

September 12, 2011

VIA ELECTRONIC FILING

Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: Project No. 13287-000 – City of New York West of Hudson Hydroelectric Project
– **Filing of Transcripts from Public Meetings**

Dear Secretary Bose:

As indicated in its fifth progress report filed with the Federal Energy Regulatory Commission (“Commission”) on August 31, 2011 in the above-referenced proceeding, the City of New York (“City”) conducted public meetings on July 21, 2011 to discuss the studies conducted to date with respect to its West of Hudson Hydroelectric Project (“Project”) and its plans for filing applications with the Commission related to the Project. The City hereby files copies of the transcripts from such meetings.

The attachments to this letter are as follows:

1. Attachment A – Transcript and errata sheet from the Public Meeting conducted July 21, 2011 at DEP’s office in Kingston, New York; and
2. Attachment B – Transcript and errata sheet from the Public Meeting conducted July 21, 2011 at the Town Hall in the Town of Walton, New York.

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If you have any questions regarding this filing, please feel free to contact me.

Respectfully submitted,

COUCH WHITE, LLP

Garrett E. Bissell

Garrett E. Bissell
Counsel for the City of New York

GEB/kas/dap

cc: Service List

Mr. Timothy Looney (via email w/ enc.)

Mr. Anthony Fiore (via email w/ enc.)

Robert Craig, Esq. (via email w/ enc.)

Linda Geary, Esq. (via email w/ enc.)

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Attachment A

Transcript and errata sheet from the Public Meeting conducted July 21, 2011, at DEP's office in Kingston, New York

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NEW YORK CITY
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Public Information Meeting
Re:
CITY OF NEW YORK
WEST OF HUDSON HYDROELECTRIC PROJECT
FERC PROJECT NO.13287-000

July 21, 2011
10:00 a.m.
DEP Office
71 Smith Avenue
Kingston, New York

Reported by: KAREN SCHMIEDER, CSR, RDR
SMI Reporters

1 IN ATTENDANCE:

2

3

ANTHONY FIORE

4

Chief of Staff for Operations

5

New York City DEP

6

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KEVIN M. LANG, ESQ.

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GARRETT BISSELL, ESQ.

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Couch White, LLP

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THOMAS J. SULLIVAN, P.E.

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MARK J. WAMSER, P.E.

13

Gomez & Sullivan Engineers, P.C.

14

15

TODD WEST

16

ROBERT PRINCIPE

17

Bureau of Water Supply, NYC DEP

18

19

TOM BAUDANZA

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Fisheries Biologist, NYC DEP

21

22

23

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1 P R O C E E D I N G S

2

3 MR. FIORE: Good morning,
4 everyone. I'm Anthony Fiore, and I
5 work for Department of Environmental
6 Protection, Chief-of-Staff for
7 Operations for the Agency, which
8 includes our Bureau of Water Supply,
9 which I think almost everybody in this
10 room is probably familiar with; it
11 also includes our water and sewer
12 operations and our wastewater
13 treatment.

14 I'm going to be giving you
15 the presentation today. Before we get
16 started, however, I just want to go
17 over a couple of administrative
18 things. We do have emergency
19 evacuation alarms in the building. If
20 there is a fire or some other
21 disturbance, those alarms will go off.
22 You'll see the two on either end of
23 the room, they have white flashing
24 strobes, and the sound out of those

1 things will drive us out of the
2 building, okay. It is piercing. If
3 we do have to leave, we will go down
4 the stairs, the way that you came in,
5 out the front doors, and where the
6 flagpole is in the parking lot is our
7 assembly area. So don't leave, go to
8 that area so that we can account for
9 everybody in case fire department has
10 to come in. That way we'll know if
11 there are people still in the building
12 or not. So please don't leave. We'll
13 assemble there.

14 Restrooms are out this door
15 to your right and down the hallway on
16 your left. Coffee, danishes and such
17 are over here for your enjoyment.
18 Those are all the administrative items
19 that I wanted to go over.

20 I do just want to introduce
21 the team here. Our outside legal
22 counsel is Couch White, Kevin Lang and
23 Garrett Bissell, at the other end.
24 And then our engineering consultants,

1 Gomez and Sullivan are over here; Tom
2 Sullivan and Mark Wamser. Then for
3 Bureau of Water Supply we have got
4 Todd West and Rob Principe that head
5 up planning for the Bureau and are
6 coordinating the hydro project for the
7 Bureau. And Tom Baudanza, who is our
8 fisheries biologist here.

9 So today I'm going to be
10 talking about our West of Hudson Hydro
11 Project. The main focus of it will be
12 to go over the studies that we have
13 conducted in support of our license
14 application. I just want to put it
15 into context of where we are today and
16 where we have come from.

17 So back in September of '08
18 we filed our preliminary permit
19 application with the Federal Energy
20 Regulatory Commission to study these
21 developments. And really, that's what
22 a permit application allows you to do;
23 it gives you three years to form the
24 necessary studies that would support a

1 license application. In March of '09
2 we were actually awarded that permit,
3 so in August of '09 we filed our
4 pre-application document. The
5 pre-application document really kind
6 of looks at what data readily
7 available on the project developments
8 and what gaps in data there might be,
9 and that kind of informs you of what
10 studies you might need to do.

11 The other part of the
12 pre-application document is to
13 identify the relevant stakeholders who
14 may be interested in the project, and
15 so we did that in our pre-application
16 document. From there we sent out
17 notices to folks about the project so
18 that they could become part of the
19 development of this.

20 In December of '09 we held
21 what's called a joint meeting, and all
22 of the identified stakeholders in that
23 pre-application document were notified
24 and invited to come to that meeting.

1 At that meeting we discussed the
2 pre-application document, what data we
3 had about the developments, what data
4 gaps there were and kind of a broad
5 sense of what studies we thought we
6 would need to conduct to support our
7 license application.

8 So from that meeting,
9 gathering the comments from the
10 stakeholders, that's the resource
11 agencies, NGOs, the public, all the
12 interested parties, we put together
13 our study plans. We presented those
14 to the resource agencies in February
15 of '10, had some back and forth with
16 them, finalized our study plans in
17 June of '10 and presented preliminary
18 results for some of those studies to
19 the resource agencies in August and
20 then again in October. Since October
21 of '10 to today we've been finishing
22 up those studies and conducting some
23 additional field work to support those
24 studies. So that kind of brings us to

1 today.

2 This is the agenda for
3 today. We want to give you an
4 overview of the licensing schedule.
5 We are going to show you what the
6 current conceptual layouts of the
7 project developments are. We are
8 going to talk a bit about how we plan
9 on operating the developments, and
10 then the studies that were conducted.
11 We did entrainment; mortality studies;
12 wetlands; wildlife; rare, threatened
13 and endangered species; erosion;
14 aesthetics; archeological cultural and
15 historical properties, and then
16 socioeconomics. And then, of course,
17 we'll take questions and comments on
18 what we presented. You can stop me
19 any time you like during the
20 presentation as well and ask me
21 questions, and I'll do my best to
22 answer those.

23 So this is the licensing
24 schedule. Just starting in the upper

1 left corner, it is where we are today.
2 That's the meeting or the presentation
3 we're doing today. We are going to
4 ask that if you'd like to submit
5 comments on our studies to have those
6 comments back to us by August 10th, so
7 that we can consider them in the
8 preparation of our Draft License
9 Application, which will be submitted
10 in November. That's not the only
11 chance you will have to comment on
12 this. It's just if we are going to be
13 able to consider those comments in
14 preparation of the Draft License
15 Application, we need to get them by
16 August 10th. You can comment on the
17 Draft License Application after that,
18 so don't feel like you don't have the
19 time to do that.

20 So the Draft License
21 Application and what the Federal
22 Energy Regulatory Commission terms an
23 Exemption Application -- and I'll
24 speak a little bit about what that

1 means, and our 401 Water Quality
2 Certificate, which is issued by the
3 Department of Environmental
4 Conservation in September -- sorry, I
5 misspoke, we'll be submitting that in
6 September. The written comments
7 formally on those draft applications
8 will be due in November. And really,
9 it's 90 days from when we submit our
10 Draft License Application and
11 Exemption Applications to the Federal
12 Energy Regulatory Commission. So you
13 have 90 days from that date to submit
14 formal written comments.

15 So the Draft Exemption
16 Application, what does that mean? It
17 doesn't mean we're exempt from
18 anything. It is kind of a short
19 license application so to speak. The
20 main difference between a License
21 Application and Exemption Application
22 is that the Exemption Application is
23 in perpetuity; there is not a
24 re-licensing period. With your

1 license applications, generally it's a
2 50-year license, and after 50 years it
3 comes up for renewal. It could be a
4 little bit less time, maybe 40 years,
5 there's some flexibility in there, but
6 generally they are 50-year terms.

7 With Exemption Applications
8 the terms that the regulating
9 agencies, in this case New York State
10 Department of Environmental
11 Conservation and the U.S. Fish and
12 Wildlife Service, whatever terms they
13 put on the exemption are mandatory.
14 With the License Application it is
15 FERC's final approval of what's
16 mandatory and not.

17 So we're going to submit
18 that Draft License Application in
19 September and comments are due in
20 November. We'll address those
21 comments in our final application,
22 which we plan to file in the spring of
23 2012, hopefully in March.

24 After we file the License

1 Application, FERC, the Federal Energy
2 Regulatory Commission, will issue
3 additional information requests, so
4 they'll look at the License
5 Application. If there's additional
6 information they think is necessary,
7 either from their reading of our
8 License Application or if there's
9 comments that they believe need to be
10 addressed that haven't been, they'll
11 issue that. We'll address those and
12 any deficiencies that might be in the
13 License Application -- if there is
14 something missing or an inaccuracy in
15 the text, what have you.

16 Then FERC issues a Scoping
17 Document, and there will be a public
18 meeting held within 30 days after that
19 Scoping Document is issued, which
20 again everybody can comment on. The
21 City will have 90 days to respond to
22 that. And then FERC will issue a
23 Notice of Applications Ready For
24 Environmental Analysis. The resource

1 agencies will submit what terms and
2 conditions they see necessary for
3 that; we'll submit our comments, and
4 then FERC will issue a Draft
5 Environmental Assessment. And that
6 may be an -- in the environmental
7 lingo it is an Environmental
8 Assessment or Environmental Impact
9 Statement. And then written comments
10 on that will be due, and then FERC
11 eventually issues a Final EA and then
12 the license. So there's a lot of time
13 between now and then and there are a
14 lot of opportunities for continued
15 input, so that's really what I want to
16 highlight out of this slide.

17 If you notice on the title,
18 we are talking about three
19 developments: Neversink, Pepacton and
20 Cannonsville. Our preliminary permit
21 is for four developments, that fourth
22 being Scoharie. To date we haven't
23 found a viable option for developing
24 Scoharie. We continue to look at

1 that, but as such we haven't done any
2 studies yet on that development
3 because we just don't know what the
4 scope of those would be because we
5 don't have the development defined.
6 So it just wouldn't make any sense at
7 this point to be conducting studies.
8 If we do find a feasible option, we'll
9 look at the scope of what that is, and
10 we'll conduct the necessary studies in
11 accordance with that.

12 What I will tell you at this
13 point for this project is we are
14 designing in a connection point for a
15 hydroelectric facility in our
16 lower-level release, which is
17 currently being designed for that
18 site. So if something changes in the
19 near term, or in the long term, we
20 will have a connection point ready for
21 connection to the eventual
22 hydroelectric facility.

23 So this is the Cannonsville
24 development, and I'm sorry for the

1 busyness of the slide. It's a little
2 bit hard to see. But in our
3 pre-application document, the very
4 early stage of kind of conceptualizing
5 this, what I point out to you is that
6 we had originally proposed four
7 turbines, as is here, just over
8 1100-CFS and about 12-megawatt
9 capacity for it. Today that's
10 changed, after further engineering
11 analysis. It's still four turbines,
12 but it is 1500-CFS maximum and about
13 14-megawatts in capacity.

14 Let's see if I can point
15 out; it's hard because we have got
16 double screens here. But if you look
17 at the base of this green area, kind
18 of in the middle bottom, that's where
19 the existing lower-level release is.
20 Again, over here, this is the area
21 that we're talking about. What we are
22 proposing to do is build a new
23 powerhouse adjacent to the lower-level
24 release structure. There is a conduit

1 that takes water from the reservoir
2 intake that is out here somewhere. It
3 comes to a structure that's on top of
4 the damming here, and it is
5 underground conduit that brings the
6 water down to the existing lower-level
7 release. The hydroelectric facility
8 would tie into that conduit and go
9 into a new powerhouse adjacent to the
10 existing lower-level outlet. And then
11 the tailrace would be here, and it
12 would tie into a common tailrace from
13 the existing lower-level release.

14 Hi. Yes.

15 MS. THARP: Diane Tharp,
16 from Nordel Conservancy. I've spoken
17 to you before.

18 So right now the maximum
19 release from Cannonsville is 1500 CFS?

20 MR. FIORE: Yes.

21 MS. THARP: So this will
22 then remain the same? It won't
23 increase? Because I know before we
24 thought perhaps more turbines would

1 increase it.

2 MR. FIORE: Well,
3 technically, yes, it can increase the
4 discharge capacity because you have
5 both the lower-level release and the
6 turbine releases.

7 MS. THARP: So it could be
8 greater than the 1500 CFS?

9 MR. FIORE: Yes, yes.
10 About 3300, right, Mark?

11 MR. WAMSER: That's right.

12 MR. FIORE: 3300 CFS.

13 Yes, Howard.

14 MR. BARTHOLOMEW: Howard
15 Bartholomew of DCC. I have a
16 question. What would be the duration;
17 in other words, how often would the
18 turbines operate for the 1500 CFS,
19 weeks or months or days or year?

