybe it's just my reading -- in the Towantic information pertaining to the water system interconnect with Connecticut Water Company. In responding to Pomperaug Interrogatory Number 1, the Heritage Village Water Company letter to Towantic calls out the need for the

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interconnect agreement with Connecticut Water Company. In response to Pomperaug Interrogatory Number 2, Towantic indicates the interconnect agreement will not be relied upon. Please explain.

THE WITNESS (Bazinet): Question Number 2 is asking how the facility will meet the 663 to 712 GPM water demand, and that will not be met through interconnect agreements with other facilities. We will take the 218,000 gallons per day, and then any water above and beyond the 218,000 gallons per day, which I think is roughly equivalent to 150 GPM, will be supplemented through on-site storage.

MR. DeJONG: So I need to come back to that question. Is Towantic saying there is a need for the Connecticut Water Company interconnect?

THE WITNESS (Bazinet): Well, I think Heritage Village is saying that.

MR. DeJONG: And Towantic is in agreement with that?

THE WITNESS (Bazinet): We would anticipate that Heritage Village knows

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their system better than we do. I will point out that this is an interconnect that's being used to service their entire system, not just the Towantic project, and it doesn't relate solely to the Towantic project.

MR. DeJONG: Thank you.

Continue on with the interconnect. How will Heritage Village Water Company be able to offer you a guarantee that the Connecticut Water Company interconnect will be available to you and, as you just correctly mentioned, to others post the 2017 approved diversion date; if not, how will required water demands be met?

THE WITNESS (Bazinet): So, as a franchised water company, Heritage Village has an obligation to serve all of its customers. So whether that's via an interconnect that exists with Connecticut Water Company or some new source of supply, it's something that they'll be faced with in their obligation to serve their customer base, unless that is they decide to waive their franchise rights and allow a different water company within a similar geographic

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territory -- naturally Connecticut Water comes to mind given the existing interconnect -- to step in and provide franchise service.

However, in the event that that's -- in the event they are not able to meet their obligations as a water utility, Citing Council Interrogatory Number 30 recently submitted addresses of a number of different alternative options that we would explore in more depth to understand whether or not we could use one of those sources.

MR. DeJONG: As a follow-up to that question, would it be correct to say that in the service agreement letter from Heritage Village they specifically call out the need for the Connecticut Water Company interconnect to meet your demands?

THE WITNESS (Bazinet): So I think the December 23rd commitment letter, the fifth bullet down, pretty clearly explains the commitment and the contingency on the Connecticut Water interconnect to serve not only CPV, but its other customers.

MR. DeJONG: Thank you.

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Next question: You describe water demand limits as being estimated or expected. Can you discuss whether the values represented are, in fact, actual limits or will upward and, perhaps, downward adjustments be necessary after the plant is operational?

THE WITNESS (Bazinet): I'm sorry. Can you repeat the reference at the beginning or where do we say it's expected versus --

MR. DeJONG: In the environmental overview words used are "estimated" and "expected" is my recollection.

THE WITNESS (Bazinet): So the maximum daily quantities that we submitted in our water request to Heritage Village are not expected or not -- will not be exceeded is a better word to use. Expected quantities, obviously, change on a daily basis on a minute-by-minute basis depending on what's happening at the facility at a given point in time.

MR. DeJONG: Next question,

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please: How will Towantic and Heritage Village Water Company manage and report on actual use, and will there be a third party to monitor for a compliance? And I'll give you a reference. It's my understanding that the Killington power facility, which is supplied by the Connecticut Water Company, provides the Department of Public Health, State Department of Public Health, with water facility reports and compliance data.

MR. SMALL: Just for clarification, do you mean Killingly, the Lake Road plant in Killingly?

MR. DeJONG: Yes, I do. I misspoke. I apologize.

THE WITNESS (Bazinet): So a couple of elements there. I guess the first is with respect to the supply volumes I presume the question is directed. We've discussed with Heritage Village that they would have metering equipment which would have automatic shut-off valves, which were triggered at our daily maximums. The reporting requirements are going to be dictated by the permitting entities that have

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issued the permits for Heritage Village's supply source. We haven't reviewed those in detail to understand what those would be at this point. Furthermore, we're not familiar with Killingly's requirements -- Lake Road's requirements, that is.

MR. DeJONG: That's helpful. Thank you.

Next question, please: You've stated that if the Heritage Village Water Company can at any time, supply more than the estimated water limits that Towantic would accept the same. Please explain the basis for this statement.

THE WITNESS (Bazinet): Heritage Village has the ability to withdraw up to 2.052 million gallons per day from five wells located in Southbury. In addition to that, they have an interconnection capacity with Connecticut Water which can supply up to an incremental 500,000 gallons per day. The expectation, based on historical demand profile for their system and when that would coincide with the plant's demands, is that they operate well below those permitted

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yields and interconnection capacities during the period in which our demands are highest.

So, to the extent that there is sufficient excess water capacity available below the aggregate basis 2.552 million gallons per day, Heritage Village has indicated their willingness to supply that water to the project.

MR. DeJONG: A follow-up to that question. In your conversations with Heritage, was there any discussion about what Heritage uses as a benchmark for letting you know whether or not they can supply more than the estimated water limits; for example, would they look at river flows when they make that determination? And I'm just asking if there were conversations to that effect.

THE WITNESS (Bazinet): I'm not familiar with all of the terms of their permitted withdrawal rights. I suspect that they have conditions that, depending on river flows or other events, that, again, I'm not familiar with the specific conditions, but they may have restrictions on whether or not they can take up to their 2.052 million

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gallons per day, which is permitted by the state.

MR. DeJONG: I apologize for the next question. It's a bit lengthy. The Siting Council, in its opinion on page 3, dated June 23, 1999, in Docket 192 stated, quote, "The Council believes that this river basin" -- and they're referring to the Pomperaug basin -- "could be overused if not carefully measured and regulated and will order that Towantic Energy develop a plan to use on-site water storage facility operation during low flow conditions or whenever determined necessary by local and/or Heritage Village Water Company officials to protect the water quality and quantity."

Please describe what actions Towantic has taken to comply with this statement from the Council for its current application. Will Towantic provide the Siting Council with a water management plan that addresses stated concerns about public water supply and aquatic health protection?

I'm happy to go back over that.

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THE WITNESS (Bazinet): The tail end of the question, please.

MR. DeJONG: The last part of the question is will Towantic provide the Siting Council with a water management plan that addresses stated concerns about public water supply and aquatic health protection.

THE WITNESS (Bazinet): I believe the first part of the question was what steps have we taken to -- I'm sorry, can you --

MR. DeJONG: Sure. Again, it's a long question. The Council believes that this river basin could be overused if not carefully measured and regulated and will order that Towantic Energy develop a plan to use on-site water storage for facility operation during low flow conditions or whenever determined necessary by local and/or Heritage Village Water Company officials to protect water quality and quantity. Again, this references back to the 1999 decision. Please describe what actions Towantic has taken to comply with this statement for its current application?

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THE WITNESS (Bazinet): So there are a number of different things that the project has done to minimize its overall water consumption as a project. First off, we're an air cool facility which uses substantially less water than a wet cooled generating facility. In addition, the 1999 approval was permitted with the wet surface air cooler, which is a device that's used to cool auxiliary equipment on the site. We're now using fin-fan coolers, which uses just air, so we've eliminated that supply source altogether for demand point altogether.

Third, we incorporate demineralized water to make up on all of our processes, which has the net effect of reducing overall consumption and discharge.

Lastly, the facility is planned to be equipped with two water storage tanks totaling 875,000 gallons each. And I believe in a recent interrogatory to address an interrogatory issued by the Connecticut DEEP, we've examined the potential for increased storage capacity as well. Those haven't been submitted yet, but they will be

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shortly.

Lastly, we are -- or the Applicant has been and will continue to pay for two gauge stations on the Nonnewaug and Weekeepeemee Rivers to monitor river flows, and we've agreed to fund an incremental flow -- instream flow incremental methodology study to, you know, meet the commitments that the project has made in the past but continue to show that as well.

MR. DeJONG: I'd like to come back to the IFIM study and the stream gauge. I have that, actually, as a following question. But I think what you've just commented on are very positive steps forward in terms of water conservation in regards to what the plant usage is, but when I think about a water management plan and coordination with Heritage Village, I think a little broader than that in terms of if there are issues associated with low aquifer levels, low river flows, how is that plan going to be implemented, and how will that work with Heritage Village Water Company? I think that's what, at least, I had in mind

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when I read about the need for a water management plan.

THE WITNESS (Bazinet): We, CPV Towantic, is more than willing to work with Heritage Village on such a plan. I think the reality is that such a plan would take into a number of different considerations that we don't have necessarily control over. For example, I think most people in your world are familiar with the fact that there are a number of different registered not permitted, diversions that are apparently still on the books and not necessarily accounted for to understand whether or not those sources are actually pulling water on a daily basis or less frequently, for that matter, but are actual demands on the system, whether they are actually demands or whether they're just hypothetical demands.

So there are a number of different issues that we would be more than happy to sit down with Heritage Village, the Connecticut DEEP and work through as a customer of the Heritage Village system, but

we'd emphasize that it's not just CPV Towantic that puts, perhaps, this issue on the table. It's the fact that Heritage Village supplies a number of different residential customers, commercial customers, industrial customers in this area of Oxford that would also be faced with the same issues.

MR. DeJONG: If the Council deemed it appropriate -- this is a follow-up. If the Council deemed it appropriate, would you be able to provide the Council with a draft water management plan for their review?

THE WITNESS (Bazinet): Yes, absolutely.

MR. DeJONG: Thank you.

The next question is related to water conservation. It's a little redundant, but let me give it a try. In its June 23, 1999 decision and order, the Siting Council, in describing an operations plan, the Council included a requirement for a, quote, a water conservation plan to use on-site water storage facility operation during low flow conditions, end of quote.

Please describe how the Heritage Village Water Company and Towantic will coordinate a required response to water conservation during periods of draught and/or high water demands? And perhaps most importantly on this question, if Heritage Village Water Company implements voluntary or mandatory water conservation for its customers, how will Towantic respond?

THE WITNESS (Bazinet): So I think you addressed that, in part, in your question. The facility is equipped with two 875,000 gallon storage tanks, which could be called upon in such an instance to supplement the facility's water requirements during those periods. Those periods happen to correspond with some of our lower flow conditions as a facility, oil being the higher flow conditions and most likely to occur in the winter.

MR. DeJONG: Again, I just would reiterate that that would be -- in my mind that would be part of a water management plan in terms of how Towantic would respond to the water conservation requirements either

set by Heritage Village Water Company or in the future because there is, as part of Public Act 14-163 last year, there is an initiative to move municipalities forward in terms of municipal water use and draught ordinances. So I believe that should be part of the water management plan, and would ask you to consider doing so.

Next question: With the water demands for oil-fired operations exceeding one million gallons and with the stated maximum demand being 218,000 gallons per day, the operation of the facility using the plant 1.75 million gallons of on-site water storage has been identified to be 52 hours, if I have that correct. Please confirm that the plant will need to shut down operation to comply due to limitation of water supply?

THE WITNESS (Bazinet): So 52 hours or more pending availability and excess supply, as we discussed in one of your prior questions from Heritage Village, but yes, after 52 hours, absent any excess supply availability from Heritage Village, the plant would need to reset its storage capacity to

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support further USLD operation.
MR. DeJONG: And in follow-up to that question, in follow-up to the previous question, is there any regulatory authority that can require the facility to continue operation and thereby shift water restrictions to other Heritage Village Water Company customers?
THE WITNESS (Bazinet): None that we're aware of.
MR. DeJONG: Next question: In response to CSC-31, Towantic suggests the possibility for additional water supply from the Heritage Village Water Company during winter due to a decrease in water demands from the Heritage Village Water Company. I believe you just mentioned that earlier.
Towantic goes on to say, quote, More water is likely, end of quote. As reported by the coalition, winter flows, at times, have been below those identified as critical to fish habitat during the winter. How does Towantic justify taking more water during the winter season when it will show that the river is already at risk? Again,

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another long question.
THE WITNESS (Bazinet): So we don't -- we actually don't provide the permit conditions that Heritage Village is able to withdraw up to 2.052 million gallons per day from ground water sources. And when we look at our withdrawal from the Heritage Village system relative -- rather than repeating it, I'll direct you to Connecticut Siting Council Interrogatory Number 33, which I think in part addresses the point that you're raising. And under its 1 in 100 conditions, our facility's average demand would represent less than 1.3 percent reduction in stream flow, and that's all within the permitted safe yields of the Heritage Village system.
(Whereupon, Mr. Lynch entered the hearing room.)
MR. DeJONG: I think it's important to note here, just to tag onto this question, you had mentioned the IFIM study and your willingness to fund that study. We actually -- the coalition actually moved forward in funding that study. That's a completed study, and that's an update to

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where we left off in 1999. We have more information today than we did in 1999 regarding critical flows during the six bio periods.
So my reference to this question -- and it's going to be also referenced in the follow-up question -- has to do with the fact that there are critical flow periods that have been identified as a result of the IFIM study. The river is already exhibiting flows that are below those critical factors, so that's why we, as a coalition, are very concerned about, whether it's Towantic or another large potential water user, how that might impact river health.
So I'll go on to the next question. PRWC highlighted in its prefile testimony, the need for a detailed review of how water demands will impact the river ecosystem. In response to Question CSC-33, Towantic argues that additional water withdrawn from the facility will have a small incremental impact on river flows. Has Towantic considered the evidence provided by

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the coalition that indicates that river flows, at times, are already below critical flows identified within the coalition submitted exhibits, both for overwintering and rearing and growth periods. Kind of just restating what I've said that we have now known conditions in the river that we did not know in 1999, based upon the IFIM study that the Council strongly recommended be completed, that suggests that the river is already exhibiting critical flows, have you considered what your impact withdrawals would be on the overwintering and rearing and growth bio periods, which are the two most significantly impacted critical flow periods?
THE WITNESS (Bazinet): So the data that I just mentioned to you in your last question was from the 2010 USGS study titled "Estimation of the Effects of Land Use and Groundwater Withdrawals on Stream Flow for the Pomperaug River in Connecticut." It cited that even in under one in a hundred conditions of 7.3 cubic feet per second of stream flow -- I'm not sure if that's synonymous with critical or what. I believe

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the term was rare -- the facility's average demand would represent less than 1.3 percent reduction of stream flow under rare conditions.

