

In The Matter Of:
WEST OF HUDSON HYDROELECTRIC PROJECT

FERC PROJECT NO. 13287
December 16, 2009
9 A.M.

Premier Reporting
www.premiereporting.com
845-687-0707
info@premiereporting.com

In the Matter of:

WEST OF HUDSON HYDROELECTRIC PROJECT
FERC PROJECT NO. 13287

Wednesday, December 16, 2009

9 A.M.

MINUTES OF JOINT MEETING

NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
71 SMITH STREET
KINGSTON, NEW YORK

REPORTED BY: ROBYN HARRELL

9 A.M.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

APPEARANCES:

ANTHONY J. FIORE, Director of Planning and Sustainability

TINA JOHNSTONE, Director of Operations

ROBERT CRAIG, ESQ., Assistant Counsel

ALSO PRESENT:

GOMEZ AND SULLIVAN ENGINEERS, P.C.
BY: MARK J. WAMSER, P.E.

COUCH WHITE, LLP
BY: KEVIN M. LANG, ESQ.

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 MS. JOHNSTONE: Morning,
3 everybody. My name is Tina Johnstone.
4 I'm Director of Operations for the
5 Bureau of Water Supply, DEP, and welcome
6 to our Kingston offices.

7 Real quick, first take care of
8 some housekeeping. If anybody needs to
9 use the bathroom, grab these doors, make
10 a right, make a left and a right in that
11 little hallway there (Indicating).

12 And in case of an emergency in
13 the building, there is an evacuation
14 alarm which will go off. If that
15 happens, just leave the way you came,
16 down the hallway, out the door, down the
17 lobby and out in the parking lot.
18 Please don't drive away because we take
19 a head count. We have a sign-in sheet.
20 So we don't want anybody in here looking
21 for anybody whose not in here.

22 So today we're here for the
23 joint meeting required for by the

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 Federal Energy Regulatory Commission to
3 talk about our New York City's West of
4 the Hudson Hydro Project.

5 The hydro project includes four
6 dam sites, Cannonsville, Pepacton,
7 Neversink and Gilboa, and the purpose of
8 this meeting is to give you an overview
9 of the proposed hydro project, as well
10 as an overview of the time line and the
11 current status where we are with the
12 project and the permit applications with
13 FERC, and also to solicit any feedback
14 from you, any studies you feel should be
15 undertaken as a part of the application
16 process, any comments or concerns you
17 may have on the project.

18 So we're going to give a
19 presentation covering everything that I
20 just spoke about, and then we'll open up
21 the floor for any questions or comments.

22 If you have any questions or
23 comments, before you make them, please

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 state your name and affiliation. We
3 have a stenographer here today to record
4 all of that information.

5 So at this time, I'd like to
6 introduce the panel that will be here to
7 assist today in the meeting: Myself,
8 Tina Johnson; Anthony Fiore, our
9 Director of Planning and Sustainability
10 for DEP; Mark Wamser with Gomez and
11 Sullivan, our engineering consultant;
12 and Kevin Lang, our legal consultant.

13 With that, I'm going to turn it
14 over to Anthony to give us the
15 presentation.

16 MR. FIORE: Thank you, Tina. As
17 Tina mentioned, the agenda for this
18 meeting this morning is to give you an
19 overview of the project. We are going
20 to start by just giving a pretty quick
21 overview of the water supply system,
22 some of the post facility plans, post
23 operations, and then an overview of the

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 FERC licensing process, an overview of
3 our pre-application document, and then,
4 as Tina said, we'll open up for
5 comments. And that's really the main
6 focus of the meeting today to hear back
7 from you all.

8 MR. LANG: Anthony, if anyone
9 needs any copies, it's back by the door.

10 MR. FIORE: Where are they?

11 MR. LANG: Right in front of the
12 door, we have extra copies.

13 MR. FIORE: Okay. The
14 pre-application document.

15 MR. LANG: The presentation. We
16 have copies right here.

17 MR. FIORE: There are some
18 copies, if you want to take a quick
19 review of the pre-application document.

20 So I want to just get in -- and
21 I'm sure a lot of people in the room are
22 very familiar with our system, but I'd
23 like to just go over some of the

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 characteristics of it to set the stage
3 for the project. It is an unfiltered
4 water supply system consisting of 22
5 impoundments in total, ranging in size
6 from .2 billion gallons to over 140
7 billion gallons. We deliver over 1
8 billion gallons a day serving
9 approximately nine million people, one
10 million of those residing in counties
11 outside of New York City.

12 It's spread, our water supply
13 system is spread over a large
14 geographical area. It's a 2000-square
15 mile watershed. The system is broken up
16 into three subsystems. We have our
17 Croton system, which is on the east side
18 of the Hudson River. Our Catskill
19 system here (Indicating) -- and I
20 realize I'm pointing at one side, but
21 can everybody see over here? And then
22 the Delaware system here (Indicating).

23 The Croton system is our -- is

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 the oldest part of the system. It
3 consists of 12 reservoirs and three
4 controlled lakes, and it has a total
5 capacity of 88 billion gallons.

6 The Catskill subsystem was the
7 next to come on line. It's made up of
8 Schoharie Reservoir and Ashokan
9 Reservoir here (Indicating), and it has
10 a total capacity of approximately 140
11 billion gallons.

12 The Delaware subsystem was the
13 last to come on line. It consists of
14 Cannonsville, Pepacton, Neversink and
15 Roundout, and that has a total capacity
16 of approximately 320 billion gallons.

17 It's important to note that
18 these three subsystems are operated in
19 concert with one another to deliver a
20 high quality of water to the customers.