20 MR. FIORE: Well, in a bit
21 I'm going to show you the flow
22 duration curves, and that will give
23 you a better sense of that.

24 MR. BARTHOLOMEW: Okay,

1 sure. Thanks.

2 MR. FIORE: You're welcome.

3 What else do I want to point
4 out? You're going to see this layout
5 a couple times in the presentation as
6 we go through the different studies.
7 This kind of shows everything lumped
8 together, and that's why it's kind of
9 busy. But we'll have to relocate the
10 existing leachfield in order to put in
11 the new powerhouse. There will be a
12 sedimentation basin here to keep the
13 work in this tailrace dry. Spoils
14 disposal area is over here, and we've
15 identified three different staging
16 areas; depending on how much equipment
17 needs to be brought in will determine
18 how many of these or which of these
19 staging areas will be used.

20 The electrical
21 interconnection is proposed to run
22 this way, up to where we currently
23 have a maintenance yard, and then it
24 will tie into these existing overhead

1 electric lines. This will be buried
2 and then overhead here. It follows
3 existing power lines. I think that's
4 all on this for now.

5 This is the Pepacton
6 development. Originally we had
7 proposed two turbines for this
8 facility, with a total cubic feet per
9 second of 270 and a 3.1 megawatt
10 capacity. In doing a further
11 engineering analysis, we can't fit
12 that into this facility. This is
13 tight. This facility exists, it is
14 where the lower level releases are.
15 Our plan is to remove one of the two
16 release valves and substitute it with
17 a turbine generator and put in a
18 bypass line, so that if the turbine
19 has to go down for maintenance we
20 still have the release capacity. But
21 it is very tight space, so we couldn't
22 fit anything bigger than what we are
23 proposing now, which is one turbine
24 approximately 162 CFS and 1.7-megawatt

1 capacity.

2 Let me just say for all
3 these developments right now these
4 numbers are subject to change. We've
5 got to get confirmed bids from the
6 vendors. At that point the sizing
7 will be really detailed, but this is
8 for budget purposes what the vendors
9 have supplied to us at this point. We
10 have looked at the sizing of that and
11 know that we can fit that in. But
12 again, it is subject to a little bit
13 of change.

14 So this is that existing
15 lower-level release. It sits atop of
16 the dam. This is the dam reservoir,
17 the earthen embankment, and this is
18 the spillway here -- and I apologize
19 again to all of you over there for
20 speaking from here. The staging area,
21 this would be where the proposed
22 switch gear is located with an
23 underground line to an existing pole.

24 The Neversink development.

1 Originally, again like Pepacton, we
2 had two turbines planned for this, a
3 total of 160 cubic feet per second at
4 1.65-megawatt capacity. As Pepacton,
5 that's been reduced to one turbine,
6 again it is the same as replacing an
7 existing release valve. This space is
8 even tighter than Pepacton. It's very
9 challenging to fit something in here.
10 I think we have something now that can
11 fit. We actually have to remove a bit
12 of a concrete shelf. This is in the
13 bottom of this chamber. I don't know
14 what the elevation difference is,
15 Todd, you know, 80 feet or something
16 along those lines.

17 MR. WEST: Sure.

18 MR. FIORE: And then lower
19 this turbine and generator down in
20 there. So a very, very tight space.

21 This structure is a little
22 bit different than Pepacton and
23 Cannonsville in that this is a common
24 structure for the lower-level releases

1 as well as the intake for our water
2 supply diversion, which takes water
3 from Neversink to the Rondout
4 Reservoir. For the other two sites,
5 the intake for water diversions is a
6 separate facility.

7 Our staging area, this is
8 just a mowed grassy area. The
9 proposed switchgear would be right
10 next to the existing asphalt area.
11 And this is an existing underground
12 conduit for electric lines, and we've
13 got enough space in there to slip in
14 the line for this project.

15 MS. THARP: In both
16 Neversink and Pepacton, since you're
17 replacing one of the valves, would
18 that -- will there actually be less
19 release than now or will it be the
20 same?

21 MR. FIORE: For Pepacton it
22 will be the same.

23 MS. THARP: That's 700
24 normally?

1 MR. FIORE: Yes. And for
2 Neversink we are still working out the
3 details of the bypass line. The plan
4 is to keep it the same, but we still
5 have to size that pipe. We got to
6 make sure that fits in there. So
7 we're still working on the engineering
8 of that.

9 The operating regime. I
10 think most everybody in this room is
11 familiar with how we release water
12 from our Delaware basin reservoirs.
13 It's been governed by what's called
14 the Flexible Flow Management Program,
15 that's a flow regime that's agreed
16 upon by the decreed parties from the
17 1954 Supreme Court decree that
18 establishes the water that's allocated
19 to the City from the Delaware River
20 basin, which is 800 MGD, million
21 gallons a day. That Flexible Flow
22 Management Program has been superseded
23 by what's called the Flexible Flow
24 Management Program Operations Support

1 Tool; that's a long name, but that
2 came into effect in June of this year,
3 so it is brand new. The idea of this
4 is that there will be more water
5 that's released downstream than under
6 the preexisting Flexible Flow
7 Management Program. This flow regime
8 is effective for one year, with a
9 possible one-year extension, based on
10 unanimous decision by the decree
11 parties. And the decree parties, for
12 those that don't know, are New York
13 State, New York City, Pennsylvania,
14 Jersey and Delaware, states of and
15 Commonwealth of Pennsylvania. And
16 then the decree parties will decide on
17 what the successor, if it changes at
18 all, to the FFMP-OST is at that point.

19 Okay, Howard, so our flow
20 duration curves. This is for the
21 Cannonsville development, and the red
22 line is the FFMP; the blue line is the
23 new flow regime, the FFMP-OST. What
24 you should take away from all of these

1 sites is that there is more water
2 available under the FFMP-OST to the
3 downstream stretches than previous.

4 And just to orient folks who
5 are not familiar with these graphs,
6 you have your total stream discharges
7 on your Y axis in cubic feet per
8 second, and the time that that flow is
9 equaled or exceeded on your X axis
10 here. For example, 50 percent of the
11 time under the old FFMP, maybe
12 somewhere around 400 CFS; under the
13 new FFMP-OST it's closer to say 480
14 CFS that's available 50 percent of the
15 time.

16 MR. TRIOLO: Based on
17 that -- Mike Triolo, Catskill
18 Watershed. Full capacity of those
19 generators about 20 percent of the
20 time or a little less than 20 percent
21 of the time?

22 MR. FIORE: I'm sorry, say
23 that again.

24 MR. TRIOLO: Based on that

1 graph, your turbines will only be
2 operating at full capacity around 20
3 percent of the time, is that right?

4 MR. FIORE: Yes, Mark.

5 MR. WAMSER: Mark Wamser,
6 Gomez and Sullivan, consultants. If
7 you look at the blue line, where it is
8 at 1500, go straight down, it is
9 around 11, 12 percent of the time
10 you'd be operating at 1500.

11 MR. FIORE: That's right,
12 thanks, Mark.

13 I'm sorry, I forgot to
14 mention, if you have questions, please
15 state your name and who you are
16 associated with. We do have a court
17 reporter to take notes for us, so to
18 make sure we get everyone's comments.
19 Thank you.

20 Same thing for the Pepacton
21 development, again, the FFMP-OST is
22 this blue line, that's the flow regime
23 in operation today. So what was the
24 max CFS on this site?

1 MR. WAMSER: On this is 162.

2 MR. FIORE: 162 CFS, so
3 somewhere around here I guess. And
4 the next slide, please, same thing for
5 Neversink. Again, the blue is the
6 FFMP-OST flow regime. So again, the
7 takeaway from this is that under the
8 new flow regime there is more water
9 available to the downstream stretches
10 than previously.

11 So we'll get into the
12 studies that we conducted now. The
13 first one that I want to talk about is
14 the entrainment study. We looked at
15 water quality, species composition,
16 and depth of water in order to
17 determine proximity to intakes of the
18 various fish species that occupy the
19 reservoirs. For those that would be
20 based on those parameters found near
21 the intakes we compared swim speeds to
22 intake velocities, and then for
23 mortality we evaluated pressure
24 differentials between the low-level

1 intakes -- all our intakes, if you're
2 not familiar, are at the bottom of the
3 reservoir, and where those release to
4 is at a higher elevation in the
5 downstream releases. So there's a
6 pressure differential from that.

7 For intake protection we
8 looked at what currently is existing,
9 which is basically bar racks on our
10 intakes and then some additional types
11 of intake protection, be it both
12 physical and/or behavioral measures.
13 And the behavioral are things like
14 sound or flashing lights, that kind of
15 stuff, so we took a look at that.

16 And then we evaluated the
17 need for downstream fish passage as
18 well. So the results from the study,
19 based on the life history and habitat
20 of the fish species in the reservoir,
21 their swimming speeds, it is expected
22 that entrainment for all those species
23 will be low. Again, we're talking
24 deep intakes, so the risk for fry and

1 juvenile fish is expected to be
2 minimal as well. That kind of habitat
3 doesn't generally support that life
4 history of the fish, and I want to put
5 this in context. This is the impact
6 of the hydroelectric developments on
7 current conditions.

8 Mortality. The fish that
9 are caught in the intakes will not
10 survive the pressure differential.
11 That currently exists. So any fish
12 that go into those intakes today, come
13 out the pressure differential, is
14 highly likely to be lethal. And
15 downstream fish passage, this was
16 found not to be advisable. We're
17 talking about taking fish from depths
18 where the intakes are again and
19 putting them in a higher elevation
20 stream. The pressure differential
21 would cause mortality. And if we have
22 a surface-level fish passage, then we
23 are taking basically warm-water fish
24 species and introducing them into a

1 cold-water habitat. So that was not
2 advisable to do.

3 The wetlands, wildlife and
4 rare, threatened and endangered
5 report. Basically what we did is we
6 looked at the different habitats, the
7 wetlands and what the associated
8 species are with this. We consulted
9 with our DEP biologists, our field
10 personnel, and our contracted field
11 biologists went out to the sites and
12 did site surveys. We plotted the
13 habitats and the areas that would be
14 disturbed by these projects, so we
15 took those areas that are going to be
16 disturbed and we overlaid the habitats
17 and the wetlands onto those to see if
18 any of them fell within the impact
19 area.

20 The field studies were
21 conducted both in spring and summer
22 seasons. The first round went out in
23 the summer. We came back in the
24 following year in the spring just to

1 make sure that we capture vernal pools
2 and animal species and vegetative
3 species that are associated with
4 vernal pools.

5 Then we looked at what
6 mitigation impacts might be needed,
7 and really what are you going to see
8 from all this, it's things that would
9 be related to construction activities.

10 So the results of that
11 study, the vegetative cover types, a
12 lot of open fields, as you can
13 imagine, if you haven't been out to
14 these sites, they've all been
15 previously disturbed to put in
16 infrastructure that's there today, the
17 dams and spillways and existing
18 lower-level release chambers. Some
19 mixed forest and emerging wetlands.
20 The staging areas we are trying to
21 limit to existing mowed fields.

22 The electrical equipment at
23 Cannonsville, again looking to be
24 adjacent existing structures and

1 follow existing routes.

2 There were ten invasive
3 plant species that were found at this
4 site; those invasive plant species are
5 well established. We didn't find any
6 new invasive species from either of
7 the two lists, and I don't remember
8 the name of the lists off the top of
9 my head, but there is emerging and
10 something else, I forget.

11 MR. BAUDANZA: Early
12 detection and approaching region.

13 MR. FIORE: Early detection
14 and approaching region. We did not
15 find any of those.

16 Wetlands, riparian and
17 littoral habitats. There is a
18 low-quality wetland where the new
19 powerhouse at Cannonsville will be
20 placed, along with the tailrace. We
21 say low quality, really it is not
22 supportive of much in the way of flora
23 and fauna. It is currently populated
24 by canary reed grass, which is an

1 invasive species, so there is not much
2 there.

3 We did identify two
4 additional wetlands that were not
5 previously mapped in the area. They
6 are in the buffer zones but outside of
7 the impact areas. And the buffer
8 zones are -- what we did is we looked
9 at the area that we're going to be in,
10 where our construction equipment will
11 be, where new infrastructure will be
12 placed, and we took a 100-foot buffer
13 around all of that. So that's the
14 buffer zone, to see if anything in
15 that zone would be impacted. And
16 again, here, there are two wetlands
17 and three vernal pools that are in the
18 buffer zones.

19 Wildlife, I'll just go right
20 to the rare and threatened, endangered
21 species. Jefferson salamanders and
22 long-tail salamanders, the type of
23 habitat that's in this area does
24 support those species. None were seen

1 during the site visits, but the
2 habitat could support it. And one of
3 the vernal pools looks like it may be
4 suitable habitat for those species.

5 For every development I'm
6 going to talk about, Bald Eagles
7 exist. They are around, that's a
8 great thing. They have come back big,
9 and we are very happy about that. We
10 didn't see any nesting sites or
11 roosting sites in the project area
12 itself or the buffer zones. It
13 doesn't mean they don't exist or will
14 not exist by the time we go to
15 construction, but we have plans to
16 deal with that.

17 So at this point we have not
18 identified any need for mitigation
19 measures for the habitats and for
20 flora and fauna, other than again with
21 the Bald Eagles, we continue to
22 monitor where they are, and when we go
23 to construction we'll be working with
24 DEC and U.S. Fish and Wildlife Service

1 on any protective measures that may be
2 needed due to those construction
3 activities. You know, the eagles
4 could be a mile away, and there may be
5 still things we need to do to protect
6 them, so those will be developed in
7 consultation with agencies.