I'm not going to profess to know whether that falls above or below critical in terms of the scale of severity, but the data that you're asking about is data quoted from this USGS study that you referenced.

MR. DeJONG: And I think it's fair to do that. The coalition will provide some additional study in regards to the USGS, which in itself served as an exhibit in regards to how much water is currently being diverted and how much water is allowed to be diverted and how that study was developed. This is information that was forthcoming. And so your comment is appropriate for the information you have in hand now, but we'll be providing you with some additional information on it.

Mr. Chairman, I have three more questions.

In granting the Heritage

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Development Group -- that's the parent company to the Heritage Village Water Company -- a diversion permit for ponds and Pomperaug River withdrawals for golf course irrigation, DEEP has placed a river flow restriction on the ability of Heritage to utilize that diversion; in other words, if the river is flowing below our set point, then the diversion cannot be used.

With the understanding that the DEEP has provided comment to the Citing Council, would it be reasonable to request that DEEP officials be further called upon to review both registered and permitted diversions within the basin to assist with the understanding whether Towantic out-of-basin water demands will have an adverse impact on the river?

So restating -- it's a long question.

MR. SMALL: Can you restate that? I think I had trouble following that, and I think my witnesses may have as well.

MR. DeJONG: Sure. The Heritage Development Group, which is the

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parent company to the Heritage Village Water Company, has a diversion permit for withdrawing water from the river and the ponds for irrigation of its golf course. DEEP has a flow restriction in terms of if the river is flowing at a specific flow level, that diversion permit is no longer -- that diversion is no longer usable by the Heritage Development Corporation. I've got to stress it's not the Heritage Water Company. It's the Heritage Development Corporation, the parent.

What I'm suggesting is that knowing that DEEP has permitted the Heritage Development Corporation and placed a restriction on the flow suggests to me that DEEP recognizes the concerns that we've tried to share with you regarding flow on the Pomperaug. And as we have stated in our testimony, and I'm restating now, would it be reasonable for the Applicant to request information from DEEP to confirm what Mr. Bazinet just talked about, and that's the registered diversions versus the permitted diversions versus those diversions that are

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being utilized?

MR. SMALL: Mr. Chairman, I'm not sure how we can answer this. There's a combination of legal questions in there, information that we don't know much about. Heritage Village Water Company is a franchised water company with obligations to serve and restrictions on anybody in its franchise area getting water elsewhere. The Heritage Development Company is a company -- at least I'm not aware. I'm not sure if our witness panel is -- it's a very different legal situation. Additionally, Heritage Village Water Company has registered diversions, which it uses to meet its public service obligations. This Heritage Development Company certainly is not a public utility, and it's also obtaining diversion permits, which are a very different animal than registered diversions. So, I don't think it's a question my witnesses can answer.

I don't know where we would start and whether we should be asking DEEP -- and also just even being asked to -- the

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question should we be asking DEEP for information. So I guess I'm reluctant to object, but we just can't answer it. I don't think it's a question our witnesses can answer.

MR. DeJONG: Mr. Chairman, would it be helpful if the coalition submitted an interrogatory on this issue?

THE VICE CHAIRMAN: I'm not sure that an interrogatory does very much because I really think that what, as I understood the question, you're asking the Applicant to ask DEEP if it has this information on diversions and what have you. And so, I assume the answer is no, they don't have the information. And whether they should ask DEEP for it and query whether or not if DEEP thought it was significant enough because they wouldn't have provided this information as a part of their review when they gave us their report, I really don't know. I guess the question is do you want to ask DEEP if they have this information?

MR. SMALL: Well, I mean, if you have that information, you can provide it

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in the record.

THE VICE CHAIRMAN: I assume they don't have it.

MR. DeJONG: We don't have all the current information. So maybe the question needs to be withdrawn to the Applicant. Is there a part of the process that allows the coalition to petition the DEEP for this information?

THE VICE CHAIRMAN: I don't know that there is.

MR. SMALL: You can request the information from DEEP.

THE VICE CHAIRMAN: You certainly can ask, and the Applicant can certainly ask.

MR. DeJONG: Then I'll withdraw the question, and we'll submit a request to DEEP.

THE VICE CHAIRMAN: Maybe both of you will follow up on it. Maybe if two ask, you'll get it, instead of just one.

MR. DeJONG: The next question: In response to Question CSC-30, you refer to the Heritage Village Water

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Company's legal right to supply water to the facility. However, it is believed that the intent of the question was directed to water sources and not water suppliers. Would it not be possible for Heritage Village Water Company to maintain its exclusive service area by purchasing water for the proposed facility from another provider such as Aquarion Water Company's system that has exclusive service area rights with the southern tier of Oxford in a similar way that Heritage Village Water Company purchased water through the identified Connecticut Water Company interconnect in Middlebury?

And I should make mention of the fact for full disclosure, that I am a 30-year retired employee of Aquarion Water Company when I asked this question.

THE WITNESS (Bazinet): I suspect the answer to the question is yes. I presume not -- and I should probably be deferring to counsel on this -- but that it would be subject to some PURA approval similar to the current situation with Connecticut Water and Heritage Village.

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MR. SMALL: Just to clarify as counsel, Heritage Village can serve its customers as a franchise utility any way it chooses, subject to appropriate permit. So it might need PURA approval, it might need approval from the Department of Public Health, and it might need approval from the DEEP, again, depending on what its other water source is, but it could procure supplies from other companies. The answer is yes.

MR. DeJONG: Thank you.

MR. SMALL: As a legal matter.

MR. DeJONG: My concern in reading your response was that the response was limiting it to the fact that water could not be brought in because they have the exclusive service area. And I think you've just reinforced the fact that, if Heritage was interested and it was needed from the facility, they could secure water from other sources, one of them being Aquarion Water Company, which services part of Oxford already.

THE VICE CHAIRMAN: But that's

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a decision for Heritage Water to make and not for them. They ask Heritage for the water, and it's up to Heritage to decide where to get it.

MR. SMALL: That's correct, Mr. Chairman.

MR. DeJONG: I agree, Mr. Chairman. I'm just trying to clarify the point that --

THE VICE CHAIRMAN: There may be other sources available --

MR. DeJONG: -- there may be other sources.

THE VICE CHAIRMAN: -- but it's not for them to be looking for it. They have to go to Heritage who has the jurisdiction to supply the water.

MR. DeJONG: Yes. And my last question, just to reiterate, the instream flow incremental methodology report, the IFIM study, is actually part of the exhibit that we entered early on, so that report has been completed. It provides updated information to where the Council left off in 1999 regarding aquatic health of the river. I

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believe I just heard you say that, if the Council decided to improve your facility and you had to manage water withdrawal from the Pomperaug Basin, you would look favorably on continuing the funding of these gauges; did I hear that correctly?

THE WITNESS (Bazinet): Yes.

MR. DeJONG: With that, Mr. Chairman, I'd like to thank the Council and the Applicant for your time.

THE VICE CHAIRMAN: Before you leave, Mr. Hannon, you have a follow-up?

MR. HANNON: I just want to follow up on one of the questions that was asked. I'm not sure I really understood the answer. I was talking about the storage of water on site. I realize that you have the two tanks there. But the way that you responded, it sounded as though you had to deplete the water from both of the tanks before you could refill either of the tanks; is that correct or not?

THE WITNESS (Bazinet): No, that's not correct.

MR. HANNON: So then the 52

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hours is if you ran those tanks totally and did not replace any of the water?

THE WITNESS (Bazinet): It's assuming that you are replacing the water as you're using it.

MR. HANNON: So, if you're replacing the water as you're using it, then there is no 52 hour cap?

THE WITNESS (Bazinet): Right. You're only replacing at a rate of 150 or so GPM, and you're consuming at a rate of somewhere between 600 and 700 GPM.

MR. HANNON: Okay. So it might extend it a little bit?

THE WITNESS (Bazinet): Yes.

MR. HANNON: Okay. I just wanted to make sure because the way that you responded, it sounded like you had to use all the water before you could do any refilling of either of the tanks. Okay. Thank you.

THE VICE CHAIRMAN: Dr. Bell.

DR. BELL: Thank you, Mr. Chair.

In line with Mr. Hannon's question trying to clarify this matter of the

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water tanks, where is the water for the water tanks coming from? We discussed Heritage Village and the 218,000 gallons, but I'm assuming, maybe incorrectly, that CPV would go to Aquarion or a company in Massachusetts, wherever, and bring water in trucks to fill the water tanks. Is that a correct assumption or belief?

THE WITNESS (Bazinet): The tanks will be filled by Heritage Village.

DR. BELL: So that would be beyond -- above and beyond the 218,000 gallons that they would be supplying to you for operations during the whale use?

THE WITNESS (Bazinet): We'll begin service, and we'll be subject to caps of 218,000 gallons per day for a certain portion of the year and 150,000 gallons per day for a separate portion of the year. And to the extent there is excess supply available on their system, we discuss with them the ability to take that excess supply, but we will fill the tanks based on the maximum daily quantities that Heritage Village is providing.

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DR. BELL: And that's per contract with Heritage Village?
THE WITNESS (Bazinet): It will be. We are in that process currently.
DR. BELL: And if there wasn't enough supply to do what you were saying, which I think I understand, then you would go to some other source?
THE WITNESS (Bazinet): We could truck water in. That would obviously be a little more tedious, but we could truck water in, correct.
DR. BELL: Thank you.
Thank you, Mr. Chair.
THE VICE CHAIRMAN: Thank you very much.
MR. DeJONG: Thank you, Mr. Chairman, and members of the Council.
THE VICE CHAIRMAN: Mr. Hannon.
MR. HANNON: Another question on this. So one of the questions I asked previously was the application stated that the demineralized water would be coming from a location off-site. I did not really get a

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response as to where that would be. So are you, in fact, saying that that off-site location is Heritage Village?
THE WITNESS (Bazinet): So potable water will be supplied by Heritage Village, and it will be converted to demineralized water on site via off-site regenerated trailers. So the trailers are portable. They come on the site from other locations and recharge at other locations, but the water is demineralized on-site and stored in water storage.
MR. HANNON: Thank you.
THE VICE CHAIRMAN: Dr. Klemens.
DR. KLEMENS: You gave a number for the low flow, not the worst case scenario, the low flow, a percentage, reduction in surficial water was one point something?
THE WITNESS (Bazinet): One second, please.
DR. KLEMENS: Once we get it, I have a question.
THE WITNESS (Bazinet): So,

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according to the USGS report done in 2010, under one in a hundred conditions, the stream flow was estimated at 7.3 cubic feet per second. The facility's average demand would represent less than 1.3 percent of that stream flow.
DR. KLEMENS: Can you relate that to anything that's less than 1.3? Can you relate that to any type of impact or lack thereof? Because this is a bunch of numbers. What does it mean on the ground? Does it stream over to any kind of impact caused by your water demand in low flow times?
THE WITNESS (Bazinet): We don't have a practical comparative point we could use currently. I mean, it's a pretty complex question. I think it would require a follow-up.
DR. KLEMENS: Will you follow up? Because you have all these numbers, but I'd like to know what it actually means on the ground to the stream itself.
MR. SMALL: Dr. Klemens, we'll file a late-file, but this may be one of those things that needs the extensive studies

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like the studies previously done. It just strikes me from having looked at those studies, and you've looked at them too, I'm sure, this is a pretty complicated issue. It's not -- so I'll doubt -- we'll see what we can do. And we'll also -- the other thing we should probably do is correlate whether these low flows are in the winter where we have maximum demand to give a little more perspective, but we'll provide a response. It may not have a definitive answer, but we'll do it.
DR. KLEMENS: I'm not sure there is a definitive answer, but I'm trying to find it.
MR. SMALL: Yes. We'll see what we can do.
DR. KLEMENS: Thank you.
Thank you, Mr. Chairman.
THE VICE CHAIRMAN: Anything further?
Mr. Zak, I believe you're here with the Naugatuck River Revival Group?
KEVIN ZAK: That is correct. And I'll ask a few simple questions, and then

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if I get by my nervousness -- I'm a fish out of water here.
So, basically, I do need to ask if I will be allowed to ask further questions at another time.
THE VICE CHAIRMAN: Yes, you will.
MR. ZAK: So, if I get too nervous --
THE VICE CHAIRMAN: There's material that hasn't been filed yet, and there's probably material we haven't even dreamt of that will be filed subsequent also --
MR. ZAK: Probably.
THE VICE CHAIRMAN: -- and so everybody will get a crack when we believe everything is before us. But go ahead.
MR. ZAK: Thank you.
THE VICE CHAIRMAN: And take your time.
CROSS-EXAMINATION
MR. ZAK: Thank you. Does CPV have a corporate environmental policy?
THE WITNESS (Bazinet): We do,

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not one I'd be able to quote or --
MR. ZAK: Do you have any environmental programs that CPV engages in that I could take to the people to show them your corporate responsibility?
THE WITNESS (Bazinet): Perhaps you can more specifically define what you mean by "environmental programs." I could offer up that CPV is one of the largest developers and subsequent constructors and owners of wind generation. I would consider that environmental, but --
MR. ZAK: I would also. And I appreciate that, and that's one of the examples. I was just wondering if you have anything other than some kind of clean power generating that you engage in, whether it might be a national park that you're helping with?
THE WITNESS (Bazinet): I'm going to suggest that we take that as a to-do item and file a late-filed exhibit that can document all of the things that CPV is involved in.
MR. ZAK: With that in mind,

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what negative economic and environmental externalities did you consider in your overall analysis of the deposition of pollutants in the surrounding area?
THE WITNESS (Sellars): I can take the first crack at that. One of the analyses we did was to look at what the impact of introducing the facility into the grid would be, and the result of that is the displacement of some older, less efficient and higher emitting units. And we were able to quantify the emission reductions for nitrogen oxides, carbon dioxide and sulfur dioxide, for example. There will be a reduction regionally of nitrogen oxide emissions, I believe, of 466 tons per year, beginning in 2018, which will grow to 802 tons per year by 2020. For carbon dioxide there'd be a reduction in regional emissions of 270,454 tons per year, beginning in 2018, growing to 486,621 tons per year by 2020. And for sulfur dioxide there would be a reduction in regional emissions of 416 tons per year, beginning in 2018, growing to 2,466 tons per year by 2020. So, in terms of those

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environmental externalities, there will be improvement in air quality on a regional basis by the reduction of these emissions.
MR. ZAK: But correct me if I'm wrong, there will be pollution emitted from the plant?
THE WITNESS (Sellars): That's correct.
MR. ZAK: So there will be a carbon footprint?
THE WITNESS (Sellars): There will be a carbon footprint, but when you look at the impact of the facility on the overall grid, there will be a net reduction in CO2 emissions.
MR. ZAK: Is CPV familiar with the history of the Naugatuck Valley and its relationship to pollution in the past and what has occurred since 1999 to the present?
THE WITNESS (Bazinet): Perhaps not all of the details that you may be familiar with, but I am familiar with some of the history associated with the Naugatuck River and the -- I don't recall the name of the facility off the top of my head.

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MR. ZAK: Uniroyal perhaps --
THE WITNESS (Bazinet): Yes.
MR. ZAK: -- with their stacks?
Can you give me a very brief description of what you know and the CPV knows of that history?
THE WITNESS (Bazinet): I'd hesitate to do that at all. You probably have the details a lot better than I do.
MR. ZAK: Well, if I may, it's in general the Naugatuck River Valley, including Oxford, the towns, 14 towns surrounding 11 along with the Naugatuck river itself, experienced serious pollution in the course of its history, and since the Clean Water Act and Clean Air Act it has made significant advancements in a positive way. However, it still is very impaired, and it has displayed still serious air pollutants specifically, which range, from time to time, in the top ten worst counties in the country.
So, let me go on to another area. Can you tell me how many, if any, any eagles' nests are within a 10-mile radius of

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the plant?
THE WITNESS (Bazinet): No, we don't have that information available.
MR. ZAK: Can you tell me how many turkey vulture nests may be within close proximity, say a couple of miles, up to 10 miles, from the plant?
THE WITNESS (Bazinet): No.
MR. ZAK: How about black vulture nests?
THE WITNESS (Bazinet): No.
MR. ZAK: How about peregrine falcon nests within 10 miles of the facility?
THE WITNESS (Bazinet): I can tell you that we've consulted DEEP on the threatened and endangered species that are present in the vicinity of the site, and we've received a letter indicating the potential for the presence of certain species. I'm sure you have a pretty long list. I could answer each of them, if you like, but I can assure you that I probably don't know how many nests are present for any particular species.
MR. ZAK: Are you saying DEEP

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knows?
THE WITNESS (Bazinet): What I'm saying is that we've consulted with DEEP on the potential presence of certain species, none of which you've mentioned, and they've listed a number of different species that may potentially be present on the site but, no, I don't believe --
MR. ZAK: Not on the site. I'm sorry. I meant within a general -- a reasonable distance as the crow flies, so to speak, up to 10 miles.
THE WITNESS (Bazinet): I'd refer you to Exhibit 1, Appendix F, which documents the Threatened and Endangered Species Agency correspondence.
MR. ZAK: And say that again, please. Exhibit what?
THE WITNESS (Bazinet): Exhibit 1 of the petition filing on November 3rd, Appendix F.
MR. ZAK: Okay. I do not believe I have that in front of me, but if you can -- is there anything specific that I mentioned? Does that answer the questions

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I -- I'm sorry, I'm a little -- I'm a slow study, so please bear with me.
THE WITNESS (Bazinet): So, the species that you mentioned are not on that.
MR. ZAK: Okay.
THE WITNESS (Bazinet): But there are others listed on that.
MR. ZAK: How about --
THE WITNESS (Bazinet): Do you want me to read it?
MR. ZAK: Does it include Osprey nests in the area?
THE WITNESS (Bazinet): It includes the red bat, the cory bat, silver-haired bat and Eastern box turtle.
MR. ZAK: Moving on, and I think I'll finish with this: I'm a little confused with an interrogatory question CSC-5, page 1, in regards -- second paragraph. And just for my own clarification -- again, I apologize for not understanding what you had written there -- halfway down it says -- it talks about the IBA and the Naugatuck State Forest, and it

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said it would not experience any adverse impact resulting from the proposed development of the facility. The conclusion that the subject property's open field does not support significant grassland bird habitat is further supported by the DEEP natural diversity database.

Back to the first sentence about "not experience any adverse impact resulting from the proposed development of the facility," is that the actual building of the facility? Is that what it's talking about?

THE WITNESS (Gustafson): Yes, it's essentially modelable of that habitat. Dean Gustafson, by the way.

MR. ZAK: So, in other words, when you're building, that's directly related to just building the facility and the grounds touching your property?

THE WITNESS (Gustafson): That's correct.

MR. ZAK: Okay. So it doesn't address future noise, correct, from the plant? There is noise, a certain amount of

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noise, quote, for lack of a better word, noise pollution from the plant, correct, after it's built going on to 30 years from now?

THE WITNESS (Gustafson): That response is specific to the removal of the habitat, but there is a separate noise study that's been submitted as part of the application.

MR. ZAK: And so it also does not refer to the lighting of the facility over the next 30 years. Correct?

THE WITNESS (Gustafson): That's correct.

MR. ZAK: And it does not include the future effluent that is coming out of that plant for the next 30 years. Correct?

THE WITNESS (Gustafson): That response does not incorporate that, but there is a separate air study that's been done.

THE WITNESS (Sellars): That's correct. The air quality impact analysis to the closest point on the state forest, we looked at all the pollutants and of most

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interest has been the PM2.5 or fine particulate emissions. The maximum impact of the plant on that facility on that state forest would be .05 micrograms per cubic meter, and that assumes year-round firing of oil, even though we wouldn't be allowed to do so, a very, very conservative analysis. That translates to four-tenths of 1 percent of the national ambient air quality standard and about zero point 5 percent of the existing background levels.

We also did screening of the impact of the facility on plant soils and animals everywhere, and basically the facility has an insignificant impact to any of those parameters, even at its point of maximum impact, which the state forest would be a tiny fraction of that impact.

MR. ZAK: I'm sorry. Can you go back to your statement just a second ago. You said everywhere --

THE WITNESS (Sellars): We did a -- the analysis is based on the point of maximum impact, which is the highest modeled concentration that would result from the

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facility. That point of maximum impact occurs very, very close to the property fence line, and it drops off remarkably with distance in all directions.

MR. ZAK: You're referring to the map that was just submitted we received in the mail yesterday --

THE WITNESS (Sellars): That was an isopleth of concentrations, correct.

MR. ZAK: Exactly. Okay. And It's pretty much just referring to PM2.5. Correct?

THE WITNESS (Sellars): Correct, but a similar relationship occurs with all the pollutants.

MR. ZAK: Including ground level ozone?

THE WITNESS (Sellars): Ground level ozone is really formulated on a regional basis, so the facility will have very, very insignificant impact on ground level ozone anywhere in this area. The ozone levels are formed by the contributions of precursor emissions from a large distance since it's a photochemical reaction that

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occurs over a great period of distance and time. So this facility would have pretty negligible impact on ground level ozone concentrations.

MR. ZAK: What analysis has your company done on the current emissions in the Naugatuck Valley?

THE WITNESS (Sellars): Well, we've included in our analysis monitored background levels that occur in a number of receptors around the state, as well as cumulative impact analyses for certain pollutants, as directed by the Department of Energy and Environmental Protection.

MR. ZAK: Thank you. No further questions. Thank you.

THE VICE CHAIRMAN: Thank you, Mr. Zak.

Next will be Lake Quassapaug Association.

(No response.)

The Middlebury Bridle Land Association.

(No response.)

THE VICE CHAIRMAN: Town of

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Southbury?

EDWARD EDELSON: No questions.

THE VICE CHAIRMAN: I missed the Naugatuck Valley Audubon Society.

JEFF RUHLOFF: Good afternoon, Members of the Council. Thank for this opportunity to ask some questions.

THE VICE CHAIRMAN: Would you give us your name for the record, please.

MR. RUHLOFF: My name is Jeff Ruhloff. I'm a member of the board of directors of Naugatuck Valley Audubon Society.

MR. LYNCH: Would you bring the microphone closer, please.

MR. RUHLOFF: Jeff Ruhloff, Naugatuck Valley Audubon Society Board of Directors.

We have two other members of the board who are unable to be here, so I have a couple of questions from them and a couple from myself.

CROSS-EXAMINATION

MR. RUHLOFF: My first question to the Applicant is: What's the

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expected operational lifetime of the plant?

THE WITNESS (Bazinet): So we've provided a more formal answer to the same question in Westover interrogatory responses. I believe it's Question Number 9. It goes on to say that the expected life of the facility is in excess of 35 to 40 years.

MR. RUHLOFF: And in your corporate experience now with wind and with gas, do you see this being a continued best means of creating clean energy over that lifetime?

THE WITNESS (Bazinet): I'm sorry. It was Question Number 7, by the way, not Number 9.

MR. RUHLOFF: Thank you.

THE WITNESS (Bazinet): And I'm sorry, can you please repeat that question?

MR. RUHLOFF: From your experience as building and managing both wind plants and gas plants, do you see a gas plant continuing to be the best method of providing clean energy for the lifetime of this plant?

THE WITNESS (Bazinet): So, as

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a corporate philosophy, we believe gas and renewables are very complementary resources, and we believe that for the foreseeable future, including the lifetime of this facility, both will continue to play an integral role in reshaping the resource mix of the power generated in the United States.

MR. RUHLOFF: And then to shift, there is the -- you mention that the survey for the wetland areas, the first survey, was on June 26 of 2014; is that correct?

THE WITNESS (Gustafson): That's correct.

MR. RUHLOFF: And I just have to ask, isn't that late in the year to be doing an amphibian survey?

THE WITNESS (Gustafson): It is late with respect to observing any active breeding as far as egg mass counts, but larvae, you would expect to see larvae that time of year for pelobates species.

MR. RUHLOFF: And to then also follow up to the Connecticut Siting Council -- this was Question 5, where it's

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saying, per the Department of Energy and Environmental Protection, they are not finding grassland birds to be expected. That's also referenced from the Audubon IBA information. Have there been any wildlife surveys of any kind of any detail on the site or its immediate surroundings?

THE WITNESS (Gustafson): Not that I've been -- not that we've addressed.

THE WITNESS (Gresock): The prior application for the currently approved configuration did include a number of wildlife surveys back at that time.

MR. RUHLOFF: I guess it would be an open request. Where would that information be available? I have not found anything relating to an environment impact statement from 1999.

MR. SMALL: It would be in the Siting Council files, the copy of the application and the copy of everything else in their files, and they're part of this record too.

MR. RUHLOFF: All right. Now, is that available on line then somewhere, or

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would I need to come here?

THE VICE CHAIRMAN: I'm informed you'd have to come here. It's not available on line because it's so far back.

MR. RUHLOFF: Okay. Those are the only questions I have at this time.

THE VICE CHAIRMAN: Did you have any questions of the parties that couldn't make it?

MR. RUHLOFF: That includes at this time.

THE VICE CHAIRMAN: Thank you very much.

Dr. Klemens.

DR. KLEMENS: I just have a question maybe for Mr. Gustafson. At what point does a wildlife study, in your professional judgment, need to be redone? Is one 15 years old adequate?

THE WITNESS (Gustafson): In my professional opinion, it probably needs some some level of updating because 15 years would, in my opinion, be considered a significant enough period that additional data would probably be useful.

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DR. KLEMENS: Thank you.

Thank you, Mr. Chairman.

THE VICE CHAIRMAN: Okay.

Dennis Kocyla, K-o-c-y-l-a.

(No response.)

THE VICE CHAIRMAN: Town of Southbury?