8 A familiar map, again, this
9 is the Cannonsville site. So a couple
10 things that I want to point out. The
11 vernal pools, here is one very small,
12 the second vernal pool is here, and
13 the third vernal pool is here. I
14 thought I had the size of these, but
15 if I remember correctly, this is about
16 .1 acre, and this may be a little bit
17 more than half an acre. And this one
18 was about 1 acre, just over one acre.
19 Details are in the reports, and you'll
20 have access to those.

21 Then the wetland areas that
22 we identified and I just spoke about
23 here, obviously this is the tailrace
24 and existing pool. This is the second

1 wetland, and this is the third
2 wetland. I think I have my numbers
3 wrong, but I think those are
4 associated with the wetlands, not the
5 vernal pools. This is .1, just over a
6 half acre, and just about one acre,
7 and this is not to scale.

8 Again, the spoil disposal
9 area, the buffer zone, all the yellow
10 indicates the buffer zone. So we
11 looked at in this 100-foot radius
12 around areas that we would be working
13 in, any habitats, wetlands, rare,
14 endangered, threatened species are in
15 here. So that gives you the visual of
16 it.

17 Again, this is tracing the
18 power lines, that's why there's a
19 buffer zone around that. This is the
20 sedimentation pond. This is staging
21 area 3, staging area 2, staging area
22 1, and that's why you see the buffer
23 zones around those.

24 For Pepacton, same study,

1 same scope as at Cannonsville. The
2 staging areas again are going to be on
3 mowed grass. The wetlands, riparian,
4 littoral habitats, none were
5 identified in the area of disturbance
6 of those projects. Very little
7 wildlife, except for nesting cliff
8 swallows which are on the existing
9 lower-level release structure.

10 Rare, threatened, endangered
11 species, the only one here that we
12 have seen, observed and know of, Bald
13 Eagles. But again, no nests as of the
14 date of the site visit. And
15 mitigation, same as Cannonsville; at
16 this point we haven't identified the
17 need for any mitigation measures
18 except for working on protective
19 measures for Bald Eagles during
20 construction.

21 This is the visual of
22 Pepacton. This is existing paved road
23 here. This is the dam; the spillway
24 is here. This would be the staging

1 area. It is a flat grassy area
2 directly adjacent to the existing
3 lower-level release structure. New
4 switchgear would be placed here with
5 underground line run to this pole.
6 Existing overhead lines are here, and
7 these are the buffer zones that were
8 looked at.

9 For Neversink, pretty
10 similar to Pepacton. The staging
11 areas again in mowed grass. There was
12 one invasive plant species found here,
13 multiflora rose I think, which was
14 also found at Cannonsville. That is
15 in the area where that underground
16 electrical conduit is, so that area is
17 not going to be disturbed.

18 For wildlife, various common
19 birds that we see around, and the
20 nests again were cliff swallows, just
21 like at the Pepacton development.
22 Rare, threatened, endangered species
23 again limited to the Bald Eagles, and
24 the same note, that protective

1 measures will be developed in
2 consultation with U.S. Fish and
3 Wildlife and DEC during construction
4 activities.

5 And the visual here, this is
6 the access road that comes into the
7 site. Here is the staging area. The
8 buffer zone that was looked at. This
9 is the underground electrical line
10 that exists today and that we can slip
11 the new electrical connection through,
12 and the buffer zone that was looked at
13 around it. And again, that invasive
14 multiflora rose species was found in
15 this area.

16 The erosion study. We
17 looked at the potential areas impacted
18 during construction, we developed
19 conceptual-level plans showing
20 proposed sediment and erosion control
21 measures. These plans will have to be
22 more fully developed once we have a
23 better scope and detail of the
24 construction, but we've identified

1 some conceptual plans at this point.

2 For all the projects,
3 obviously our erosion control measures
4 will comply with the regulations. It
5 seems funny to say that, but I think
6 necessary to say that. And then once
7 construction is done, all the staging
8 areas and areas that are temporarily
9 disturbed will be regraded, reseeded,
10 watered until grass is established,
11 and original appearance will be
12 restored.

13 For the Cannonsville site
14 there's enough acreage that's going to
15 be disturbed that we are going to need
16 a State Pollution Discharge
17 Elimination General Permit, so the
18 SPDES General Permit for stormwater
19 discharges. All the water that's
20 going to be pumped out of the tailrace
21 area, you've seen this before and
22 you'll see it again. It will be put
23 into that sedimentation pond, and that
24 pond will be excavated, and the spoils

1 of that will be brought to the spoils
2 area. And then upon completion, the
3 spoils will be put back into that
4 sedimentation basin; it will be
5 regraded and seeded to prevent
6 invasive species growth. So that's
7 here, the sedimentation pond that
8 we're talking about.

9 The yellow outlines where we
10 plan to have control measures put in
11 place, silt fencing or the like;
12 that's yet to be developed. But what
13 you can see is this is a currently
14 existing dirt road. There will have
15 to be some grubbing of this to make it
16 suitable for construction vehicles to
17 get to the spoils area, but it will be
18 protected on both sides for runoff and
19 encircling the spoils area. Any of
20 the staging areas that are used will
21 also be protected. We see that
22 protection also around the
23 sedimentation pond, around the
24 leachfield that will have to be

1 relocated, around the proposed
2 substation here. And then we'll have
3 to put a cofferdam in to be able to
4 work in this area. That will be
5 protected. There is a second kind of
6 portable cofferdam that will be put in
7 place that, if I remember correctly,
8 runs parallel with the stream and kind
9 of goes like this. This will all be
10 protected, and we'll have a turbidity
11 curtain around that as well when we
12 install that cofferdam, and when that
13 cofferdam is removed to capture any
14 turbidity that is disturbed from those
15 activities.

16 Pepacton. I mean there is
17 not much here. Most of the work is
18 inside the existing structure. But we
19 do have controls that have to be put
20 around the staging area and then
21 around the area where the switchgear
22 will be placed and the electrical
23 lines run.

24 And our Neversink one,

1 similar to Pepacton again. The
2 staging area will be protected. Where
3 the proposed switchgear will be
4 protected during construction
5 activities. We don't need anything
6 along this corridor. It is already
7 existing underground line, and we'll
8 just be slipping the new electric
9 service through there.

10 The aesthetics study. We
11 went out and photo documented the
12 areas as they are today from both
13 public viewsheds -- and what I mean by
14 that is just areas from publicly
15 accessible sites that you may be able
16 to see the project areas from. And we
17 also looked at it from the City-owned
18 lands.

19 We used an ArcGIS analysis
20 to evaluate what lines of sight you'd
21 have if you were in a boat fishing on
22 a reservoir, or just boating. I guess
23 you don't have to be fishing. And we
24 looked at new structures and

1 construction-related activities on
2 aesthetics. We created some
3 renderings to show the new
4 infrastructure that will be put in
5 place and identified need for
6 mitigation measures.

7 So at Cannonsville, really
8 the primary viewshed for the public is
9 from Route 10; however, the pull-offs
10 there are heavily vegetated, and they
11 really limit line of sight to the area
12 where the projects will be taking
13 place. From the reservoir you'll not
14 be able to see the project or the
15 construction activities because of the
16 height of the dam. So based on that,
17 the conclusion from that study was
18 there's no materially adverse impacts
19 on aesthetics.

20 The new powerhouse will be
21 architecturally designed to match the
22 existing facilities and the
23 surrounding area. The new power lines
24 are going to be constructed the same

1 route as existing. The new substation
2 is going to be located directly
3 adjacent to our existing lower
4 level -- at that area that's at the
5 maintenance yard, I believe. And then
6 the staging and spoils areas will be
7 restored to their previous condition.

8 So this is showing you the
9 viewsheds. These white circles are
10 public viewsheds, so if you were on
11 the reservoir or on Route 10 -- you
12 can forget about this, this is a
13 mistake. It's not a public viewshed.
14 That's the spillway. If you were
15 standing on that there would be
16 serious problems. And there should be
17 a line here as well, which will be
18 fixed. This is another public
19 viewshed. C3, C6, C4, C5 are all on
20 City property, not from public
21 viewsheds. So the green lines
22 represent the visible areas, what you
23 could see from those points, and the
24 blue circles then delineate where your

1 view would be obstructed, and the red
2 are obstructed views.

3 So at Cannonsville, this is
4 where the new powerhouse would be.
5 There really are no clear views to
6 that from any public viewsheds. This
7 is where that substation would be.
8 Again, no line of sight view from the
9 public viewsheds.

10 Next slide. So this is the
11 first view from C1, which was a public
12 viewshed -- if you could just go back,
13 thank you. So C1 is here; C2 is over
14 here. So this is from the east,
15 looking over -- this is the top of the
16 dam. The project is down underneath
17 there, so you're not going to see
18 anything. This is from the west, and
19 you can't see anything from there.

20 Next slide, please. Okay,
21 this is a rendering of what the new
22 structure will look like. This is the
23 current condition, this is the current
24 lower-level release outlet, the

1 existing tailrace, the stilling pool,
2 overhead lines that exist today.
3 Again, the reservoir is behind here.
4 The spillway is out this way, and then
5 this is what we believe it will look
6 like when we're done with it. This
7 will be the new powerhouse housing the
8 four turbines, the tailrace that will
9 come into a common stilling pond. So
10 it's not a significant difference from
11 the current view today. It actually
12 looks a little better.

13 FEMALE SPEAKER: Is that the
14 wetland that was on the --

15 MR. FIORE: Can you go back,
16 please. This was that first wetland
17 not previously mapped. This is what
18 we called the low-quality wetland
19 because of the canary reed grass that
20 has overpopulated this area. This is
21 what it will look like after the
22 project is done.

23 This is up at the top of the
24 dam, where the current maintenance

1 yard is and where we propose the new
2 switchgear to be. So this is -- the
3 top left is the current condition;
4 this is a rendering showing that in
5 place. Again, directly adjacent to
6 the maintenance yard. You can't see
7 this from any of the public viewsheds.

8 Pepacton results. The
9 viewsheds are really from Route 30,
10 and the reservoir. The distances from
11 Route 30 to the site are very, very
12 long distances, and it's going to
13 reduce visibility even for
14 construction activities greatly. The
15 existing release work buildings will
16 obscure the new electrical
17 infrastructure that's put in place.
18 Most of the construction here again is
19 going to be taking place indoors. And
20 any areas that are disturbed outside,
21 again, will be restored to previous
22 conditions.

23 So these are public
24 viewsheds here and here. This is the

1 highway here. Here's another public
2 viewshed, and then these would be from
3 the reservoir. Again, the green
4 represents your line of sight. The
5 red is showing an obstructed view.

6 If you go to the next slide
7 so we can see the actual pictures,
8 that would be helpful. So this is
9 right at the entrance to the facility,
10 again it is a long distance. This is
11 the existing powerhouse. This is from
12 the second public viewshed. This is
13 the existing lower-level release
14 chamber, so you can see it is an awful
15 long way.

16 So this is what the site
17 looks like today, the upper left-hand
18 corner picture, and with the project
19 development, this is the switchgear
20 here. The substation that's what's
21 new. It's hardly visible even from
22 City property.

23 Neversink. From Route 55
24 and the reservoir again, the viewsheds

1 are obscured. There is topographical
2 elevation differences between some of
3 the public viewsheds on the roadway to
4 the area. Again, most of this
5 construction is going to be taking
6 place indoors, and we will restore any
7 outdoor areas that are impacted.

8 Let's go to the next slide
9 so we can see it. Okay, a lot of
10 viewsheds shown on this map. This is
11 the roadway here, the reservoir views.
12 I think the next slide is going to
13 show from N2, which is here; basically
14 you're looking uphill, so there's
15 enough of an elevation difference so
16 you can't see anything. N1 was from
17 the highway; again, it's quite a long
18 distance. That's the existing intake
19 structure. The electrical equipment
20 would be behind this in this photo.
21 This is from the entrance of the
22 plant, and again, it kind of dips down
23 so you can't really see anything. And
24 this is from the end of the -- this is

1 the emergency spillway.

2 Before condition, upper
3 left-hand corner with the new
4 substation; the bottom right-hand
5 corner is what we believe it will look
6 like.

7 Any questions on that stuff?

8 The cultural, archeological
9 and historic development study. We
10 looked at soils in the area, the
11 bedrock geology, the topography of the
12 area to determine what the likelihood
13 of the existence of archeological and
14 cultural resources would be. We did
15 quite extensive literature research,
16 and in this case DEP has an extensive
17 amount of documentation on this from
18 the original development of the
19 reservoirs and dams. But we also
20 looked at Parks, Recreation and
21 Historic Preservation databases and
22 the New York State Museum files, and
23 then site visits were conducted in the
24 spring of 2010.

1 So based on the geology and
2 topography and so forth, the finding
3 from the study was that there is a
4 moderate sensitivity for both
5 pre-contact and historic archeological
6 sites. However, because all of this
7 land was previously disturbed quite
8 extensively for the development of the
9 reservoirs and the dams and associated
10 facilities, the existence of those
11 types of resources is highly unlikely.
12 No properties listed on the State or
13 National Register For Historic Places
14 or eligible for listing. And given
15 the location of the new facilities, we
16 don't anticipate any adverse impacts
17 on these resources.

18 However, in accordance with
19 the Federal Energy Regulatory
20 Commission regulations we will be
21 developing an Historic Properties
22 Management Plan for these
23 developments.

24 We also did a socio-economic

1 study. The socio-economic study is
2 not complete. It will soon be
3 complete, but what we can give you
4 today are the preliminary results from
5 that study. What it did was look at
6 how construction and operation from
7 this development would impact
8 employment, personal income and other
9 factors. We looked at the demographic
10 and economic trends existing in the
11 towns and counties where these
12 projects will develop today, and we
13 identified the economic impacts
14 direct, indirect and induced from the
15 construction and the ongoing operation
16 of these developments. We also
17 estimated the potential environmental
18 externality benefits that might be
19 associated with the project, and we
20 looked at the impact on wholesale
21 energy pricing from the project
22 development.