(No response.)

THE VICE CHAIRMAN: GE Energy Financial Services?

(No response.)

The Borough of Naugatuck Water Pollution Control Authority?

Wayne McCormack?

WAYNE McCORMACK: I have no questions.

THE VICE CHAIRMAN: Thank you.

The Westover School?

KATE TRUINI: My name is Kate Truini. I am the director of environmental sustainability programs at Westover School. We're a small all-girls independent school located on the green in Middlebury, Connecticut. The interrogatories we submitted were formulated by students in a

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sustainability energy course, and I have additional questions regarding NOx and some of the items in Exhibit 1 around page 25.

CROSS-EXAMINATION

MS. TRUINI: Can you explain SLI, EPA's significant level impact, and to what that refers? I'm not familiar with that terminology.

THE WITNESS (Sellars): Sure. In addition to establishing ambient air quality standards, the United States Environmental Protection Agency also establishes some other parameters and metrics. Most important among those are the prevention of significant deterioration increments, and then they also promulgate a set of significant impact levels. One significant impact level is a screening concentration.

It is not a health-based number. It is a screening concentration that the EPA uses to determine if a cumulative impact analysis is warranted on the basis of the potential project's contribution to air quality. It is also the level in a

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nonattainment area, in an area that does not attain the ambient air quality standards, that a new facility is allowed to degrade air and still be approved. The ambient air quality standard is the health-based statistic that's based on levels set by EPA for the protection of the health of the most sensitive segments of the population, typically chronic asthmatics, emphysemics, the elderly, children.

They also adopt prevention of significant deterioration increments which are for areas that currently attain the ambient air quality standard. These are the levels of degradation in air quality that are determined to be insignificant.

MS. TRUINI: Thank you.

I'm aware that Connecticut is now designated unclassifiable attainment in regard to NO2. In December, this coming December, there will be new data. Do you think that that will affect the status of the plant's impact right now?

THE WITNESS (Sellars): There will be new data from monitors that are

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placed very specifically close to roadways that will determine what the values are in those areas. I do not anticipate a change in attainment designation.

MS. TRUINI: Or ambient background levels?

THE WITNESS (Sellars): Correct.

MS. TRUINI: And that same answer would not affect levels of NO2 putting it over that NAQS?

THE WITNESS (Sellars): The ambient air quality standard for NO2, on an annual basis, is 100 micrograms per cubic meter, and currently at the monitor deemed to be most representative of the area where the facility is proposed to be located has a background concentration of 21 micrograms per cubic meter, so it's a small fraction of that.

MS. TRUINI: From that page 26 regarding offsets for NOx, due to changed conditions, you're required to obtain 57 more offsets. That would be a total of 237 offsets. And does that mean that you're

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putting into the air 234 tons of NOx, one ton per offset, and over what time period?

THE WITNESS (Sellars): The facility will emit 196.2 tons per year of nitrogen oxide emissions compared to the originally-approved facility that was emitting 246 tons per year.

MS. TRUINI: Can you say that second number again?

THE WITNESS (Sellars): Sure. The facility that was approved in 1999 would have emitted 246 tons per year of nitrogen oxides. The annual emissions of the proposed facility is 196.2 tons per year. Now, the offsets are required to be obtained at a ratio of 1.2 to 1. So there are 177 previously acquired offsets, and an additional 57 tons of offsets would be required for the facility to receive its air permit.

MS. TRUINI: Can you say that one more time? Can you repeat that one more time? I understand the 1.2 to 1 ratio.

THE WITNESS (Sellars): Sure. The facility calculates a total, let's call

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it, potential to emit. So this is assuming that it operates at its maximum allowable condition over the course of the year. So that would be the full 720 hours of oil operation. The plant would be running 8,760 hours a year flat out at 100 percent load under its maximum conditions. If you looked at that, the total that it could potentially emit would be 192.2 tons per year. So, we would need 1.2 times that in total nitrogen oxide offsets to satisfy the EPA's Cap and Trade Program. The project previously acquired 177 tons of offsets, and it will acquire 57 additional tons prior to operation.

MS. TRUINI: These offsets will come from the regional airshed, New Britain. Can you explain the size of that regional airshed, and is that in surrounding towns in Connecticut?

THE WITNESS (Sellars): Sure. The offsets, in order to be approved, have to meet a number of tests. Among them is they have to be from a source that is either shut down or reduces its emissions beyond what

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would be legally required in the same nonattainment area as the project or an adjacent nonattainment area of equal or higher nonattainment severity. So the entire Northeast of the United States is nonattainment for ozone. Some areas are more severely nonattainment than others.

So the offsets would need to come from the same nonattainment area which covers Southwestern Connecticut and it goes into Long Island and New York City or an adjacent area that was equal or more severe in ozone nonattainment severity.

MS. TRUINI: How do the offsets work? Is NOx removed from the air, is it nitrogen fixing bacteria?

THE WITNESS (Sellars): The offsets are created from something called "the emission reduction credit." So, when a facility that currently emits nitrogen oxides either shuts down or voluntarily establishes controls on its emissions and reduces actual emissions, not a paper reduction in permitted emissions, but reduces the actual amount of emissions, it can apply for an emission

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reduction credit. So, in order to be approved, they have to meet the tests of -- they have to be real, real reductions, so it's reduction from the actual emissions.

You have to be quantifiable, so they have to have demonstrated and proven what their emissions were. They have to be permanent, so it has to be a permanent reduction. So the facility that was creating the emission reduction credits would have to surrender its air permit or take an additional restriction of its air permit. And then finally they have to be federally enforceable, so they would have to be established as a condition on the donor sources permit.

And they have to be surplus. That means they have to be above and beyond any requirement that otherwise would be applying to the facility. So, if a facility was required to reduce its emissions, it can't get credit for those emission reduction credits.

MS. TRUINI: And has the proposed plant met those standards, or is

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that something that would happen when it's being built?

THE WITNESS (Sellars): For the 177 tons of offsets it currently has, those emission reduction credits were certified as having met those obligations, and for the additional 57 tons of offsets, they would have to be certified by the Department of Energy and Environmental Protection as meeting those requirements.

MS. TRUINI: So, by running this plant, it looks like the NOx levels in our area would be doubling. Is there any -- no.

Are there initiatives in the local area of Oxford that would be addressing NOx levels here?

THE WITNESS (Sellars): Well, there will be two things to keep in consideration. One is the nitrogen oxide offsets are really required because the facility is located in an area that does not attain the National Ambient Air Quality Standard for ozone, and nitrogen oxide is one of the precursors of ozone. Ozone is a

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regional pollutant. And in addition to those offsets, as I mentioned a little earlier today, the facility will be displacing the operation of older, less efficient, higher emitting facilities, and that would result in a net reduction in nitrogen oxides.

So, first of all, one of the things that you have to -- if you look at just nitrogen oxides for nitrogen dioxide, I guess I would disagree it would be doubling the impact or the nitrogen oxide levels in the area. If you look on page 25 of Exhibit 1, you see what the impact concentration is.

So, on an annual basis, for example, for nitrogen dioxide, the project's maximum impact would be 1.4 micrograms per cubic meter. This compares to an ambient background level of 21 micrograms per cubic meter compared to the 1.4, and then you add the background plus the impact and compare that to the ambient air quality standard, which is 100 micrograms per cubic meter.

So we have to basically meet two tasks. One, we can't cause or contribute

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to an impact that would result in a violation of the ambient air quality standard. And in addition, EPA has established something called PSD increments, prevention of significant deterioration increments, and they've determined basically how much degradation can be allowed in an area that currently attains the ambient air quality standard before the impact of the facility would be significant and not be allowed, and that increment is 25 micrograms per cubic meter.

It's also very important to note that all of that math and where the impacts are based on the maximum modeled impact of the facility, and the annual concentrations that I've given you, the maximum impact occurs very, very close to the property line of the facility, and it also incorporates a number of very, very conservative assumptions in terms of how the facility will operate over the course of the year. So it's based on that maximum potential to emit.

In this case the impact would

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be based on, assuming that the facility was burning oil year-round, even though that would not be allowed, the concentrations drop off very, very rapidly from that point of maximum impact. So, across the entire area, the impact will be much less. For example, at your school if you looked at, say, PM2.5 impacts, the maximum at Westover School would be four-tenths of 1 percent of existing level, something like that, so very, very small. And a similar relationship would occur relative to all of the other pollutants as well.

THE VICE CHAIRMAN: Ms. Truini, do you have much more?

MS. TRUINI: I don't. I have one more.

THE VICE CHAIRMAN: Okay. Why don't we wrap up with you before we break.

MS. TRUINI: Actually two more.

THE VICE CHAIRMAN: Well, we'll give you two.

MS. TRUINI: With SO2, H2SO4, NOx increasing with the new plant relative to

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the original design and the need to consider regional effects, how will this affect pH of rainfall moving forward?

THE WITNESS (Sellars): Sure. As you know, sulfur dioxide is an acid rain contributor. And the facility's maximum impact for sulfur dioxide, on an annual basis, is .03 micrograms per cubic meter compared to an existing background of 29 micrograms per cubic meter, so it would have a negligible effect on the overall sulfur burden in the atmosphere and therefore would be expected to have a negligible effect on acid deposition.

In addition, because acid deposition like ozone, is a regional issue, it's imperative to look at the impact of the facility on a holistic basis on the region in terms of what the overall sulfur burden would be in the region. And because this facility would be dispatched ahead of older, less efficient, higher emitting units, there would be a net reduction in SO2 in the region of 416 tons per year in 2018, growing to 2,466 tons per year in 2020. So, you'd have to

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look at it as basically a net benefit in terms of that acid deposition.

MS. TRUINI: Thank you.

My closing question: I think Westover is the only school with intervenor status, and so I feel kind of obligated to ask about are you familiar with the Harvard study correlating exposure of pregnant woman in their third trimester to PM2.5 and risks of autism? Is there anything else that I should be aware of about effective possible emissions on developing bodies? I'm specifically concerned with teenage girls.

THE WITNESS (Sellars): Sure. When the United States Environmental Protection Agency adopts those ambient air quality standards, they look at a wide range of epidemiological studies, and they are to take into account all of those things. So, we are relying on EPA's ambient air quality standards as our basis. And because the facility in terms of, you know, its burden on particulate emissions would be a lot lower than what was originally proposed and such an insignificant fraction of those ambient air

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quality standards, particularly at a location like where your school is, it's, in fact, a small percentage of the natural year-to-year variation in observed levels in the area, we'd have to conclude that it really is going to have no effect on the health of your students.

MS. TRUINI: Thank you. That's all.

THE VICE CHAIRMAN: Thank you very much. We'll break now for lunch and resume at 1:55.

(Whereupon, the witnesses were excused, and a recess for lunch was taken at 1:06 p.m.)

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AFTERNOON SESSION.
1:57 P.M.

D E A N G U S T A F S O N,
F R E D E R I C K S E L L A R S,
L Y N N G R E S O C K,
A N D R E W B A Z I N E T,
J O N D O N O V A N,
D A N I E L L E P O W E R S,
T A N Y A B O D E L L,
having been previously duly sworn, were examined and testified further on their oaths as follows:

THE VICE CHAIRMAN: I'd like to call to order again the meeting of the Connecticut Siting Council and continued cross-examination. The next intervenor is the Westover Hills Subdivision Homeowners. Marian Larkin and Greenfield LLC.

MR. HILL: Good afternoon. For the record, I'm Attorney Edward Hill, and with me today is Marian Larkin, and she will do the questioning.

MR. SMALL: Will you please identify for the record what that --

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MS. LARKIN: This is Exhibit A, and this is mostly Middlebury, Connecticut, the power plant.

THE VICE CHAIRMAN: If you're going to do most of the questioning, why don't you take the microphone.

MS. LARKIN: We're calling this Exhibit A dated yesterday, the power plant location on it, and this is Middlebury with some Oxford on it, and this is the southwest corner of Middlebury, and the shaded area is actually land that my family owns in Middlebury, Connecticut, and it's just under 1,000 acres.

MR. SMALL: And is this document part of the record at this point? Did you intend to offer it into the record?

MS. LARKIN: It may be. You may enter it if you like. I'd be happy to enter it.

THE VICE CHAIRMAN: Any objection?

MS. LARKIN: If you were to take this map, which is part of your book, this is your topo map. This is just a

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partial view. I shaded the area that is our property with the -- a piece of our property. Our property actually exceeds and extends up to here. You can enter that too because that's already in the record.

MR. SMALL: I just think it should be submitted and then taken in as an exhibit, but for presentation purposes, no objection.

MS. LARKIN: Okay.

Chairman Stein, Attorney Bachman, members of the Siting Council, my name is Marian Larkin. I live at 747 South Street, Middlebury, Connecticut. My affiliation is to my family, both present and future. We are farmers, but we're not just that. We also have professionals amongst the family. We grow hay, corn, timber, and we also lease homes.

MR. SMALL: Excuse me. This is cross-examination. I'm going to object to the statement as opposed to cross-examination.

MS. LARKIN: I'm here today to question the Applicant regarding the adverse

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impacts against our real estate, the environment and the air by the proposal of this power plant.
MR. SMALL: Again, we're objecting. Mr. Chairman, we're objecting to a statement. If they have questions, please let Ms. Larkin ask us questions.
CROSS-EXAMINATION
MS. LARKIN: All right. Do you know how many acres the Larkins own in Middlebury and Oxford, please?
THE WITNESS (Bazinet): You just stated for the record just under 1,000 acres.
MS. LARKIN: Uh-huh. And the Applicant owns how many acres?
THE WITNESS (Bazinet): So we own 20 acres with an option to purchase an additional 6.2 acres.
MR. ASHTON: So you've got 20 plus possibly 22?
THE WITNESS (Bazinet): Plus 6.2.
MS. LARKIN: Is it true that the Applicant will be sending pollutants by

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air and pipe beyond the boundaries of its 26 acres?
THE WITNESS (Sellars): Yes. The facility will be seeking a permit from the Department of Energy and Environmental Protection, and will admit products of combustion, yes.
MS. LARKIN: And how far do the liquid pollutants go from the 26-acre site before they are finally disposed of in some manner?
THE WITNESS (Sellars): I'm not aware of any liquid pollutants.
MS. LARKIN: What is it that goes to the Naugatuck septic sewer plant, is that not a liquid?
THE WITNESS (Bazinet): The water that's discharged from the project site to the Oxford water pollution control system and subsequently to the Naugatuck publicly-owned treatment works is typical discharge associated with any commercial/industrial facility, not specific to our power plant.
MS. LARKIN: Oh, so there are

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no extraordinary pollutants in that water from the power plant?
THE WITNESS (Bazinet): No.
MS. LARKIN: And is there ammonia in that effluent?
THE WITNESS (Bazinet): No.
MS. LARKIN: No ammonia whatsoever. Okay.
As far as the pollutants by air, how far do you say that they will extend?
THE WITNESS (Sellars): The pollutants by air, we modeled a grade of several miles around the facility. As I testified earlier, the point of maximum impact is very, very close to the property fence line, and the concentrations drop off rapidly with distance as you move away from the fence line. And there's an exhibit that's been filed, Late-File 2Q, which provides isopleths of what the concentrations are as you move away from the facility.
MS. LARKIN: Well, would you say that the air pollution extends throughout our property? I can tell you from here that

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that's --
MR. ASHTON: Ms. Larkin, I have a request. I have good eyesight. I'm an engineer. I haven't got the foggiest idea what that Exhibit A is. I don't know what the white lines are. They look like isobars. Would you kindly explain that, if you're going to refer to it?
MS. LARKIN: As long as I have permission to do so, I'm happy to.
Okay, 1,000 feet, 2,000, and on and on, 1,000 foot increments.
MR. ASHTON: And that's from?
MS. LARKIN: From the power plant site from --
MR. ASHTON: Okay. And the power plant site is at the left center on that diagram?
MS. LARKIN: Yes.
MR. ASHTON: Where is your property?
MS. LARKIN: This -- it's shaded. I'm sorry you can't tell. That's a land trust property that my family gave to the land trust, and this is our property,

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this shaded area. This is Route 84. We go over Route 84. This is Westover School right here, that land here, for instance.
MR. ASHTON: And those are 1,000 foot increments?
MS. LARKIN: Thousand foot increments.
MR. ASHTON: Thank you very much.
MR. LYNCH: Could you give the direction -- this is an audio tape. What direction is your property from the site?
MS. LARKIN: It's north and east.
MR. LYNCH: Thank you.
MR. ASHTON: North and east. Where is north on that map?
MS. LARKIN: North is this way.
MR. ASHTON: That's a little different.
MS. LARKIN: Let me do it this way.
MR. ASHTON: Leave it the way it was.

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MS. LARKIN: Which do you like?
THE VICE CHAIRMAN: Leave it the way it was. We'll turn our head to look in the other direction.
MR. ASHTON: So, north is to the right, as you have the map displayed on the board. The plant site is at the left and south of your property generally by 2,000 to 4,000, 5,000 feet, something like that.
MS. LARKIN: I can tell you this increment says 4,000 right here. The closest we are is about -- I can't read it. Sorry -- 2,000. So that's like 2,500 to our property right here.
MR. ASHTON: Okay. And what is your property, is it open space?
MS. LARKIN: A lot of it is open space. We have a lot of forest land and a lot of farmland.
MR. ASHTON: Thank you.
MS. LARKIN: So I was going to ask you whether you knew which increment our property falls into, and I just told you the answer so...

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Now, would it be possible for you to keep your pollutants inside the boundaries of your 26 acres?
THE WITNESS (Sellars): No. No facility, regardless of how small, would possibly be able to do that. Even a house could not do that.
MS. LARKIN: Could you use less natural resources in the way of water and drinking water?
THE WITNESS (Bazinet): We've taken a number of pretty significant measures to reduce the overall consumption of water from the facility, and we've evaluated other methods of storage, other sources of water. There may be other methods that we haven't yet explored, and we're willing to explore those methods, but we feel as if we've done a pretty exhaustive and thorough job of trying to minimize the overall consumption relative to the prior approved facility.
MS. LARKIN: What could you do more? Is there something you could do more about? You said you were looking at other things.

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THE WITNESS (Bazinet): No. I think I said that I'd be willing to look at other things that we haven't yet looked at, but none of which I have at the tip of my tongue.
MS. LARKIN: Okay. I'm wondering whether -- well, your plant, you say that your plant will have minimum visual impact, but is it not true that on an 830-foot leveled by you-all site, that 150-foot tall stacks with plumes emanating from them, sometimes opaque steam and smoke, wouldn't that have a fairly great visual impact?
THE WITNESS (Gresock): There will be locations in the community from which the facility will be visible. One of the things that this project configuration does is try to reduce that visual impact by reducing the height of a number of structures at the facility.
MS. LARKIN: Do you think you could possibly plant some trees -- evergreens would be nice -- to block the plant so that it would be less visible from all directions,

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specifically our direction?
THE WITNESS (Gresock): Generally speaking, there are a lot of existing trees in the community that do block the lines of sight from a lot of locations that surround the facility.
MS. LARKIN: But those are mostly deciduous trees on your site. I don't think there's one pine tree up there that I saw. Could you put pine trees up there so no one would have to see as much of it for real estate values alone right there?
THE WITNESS (Bazinet): So we're more than willing to incorporate tools, you know, to visually mitigate the facility sight lines. In fact, the current development and management plan considers that as much as possible of the existing vegetation on the northern end of the site will be retained to do exactly that. I don't know that there's any tree -- and I'm not an expert in this particular realm -- that could be planted to shield entirely the stacks proposed for this location.
MS. LARKIN: It might help you

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to know that pine trees do like to be on the north slopes and northeast slopes, so that could help you realize more blockage.
THE WITNESS (Bazinet): If I could direct you to condition 2E of the original D&M plan, dated I think it's October 2001.
MS. LARKIN: Sorry, is that in here?
THE WITNESS (Bazinet): It's part of the existing Docket 192B.
MR. SMALL: So it would be in the Siting Council files.
THE WITNESS (Bazinet): Which has a landscaping plan which does include evergreens.
MS. LARKIN: And are they tall evergreens? They're like cathedral-type pines.
THE WITNESS (Bazinet): Without reviewing each of the details here, I reference that exhibit and, you know, you will be able to find all the details in that.
MS. LARKIN: Could you lower your plant some? I mean, I already

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understand that you dropped it by one foot. Why have you dropped it by one foot since the 1999 proposal?
THE WITNESS (Bazinet): So, the reality -- there was actually a small difference, if I recall, between the northern end of the site and the southern end of the site. It wasn't graded flat at 830 and a half.
MS. LARKIN: Okay.
THE WITNESS (Bazinet): But there are a number of different factors that contributed to reducing the overall site footprint from, you know, a height standpoint as well as visually.
MS. LARKIN: Okay. So, it's not a big deal, you're telling me, just evening it out. Okay.
So, when you factor in the height of the stacks with the elevation, how high is that, that the top of the stacks would be from sea level, how many feet?
THE WITNESS (Bazinet): Nine hundred and eighty feet above mean sea level.
MS. LARKIN: Are you familiar

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with the hills in the Middlebury, Southbury, Woodbury, Naugatuck, Oxford area and how tall they are?
THE WITNESS (Gresock): We don't have the exact heights, but we know there are hills, and some of them are taller than the stacks.
MS. LARKIN: We say that perhaps Andrew Mountain is taller, but perhaps none of the others are taller, particularly since they don't have stacks on them with plumes on top of that.
THE WITNESS (Bazinet): The topography of the land, as you go east of the site, actually exceeds 980.
MS. LARKIN: How far east? Where?
THE WITNESS (Bazinet): We could provide a reference point for you, if you'd like.
MS. LARKIN: Because our land doesn't exceed 980 for sure, so we go to about 820. We see eye to eye with you in some places. Sorry.
MR. SMALL: Let's have

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questions, not editorial comments.
MS. LARKIN: I'm sorry.
MR. SMALL: But if you want, we can provide a late-filed exhibit with elevations.
MS. LARKIN: Elevations. That would be great. That would be great.
Can you tell me how, when the plumes go up before they completely disperse, how high are those plumes going to go? I mean, of course, it depends on wind condition, but when they're all mixed up with the atmosphere, how high are those going to go for visibility reasons?
THE WITNESS (Gresock): The modeling that we've done has been air dispersion modeling and hasn't identified the heights of the stacks -- of the plumes. But looking at the MITRE modeling that was done back in 2012 for the prior project configuration, we spoke last time about a median height of the plume above the stack that had been identified from 28 to 29 feet, and then, obviously, under certain weather conditions it would be taller. The 99th

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percentile value they identified was 344 to 532 feet, and the range really reflected the difference between stable and unstable wind conditions.
MS. LARKIN: So what was your highest number, please, again?
THE WITNESS (Gresock): The 2012 MITRE model for the 99th percentile had 532 feet identified.
MS. LARKIN: Above the stack height?
THE WITNESS (Gresock): Above the stack height.
MS. LARKIN: That's remarkable.
Were a lot of you on the site when the council members were there the other day? And you could see for miles and miles around, could you not? Well, were you at the site with the Siting Council the other day when we were all there?
THE WITNESS (Gresock): Yes.
MS. LARKIN: Okay. How many miles do you think you could see from that site?

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THE WITNESS (Gresock): I have no idea.
MS. LARKIN: Was it quite lengthy like in terms of 20 miles, 50 miles?
THE WITNESS (Gresock): I have no idea.
MS. LARKIN: Did it seem to be as far as the eye could see?
THE WITNESS (Gresock): I can't answer that question.
MS. LARKIN: I'm sorry.
And it was a beautiful view. Correct?
THE WITNESS (Gresock): It was a clear day, yes.
MS. LARKIN: So, when it comes to real estate, would you agree that a beautiful view is something that would make the value of your real estate higher?
MR. SMALL: Could you restate that question because I'm not sure I understand it?
MS. LARKIN: I am saying that the view from the power plant was beautiful, and real estate value is, is it not, often

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predicated on -- a higher value -- on a beautiful view?
MR. SMALL: Mr. Chairman, none of our witnesses are real estate appraisers, real estate experts, et cetera, so we don't have the ability to answer that question.
THE VICE CHAIRMAN: So the answer from the panel is you don't know?
MR. SMALL: Yes.
MS. LARKIN: Excuse me. Do any of you own any homes with views?
MR. SMALL: We're getting far afield, I think.
MS. LARKIN: Okay. I'm trying to address real estate values, and I would assume that that's okay to address something that impacts my family greatly because of our acreage that is so close to the plant.
MR. SMALL: Can I request, Mr. Chairman, that the questioner ask questions and not constantly editorialize and attempt to get information in the record when she's not there as a witness subject to cross-examination?
THE VICE CHAIRMAN: I'll ask

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you to make an effort to do that. I understand --
MS. LARKIN: I'm trying to. I'm just not an attorney. I do not know how to do this.
THE VICE CHAIRMAN: I appreciate that.
MS. LARKIN: Okay.
So this is sort of hard for me to do here. So would it surprise you that realtors will be writing in to you all, the Siting Council, and the Applicant, about the values of real estate that would be diminished by looking at the plant, if they don't see the plant there or the stacks but the plumes, and they will be writing in, so we will be hearing from people who are local experts.
Do you know --
THE VICE CHAIRMAN: For the record, real estate values is not one of the items that can be taken into account in making the decision.
MS. LARKIN: Oh, really? Okay. Well, then we can talk about pollution

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and water. Okay.
Can you tell me why -- I mean, I'm sorry. Can you tell me why real estate values would not be taken into consideration since -- by a statute?
MS. BACHMAN: The charge of the Council is to balance the public benefit of the facility against the potential adverse environmental impacts. Those environmental impacts are delineated under Section 16-50p.
MR. HILL: Ms. Bachman, if I can just point out to you that, on your website, you do talk about the balancing of the provision of reasonably-priced utility services against the environment, but you also talk about the sacrifice of scenic and historic and other assets. That's on your website. So it seems to me that the impact on real estate values is relevant to this. If the Commission rules that it's not, then we won't ask any questions about it.
MS. BACHMAN: Attorney Hill, real estate values and property values are not part of the evaluation. And again, that is Section 16-50g, which does describe the

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Council's charge. But I would advise perhaps you should look at 16-50p, which lists all of the criteria this Council has considered.
MS. LARKIN: I have a quick question on visibility. Then why are balloons even tethered to the site for us to see where the stacks will be? Why does that even happen if it doesn't matter?
THE VICE CHAIRMAN: That's really not the real estate value. That's the visual impact for the surrounding area.
MS. LARKIN: And as that reflects on real estate. Sorry. I have a broker's license. All right. Let's go ahead.
So, when you put that up for educational reasons for whatever, the balloon is quite small, and I would say that -- oh, no.
May I show you what 22 feet look like? I have a tape, Chairman Stein.
MR. SMALL: Objection. What's the purpose of this?
THE VICE CHAIRMAN: What's the purpose of this?