23 So local economic impact,
24 primarily through employment of local

1 residents as part of the construction
2 related work done on site or through
3 use of local sub-contracting. And I
4 don't have those percentages off the
5 top of my head, but they are in the
6 report, and they are really quite
7 modest. We estimated the total
8 direct, indirect and induced benefits
9 and the induced multiplier effect
10 really means workers in the area
11 getting paid and then buying stuff in
12 the local area, so putting that money
13 back into the local economy.

14 At Cannonsville we
15 approximate -- not us, but the study
16 done approximated \$4 million and 16
17 full-time equivalent jobs per year
18 during the construction time.

19 At Pepacton it was estimated
20 at a \$700,000 one-time increase in
21 economic output and 2 FTE equivalent
22 positions.

23 And at Neversink there was a
24 one-time increase of approximately

1 \$400,000 and one FTE.

2 Yes.

3 MR. TRIOLO: Mike Triolo,
4 Catskill Watershed.

5 How long would it take to
6 complete those projects?

7 MR. FIORE: At Cannonsville
8 I think we are estimating between 18
9 and 24 months, and for the other two
10 developments closer to twelve months.

11 Okay, project developments
12 are essentially zero variable cost
13 generation. What does that mean? It
14 means it's generated by water; no fuel
15 inputs are really necessary to
16 generate this power. It will offset
17 higher-cost and dirtier energy
18 production. And for the offset to
19 wholesale electricity prices, these
20 are the estimates a 7/10 percent
21 reduction; total estimated savings is
22 about \$13.6 million for the project,
23 that's for the whole area.

24 And reduction of CO2

1 emissions, 32 to 64,000 metric tons
2 annually would be displaced from
3 fossil fuel fired generation
4 facilities, and that's equivalent to
5 removal of approximately 5,500 to
6 11,000 vehicles from the road. So
7 while overall it might be considered
8 modest, I think locally that's a
9 pretty big impact.

10 That concludes what I have
11 to say today. What I will direct your
12 attention to is that if you want to
13 submit written comments or questions,
14 you absolutely can do that. This is
15 the contact information for that, if
16 you want to mail it. It is Zinnia
17 Rodriguez, she is a principal
18 administrative assistant for the
19 department, 59-17 Junction Boulevard,
20 19th Floor, Flushing, New York 11373
21 is the zip code. Her email is
22 zinniar@dep.nyc.gov. And the study
23 reports are all located on our web
24 site. If you go to www.nyc.gov/dep or

1 just type NYC space DEP into your
2 browser; go to our main page, and on
3 the left-hand side you'll see
4 something called A to Z, click on that
5 link and then click on H for hydro.
6 You'll see all of our documents put up
7 there, including the Preliminary
8 Permit Application, our PAD,
9 Pre-Application Document, and all of
10 this these studies are located there.

11 Yes.

12 MS. THARP: Diane again. I
13 was hoping today that I would see the
14 slides for the environmental and the
15 aesthetic and economics studies, a
16 study of the safety of the actual dams
17 with this hydroelectric project.
18 Because they are earthen dams over 50
19 years old, and I know that they are
20 inspected, but the inspection reports
21 that I had in 2006 did note
22 deficiencies, and I do not know if
23 they have been corrected.

24 MR. FIORE: Okay.

1 MS. THARP: Paul Rush, in a
2 meeting in Delaware County in March
3 8th of 2006, he also noted
4 deficiencies that were found in the
5 dams by the GZA, Geoenvironmental
6 Company, as well as New York City DEP
7 inspections. And as we know, earthen
8 dams, they are subject to erosion. We
9 have had massive floods, because I
10 live on the Delaware, and the
11 spillways are subject to more erosion
12 when you have the massive amounts of
13 water that have come over them.

14 So I am wondering or asking,
15 is there going to be a more intense
16 study, would that come up with the
17 FERC process, or is that going to be
18 done by the New York City DEP?

19 MR. FIORE: Yes, it is being
20 done now. We are examining the GZA
21 reports. FERC dam safety requirements
22 are the most stringent that there are.
23 We are going to have -- the
24 inspections will be increased under

1 FERC regulations. There will be FERC
2 inspections that are conducted, in
3 addition to the New York State DEC
4 inspections and DEP's own inspections,
5 and we are going through that analysis
6 now. That does have to be submitted
7 to the Federal Energy Regulatory
8 Commission, and those results will be
9 publicly available. Absolutely.

10 MS. THARP: I thought the
11 FERC probably would.

12 MR. FIORE: I can't talk too
13 much about it, but it is a very
14 intense study. And I know that
15 because of all the requests for data
16 that are coming to me.

17 MS. THARP: From the public
18 view, that's what we want to hear.

19 MR. FIORE: Yeah,
20 absolutely.

21 Mark, do you want to answer
22 that?

23 MR. WAMSER: Mark Wamser,
24 with Gomez and Sullivan. This will

1 be considered critical structure
2 energy information. So it is not all
3 going to be in the public's view.

4 MR. FIORE: But deficiencies
5 would be noted.

6 MR. WAMSER: If FERC finds
7 deficiencies, yes, the public would be
8 aware because they would let you know
9 that. But in terms of what we file,
10 it is going to be critical energy
11 infrastructure information, which
12 means it is not going to be available
13 for the public to look at. Because
14 there will be specific drawings and
15 stuff --

16 MR. FIORE: Yes, specific
17 drawings that show our facilities and
18 equipment are not available for
19 security purposes. But any
20 deficiencies that are discovered will
21 be made publicly available.

22 MR. WAMSER: Right.

23 MR. FIORE: And have to be
24 addressed. FERC will make you address

1 those in order to develop the site.

2 MS. THARP: Okay, well,
3 that's good to know. Thank you.

4 MR. FIORE: You're welcome.

5 Other questions, comments?

6 Is that sign-in sheet still
7 going around? I just want to make
8 sure that we get everybody on there,
9 so that if you're not already on the
10 stakeholder list, we can put you on
11 that stakeholder list to notify you of
12 additional meetings.

13 I know it is a lot to take
14 in today, and I went over things at a
15 fairly high level, so I just want to
16 point out again that there is time to
17 look at these study reports in depth
18 and provide comments and input on
19 them.

20 So again, in order to
21 consider changes to our Draft License
22 Application, we are looking for any
23 comments to be sent to us by August
24 10th, and then there will be another

1 opportunity for you to comment on the
2 Draft License Application after that.

3 Yes.

4 MR. BOSCH: Adam Bosch from
5 The Record. I have two quick
6 questions. One, do you guys have a
7 working dollar figure for how much the
8 project is going to cost to build?

9 MR. FIORE: We are still
10 working on that.

11 MR. BOSCH: And the other
12 thing I wondered, have you guys worked
13 on any sort of cost-benefit analysis?
14 Because it looks like you're going to
15 be able to produce at peak less than
16 half what you thought at the beginning
17 when this project was conceived. So
18 have you looked at whether for the
19 City this project is worth going
20 forward on?

21 MR. FIORE: Yes, that's all
22 still being done today, with the
23 continued engineering studies,
24 including dam safety and being able to

1 fit things inside the facilities,
2 looking at our existing
3 infrastructure, it is all going to be
4 taken into consideration, so work in
5 progress.

6 Yes.

7 MR. WO: Jeromy Wo, Nordel.

8 As I understand it, the
9 Delaware River Basin Commission
10 requires that any hydroelectric
11 project that takes place within the
12 basin follows their approval process.
13 Where is that built into the licensing
14 schedule? I mean, is that
15 specifically FERC, and then afterwards
16 the DRBC will be consulted?

17 MR. FIORE: No. We have
18 already consulted with the DRBC. I've
19 given a presentation to them, and we
20 will be filing their application.
21 Their application is really to capture
22 water withdrawals from the Delaware
23 River. We are not withdrawing any
24 water for this project from the

1 Delaware River. So their application,
2 like there's really not much for us to
3 fill out on it, but we are consulting
4 with them on the project.

5 MR. WO: Okay. See that's
6 confusing because there's a section of
7 the Compact, Section 9, that states
8 the Commission has to approve all
9 hydroelectric projects. So is that
10 part of the application, I mean is it
11 specifically withdrawals that they
12 have to approve?

13 MR. FIORE: Yes.

14 MR. WO: Or is it the
15 project in general?

16 MR. FIORE: They have to
17 approve projects that withdraw water
18 from the Delaware River. We are
19 considering this project in
20 consultation with DRBC though, so if
21 they have specific concerns about the
22 project, we are going to address those
23 concerns.

24 Adam.

1 MR. BOSCH: Adam Bosch. One
2 last thing, I know one last thing at
3 the meeting in December of '09 a lot
4 of people were asking where is the
5 power going to go. Have you figured
6 that out yet? Obviously you figured
7 where you're going to connect to the
8 grid, but it will be just sold on the
9 open market I guess?

10 MR. FIORE: We don't know
11 that yet. Some of the power could be
12 used behind the meter so to speak.
13 Depending on the amount of generation,
14 it could go into the grid; it could be
15 a power purchase agreement with
16 someone else. You know, all the
17 options are still open today.

18 Yes.

19 MS. THARP: Diane Tharp,
20 Nordel.

21 I know that you put out
22 what's put out what was called an RBI
23 that was called a request for interest
24 from partners. Has anybody responded

1 at all to partner with you?

2 MR. FIORE: Yes, the request
3 for expression of interest was really
4 to look to the private sector to see
5 if they have any interest in
6 developing the project with the City
7 so that we hopefully develop it in the
8 most efficient and economic way
9 possible. So we did reach out through
10 this request for expression of
11 interest. We did get responses back,
12 we got seven responses back from that.
13 We are looking at kind of the ideas
14 that they have, and we'll be
15 considering that further to see if
16 it's feasible to involve the private
17 sector in the development of the
18 project in some way.

19 Okay, I would like to thank
20 all of you for taking the time to come
21 here today to listen to the
22 presentation. I hope it was of some
23 value to you all. We are open for
24 additional questions and comments, as

1 I've stated.

2 And please feel free to take
3 some of the pastries, bagels, coffee.
4 There's a lot of it here. Thank you
5 again.

6
7 (Whereupon, the
8 above-captioned proceedings concluded
9 at 11:40 a.m.)

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C E R T I F I C A T I O N

I, Karen Schmieder, a
Certified Shorthand Reporter,
Certificate No. 768, and Notary
Public, do hereby certify that I
recorded stenographically the
proceedings herein at the time and
place noted in the heading hereof, and
that the foregoing transcript is true
and accurate to the best of my
knowledge, skill and ability.

IN WITNESS WHEREOF, I have
hereunto set my hand this 21st day of
August 2017

A handwritten signature in black ink, appearing to be 'KS' followed by a stylized flourish.

KAREN SCHMIEDER, CSR, RMR
Registered Diplomate Reporter

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Attachment B

Transcript and errata sheet from the Public Meeting conducted July 21, 2011, at the Town Hall in the Town of Walton, New York

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NEW YORK CITY
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Public Information Meeting
Re:
CITY OF NEW YORK
WEST OF HUDSON HYDROELECTRIC PROJECT
FERC PROJECT NO.13287-000

July 21, 2011
7:00 p.m.
Town Hall
129 North Street
Walton, New York

Reported by: KAREN SCHMIEDER, CSR, RDR
SMI Reporters

1 IN ATTENDANCE:

2

3

ANTHONY FIORE

4

Chief-of-Staff for Operations

5

New York City DEP

6

7

KEVIN M. LANG, ESQ.

8

GARRETT BISSELL, ESQ.

9

Couch White, LLP

10

11

THOMAS J. SULLIVAN, P.E.

12

MARK J. WAMSER, P.E.

13

Gomez & Sullivan Engineers, P.C.

14

15

ROBERT PRINCIPE

16

Bureau of Water Supply, NYC DEP

17

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TOM BAUDANZA

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Fisheries Biologist, NYC DEP

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1 P R O C E E D I N G S

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MR. FIORE: My name is Anthony Fiore, from the Department of Environmental Protection. I'm Chief-of-Staff for our Operations Division, which includes our Water Supply Bureau, our water and sewer operations and our wastewater treatment. I've come here tonight to give you an update on our West Hudson Hydroelectric Project, mainly focused around studies that will have been conducted to date in support of our License Application.

Before I get into it I just want to introduce few folks that we have here with us. From Couch White we have Kevin Lang and Garrett Bissell; they are our legal consultants that help us with the regulatory process. We have Gomez and Sullivan, Tom Sullivan and Mark Wamser, our engineering consultants on

1 the project. In house we have John
2 Vickers, Chief of Operations over here
3 on the west side. I'm sure most of
4 you know him. Tom Baudanza, our
5 fisheries biologist, and Robert
6 Principe in the back, who is our
7 hydroelectric engineer.

8 To give you a little bit of
9 background, we started this process
10 just about three years ago. We filed
11 a Preliminary Permit Application with
12 the Federal Regulatory Energy
13 Commission back in September of '08.
14 Basically the permit gives you the
15 authority to study hydroelectric
16 developments.

17 We were granted that permit
18 in March of '08, and in August of '09
19 we filed what's called a Preliminary
20 Application document. That
21 Preliminary Application document
22 basically identifies the data that is
23 readily available for the project
24 development sites, what gaps in data

1 there might be, and who the
2 stakeholders are that might be
3 interested in the project.

4 In December '09 we held
5 what's called a joint meeting, and
6 that's where we discussed what data we
7 had available for the project sites,
8 what data we thought might be enhanced
9 through some studies and had reached
10 out to all the stakeholders that we
11 had identified in the process to be
12 part of this development.