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MS. LARKIN: Because the balloon is only 5 feet, and the stacks, of which there are two, are way out.
THE VICE CHAIRMAN: We understand that.
MS. LARKIN: Okay.
THE VICE CHAIRMAN: The balloon was of the standard size. The balloons are flown at our request for dockets involving wireless towers, and so forth, and it's really to give the members of the council and their staff and the public an appreciation as to where on the horizon the height of wherever the structure plan, as being proposed, would be located and where it is visual from the surrounding areas. It's not meant to depict that it's a tower or it's a building or it's a smoke stack.
MS. LARKIN: I understand that. And the impacts are plentiful.
Okay, moving on, you've measured the emissions from this plant. And would you live next to this plant if you had your druthers? Could you live next to it?
THE WITNESS (Gresock): I

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absolutely would.
MS. LARKIN: Really? Okay.
So would you prefer living next to a solar plant, if you were given the choice, or a wind plant, or a fossil fuel plant would be okay to live next to -- be all right? I don't mean "next to," within a mile.
THE WITNESS (Gresock): As a personal question, yes.
MS. LARKIN: You would. All right.
Are you aware that the pollution can actually impact living things, you know, all creatures, humans?
THE WITNESS (Sellars): As part of our analyses, we did a pretty comprehensive air quality impact analyses, and you have to compare your impacts to metrics that relate to whether there's an impact to animals, vegetation, soils and, most importantly, human beings. So, the United States Environmental Protection Agency has set national ambient air quality standards for the protection of public

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health. They've also established secondary ambient air quality standards for the protection of public welfare, including impacts to animals, plants, et cetera, and wildlife.
In addition to that, as part of our air permit application, in addition to demonstrating that our impacts are a small fraction of those ambient air quality standards and would not threaten the area's ability to comply with those standards, we're required to do an analysis of what the impact is on soils, vegetation, and wildlife. And using the United States Environmental Protection Agency screening criteria that look at various sensitive wildlife species, as well as plant life, we do an analysis and compare the screening levels. If you exceed those screening levels, then more sophisticated analyses would be required.
A facility's maximum impacts very, very conservatively modeled, assuming operating scenarios that we couldn't possibly operate under for conservatism, result in impacts that are a very, very small fraction

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of those screening levels. So it is my opinion that this facility will not have a significant adverse impact on people, plants, animals, soils, vegetation, wildlife.
MS. LARKIN: When the EPA does a study like that, do they study it as far as that the impacts are mixed in and everything is evenly distributed, in other words, the pollution is evenly distributed over the area, or do they take into consideration that some of that pollution will always go to wherever the air depression is at the time, right?
THE WITNESS (Sellars): Our modeling determines where the concentrations will be the highest, and we take that highest maximum predicted impact level and compare those to thresholds that have been established for the protection of humans, plants, animals and vegetation.
MS. LARKIN: Do we have maps of where those spots are with their concentrations?
THE WITNESS (Sellars): Yes. They've been filed as part of our exhibit

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number --
MS. LARKIN: All right.
MR. SMALL: It was filed as Late-File Exhibit 2Q filed on February 5th.
MS. LARKIN: Okay.
THE WITNESS (Sellars): And what that exhibit shows is, even at the point of maximum impact, the facility's maximum impacts are a small fraction not only of the ambient air quality standards, but of existing levels of those pollutants that are in the atmosphere right now, and in fact, in most cases, they're an insignificant fraction of the natural year-to-year variation in the measured levels.
MS. LARKIN: Do you know that exposure from air pollution can cause soil to become unproductive? Did you know that?
THE WITNESS (Sellars): I'm quite aware. Having been the coauthor of the United States Department of Energy's Acid Rain Information Book, I've been studying this for about 35 years.
MS. LARKIN: Good.
THE WITNESS (Sellars): And

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the exposure of those soils to significant concentrations of air pollutants can have a deleterious effect, which is why you do a screening against the soil criteria, and it looks at the deposition rates onto the soil, as well as what the impact -- the uptake rates of the plants that would be in those soils are, and the maximum impact at this facility is a tiny fraction of those screening levels.

MS. LARKIN: So there is a UVA study, have you seen that, that, for instance, timber trees, a timber crop, can lose 30 percent of its growth from being exposed to air pollution?

THE WITNESS (Sellars): To what level of air pollution?

MS. LARKIN: I don't have that answer. Can you tell me?

THE WITNESS (Sellars): I think that's what's --

MS. LARKIN: Can you tell me?

THE WITNESS (Sellars): That is what those screening levels are based on. They're based on those kinds of studies that

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determine what the impact would be on -- when the impact would be significant, significantly affect vegetation. So, if you're looking at the pollutants themselves, they are ubiquitous in the environment. You emitted them on the way here in your car, and your house emits them. So it's all a matter of concentration. It's a matter of how much and what those concentrations are and how those concentrations compare to the sensitivity thresholds either of vegetation or of people.

MS. LARKIN: All right. But given our close proximity, doesn't that mean that we're affected more than others would be?

THE WITNESS (Sellars): You would be affected less than somebody closer and more than somebody farther away, but the levels, even at the point of maximum impact, are a small, insignificant fraction of the ambient air quality standards that have been set to protect people and the secondary standards that are set to protect plants, animals and wildlife.

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MS. LARKIN: So you can assure me that we won't have any difficulty having our trees grow and our hay grow and our crops being okay?

THE WITNESS (Sellars): If your hay grows now, your hay will grow fine in the future.

MS. LARKIN: Okay. So, being that we're so close to the plant and knowing that there have been some Richter scale magnitude explosions, not only -- we're talking about gas fuel explosions of 1.1 magnitude near the San Francisco Airport and over 5 magnitude at the Middletown plant, Kleen Energy, which was felt all the way to New York State, would it be fair to say that there's an unease to the residents of -- well, us, for instance, and people nearby, particularly of a possible -- obviously, it's a supposition -- possible conflagration given that there's a compressor gas station next door and fuel stored on site, and so on?

MR. SMALL: I'm going to object to the question just in the sense of we can't answer a question whether people

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have an unease. If the question is meant to be is this facility safe, I believe we can answer that.

MS. LARKIN: Would it be fair to say to you that would it be something that you could understand that I wouldn't feel safe?

MR. SMALL: That's total speculation.

MS. LARKIN: Well --

MR. SMALL: If you want, we can answer the question with respect to the safety of the plant. If you want to know what people's perception is, I'm going to object and ask the Chair to rule.

MS. LARKIN: But accidents do happen, though, don't they, right?

THE VICE CHAIRMAN: We all know that.

Dr. Klemens.

DR. KLEMENS: Can I ask a question?

There's a gas line there now. So I guess the question is, is by placing a plant there increasing the chance of

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explosion or not, or is it what it is now?
MS. LARKIN: And the gas lines expanding --
DR. KLEMENS: That's a question for the Applicant.
THE WITNESS (Bazinet): I mean, we will, and we do, as a company across many different parts of the country, put into place many different precautions to avoid any such incident. Does the risk increase? I honestly don't know the answer to that question, but what I can say today is that there's the presence of a gas pipeline. There is a facility that compresses and handles that gas on a daily basis. And assuming that appropriate measures and safety precautions are put into place, the likelihood of an event ever occurring is very, very small.
For example, the Nevas and Thomas Commission recommendations will be implemented on a facility like this to ensure that gas is not used for pipe cleaning. So, I think measures of that nature are going to be put in place, will be outlined in our

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development and management plan as we proceed, and the risk analysis piece, I'm not sure I'm qualified to do that but --
DR. KLEMENS: Thank you.
MS. LARKIN: Do you know that the pipeline that's there now is going to be expanded in diameter?
THE WITNESS (Bazinet): There are modifications being made to the Algonquin system based on their current project that was approved by FERC, correct.
MS. LARKIN: Is your plant going to be serviceable, operational supposedly when the pipeline expands, or can you operate on the smaller size pipe now, which is like 24 or 30? Which is it, 24 or 30 inches now?
THE WITNESS (Bazinet): It's 26 and 30. And we can operate off of either.
MS. LARKIN: Okay. So the 42 inches will have more gas go through it, but you don't necessarily need it, you don't need the 42 inches because that's what it's going to because we get letters to this effect that they're doing this on our property because we

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do have a gas line on our property?
THE WITNESS (Bazinet): I'm not sure. I know there are pieces of the pipeline that are being upgraded to 42 inches. I'm not sure which sections of the pipe are being done. So I'm not sure how to answer your question. All I can say is that we could operate the entire plant on either one of the pipelines with or without the upgrade.
MS. LARKIN: So the more fuel, the bigger the fire; would that be right?
THE WITNESS (Bazinet): I'm sorry. I'm not sure of the question you're asking.
MS. LARKIN: Well, if there were an accident and the accident were fed by a great deal of fuel, there would be an even bigger problem?
THE WITNESS (Donovan): Is the question related to the utility?
MS. LARKIN: It's related to the fact that there are multiple fuels on two sites side by side, and either one could conflagrate the other, and the more fuel

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there is, the more damage, the bigger the explosion, whatever. I'm not a munitions expert.
THE WITNESS (Donovan): This isn't munitions, and I can't really speak for the utility, but generally those pipelines are operated with very fast-acting control valves to slam shut in the event of a loss of pressure.
MS. LARKIN: Are you familiar with the PG&E explosion -- I think it was 2010 -- east of the airport, a 20-some-odd inch gas line with a poor weld exploded, and 45 homes were destroyed, eight people were killed, 52 were injured, and PG&E did not turn that gas off for 95 minutes?
THE WITNESS (Bazinet): So we are familiar with it. I'm not sure how applicable that is to this particular scenario, and in no case does the presence of our facility exacerbate that.
MS. LARKIN: Mr. Chairman, may I address economics in this conversation? Yes, I think --
All right. Do you know that

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there's a large horse industry in Connecticut? Are you aware of that?
THE WITNESS (Bazinet): We're aware that, based on various submittals to this particular proceeding, there is a horse industry in Connecticut. Large, I think, is a pretty subjective term, but other than that, yes.
MS. LARKIN: Do you know that there are more horses per capita in Connecticut than any other state? Do you know that as a fact?
THE WITNESS (Bazinet): I don't know that as a fact.
MS. LARKIN: And the economic value of that would be fairly large to the state with sales of goods and, you know?
MR. SMALL: Your prefile testimony did mention that. We haven't had a chance to explore or cross-examine.
MS. LARKIN: Are you aware that there are -- well, you are aware of the Larkin State Bridle Trail existence?
THE WITNESS (Bazinet): Yes.
MS. LARKIN: And are you aware

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that there are multiple trails that connect to that, including the use of both the gas line and the transmission lines as bridle trails, those right-of-ways are used for those purposes; are you aware of that?
THE WITNESS (Bazinet): I wasn't personally aware of that, no.
MS. LARKIN: Okay. You are aware that horseback riding is a recreational event and enjoying the outdoors, and so forth, would that be correct, and that one would -- well, okay. Go ahead. Sorry. It's recreation.
THE WITNESS (Bazinet): Yes.
MS. LARKIN: Is there something you can do to make riding as enjoyable as it is now after the plant was put in place? I'm talking in reference to noise pollution, air pollution, visibility, across the board?
MR. SMALL: I'm going to object on the ground the word "enjoyable," again, is so subjective. I don't think the witnesses could properly answer that question.

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MS. LARKIN: You don't have any horseback riders in your group. Okay.
A question I have is: If we are polluted now greatly, as Connecticut is already over the limits EPA-wise, why is it that this plant would be a good idea here?
THE WITNESS (Sellars): As I testified earlier, the facility will displace the operation of older, less efficient and higher emitting power plants across the region, and as a result, there will be a net reduction in air pollution in the region by a significant amount.
In addition to that, the only pollutant for which the area is not attaining the national ambient air quality standards is ground level ozone. Ozone is a regional pollutant, and because the facility is locating in an ozone nonattainment area, it's in addition to that displacement benefit required to actually get offsets of nitrogen oxide emissions, which are the precursor to ozone. So twice we'll reduce emissions. We'll have to get offsets equal to 1.2 times our total tons per year of nitrogen oxide

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emissions in the same ozone nonattainment area or an adjacent area equal or higher ozone nonattainment severity plus the displacement. So, if you add those two benefits together, there will be a net reduction in burden on air pollution.
MS. LARKIN: Are you talking about the carbon credits that you're purchasing elsewhere?
THE WITNESS (Sellars): No, I'm not talking about carbon credits. I'm talking about nitrogen oxide offsets, which are the precursor to ozone. In addition to that, the facility itself will displace emissions of nitrogen oxides by reducing the operation of older, less efficient, higher emitting units in the region.
MS. LARKIN: And isn't that -- you're reading into the future. It's like a supposition --
THE WITNESS (Sellars): I wouldn't consider it a supposition. I would consider it a mathematical model based on the dispatch or in the dispatch queue of the facilities. They are dispatched in order by

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the grid operator generally in direct proportion to its marginal cost, which is directly related to the plant's efficiency. So we've done analyses and modeling of what the future in 2018 to 2020 dispatch would look like with and without the facility, and with the facility there will be a significant reduction in emissions of all of the pollutants that we looked at.