13 In February of 2010, we held
14 a study plan development meeting with
15 the resource agencies, which in this
16 case are Department of Environmental
17 Conservation and the U.S. Fish and
18 Wildlife Service. And then we
19 finalize our study plans based on
20 conversations with those resource
21 agencies and the feedback they had
22 given during the joint meeting in June
23 of 2010.

24 In August of 2010 we

1 presented the preliminary results from
2 some of those studies to the resource
3 agencies. And based on some feedback
4 we got from them, we amended the
5 studies, presented that again to them
6 in October of 2010. From that point
7 forward we were finalizing most of the
8 other study plans and doing additional
9 field work. So that kind of brings us
10 to where we are today.

11 This is the agenda for this
12 evening. I want to go over the
13 licensing schedule, give you a look at
14 how the project layouts are conceived
15 at this point, how we're going to
16 operate those projects, studies that
17 we have conducted and the results of
18 those, and any questions or comments
19 that you all have. Feel free to stop
20 me at any point and ask questions.
21 When you do, I'm just going to ask you
22 to identify yourself and any
23 association that you are affiliated
24 with. We do have a court reporter

1 here, so that we can get the notes and
2 make sure we capture everybody's
3 comments, so that will be helpful to
4 us.

5 This is the licensing
6 schedule. We are going to begin in
7 the upper left-hand corner. This is
8 today, and we are holding these kind
9 of Town Hall meetings to discuss our
10 studies. We are asking and welcome
11 input from all of our stakeholders. If
12 you want to submit comments on what we
13 present here tonight, the studies that
14 have been conducted, we ask that you
15 get those to us by August 10th. Now,
16 that's only so that we can consider
17 those comments in our Draft License
18 Application. It's not the only time
19 that you will have to comment on this,
20 so don't get worried. But you know,
21 if you'd like to submit some comments
22 by then, we'll have some time to
23 consider those in preparation of our
24 Draft License Application.

1 In September we plan on
2 issuing our Draft License Application
3 for the Cannonsville development and
4 there will be Draft Exemption
5 Applications for Pepacton and
6 Neversink, as well as what's called a
7 401 Water Quality Certificate, which
8 is issued by the Department of
9 Environmental Conservation.

10 For those of you not
11 familiar with the FERC terminology,
12 between a License Application and a
13 Draft Exemption Application, the
14 exemption is a bit of a misnomer. We
15 are not being exempt really from
16 anything. We're doing all the same
17 work that we have to do up front for
18 exemption as you do for a license.
19 The difference between an exemption
20 and a license is the terms that
21 Department of Environmental
22 Conservation and U.S. Fish and
23 Wildlife Service put on your
24 development are mandatory.

1 In a License Application
2 it's FERC that decides what the
3 mandatory conditions are. And the
4 other difference is the exemption is
5 kind of a licensing in perpetuity.
6 The License Application comes up for
7 renewal every, in most cases, 50
8 years; a license is generally provided
9 for a 50-year term, and sometimes it's
10 a bit shorter. It could be 40 years,
11 but generally it's a 50-year term. So
12 that's the only difference between
13 those. Again, the exemption is kind
14 of a misnomer, so I don't want people
15 to get confused by that.

16 Written comments on the
17 Draft License Application formally
18 will be due in November. And let me
19 just point out that it's really 90
20 days after we file our Draft License
21 Application. So if it's September
22 1st, you know, it would be November
23 1st that those comments are due.

24 WOMAN IN AUDIENCE: It would

1 be the end of November, because
2 September 1st to November 1st is 30
3 days. To the end of November is 90
4 days.

5 MR. FIORE: The City will
6 file our Final License Application
7 then in March of 2012. And then FERC
8 will issue what's called Additional
9 Information Requests, so they are
10 going to go through the License
11 Application. If they feel there is
12 something missing from the License
13 Application from their read of it or
14 based on comments, or if there's
15 something just missing in the
16 application, they'll ask for
17 additional information. We'll address
18 those requests for additional
19 information and any deficiencies that
20 there might be in the application.
21 And then FERC will issue what's called
22 a Scoping Document. Once they issue
23 that, there will be another public
24 meeting within 30 days of issuing that

1 Scoping Document.

2 After that we'll have 90
3 days to respond to any issues that are
4 brought up during that period of time.
5 After that FERC will issue a notice
6 application is ready for environmental
7 analysis, and the resource agencies,
8 again Department of Environmental
9 Conservation and U.S. Fish and
10 Wildlife Service in this case, will
11 submit preliminary terms and
12 conditions, and we'll reply to those
13 terms and conditions. And then FERC
14 will issue their Draft Environmental
15 Assessment. Depending on the scope of
16 the projects, that environmental
17 assessment may be, in simple terms, an
18 Environmental Assessment or it may be
19 an Environmental Impact Statement,
20 depending on the scope of the project.
21 Then finally, FERC issues their Final
22 Environmental Assessment and a Final
23 License Order.

24 So really what I would like

1 you to take away from this, if you
2 take away nothing else, is that there
3 are multiple periods for public
4 comment and involvement in the
5 project. So don't get worried that
6 you're going to hear our study results
7 for the first time tonight, and we're
8 asking for comments so that we can
9 consider those before we submit our
10 Draft License Application by August.
11 There are multiple times after this
12 for comments and input.

13 If you'll notice, the title
14 of the presentation, we talked about
15 the study plans for our Cannonsville,
16 Pepacton and Neversink development.
17 We have a preliminary permit for four
18 developments, and the fourth is the
19 Soharie development. We have not yet
20 identified a viable project at that
21 location. We're continuing to assess
22 options there, but because we haven't
23 identified a viable option at this
24 point we haven't conducted any of

1 these studies on that location. It
2 just wouldn't make sense to do so at
3 this point because we don't know the
4 scope of the project. So if we
5 identify a viable option there, we'll
6 then do the scoping for those study
7 plans for that development site.

8 What I will tell you is we
9 are designing a lower-level release
10 for that location, and we're designing
11 into that lower-level release a
12 connection point for a hydroelectric
13 facility, whether we figure something
14 out in the near term that will work
15 there or something that works in the
16 longer term, you know, with market
17 conditions and technology change we'll
18 be set to kind of plug into that, so
19 to speak.

20 This is kind of a busy
21 slide, but this is the Cannonsville
22 development. Just to orient
23 everybody, and probably everybody in
24 this room knows these reservoirs

1 better than I do, but this is our dam,
2 the earthen embankment here, the
3 spillway is over here. Down at the
4 toe of the dam is the current
5 low-level release outlet. It takes
6 water from an intake in the reservoir
7 through a conduit that runs through
8 the dam here and brings water to this
9 lower-level release outlet and
10 discharges downstream into the West
11 Branch of the Delaware.

12 What I want to point out
13 here is that originally when we
14 submitted our pre-application document
15 we had originally conceived of four
16 turbines here, but a total cubic feet
17 per second of approximately 1100 and a
18 total capacity of 12 megawatts. As we
19 have gone through the engineering,
20 that's been refined a bit. It's still
21 four turbines, but it's up to 1500 CFS
22 with a total station capacity of about
23 14 megawatts. So we got a little bit
24 more out of it as we got deeper into

1 the engineering.

2 Now, one caveat to this and
3 the rest of the developments is these
4 numbers are still subject to change.
5 As we get further into the process and
6 we actually get solid bids from
7 turbine vendors, they will size their
8 equipment even more specifically for
9 the layout at the site. So this is
10 based on sizing that they have
11 provided us for budgetary estimates.
12 They'll give us even better sizing
13 once that goes to bid. But it won't
14 change much; it will be around the
15 margins here.

16 You're going to see this
17 slide a number of times throughout the
18 presentation as we discuss the various
19 studies that we have done, so if you
20 don't catch everything here, as we go
21 through it you'll see more and more.
22 But just a couple of things that I'll
23 point out, and I'll point them out
24 again later, this is the route for the

1 electrical line, the electrical
2 interconnection. So next to the
3 lower-level release works down here at
4 the toe of the dam is where we are
5 proposing to build a new powerhouse.
6 It will be directly adjacent to that,
7 and it will tie into that existing
8 conduit that's bringing water down for
9 that lower-level release. So all of
10 these developments are looking to
11 leverage the infrastructure that we
12 already have in place. There will be
13 a short run of underground line here
14 to an overhead pole, and this kind of
15 traces the existing route of overhead
16 poles that are at the site. Pretty
17 much one of the reasons that it was
18 picked is there is no additional
19 disturbances, and it will go up to
20 where we have some maintenance
21 facilities, and that's where the
22 switchgear will be. And then it will
23 come down and connect into this
24 existing electrical infrastructure.

1 Down here next to the
2 tailrace will be a sedimentation pond.
3 We are going to have to install some
4 cofferdams to do work, and we'll pump
5 that water out to the sedimentation
6 pond. I'll talk about this later. A
7 few staging areas for equipment, and
8 then up here a spoils disposal area.

9 Okay, the Pepacton
10 development. Again, to just orient
11 everybody, this is an existing paved
12 road into the facility. The reservoir
13 is here, the earthen dam is here.
14 Most of the work at this facility will
15 occur inside of the existing
16 lower-level release works, which is
17 here, the spoils area here, new
18 substation and underground electric
19 connection to this pole.

20 What I'll point out here,
21 when we did our Preliminary
22 Application Document we had envisioned
23 two turbines in this facility, with a
24 total of 270 CFS and 3.1 megawatt

1 capacity. As we got into the
2 engineering of it, we just can't fit
3 it in there; we can't fit that much in
4 there. It's kind of a tight space, so
5 what we can get in is one turbine,
6 that's going to give us just under 2
7 megawatts of capacity, and 162 CFS.

8 The Neversink development.
9 The Neversink development is a little
10 bit different than the other two,
11 Pepacton and Cannonsville, in that
12 this existing release structure is a
13 common intake for both our water
14 supply diversion and the releases to
15 the stream. Here we again had
16 originally envisioned two turbines in
17 this facility, at 1.65 megawatts and
18 160 CFS. Same scenario as Pepacton,
19 we can't get that in there. This is
20 even tighter space than the Pepacton
21 location. We have got to go down
22 about 80 feet in elevation difference
23 from surface to where the valves
24 currently are. There's a hatchway

1 that will lower down a turbine
2 generator set to replace one of the
3 existing valves with the turbine
4 generator. And there will be a bypass
5 line that's put in so that if the
6 turbine needs to be shut down we can
7 still get flow to there.

8 So this will be a staging
9 area. This is where the switchgear
10 would be, adjacent to this already
11 asphalted area. And this is an
12 existing underground electrical
13 conduit, and we have got room in that
14 to slip the electrical service that we
15 need for the hydroelectric, so there
16 will be no disturbance to that. We
17 can leverage this existing underground
18 conduit.

19 The operating regime. Up
20 until June of this year we have been
21 operating our releases under what's
22 called the Flexible Flow Management
23 Program. It is a flow regime that is
24 developed by the decreed parties to

1 the 1954 U.S. Supreme Court decree
2 that allotted the City with its volume
3 of water that it can take from the
4 Delaware Watershed, and that's 800
5 million gallons a day. The decree
6 parties are the State of New York, the
7 City of New York, the State of New
8 Jersey, Commonwealth of Pennsylvania
9 and Delaware. They have to agree
10 unanimously on what the flow regime
11 will be, and beginning in June they
12 agreed to a new operating regime, this
13 is called the Flexible Flow Management
14 Program Operations Support Tool
15 regime. It is kind of long. It
16 doesn't roll off your tongue very
17 well, but the FFMP-OST, what it is
18 going to wind up doing is providing
19 more water downstream than previously.
20 And this slide again we are going to
21 look at the differences between that.

22 Here we go. So this is
23 showing the difference between the
24 previous flow regime, which was the

1 FFMP, and the new flow regime, which
2 is the Flexible Flow Management
3 Program Operations Support Tool. The
4 FFMP-OST, the flow regime today is
5 this blue line. The flow regime of
6 yesterday, so to speak, is the red
7 line. Just to orient those that are
8 not familiar with this type of graph,
9 on the Y axis here we have total
10 discharge to the stream in cubic feet
11 per second; along the bottom axis we
12 have percent of time that that flow is
13 equal or exceeded. So for example, 50
14 percent of the time under the previous
15 flow regime there was approximately it
16 looks like maybe 400, 420 CFS. Under
17 the new flow regime 50 percent of the
18 time it looks like it's closer to
19 about 480 CFS. There is more water
20 that's being released downstream.

21 The same type of graph for
22 Pepacton. It's really the same
23 takeaway. The blue is the new flow
24 regime, the red is the previous flow

1 regime. More water available
2 downstream.

3 And then for Neversink.
4 Again, the blue is the new flow
5 regime; the red is the previous flow
6 regime.

7 So again, the takeaway there
8 is there is more water that's going to
9 be available to downstream releases.

10 So getting into the studies.
11 The first is the Entrainment Mortality
12 and Intake Study that was done.
13 Basically we conducted literature
14 research on water quality, species
15 composition and depth of water,
16 depending on how the reservoir is
17 operated, to understand the proximity
18 of different fish species to our
19 intakes. And our intakes are all at
20 the bottom of the reservoir, so they
21 are deep in the reservoir. So based
22 on fish species that might likely be
23 found in there, we looked at swim
24 speeds compared to what the intake

1 velocities of those intakes will be.
2 And then we looked at mortality for
3 fish that are entrained, what's the
4 mortality. And for intake protection
5 we looked at what we currently have
6 and what may be additional measures
7 that could be put in place, and those
8 include both physical barriers as well
9 as behavioral barriers. Behavioral
10 barriers are things like noise or
11 flashing lights to scare the fish away
12 basically from the intake structure.

13 And then we looked at
14 downstream fish passage. So going to
15 the next slide, this is kind of the
16 results of that. That was what we
17 did, and these are the results.
18 Basically, based on the habitat
19 requirements and life history of the
20 fish and their swimming speeds,
21 entrainment was found to be low for
22 most all of the species. And the risk
23 of entrainment for fry and juvenile
24 fish was also found to be minimal.

1 Basically again, these are deep water
2 intakes. The fish, the fry and
3 juveniles are more up near the shore
4 where there is structure for them to
5 hide in and so forth. I just want to
6 put this in context. This is all in
7 comparison to existing conditions.

8 Mortality. Any fish that
9 gets entrained today, no hydro
10 existing there, highly likely to be
11 lethal. Because again, we are taking
12 fish from a very deep area and then
13 they are released at the stream, which
14 is a higher elevation, and we have a
15 big pressure differential there that
16 kills the fish. Basically their swim
17 bladders explode. So regardless of
18 the hydro-power, any fish that gets
19 entrained today is not likely to
20 survive.

21 MR. VICKERS: Just to
22 clarify, they are not really a higher
23 elevation, just the pressure
24 differential. The atmospheric

1 pressure differential; the higher
2 pressure and lower water.

3 MR. FIORE: Everybody get
4 that? Thanks, John.

5 Again, for the intake
6 protection, based on the entrainment
7 results and mortality, no additional
8 intake protection was recommended from
9 the study.

10 Then with the downstream
11 fish passage, we looked at both a
12 low-level fish passage and then a
13 surface-level, and for the reasons
14 that John just elaborated on, the
15 low-level would result in mortality,
16 just as happens going through our
17 releases today. And a surface-level
18 fish passage is going to introduce
19 warm water fish species to a cold
20 water fisheries habitat. So that was
21 not advisable to do that either.

22 So moving onto our wetlands,
23 wildlife and rare and threatened,
24 endangered species study. What was

1 done, we looked to identify habitats,
2 what species would exist in those
3 habitats. This was done by consultant
4 DEP biologists, field personnel. We
5 had consultant field biologists come
6 in. There were site visits done, and
7 they produced a base map of the areas
8 that the projects will impact,
9 basically from construction
10 activities, with a buffer zone around
11 those areas. And once they develop
12 that base layer map, then they overlay
13 the habitat and species onto it to see
14 what would fall into the areas of
15 impact and the buffer zones around
16 those areas of impact. And the buffer
17 zone was a 100-foot zone around areas
18 that there will be construction
19 activities in, and that's in concert
20 with Wetland Guidelines.

21 So at the Cannonsville
22 development, vegetative cover types,
23 open fields, mixed forest and emergent
24 and riverine wetlands. As you can

1 imagine, staging areas have limited
2 impacts are going to be in mowed
3 fields, and the locations of the
4 electrical infrastructure, because
5 they are following existing routes,
6 are not expected to have any adverse
7 environmental impacts.

8 There were ten invasive
9 plant species found at that
10 development site. None of them were
11 new. They are all well-established
12 invasive species. None of them were
13 on the lists for -- what is it again,
14 Tom, there's two lists for identifying
15 new invasive species. We didn't find
16 any that were on either of those
17 lists. However, as I'll talk about
18 later, we are going to take measures
19 to prevent the spread of
20 already-existing invasive species and
21 introduction of any new invasive
22 species.

23 Wetlands and riparian and
24 littoral habitats. The powerhouse, as

1 I mentioned earlier, is going to be
2 located adjacent to the existing
3 lower-level release works, and a new
4 tailrace will be built in from that.
5 And that is in the area of an existing
6 wetland, previously unmapped wetland.
7 That wetland is of low quality, and
8 what I mean by that is it's actually
9 entirely populated by an invasive
10 species, canary reed grass, which does
11 not support other flora or fauna. Two
12 other wetlands were also identified
13 that are partially in the buffer zones
14 around where we'll be doing work, and
15 three vernal pools were identified
16 adjacent to the project area there but
17 outside of the actual area of
18 construction.

19 I don't know if I mentioned
20 it before, but when we did our field
21 studies, we did a field study in the
22 summer of one year, and we came back
23 the following spring just to kind of
24 catch these vernal pools to see where

1 they existed and what species might be
2 associated with them. Wildlife, a lot
3 of bird species were observed but no
4 nesting areas in the project
5 locations. And there were evidence of
6 reptiles and amphibians associated
7 with the wetlands and the vernal
8 pools. Again, those are outside the
9 areas of impact, so it's not expected
10 to have adverse effects on those
11 species.

12 As far as rare, threatened
13 and endangered species go, Bald
14 Eagles, obviously they are at all the
15 location sites. We didn't find any
16 nests or roosts in the area where
17 we'll be doing the work. That being
18 said though, we are going to be
19 working with U.S. Fish and Wildlife
20 Service and DEC during construction
21 activities to make sure that there are
22 protective measures for eagles that
23 may be nesting or roosting nearby. We
24 know, they are mapped where the nests

1 are, although there weren't any
2 identified in the project area today,
3 that may not be true during
4 construction. So there will be a
5 protective measure plan put in place
6 for that.

7 Also the Jefferson and Long
8 Tail Salamanders, we didn't see them,
9 but at least one of the vernal pools
10 was of sufficient habitat quality to
11 support their existence. The results
12 of this study at Cannonsville was that
13 really there are no mitigation
14 measures that need to be put in place.
15 Again, barring construction activities
16 and impacts to eagles, so there will
17 be protective measures put in place
18 for that.

19 Okay, here is that
20 Cannonsville layout again. And what I
21 want to bring your attention to is the
22 yellow hashed areas are those buffer
23 zones around the areas where there
24 will be work that's being done. So we

1 begin down here at the lower right of
2 the toe of the dam. This is the
3 existing lower-level release works
4 here. Directly adjacent is where the
5 new powerhouse is proposed to be
6 built. There will be work in the
7 tailrace, the existing tailrace, and
8 the stilling pool, so there will be a
9 buffer zone around all of this. The
10 leachfield will need to be relocated
11 to put in the powerhouse. This is the
12 route that the electrical lines will
13 take following the current electrical
14 lines, but we're going to put new
15 poles in. And this is kind of a steep
16 grade here, so we'll be careful about
17 runoff during that activity. And the
18 spoils area buffer zone, this is one
19 of the staging areas, staging area 1,
20 and you can see this vernal pool comes
21 just into the buffer zone of that
22 staging area. Staging area 2 is here.
23 This is another wetland, one of the
24 unmapped wetlands that was identified.

1 This right here, and my pointer is
2 fading, is another wetland, and then
3 obviously down by the tailrace, that's
4 what I had termed that low-quality.
5 Yes.

6 WOMAN IN AUDIENCE: When the
7 '04, '05, '06 floods repeat
8 themselves, how will that impact where
9 you've got your spoils section?

10 MR. FIORE: This spoils
11 section is a temporary area. Once the
12 construction activity is done, this
13 will be regraded and reseeded to match
14 the previous conditions. That goes
15 for all the areas that are disturbed.
16 All of those will be restored to
17 previous conditions.

18 There is a sedimentation
19 pond here that will have to be
20 excavated. The material from that
21 will go into this spoils area during
22 construction activities. Once that's
23 done, it will be refilled and regraded
24 here. The wetlands that were

1 identified through this study and
2 delineated, they are small in size.
3 The smallest one I had think is .1
4 acres. This one is about half an
5 acre, .6 tenths of an acre, and this
6 is just over one acre here.

7 At Pepacton, similarly, the
8 vegetative cover was mostly mowed
9 grass. The staging areas will be in
10 that mowed grass. The areas of
11 construction activities, no wetlands,
12 no riparian, no littoral habitats were
13 identified either in that or in the
14 buffer zones.

15 As far as wildlife species
16 go, there were a lot of common bird
17 species around and also cliff swallows
18 that are nesting on the existing
19 lower-level release works.

20 As far as rare, threatened,
21 endangered species, only Bald Eagles
22 were identified. They were seen
23 flying over. Again, no nests or
24 roosts were spotted in those areas of

1 work.

2 As for Cannonsville, the
3 results of this study didn't recommend
4 any mitigation measures, other than
5 again during construction activities
6 to develop a protective measures plan
7 for Bald Eagles.

8 A picture of Pepacton again.
9 This is the existing access road in,
10 the existing release works here.
11 Directly to the east of the building
12 will be the staging area. This is the
13 buffer zone. The switchgear will be
14 here. This will be an underground
15 electric line to an existing overhead
16 pole, which will connect to the
17 existing electrical infrastructure,
18 and this is the buffer zone around
19 that area.

20 So with the Neversink
21 development, again, if you've been out
22 to these sites, you know it better
23 than most, that vegetative cover is
24 mostly mowed grass in the area. Some

1 forest plantation. The staging areas
2 again will be in that mowed grass
3 area. We don't expect any disruption
4 to forest plantation, because as I
5 showed before and I'll show again
6 after this slide, there is an existing
7 duct bank for the electrical work, we
8 can just slip a new service through
9 there; we have room.

10 Wetlands, riparian, littoral
11 habitats. None of them identify in
12 the areas where the work is going to
13 occur or the buffer zones around that
14 work. And as for the Pepacton site
15 there are nesting cliff swallows on
16 the existing intake and release
17 structure, and the same for the rare
18 and threatened, endangered species.
19 Again, Bald Eagles were spotted, none
20 were nesting or roosting, but we'll
21 have to develop a plan.

22 So this is the Neversink
23 site again. This is the existing
24 intake and release works. This is the

1 mowed grass where the staging area
2 will be, the buffer zone around it.
3 The switchgear is proposed to go here,
4 right next to this existing -- the red
5 line is the existing underground
6 electrical ducting.

7 There was one invasive plant
8 species found at this location,
9 multiflora rose, and it is in the area
10 of this, so that fortunately we are
11 not going to be disturbing that area
12 because we have the underground line.
13 But that was the only invasive
14 species.

15 For Pepacton we didn't find
16 any invasive species.

17 The erosion study identified
18 potential impact. We also identified
19 conceptual level plans to control
20 that. Once we get further along in
21 the process, when we get closer to the
22 construction, more formalized plans
23 will be developed. They are going to
24 have to come forth with the state

1 regulations. So New York State
2 standards and specifications for
3 erosion control and sedimentation
4 control will be complied with. And
5 then as I said earlier, once
6 construction is completed at all three
7 developments, those areas of
8 disturbance are going to be restored
9 to their previous condition. So that
10 regrading, seeding, watering, making
11 sure that we get that grass to grow so
12 that we don't have invasive species
13 populate that area.

14 With the Cannonsville
15 development, a sufficient enough area
16 is going to be disturbed that will
17 need a Department of Environmental
18 Conservation State Pollution Discharge
19 Elimination System Permit, a general
20 permit for stormwater discharges,
21 that's their SPDES permit. Because
22 more than one acre is going to be
23 disturbed. I think it is a total of
24 just over 8 acres, 8.6 acres I think

1 in total.

2 The water, as I mentioned
3 earlier, that will be pumped out of
4 the tailrace will be put into that
5 sedimentation pond. It will be
6 drained through, the sediment will be
7 captured there. And once the work is
8 completed that will be backfilled and
9 regraded and seeded.

10 So this is the Cannonsville
11 location again. This is the area
12 where we'll put in a cofferdam so that
13 we can do the work in the tailrace,
14 and there will also be a portable
15 cofferdam that's installed that runs
16 parallel with the stream and then
17 connects to the north shoreline here.
18 That all will be protected with
19 sedimentation control. Turbidity
20 curtains will be put in for when we
21 install that cofferdam and when we
22 remove it, because we expect there
23 will be turbidity that needs to be
24 captured during that period.

1 This is again the electric
2 line, and this will all have runoff
3 controls along it as well as the
4 spoils areas and at the staging areas.

5 Pepacton site. This is the
6 staging area again. It will be
7 protected with stormwater controls, as
8 well as the work that's done around
9 the switchgear and the underground
10 line that's going to connect to that
11 existing pole; all of that will have
12 to have sedimentation control.

13 And at Neversink, again, the
14 same as Pepacton really, it is the
15 staging area and where the switchgear
16 is. As I've said a couple times, this
17 underground existing electrical
18 conduit, we are just going to slip the
19 new service through there, so that
20 doesn't need any controls.

21 We also did an aesthetics
22 study. I think you've been out to
23 these sites, you've seen them, you
24 can't help but fall in love with the

1 views from them, and we take that
2 pretty seriously. So we went out and
3 we photo documented the sites as is.
4 And this was from both public
5 viewsheds -- and what I mean by that
6 is where in publicly accessible areas
7 you can see to the areas where we're
8 going to be doing work -- and also
9 from City-owned lands, we looked at it
10 from that perspective as well. And
11 then we also looked at it from the
12 perspective of being on the reservoir
13 in a boat, boating or fishing, using
14 an ArcGIS analysis. We evaluated both
15 new infrastructure that would be put
16 in place and also the construction
17 activities themselves. Then we
18 created some renderings to give you an
19 idea of what the new infrastructure
20 will look like and identify needs for
21 mitigation.

22 So for Cannonsville, the
23 primary public viewshed is from Route
24 10. However, the pull-offs there are

1 heavily vegetated, and they really
2 obscure that line of sight to the
3 existing lower-level release works.
4 And then because, remember, that's at
5 the toe of the dam, and I'll show the
6 picture again, the height of the dam
7 itself obscures any work, especially
8 from the reservoir. You can't see
9 anything. A new powerhouse will be
10 constructed here; again, it will be
11 adjacent to the existing lower-level
12 release works, and the architectural
13 design of that will be such to match
14 existing infrastructure that's there
15 and the surrounding area.