MS. LARKIN: I do understand that water bodies do die from pollutants, I mean, the life in them die, and I think it affects human health, correct, these pollutants do, there are many studies that say that?

THE WITNESS (Sellars): Yes, which is the basis of the ambient air quality standards. And because emissions, on a regional basis, affect water bodies, the fact that there will be less emissions on a regional basis with the plant than without the plant points to its environmental benefit.

MS. LARKIN: Okay. I wonder if any of you have read Dr. Klemens'

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testimony from 1999 for the energy application. And would you please do so and have it reflect into what your thinking is here, please? Is that possible? Would you do that?

MR. SMALL: Would you file that, and that can be a late-filed exhibit and we can all look at it, because I don't believe we've seen that document.

MS. LARKIN: Okay.

MR. SMALL: Okay.

MS. LARKIN: I have to ask you something very important here. Is buying carbon credits in another state actually going to help any of us here who are going to be living within 10, 20 miles of this plant? I mean, how is that really going to help us?

MS. LARKIN: You're talking about carbon credits?

MS. LARKIN: Sorry. I'll just put it this way: Pollution credits.

THE WITNESS (Sellars): Well, there's two different things going on. There's multiple things going on. The offsets relate to the formation of ozone.

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And since ozone is a regional pollutant, its formation is over a very, very broad area. It results from a photochemical atmospheric reaction of precursor pollutants. So the levels of ozone in Connecticut are determined, in large part, by the emissions of those precursors in New Jersey, New York, Pennsylvania, and places further up wind.

In terms of carbon credits, the facility has to buy allowances of CO2, like all power plants in the Northeast, and that's related to global warming. And global warming is a global pollutant, not a regional pollutant or a local pollutant, a global pollutant, which is why planting trees in the Amazon will offset CO2 emissions in New York City. The basis is the global concentration of CO2 in the atmosphere.

In addition to that, because the facility is a power plant over 25 megawatts, it has to participate in a cap and trade program for sulfur dioxide emissions as part of the acid rain program. So it will be required to participate in that program. Acid rain, like ozone, is formed over a

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regional area and through a number of chain of atmospheric chemistry reactions. So the pH of the rain in Connecticut is determined by all of the sources basically from Ohio eastward, be they local, midrange, or long distance.

MS. LARKIN: The key question I have is: Planting trees in the Amazon, fine, but how will that help people here? Will they become less sick? Will they have less lung disease? Will they have less heart disease? Will there be less children with autism? How will that benefit us?

THE WITNESS (Sellars): Well, lung disease and cardiovascular problems and autism are really based on what the concentrations of pollutants are. We can't take into account in our air quality impact analysis studies any credit whatsoever for the displacement emissions of the older, dirtier plants, from the offsets or from the allowances. The facility has to model its maximum impacts all by itself without taking any credit for any of the other benefits or the offsetting factors. Those levels are

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then compared to the ambient air quality standards which are set for the protection of the health of the most sensitive segments of the population, and we're a tiny fraction of those, and therefore, we can conclude that the facility is not going to have a significant adverse impact on health.

MS. LARKIN: Were you at the public hearing in Oxford?

THE WITNESS (Sellars): I was.

MS. LARKIN: Did you hear the doctor who had just gotten off an airplane and came rushing up to speak about power plant pollution?

THE WITNESS (Sellars): Yes, I did.

MS. LARKIN: Do you remember what he said?

THE WITNESS (Sellars): I remember some of it. I remember there were a number of inaccuracies in what he said. He was a -- if it's the right person, there was a number of people that spoke, but he seemed to be confused about the use of offsets basically to demonstrate compliance.

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MS. LARKIN: Did he not speak about research? He's a researcher.

THE WITNESS (Sellars): Yes. Okay.

MS. LARKIN: He's a doctor researcher, physician researcher.

THE WITNESS (Sellars): Okay.

MS. LARKIN: And maybe some of the other people were there. Did he not refer to the high incidence of cancers, lung disease, emphysema, asthma, heart attacks, MIs, from proximity to power plants?

THE WITNESS (Sellars): He did. And that's one of the inaccuracies in what he was talking about. All power plants are not the same. There are a number of power plants that emit thousands of times more emissions per megawatt hour than this facility does. You can't lump them all together. Exposure to diesel exhaust has all of those same problems that he talked about. That doesn't mean that if you bought a diesel-powered Volkswagen Rabbit that you would wipe out the population of Oxford.

MS. LARKIN: I understand.

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But if this plant has a life of 20 to 30 years, isn't that a huge amount of pollution to dump in an area that's whatever, two miles out, three miles out, that's a huge amount, am I wrong, because over time you have effects -- because over time you have effects.

THE WITNESS (Sellars): Over time you have to look at the total emissions, and we've projected as far as we can into the future based on what we know right now in terms of what the emissions would be with and without the facility, and with the facility the emissions will be lower in the region than without the facility because we will be displacing older, dirtier facilities.

MS. LARKIN: But this one will be here, won't it, it will be right here?

THE WITNESS (Sellars): I'd rather have this one here for 35 years than some of the existing ones.

MS. LARKIN: But most of us in this room, would you agree, live here that are against the plant?

Okay. So, ozone. How do they

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affect pollination -- how does it affect pollination, do you know?

THE WITNESS (Sellars): I'm not familiar with pollination itself. Ozone basically is an ambient air quality standard because of its impact on humans and the environment.

MS. LARKIN: Right. And NOx, when it comes in contact with X, it becomes ozone; am I right?

THE WITNESS (Sellars): NOx is a precursor to ozone --

MS. LARKIN: Right.

THE WITNESS (Sellars): -- when emitted with volatile organic compounds and strong sunlight over a long exposure period and over considerable distance and time.

MS. LARKIN: So do you have an understanding of how important pollination is to all of us?

THE WITNESS (Sellars): I do.

MS. LARKIN: Okay. And you do know that the bees are having a hard time because of ozone, you know that? It's part

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of a study.
THE WITNESS (Sellars): Bees are having a hard time for a number of reasons, and I would not pin it directly on ozone.
MS. LARKIN: Okay. But it's one of the reasons.
THE WITNESS (Sellars): It may be one of a multitude of reasons, but there's something far more severe going on with bee populations right now than ozone.
MS. LARKIN: How about overall pollution?
THE WITNESS (Sellars): Again, a number of stressors on bee populations right now, pesticides, herbicides, a number of things are causing a decline in the bee population.
MS. LARKIN: So wouldn't it be --
THE WITNESS (Sellars): And given that the ozone levels have not significantly varied over the last 30 years, if any, they've gone down in a lot of areas and gone up slightly in a lot of areas, I

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think it would be pretty hard to pin the most recent decline in bee population on ozone since the levels have not changed.
MS. LARKIN: I guess you haven't seen the UVA study that says that the bees can no longer scent -- the scent of the flower, for instance, doesn't go as far as it used to because it's dissipated, if not completely eliminated, at about 400 feet instead of 1,000 feet; did you know that?
THE WITNESS (Sellars): Because of why?
MS. LARKIN: Because of ozone.
THE WITNESS (Sellars): If the ozone levels haven't changed, how is that different than it was 20 years ago?
MS. LARKIN: Okay. So let's add it to the mix.
MR. ASHTON: Ms. Larkin, could you keep your voice up a little bit?
MS. LARKIN: I'm sorry.
MR. ASHTON: It's awfully hard to hear.
MS. LARKIN: Maybe this is the problem. I don't know.

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DR. KLEMENS: Go closer to the mike.
MS. LARKIN: Okay. So, do you think that you can in any way -- well, never mind.
Wouldn't it make more sense to not have a fossil fuel plant here at all being that it pollutes as opposed to being a green energy type?
THE WITNESS (Bazinet): So, Mr. Sellars has tried to answer the question with respect to pollution on a number of different occasions and over the last 10 or 15 minutes. The location of the facility is based on a number of different factors, and we think this location is ideally suited for a power plant, and I think that's probably even more evidenced by the fact that the facility was recently awarded a capacity supply obligation demonstrating the need for such a facility through the ISO New England forward-capacity market.
There's just a number of different factors driving this particular location and the overall need for a facility

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like this, and I think Mr. Sellers did his best to address your questions with regard to pollution.
MS. LARKIN: When did that statement come out from ISO? Is that a recent statement?
THE WITNESS (Bazinet): The press release was issued on the 4th.
MS. LARKIN: Okay. Are you sure that the reason you want to put the plant there isn't just because there's been another power plant approved there and also just a happenstance of a crossing of a gas line and a power line?
THE WITNESS (Bazinet): I mean, I think I just answered that question.
MS. LARKIN: Okay. That's fine.
MS. LARKIN: Can you tell me how this plant would actually benefit me personally, my family, our property specifically?
THE WITNESS (Bazinet): There are a number of different benefits that accrue to the region. Those include a

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reduction in electric rates, a reduction in overall emissions in the region. It involves a number of different jobs and economic base that's created in the state of Connecticut. There's a study that was performed by UConn's Connecticut Center for Economic Analysis related to the regional economic impact of a facility like this. Those are all a number of different ways in which your family, you in particular, will benefit from a facility like this. We've -- pardon me for a minute.

(Pause.)

THE WITNESS (Bazinet): We've provided some analysis on the impacts to an individual ratepayer and recently filed, dated 1/30/15, late-filed Exhibit 2J.

MS. LARKIN: Now, I don't know how you would measure this, but if I said to you that there's a much larger benefit locally, if not statewide, from our truly green, truly clean 953 plus or minus acres, would you agree with that?

MR. LYNCH: Could you please keep your voice up?

MS. LARKIN: Yes. Sorry.

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MR. SMALL: Could you repeat the question?

MS. LARKIN: I just said would you be surprised if I said to you or would you -- and I said I didn't know how to measure this -- but if I said to you that I believe that there's a much larger benefit locally, if not statewide, from our truly green and truly clean 953 plus or minus acres, as seen on this map?

THE WITNESS (Bazinet): So the exact numbers, I don't have those, as you don't, but I think more specifically we wouldn't envision any impacts as a result of this facility. So I think that benefit still exists pre and postconstruction of this facility.

MS. LARKIN: And I know you're having difficulty with the water situation attaining enough water. There's a gap in your supply from your primary supplier. Are you -- I know at one point you were suggesting wells on your site. Are you still thinking of doing wells?

MR. SMALL: First, I don't

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know that we necessarily agree with the characterization of "difficulty," but --

MS. LARKIN: I'm sorry. Okay. Well, we'll go back to that.

MR. SMALL: -- Mr. Bazinet can answer the question.

THE WITNESS (Bazinet): Actually, can you repeat the question? I apologize.

MS. LARKIN: I don't know how to measure this, but in my view, wouldn't the benefit to not only the state -- to ourselves locally, but also to the state, be greater, larger from our clean, truly clean and truly green 953 acres?

THE WITNESS (Bazinet): We just answered that question.

MS. LARKIN: Is that the wrong question?

THE WITNESS (Bazinet): Yes, you're on the next question after that. Sorry.

MS. LARKIN: All right. Sorry. Sorry. Is there a gap in your water supply? Let's start there. Do you have a --

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THE VICE CHAIRMAN: The question was whether you were going to drill wells.

THE WITNESS (Bazinet): We do not intend to drill wells, no.

MS. LARKIN: You won't. Okay. That's a good.

So you do have a gap in your water supply plan?

THE WITNESS (Bazinet): No.

MS. LARKIN: No? Okay. So could you edify me, please, as to how you are going to get a million gallons running on oil and the number on gas is 2 --

THE WITNESS (Bazinet): The water supply plan that we've put forth is contingent on both supply from Heritage Village as well as on-site storage, which is enough to support, in our view, enough continuously ULSD operated hours in order to call on basically the worst conditions that are forecasted in the foreseeable future. We've come to that conclusion based on the detailed analysis looking at one of the two worst winters on record over the past 25

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years.
MS. LARKIN: You mentioned that.
THE WITNESS (Bazinet): Right. And we safely concluded that, out of 15 separate dispatch requests, we would have been called on from ISO New England, we would have satisfied all 15, but on two occasions the 52 hours wouldn't have been sufficient to last the entire dispatch request.
MS. LARKIN: Do you think you should go back further in time to see how cold it's been, you know, other weather other years?
THE WITNESS (Bazinet): That's over the last 25 years.
MS. LARKIN: Okay. So, when you run out at 52 hours -- I thought it was 48. It's now 52, right, that you can run on?
THE WITNESS (Bazinet): It's 52. We've recently answered that in a question as well.
MS. LARKIN: I'm sorry. So, once you're through with the 52 hours on-site storage, then you have to truck things in?