16 The new power lines, I
17 showed you the route a number of
18 times, it is going to follow the
19 existing power lines, and the staging
20 and spoiling areas will be restored to
21 previous conditions.

22 So this map is showing you
23 areas from the public viewshed. So C1
24 and C2 are from publicly accessible

1 areas. These white dots represent
2 areas on the reservoir where you might
3 be with a boat and have a view. You
4 can ignore this because that area is
5 not publicly accessible. That's the
6 spillway, so that's a mistake that
7 shouldn't be on there. If we have
8 someone standing on there, we have got
9 problems, so we don't want to see
10 that. And then C3, C4, C6 and C5 are
11 from City-owned lands. The green
12 lines represent unobstructed views,
13 and where you see a blue dot, that
14 represents where an obstruction in
15 that line of sight occurs, and the red
16 is you don't have that line of sight.
17 And I'm going to show you pictures
18 from here. But just remember, C1 is
19 just to the east and C2 over to the
20 west.

21 Next slide. So this is from
22 C1. This is the top of the dam, so
23 you can see it's quite a distance.
24 That's the top of the dam, it goes to

1 the toe of the dam except for where
2 that switch will be placed at the
3 maintenance shed. And this is from
4 C2, there is just no line of sight.

5 This is the current
6 condition. This is what I've been
7 talking about, the existing low-level
8 release works here, the tailrace.
9 This is the wetland that was unmapped
10 of low quality that I mentioned, and
11 you can see it is completely filled in
12 by that invasive species, the canary
13 reed grass. This is a rendering of
14 what it should look like after we're
15 done. This is the new powerhouse
16 housing the four turbines. The
17 tailrace work will come in, and it
18 will come into the common spilling
19 pool. I think it actually looks
20 better than it looks previous.

21 This is up at the top of the
22 dam. This is the existing maintenance
23 yard, and then with the switchgear put
24 in place, that's sort of what it

1 should look like.

2 Pepacton. Again, the
3 primary viewsheds are from Route 30 on
4 the Pepacton reservoir. Yes.

5 WOMAN IN AUDIENCE: I'm
6 working on a project to make Route 30
7 a Scenic Byway from Grand Gorge to
8 East Branch, which goes right past the
9 Pepacton. And I was wondering if
10 there's any possibility that as part
11 of this we could take down some of the
12 trees around the reservoir so we can
13 actually see it from the road?

14 MR. FIORE: Can someone note
15 that comment? We'll investigate that.

16 WOMAN IN AUDIENCE: Because
17 you're right, you see the distances
18 between the public viewsheds are very
19 long there, and it would be nice to be
20 able to see actually.

21 MR. FIORE: They are
22 extremely long distances. What I
23 can't comment on now is effects of
24 water quality with taking the trees

1 down, but we'll take that comment back
2 and get you an answer.

3 WOMAN IN AUDIENCE: Okay,
4 thank you.

5 MR. FIORE: And you'll see
6 pictures of this, but you're exactly
7 right, it is a very long distance.
8 The existing release works themselves
9 will obscure any view of the
10 electrical equipment that's put in.
11 It will be behind that structure, as
12 far as looking at it from the
13 reservoir, and really from the roadway
14 as well.

15 The construction outside
16 again is really just a staging area.
17 The work at this site is really all
18 interior to the existing structure.
19 Again, we are going to take one of the
20 two low-level release valves out and
21 replace it with a turbine generator
22 set. So that's inside that facility.
23 And again, the outdoor activities will
24 be restored to previous conditions.

1 MR. LANG: Can I just follow
2 up on your question real quick. Were
3 you asking along the entire length of
4 the reservoir or just in certain
5 areas?

6 WOMAN IN AUDIENCE: Well, I
7 don't think you're going to cut the
8 trees down along the whole reservoir,
9 but so that you can drive the road and
10 actually see that beautiful reservoir
11 instead of just seeing a bunch of
12 trees.

13 MR. LANG: Okay, thank you.

14 MR. FIORE: Okay, so here's
15 the public viewsheds. The roadway
16 here, the existing low-level release
17 works are here. This is a viewshed
18 from here again; you can see this long
19 distance, and these are sites from the
20 reservoir. So if you go to the
21 pictures, the P1 was right at the
22 entrance roadway, and you can see even
23 that is quite a long way. This is the
24 length of the dam, and then from P2,

1 that's the existing release works
2 right there, so you're not going to be
3 able to seeing anything that's in
4 there.

5 WOMAN IN AUDIENCE: What
6 about from the bridge that crosses the
7 East Branch, just below the reservoir;
8 you stand at a certain spot, I can see
9 the spillway. That's the only place
10 you can see the spillway.

11 MR. FIORE: Are you talking
12 about here?

13 MR. VICKERS: No, the bridge
14 is way up here; it is off the photo.

15 MR. LANG: Talking about the
16 bridge up here?

17 WOMAN IN AUDIENCE: No,
18 below the dam.

19 MR. VICKERS: It is off that
20 photograph.

21 WOMAN IN AUDIENCE: You have
22 to stand at the entrance to the bridge
23 and you can see the spillway.

24 MR. FIORE: We don't have

1 that.

2 MR. WAMSER: We don't have
3 it, but what you would be viewing in
4 this project would be basically that
5 substation, which is going to be --

6 MR. LANG: Let's get to the
7 next slide, and we'll show her on the
8 next slide.

9 MR. FIORE: So this is the
10 existing release works here as it is
11 today. This is a rendering showing
12 what will be new; it will be this
13 switchgear right here. So I don't
14 think you're going to see much there.

15 MR. VICKERS: I don't even
16 know that you can see that from the
17 bridge because of the curvature of the
18 angle.

19 MR. FIORE: I mean
20 literally, this is the only new thing
21 right here, so.

22 Okay, Neversink. Again, the
23 primary viewshed is from the road,
24 State Route 55 and from boating on the

1 reservoir. And the existing intake
2 structure and the vegetation around
3 that is going to obscure anything new.
4 There is topo or elevation differences
5 that also work to obscure the view.
6 And we might as well just go to the
7 map here.

8 So this is where the
9 existing intake and release structure
10 is. We looked at public viewsheds
11 from these four sites, and then also
12 on the reservoir from both sides of
13 this facility. So if you go to the
14 photos, this is quite a long distance.
15 You're not going to really see much.
16 This was from the release work, and
17 intake structure is behind these
18 trees. It kind of goes uphill, and
19 you have the tree stand there, so you
20 can't see anything from there. This
21 is the entrance to the facility, and I
22 don't know if you can tell, but that's
23 the top of the current release works
24 there. It dips down so it's hard to

1 see anything from that point of view.
2 And then this is from the end of the
3 emergency spillway here.

4 This is current conditions;
5 this is what will be.

6 Cultural Resource Studies.
7 Archeological and historic and
8 cultural properties studies. We
9 looked at soils, bedrock geology and
10 topography in order to understand if
11 there might be archeological and
12 cultural resources in the area, and
13 then we also conducted a search of the
14 documents. DEP in this case has a
15 large library of documents from when
16 it originally developed the reservoirs
17 and dams, so we had a consultant come
18 in and go through those documents
19 along with Parks, Recreation and
20 Historic Preservation databases that
21 are available. And the New York State
22 Museum, keeps a library on this type
23 of information as well. Then a site
24 visit was also conducted to each of

1 the development sites in April of
2 2010.

3 What was found, based on the
4 soils, the bedrock geology and
5 topography is there is moderate
6 sensitivity for both pre-contact and
7 historic archeological sites at the
8 developments. But because of the
9 extensive work that was done to build
10 the dams and reservoirs and associated
11 structures, existence of any is highly
12 unlikely anymore. There were no
13 properties listed on the State Or
14 National Historic Register or eligible
15 for the list found in the area. And
16 remember where we are talking for
17 development is very narrow.

18 So based on that, there were
19 really no material adverse effects
20 identified; however, we are still
21 going to have to develop an Historic
22 Properties Management Plan in
23 conjunction with SHPO, State Historic
24 Preservation Office, so that will be

1 done.

2 We then did a socio-economic
3 study. This study is still being
4 finalized. It's not complete yet, but
5 we can give you what the preliminary
6 results from the study are. It should
7 be finished shortly, but I did want to
8 just tell you what the findings were
9 from it. What we did here is we
10 looked at the impact of both the
11 construction and the operation of the
12 developments on employment, personal
13 income and some other metrics. We
14 also looked at the demographics and
15 economic trends in the areas where the
16 projects are going to be developed,
17 what those current economic trends are
18 and the demographics there, the local
19 towns and counties for the project
20 development. And then we identified
21 the economic impacts, and those are
22 the direct impacts, the indirect
23 impacts and the induced impacts. And
24 the induced impacts you'll see on the

1 next slide; they determine a
2 multiplier effect, and really what it
3 means is you got somebody locally
4 getting paid and they are buying
5 something at the local grocery store
6 or restaurant, and that money is being
7 put back into the local economy. So
8 all those things were looked at.

9 We also estimated the
10 potential environmental externality
11 benefits, and then we looked at the
12 impact on wholesale electricity prices
13 from the project development. So the
14 results from that is any economic
15 impact is really going to be through
16 employment of local residents for the
17 construction-related work that's done
18 on site or through subcontracting,
19 local subcontracting. The total
20 estimated, again direct, indirect and
21 that induced economic benefit of
22 project construction for Cannonsville,
23 there's a one-time boost in economic
24 output of approximately \$4 million,

1 and in addition to that approximately
2 16 full-time employment equivalent
3 jobs for the years that construction
4 will be going on.

5 For Pepacton, a one-time
6 increase of approximately \$700,000 and
7 2 FTEs, full-time equivalents, were
8 identified. And at Neversink,
9 \$400,000 and one FTE. So the projects
10 are rather modest in size.

11 The Cannonsville project we
12 expect to take 18 to 24 months to
13 complete. The other two are closer to
14 about 12 months, our estimation. They
15 may go a little longer by a few
16 months.

17 So on the energy generation,
18 this is what is called a zero variable
19 cost generation. What that means is
20 that the energy is being generated
21 from the water. There are no fuel
22 inputs, so you're not bringing in fuel
23 oil or natural gas. This will offset
24 generation from higher-cost fossil

1 fuel generation when it is operating.
2 It is obviously a cleaner source of
3 electricity. And the project overall,
4 all development sites aggregated, is
5 expected to slightly reduce wholesale
6 electricity prices in the upstate
7 region to the tune of approximately
8 \$13.6 million total.

9 Then when I spoke earlier
10 about the environmental externality
11 benefits, that's really talking about
12 the greenhouse gas emissions that will
13 be impacted. We expect a reduction of
14 approximately 32 to 64 thousand metric
15 tons annually from the project
16 operations. And to give you a frame
17 of reference, that's approximately
18 5,500 to 11,000 passenger vehicles
19 that would be taken off the road. So
20 in the grand scheme it may not seem
21 like a big deal, but I think locally
22 that is a big deal.

23 Okay, so that's really what
24 I have to present to you all this

1 evening. Again, if you'd like to
2 submit comments to us for us to
3 consider in preparation of the Draft
4 License Application, if you could send
5 those to us by August 10th, that would
6 be appreciated. That would give us
7 time to consider those in preparing
8 the Draft License Application. It's
9 not your only opportunity to do so
10 though. Again, after we submit that
11 Draft License Application, there will
12 be a public comment period for that.
13 And we expect to submit that Draft
14 License Application in September. 90
15 days from that submission you have to
16 provide formal written comments as
17 well.

18 The address up here, if you
19 want to send some questions or
20 comments, it is Zinnia Rodriguez, at
21 New York City Department of
22 Environmental Protection, and this is
23 the headquarters down in Queens, 59-17
24 Junction Boulevard, Flushing, New York

1 11373. Her email address is there as
2 well, if that's how you want to do it.

3 But more importantly, the
4 study reports that I've gone over
5 tonight are all available on our web
6 site. So if you go to
7 www.nyc.gov/dep, or you just Google
8 New York City DEP you'll come to our
9 home page. On the left-hand side of
10 the home page you're going to see
11 something that says A to Z. You click
12 on that link and then click on H for
13 hydro, and it will bring you to the
14 page where we have all our documents,
15 including a Preliminary Permit
16 Application, our Pre-Application
17 Document, and all of these studies are
18 located there.

19 MALE SPEAKER: Will that
20 mailing address and so forth be at
21 that site too?

22 MR. FIORE: That mailing
23 address? Yes, on our home page you
24 will see that mailing address.

1 MR. BISSELL: And the study
2 itself will be posted, so that slide
3 will be there.

4 MR. FIORE: Yes, the
5 presentation that I gave to you this
6 evening will also be posted online.

7 WOMAN IN AUDIENCE: Are you
8 going to take questions?

9 MR. FIORE: Yes.

10 WOMAN IN AUDIENCE: When you
11 were going over Pepacton, you said
12 that one of the release valves, which
13 are small now anyway, is going to come
14 out and be replaced by a turbine. If
15 the turbine isn't operating, does that
16 mean the release of Pepacton will be
17 at the capacity that it is now?

18 MR. FIORE: No, there will
19 be a bypass line put in.

20 WOMAN IN AUDIENCE: I'm not
21 an engineer --

22 MR. VICKERS: It was one of
23 our concerns.

24 WOMAN IN AUDIENCE: -- while

1 installing, are releases going to
2 continue for twelve months, or is that
3 going to be shut down?

4 MR. FIORE: No, we will have
5 to put in temporary siphons to make
6 the same releases. We have to comply
7 with our release requirements.

8 WOMAN IN AUDIENCE: Does
9 this relate to the five-foot additions
10 called for in the FFMP? I'm not sure
11 if they are in the FFMP-OST, a
12 temporary five-foot addition to
13 Cannonsville, is that part of this
14 plan?