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THE WITNESS (Bazinet): No. We will either operate on gas or not at all.
MS. LARKIN: Oh, not at all. Now, wait a minute, reliability means you operate all the time.
THE WITNESS (Bazinet): So, as I mentioned, if you look at one of the two worst winters on record over the last 25 years when oil was called on, and for an abnormal period of time relative to the prior ten years, the facility would have been able to satisfy all 15 dispatch requests and only come up short on hours on two separate occasions. We feel that's a reliable asset.
Furthermore, the market is constantly changing, and today the same unit that would have been called on to operate on ULSD last year is no longer being called on to operate on ULSD because there are a number of LNG imports coming into the pipeline system on the coastal boundaries outside of Boston that have balanced and added pressure to the system. And even on the cold snap that we had about a week or two ago, all gas-fired generators were operating on gas;

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nobody was operating on oil.
MS. LARKIN: But gas curtailment does happen in the winter so, right, usually?
THE WITNESS (Bazinet): Gas curtailment is possible during the winter, correct.
MS. LARKIN: And you're talking about the cold weather in the winter, okay, and being able to operate. Okay.
So I just want to ask you about the definition of the word "local." You talk about a regional benefit of this power plant, and you also talk about a local benefit. How many miles is local? What do you mean by local? What does local mean? Massachusetts border?
THE WITNESS (Bazinet): You have to maybe characterize your question a little more specifically in terms of which benefit you're referring to.
MS. LARKIN: Well, when I talk about local, I can say that I mean like 15 miles, we might drive somewhere to dinner or something, you know. I don't know what you

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mean by local.
THE WITNESS (Bazinet): With respect to what?
MR. SMALL: In other words, do you have a specific --
MS. LARKIN: Well, you talk about local benefits. I hear that all the time, local benefits of this, that, and the other thing. I just want to know what "local" means.
MR. SMALL: Do you have a specific reference?
MS. LARKIN: We could probably go through this book and find the word "local" a lot of times.
MS. LARKIN: Well, you're saying that you just said earlier that we'll be locally able to benefit from lower prices, locally. What did you mean by that?
THE WITNESS (Bazinet): So that statement would apply to all residents of Connecticut, all residents of New England, but local residents as well as regional residents as well as --
MS. LARKIN: So local can be

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pretty big. So what's your --
THE WITNESS (Bazinet): With respect to ratepayer benefits, it can be pretty big, correct.
MS. LARKIN: Now, when you talk about rates, how does the ISO pool or the pool, NEPOOL, do they take the highest price, and then everybody shares that highest price when the people bid; in other words, how do you save money if they take the high price?
THE WITNESS (Powers): Danielle Powers with Concentric.
So the ISO stacks up all the generators based on their demand in any particular 15-minute interval. So whichever generator clears in the stack last is what all of the generators get paid, generally speaking.
MS. LARKIN: So, when people come in with prices, you're clearing a price; am I right?
THE WITNESS (Powers): Right.
MS. LARKIN: So, if the three of you were power plants and you were putting

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in your -- what you can sell it for, and you were the lowest, she was the medium, and you were the highest, who would NEPOOL choose?
THE WITNESS (Powers): Depending on the demand level, if he was the last resource to meet demand, he would set the price.
MS. LARKIN: What do you mean by "last resource"?
THE WITNESS (Powers): So, if you had -- say your demand was 100 megawatts, and I had 40, she had 30, he had the next 30 stacked in price, he meets the 100 megawatt demand, so he clears last. He's the last guy clearing, so he would set the price for all three of us.
MS. LARKIN: So does that mean the bigger the plant, the more influence you have?
THE WITNESS (Powers): No, because ISO has a lot of rules around what we call mitigation, which is making sure that generators bid their marginal cost, which is their variable cost, fuel and variable O&M, and there are rules around what they call

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reference levels in making sure that plants, power plants' offers reflect those reference levels.
MS. LARKIN: So how are we assured -- as beneficiaries of the low prices, how are we assured we're going to get the low prices through this process?
THE WITNESS (Powers): So this particular unit, when you take Connecticut and you take New England in general, you're stacking up a lot of plants. And you have solar and wind and nuclear on the bottom, and then you've got some coal, and then in the middle you've got this flat stack of combined-cycle resources, then you go kind of up the stack with oil units. So what this unit is doing is taking, if you're putting something in the middle of that stack, you're going to knock off the high guy. So he comes off the stack, and he -- in some hours with a set price. Now you're actually coming down that supply stack, so your clearing price will be less because you're putting a more efficient resource in that supply stack.
MS. LARKIN: Does that

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efficient resource mean that the owner of that plant makes more money, is a more profitable situation?
THE WITNESS (Powers): It means that when they're dispatched, they're dispatched based on their variable costs, so they would have recovered their variable costs, and then there are other pieces of the market that they would have an opportunity to receive compensation for their fixed costs. So what we're talking about right now is the energy market, and that's purely a variable cost market.
MS. LARKIN: I understand. Okay. All right. Thank you.
So I think I can say here that I don't know whether it's fair or even polite to say, but this is in closing, that bluntly said --
MR. SMALL: I'm going to object. This isn't the time for -- is this a question?
MS. LARKIN: Okay. I'm fine. No, this is a statement. I thank you very much.

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THE VICE CHAIRMAN: You'll have your opportunity when it's time for you to put on your own case.
MS. LARKIN: Sorry?
THE VICE CHAIRMAN: You'll have an opportunity when you put on your own case subsequently.
MS. LARKIN: Okay. Good. Well, I thank you for allowing me to speak to you today, and thank you for your answers to the questions.
THE VICE CHAIRMAN: Thank you, Ms. Larkin.
Next is Quassy Amusement Park.
(No response.)
THE VICE CHAIRMAN: The Oxford Flying Club.
(No response.)
THE VICE CHAIRMAN: And Mr. McCormack, I called on you before, and you indicated at the break that you've changed your mind, you do have questions, so come forward.
WAYNE McCORMACK: My name is Wayne McCormack. I live at 593 Putting Green

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Lane in Oxford. And I just have a couple of questions.
THE VICE CHAIRMAN: Go ahead.
CROSS-EXAMINATION
MR. McCORMACK: In some of the responses earlier, Mr. Sellers referred to the region a number of times, and I'm wondering if he could define the region for me, or does it vary by whether we're talking about offsets or carbon credits, or is it the same region?
THE WITNESS (Sellars): Yes, it varies. When I was talking about displaced emissions, the amount of net reduction in emissions, that would be tied to ISO New England since ISO New England dispatch is a single grid.
MR. McCORMACK: So all of them refer to ISO New England?
THE WITNESS (Sellars): No. In the case of the carbon allowances, that's the greenhouse gas initiative that covers a number of northeastern states, and when I talk about acid rain SO2 allowances, that's basically the entire United States, and the

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NOx allowances are basically for the Northeast region.
MR. McCORMACK: Thank you. Previously Marian Larkin referred to the two weather balloons that were flown on January 15th at the site to indicate the visual impact the plant might have. The lighted plant and stacks and the noise, obviously, could not be seen viewing those weather balloons. Is there any way for CPV to simulate the lighting conditions and the sound conditions for a 48-hour period so the local residents can experience that?
THE WITNESS (Gresock): There is no way that I'm aware of that we could simulate the lighted stacks or simulate the noise environment, but as you know, the noise, in particular, has been modeled in association with the project, and it's very easy using a lot of hand-held monitoring devices to determine what the various sound levels are like based upon other environments you may be exposed to, and there are many comparison charts, as well, that would indicate what one might experience at

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different decibels.
MR. McCORMACK: Do you have any knowledge at all of a sound wall ever being created around a facility?
THE WITNESS (Gresock): Sound walls are one form of sound mitigation that can be used, yes.
MR. McCORMACK: Is that a possibility here?
THE WITNESS (Gresock): There are a lot of -- there's a lot of balancing of sound that occurs with the design. A sound wall is one measure that might be considered.
MR. McCORMACK: The concern would be that once the facility is in place and the noise is found problematic to the neighbors and the animal life in the area, what can be done about it?
THE WITNESS (Bazinet): So we're going to have an obligation to meet a certain measure, and we fully intend to meet that obligation. We're going to have to demonstrate compliance with that measure as well. How we do it, we've proposed a certain set of measures in our noise analysis that

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achieve compliance with that standard. And, you know, if we can find more effective ways of doing it, then we'll do that as well. I think what Ms. Gresock was referring to as it being a possibility, it's definitely a possibility, so is every other noise measure that we've listed in that exhibit. We're going to look for the most effective way to achieve compliance and demonstrate it at the end of the day.

MR. McCORMACK: Demonstrate it before construction or after construction?

THE WITNESS (Bazinet): We're going to have to do both.

MR. McCORMACK: So the neighbors would have the potential to ask for noise mitigation after the fact and expect it to be carried out?

THE WITNESS (Bazinet): If we're not in compliance, absolutely.

MR. McCORMACK: Thank you.

You made reference to Exhibit 2J, the late-filing on the electrical rates. I don't have that file with me. Could you save me some trouble and tell me what your

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findings were for individual or homeowner savings?

THE WITNESS (Bodell): My name is Tanya Bodell. I'm executive director of ENERGYZT.

And what we did to calculate, per the request of staff, on the impact of the rates, we looked at 2024, which is pretty much an average year during the 2018 to 2028 period of time with respect to anticipated energy savings, we took the existing Connecticut Light and Power bill that was on their website, we escalated transmission and distribution out to be a nominal number in 2024, and then we put our nominal savings as a reduction. The anticipated savings -- so, in 2024, total savings -- actually for the period the total savings are expected to be 1.474 billion for the period under examination for Connecticut alone, and that translates into a residential bill reduction in 2024, assuming a 700 kilowatt hour per month usage -- everybody's use is different, but that was the Connecticut average -- that results in a reduction of -- it basically

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results in a reduction of around $31 per year in the total electricity bill in 2024.

MR. McCORMACK: Thank you. That's about what I calculated from my bill. And I will say that doesn't impress me very much, but that's my opinion. Thank you. In reference to Marian Larkin's comments about the size or the width of the smoke stacks, I do have a simulated photograph of the smoke stacks taken from my street. The simulation was taken from the Athens plant and superimposing it over a picture of the weather balloons. I suspect you're going to direct me to introduce that into evidence rather than to show it to you.

THE VICE CHAIRMAN: You're pretty astute about that.

MR. McCORMACK: Okay. So I will be doing that then.

THE VICE CHAIRMAN: If I weren't, Attorney Small would.

MR. SMALL: Correct, Mr. Chairman.

MR. McCORMACK: One final question. It's my impression -- I think I'm

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right -- that it was you who hired the University of Connecticut to do that economic study on the area?

THE WITNESS (Bazinet): Yes, that's correct.

MR. McCORMACK: Is the cost of that study public information?

THE WITNESS (Bazinet): No, it isn't.

MR. McCORMACK: Why is that?

THE WITNESS (Bazinet): Because there's a contract between CPV Towantic and UConn.

MR. McCORMACK: UConn is a state institution, so shouldn't it be available --

THE WITNESS (Bazinet): If it's available through UConn measures, then per your request, yeah, absolutely.

MR. McCORMACK: But you don't care to share it with us?

THE WITNESS (Bazinet): No.

MR. McCORMACK: Okay. Thank you very much. Thank you, sir.

THE VICE CHAIRMAN: Thank you.

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I've been through the list of intervenors for cross-examination, and some did not respond when I called.

Is there any intervenor who's here now who has not had an opportunity to cross-examine at this juncture here today?

(No response.)

THE VICE CHAIRMAN: If not, we'll go off the record for a minute.

(Off-the-record discussion.)

THE VICE CHAIRMAN: My inclination is to call it a day and hit the road and go home. The problem we've run into is we cross-examine, and then more information comes in and we redo it again. So, if we start today, more stuff is coming in, primarily the stuff from Mr. Gustafson who is fortunately with us now and will be able to provide us with the answers to a number of questions, we just have to redo it again and we kind of spin our wheels. And I know that Mr. Perrone has a number of questions, but I think he's going to do them by way of interrogatory, so we all can read them and then, we'll all have them before us.

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And I guess the 24th is our next -- 11:00 a.m., on Tuesday, is it? Tuesday the 24th.

MR. SMALL: Mr. Chairman, just for clarification, so the 24th will be primarily staff and council member questions?

I see Ms. Bachman is nodding her head.

MS. BACHMAN: Yes.

MR. SMALL: Thank you.

THE VICE CHAIRMAN: And if there's time, I would assume that they will move on to others.

So the Council announces that it will continue the evidentiary portion of this hearing in New Britain on Tuesday, February 24, 2015, at 11:00 a.m.

Note that anyone who has not become a party or intervenor but who desires to make his or her views known to the Council, may file a written statement with the Council until the record closes.

Copies of this transcript of the hearing will be filed at the Oxford and Middlebury Town Clerk's Office.

Thank you for your participation. Drive carefully, and hopefully you'll be home before the sun sets.

MR. SMALL: Thank you, Mr. Chairman.

(Whereupon, the witnesses were excused, and the above proceedings were adjourned at 3:21 p.m.)

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CERTIFICATE

I hereby certify that the foregoing 180 pages are a complete and accurate computer-aided transcription of my original stenotype notes taken of the Connecticut Siting Council Continued Public Hearing in Re: DOCKET NO. 192B, CPV TOWANTIC, LLC, MOTION TO REOPEN AND MODIFY THE JUNE 23, 1999 CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED BASED ON CHANGED CONDITIONS PURSUANT TO CONNECTICUT GENERAL STATUTES §4-181A(B) FOR THE CONSTRUCTION, MAINTENANCE AND OPERATION OF A 785 MW DUAL-FUEL COMBINE CYCLE ELECTRIC GENERATING FACILITY LOCATED NORTH OF THE PROKOP ROAD AND TOWANTIC HILL ROAD INTERSECTION IN THE TOWN OF OXFORD, CONNECTICUT, which was held before SENATOR JAMES J. MURPHY, VICE CHAIRMAN, at the Connecticut Siting Council, 10 Franklin Square, New Britain, Connecticut, on February 10, 2015.

Lisa L. Warner, L.S.R. 061
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I N D E X

EXHIBITS
(Received in evidence.)

I N D E X (Cont'd.)