15 MR. FIORE: No.

16 WOMAN IN AUDIENCE: In other
17 words, that will not push that?
18 Because the people below the reservoir
19 already are concerned about it, but if
20 there is five foot more of water in
21 Cannonsville, however, up past
22 Bearston is it going to flood when it
23 is eleven feet over the spillway
24 spilling? How does it affect the

1 structures of these old dams with the
2 added vibration from the turbines and
3 the release? These are old dams.

4 MR. FIORE: Old dams but not
5 all of the infrastructure is as old,
6 and John can talk more specifically to
7 that. Some of it is original, some
8 has been updated, you know, new valves
9 have been --

10 WOMAN IN AUDIENCE: I'm
11 talking about the dam, not those
12 mechanicals, but the dam.

13 MR. VICKERS: Neversink and
14 Pepacton would be the existing valve
15 chamber which is in bedrock, so we
16 really don't expect a huge vibration.

17 WOMAN IN AUDIENCE: I was in
18 on the Gilboa project because of that
19 being unsafe at the time. So if
20 you're talking about the added
21 vibrations, I heard people that work
22 in it and say when you go down there
23 and it is releasing the vibrations are
24 unreal. Now you're adding a turbine

1 to that vibration. I don't know how
2 much vibration a turbine makes.

3 MR. VICKERS: I wouldn't
4 characterize that the vibrations in
5 the valve chamber are unreal. It
6 vibrates, but again, it's on solid
7 bedrock. And the new facility at
8 Cannonsville, which is going to house
9 the largest hydroelectric plant, it
10 will be engineered to handle the
11 vibration.

12 MR. FIORE: And Tom
13 Sullivan, you can talk a bit to this
14 too, because the turbines themselves
15 can't --

16 MR. SULLIVAN: When you
17 design something for a project that's
18 -- when I design something for a hydro
19 project that's regulated by the
20 Federal Energy Regulatory Commission,
21 you have to design it to their design
22 standards, and that commission handles
23 on a routine basis, so the condition
24 of the existing facility has to be

1 taken into account, as well as making
2 sure that you meet the design
3 standards. So as John said, it will
4 be engineered to the current status of
5 design standards for facilities of
6 this type. So I mean I understand the
7 concern, but it will be taken care of
8 with the design.

9 MR. FIORE: Yes.

10 MR. WILLIS: Bill Willis,
11 Delaware County Economic Development.

12 Are you going to engineer
13 more capacity if you're going to have
14 a flood-event coming? I know in the
15 past you said it was very limited in
16 how much you could release. Is there
17 going to be any increased capacity if
18 we are getting a flood event?

19 MR. FIORE: The only
20 development site that will have
21 increased capacity as a side effect
22 from this is the Cannonsville site.
23 We'll still have the existing
24 lower-level release, and in addition

1 to that we'll have the four turbines
2 that will release water. We are going
3 to operate the hydroelectric in
4 concert with what the FFMP-OST
5 dictates. We can't -- that's our
6 operating regime, so we'll not be able
7 to operate outside of that.

8 MR. WILLIS: Well, like
9 during the winter and in the spring,
10 have a ten percent void in case we get
11 a flood event.

12 MR. FIORE: That's part of
13 the FFMP-OST.

14 MR. VICKERS: Yes, so that's
15 part of the existing Flexible Flow
16 Management Program, OST, Operation
17 Support Tool. And so that program has
18 a conditional storage objective that
19 you're speaking of, that the goal is
20 to try to follow that curve, which for
21 a significant part of the year does
22 provide a ten percent void objective
23 for the reservoir.

24 MR. FIORE: Yes, sir.

1 MR. WINKLER: Frank Winkler,
2 Delaware County Electric Co-Op.

3 What percentage of the
4 low-level releases are going to be
5 utilized for power generation?

6 MR. SULLIVAN: Want to go
7 back to the flow regulation curves.

8 MR. WINKLER: I don't expect
9 a finite number.

10 MR. WAMSER: I think I can
11 tell you. Mark Wamser.

12 At Cannonsville the flow
13 range that is going to be going
14 through the turbine is between 50 and
15 1500 CFS. So if you look on the
16 graph, between 1500 and 50, which is
17 close to zero on this graph. On
18 Pepacton, it's 65 CFS to 162 CFS.
19 And--

20 WOMAN IN AUDIENCE: We don't
21 even get 162 CFS out of Pepacton
22 today.

23 MR. FIORE: Yes, it's not
24 changing.

1 MR. WAMSER: And at
2 Neversink it is between 50 and 100
3 CFS. As Anthony said, this is
4 preliminary until -- when we go to
5 talk to turbine vendors, they give us
6 very preliminary information,
7 budgetary quotes, budgetary designs.
8 When we go to actually build it, they
9 are going to give you a much more
10 detailed bid and that could change
11 slightly the design range, but it is
12 not going to be so much out of the
13 ranging that Anthony has gone through.

14 MR. SULLIVAN: But to go to
15 your questions, you wanted to know the
16 percentage of the time we'd be at X
17 capacity.

18 Go back to Cannonsville,
19 please. So you see the 1500 CFS under
20 the OST, somewhere between looks to be
21 about 5 to about 12 percent of the
22 time we would be at the maximum
23 capacity for that plant.

24 Go to the next one please,

1 Kevin. And what was the design?

2 MR. FIORE: What, 160?

3 MR. SULLIVAN: So you're
4 about 28 percent of the time, plus
5 you're going to be at design capacity.

6 And then the last one,
7 Kevin.

8 MR. LANG: 50 to 100.

9 MR. SULLIVAN: SO you're
10 going to be basically 40 percent of
11 the time. Again, remembering Pepacton
12 and Neversink are limited by the
13 physical dimensions of where we are
14 going to put the units.

15 Cannonsville we weren't
16 limited by that. Cannonsville we
17 could design a powerhouse, so we
18 weren't limited by that.

19 WOMAN IN AUDIENCE: In other
20 words, you can't use the spill,
21 because from April 1st until the
22 meeting that I had in Monticello two
23 weeks ago, 50 days, Pepacton had been
24 spilling. You can't use that?

1 MR. SULLIVAN: We can't use
2 more than 106 or whatever the design
3 flow is, 162 from Pepacton.

4 WOMAN IN AUDIENCE: So this
5 in no way will mitigate spills?

6 MR. WAMSER: Not the hydro.

7 MR. SULLIVAN: The hydro
8 won't, no.

9 MR. FIORE: Yes.

10 WOMAN IN AUDIENCE: So who
11 is going to own the electricity that
12 is produced?

13 MR. FIORE: The disposition
14 of the electric is yet to be
15 determined. There are a number of
16 options for that. Some of that power
17 could be used behind the meter for
18 on-site offsets. It could be sold
19 into the NYISO, the New York
20 Independent System Operator. There
21 could be a PPA with a specific entity.
22 All the options are still on the
23 table. We haven't figured that out
24 yet.

1 WOMAN IN AUDIENCE: So New
2 York City sells the electricity?

3 MR. FIORE: We don't know.
4 We don't know yet.

5 WOMAN IN AUDIENCE: So the
6 economics, that was just about workers
7 working on the actual changing of it.
8 That didn't have anything really to do
9 with the electricity, because you
10 don't know where the electricity is
11 going or who has it, right?

12 MR. FIORE: That's right.

13 MR. WINKLER: One other
14 thing. I'm curious -- I guess I'll
15 find the answer somewhere along the
16 line -- you said that this should not
17 change in any significant way the fish
18 kill, fish mortality from existing
19 conditions. Just curious on how
20 existing conditions compare to other
21 reservoirs and their releases?

22 MR. FIORE: Our reservoirs?

23 MR. WINKLER: Yes.

24 MR. FIORE: It is pretty

1 much similar, because our intakes for
2 the most part are all very deep.

3 MR. WINKLER: I don't mean
4 the change that you're going to do,
5 but the amount of mortality at the
6 Pepacton Reservoir, okay, in fish and
7 wildlife's eyes or is it excessive
8 already?

9 MR. FIORE: Tom, do you want
10 to answer that?

11 MR. SULLIVAN: I don't know
12 that we can give you a relative
13 comparison. I can tell you that
14 generally for the agencies no
15 mortality is really okay generally.
16 But it's not uncommon for developments
17 with low-level outlets of this height
18 to experience the same type of issues
19 that this one would experience, with
20 basically the pressure differential.
21 It is a fairly common effect, and
22 actually intake protection for
23 something like this is a lot more
24 difficult than like riverine. If you

1 went to the upper Hudson and some of
2 the shallower towns, they have
3 standard things they want you to do.
4 Deep water intake not so much. So I
5 mean I think -- I can't speak for the
6 agencies, but I'll tell you they don't
7 like it any time, but it has become
8 kind of how it works in deeper
9 reservoirs.

10 MR. BAUDANZA: Tom Baudanza.

11 In my career, since '92 with
12 DEP, in the Delaware District I've
13 investigated one fish kill below the
14 releases, and that was Cannonsville,
15 and it was yellow perch and alweiss.

16 MR. FRAZIER: Dean Frazier,
17 Delaware County.

18 The socio-economic stuff, is
19 that in more detail in the report?

20 MR. FIORE: Yes.

21 MR. FRAZIER: And when is a
22 decision going to be made about who
23 owns the electricity?

24 MR. FIORE: I don't know

1 yet. We have released a Request For
2 Expression of Interest to see if
3 there's any interest from the private
4 sector in participating in the
5 development of the project. Depending
6 on how that goes, that could affect
7 what is done with the power. We're
8 just not there yet.

9 MR. STUENDE: Carl Stuende
10 from CWT.

11 How will that though -- to
12 follow up on what Dean was asking,
13 what will be the procedure to make
14 that determination; who is going to be
15 making that determination as to who
16 will actually own the electricity
17 itself?

18 MR. FIORE: Well, that will
19 depend on how we develop the site. So
20 it will be the City.

21 MR. WILLIS: Will you
22 calculate a return on investment or
23 payback; I mean is this a money-making
24 project or?

1 MR. FIORE: We're still
2 going through that analysis now. And
3 the City has brought on a financial
4 advisor to help us with a number of
5 projects that we're looking at that
6 could potentially involve private
7 sector, public and private
8 partnerships. The City has brought on
9 a financial advisor to help us with
10 that suite of projects. This is one
11 that could potentially have that
12 structure, and they are helping us
13 evaluate that as well.

14 MR. WINKLER: Do you know
15 when you're going to have a
16 groundbreaking ceremony for the start
17 of construction of the dam?

18 MR. FIORE: So going back to
19 the schedule, we submit that Final
20 License Application in the spring of
21 2012. There is no prescriptive
22 timeline for FERC to approve that
23 license. Estimate anywhere from six
24 months to two years that they can take

1 to do that. These are not big hydro
2 projects in the scheme of hydro
3 projects, so we don't expect it to be
4 at the longer end of that range. But
5 it is really just uncertain. You
6 know, it's under FERC's control,
7 depending on their case load. We
8 don't really know. But once it is
9 approved, we would expect there be
10 some period to finish final design,
11 bring on any construction contractor
12 and then develop the site.

13 MR. WINKLER: And a turbine
14 manufacturer, wherever they may be in
15 the world, to fit the bill.

16 MR. FIORE: Yes. And I mean
17 we've had direct conversations with
18 these turbine vendors, too, in trying
19 to get the specs from them. It was
20 difficult. I think a lot of
21 hydroelectric projects have come up
22 for re-licensing, and so they are busy
23 with existing projects that they know
24 are going forward, and that's where

1 they spent their time.

2 And, Tom, jump in here any
3 time if I'm not speaking correctly.

4 MR. SULLIVAN: No, no.

5 MR. FIORE: But that was our
6 experience. I've gone down to
7 conventions and have spoken directly
8 to a number of those turbine
9 manufacturers and gotten them to
10 respond back to us on this. So those
11 relationships are being established.

12 WOMAN IN AUDIENCE: On the
13 business of who owns the electricity,
14 I notice up there you got the
15 estimated savings to upstate New York
16 of approximately \$13.6 million. Since
17 you don't know where the electricity
18 is going to go, how do you know it is
19 going to save any money for upstate
20 New York?

21 MR. BISSELL: Garrett
22 Bissell of Couch White.

23 In essence what was looked
24 at in the study was the assumption was

1 all of the power being sold into the
2 wholesale market, and with that
3 assumption of all the power being sold
4 into the wholesale market, then from
5 that what would be the overall impact
6 on wholesale electric prices. I can't
7 say that that necessarily directly
8 correlates one to one with your retail
9 rate, but certainly your retail rates
10 do track the wholesale, so it's giving
11 you some sense in terms of the overall
12 economic value of this project.

13 And when we talk about
14 upstate New York, I mean we are
15 talking, you know, because of where
16 these projects are located, it is a
17 pretty vast area that the savings ends
18 up being spread over. But I mean
19 that's in essence the assumption that
20 goes into that particular analysis.
21 That was the assumption that 100
22 percent was being sold to the
23 wholesale market.

24 MR. FIORE: I would like to

C E R T I F I C A T I O N

I, Karen Schmieder, a
Certified Shorthand Reporter,
Certificate No. 768, and Notary
Public, do hereby certify that I
recorded stenographically the
proceedings herein at the time and
place noted in the heading hereof, and
that the foregoing transcript is true
and accurate to the best of my
knowledge, skill and ability.

IN WITNESS WHEREOF, I have
hereunto set my hand this 22nd day of
August 2017

A handwritten signature in black ink, appearing to be 'KS' followed by a stylized flourish.

KAREN SCHMIEDER, CSR, RMR
Registered Diplomate Reporter

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