21 Okay. So I'm going to start
22 with our Cannonsville reservoir and dam.
23 This was placed in service in 1964.

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 I just want to give you a few
3 characteristics of the dam, and the
4 facilities themselves.

5 It's a rolled, earth-filled
6 embankment. It's 2,800 feet long. This
7 is the dam here (Indicating), and here
8 is the spillway. Now, the dam is 1100
9 feet wide at the toe and approximately
10 45 feet wide up top and there is
11 175-foot difference in elevation from
12 the bottom to the top.

13 The spillway, as can be seen, is
14 a split-level spillway. So this is a
15 lower level and this is the upper
16 spillway (Indicating). The lower
17 portion of that is 240 feet long and
18 then an elevation of 1150 feet. The
19 upper portion of that is 550 feet long
20 and an elevation of 1158 feet
21 approximately.

22 The impoundment reservoir itself
23 is 13 miles long and it has a storage

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 capacity of approximately 96 billion
3 gallons. The watershed area, the
4 drainage area towards this reservoir is
5 450 square miles.

6 So our proposal now, as of
7 today, for this facility is to locate a
8 new powerhouse which would be adjacent
9 to the existing release chamber which is
10 right here (Indicating). This is our
11 existing intake structure, approximate
12 location out of the reservoir. The
13 intake structure sits at the bottom of
14 the reservoir. There's a tunnel that
15 comes through and overlooks the feet and
16 diameter and comes down to the existing
17 release chamber with a series of valves.
18 So, the proposal here would be to, one,
19 tee off of this tunnel to a new
20 powerhouse serving two turbines to
21 generators. In addition to that, in the
22 existing release chamber we would tee
23 off of the manifold system with another

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 line serving two additional generators,
3 one of the same size as the other two
4 that comes off the 11-foot line and then
5 a smaller minimum flow turbine.

6 Right now, we're looking at
7 about 750 feet of transmission line.
8 We'll say that this is all very early in
9 the process. We have not conducted a
10 interconnection study, but from our
11 preliminary screening, that's what we're
12 looking at.

13 So moving on to Pepacton. This
14 reservoir was put in operation in 1965,
15 and it's an earth-embankment dam. The
16 dam itself is 2400 feet long. The dam
17 is here (Indicating). The spillway is
18 over here (Indicating). It's 1,200 feet
19 wide at the toe of the dam and then
20 again about 45 feet wide at the top.
21 And the elevation difference from the
22 crest of the dam is approximately 204
23 feet. The spillway -- come over the

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 spillway and then there's a tunnel here
3 (Indicating). It's a four-foot diameter
4 tunnel that's built underground which
5 discharges into a stilling pool down
6 below. The crest elevation of that
7 spillway is 1,280 feet. The impoundment
8 is 18 miles long and has a net storage
9 capacity of a normal pool of
10 approximately 140 billion gallons. The
11 watershed drainage area for this
12 reservoir is 372 square miles. So the
13 proposal here is to replace -- well, let
14 me just say this, this dam is a little
15 bit different from the previous dam
16 where I showed you at Cannonsville in
17 that the release work is located up top
18 here (Indicating). In Cannonsville, the
19 release works was located down at the
20 bottom.

21 The proposal here would be to
22 replace one of two existing valves with
23 a turbine in the existing release

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 chamber. This is still being evaluated
3 because we still need to make sure that
4 we can meet our release requirements
5 under our current release operating
6 plan. So we are looking at that now to
7 know whether or not there needs to be a
8 bypass that goes around the turbine or
9 some other alternative, but that is an
10 important component to this particular
11 location moving forward. So that's
12 still being done. And here (Indicating)
13 is a much shorter transmission run, we
14 believe, about 50 feet.

15 So then there's the Neversink
16 Reservoir, moving on to this, was placed
17 in 1964. Again, the dam is an
18 earth-embankment dam. It is 2,800 feet
19 long, 1800 feet wide at the toe, and
20 about a 200-foot elevation gain from the
21 bottom of the dam to the crest. The
22 impoundment itself is five miles long
23 with a net storage capacity at normal

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 full of about 35 billion gallons. The
3 watershed drainage area for this
4 reservoir is 93 square miles. And the
5 proposal here, similar to the Pepacton
6 site, would be to replace one of two
7 valves in the existing release chamber
8 with a turbine. So this dam, again, is
9 slightly different than the others. The
10 release chamber is located here
11 (Indicating), and this facility pictured
12 here (Indicating) actually serves two
13 purposes. It's both an intake structure
14 and a release chamber. The other
15 reservoirs, the intake structure that
16 pulls water in, convey it down to the
17 city, is located in a separate part of
18 the reservoir.

19 In this one (Indicating), the
20 intake chamber and the release chamber
21 are common facilities. However, the
22 water that comes in for releasing
23 downstream, the intake for that is also

FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.

1 Proceedings

2 at the bottom of the reservoir. I know
3 that there were some questions that came
4 up yesterday on the site work about
5 that. So I just want to clarify that
6 that is the case.

7 The difficulty with this site is
8 the space constraints within the
9 facility. So we're still, you know,
10 speaking to turbine vendors, generator
11 vendors, and looking to see what turbine
12 we can get to fit into the facility and
13 so forth. So that is still presenting a
14 bit of a tight space here. And, again,
15 this is -- right now we're looking at
16 about 800 feet of transmission.

17 So the Schoharie Development was
18 placed in service in 1926. It's a mixed
19 earthen and cyclopean masonry dam. It's
20 2030 feet long. The masonry width is
21 approximately 700 feet at the toe, and
22 earthen about 150 feet. It's 155 feet
23 high. And that elevation is

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 approximately 1,448 feet. The dam is
3 currently under rehabilitation, as I
4 think many of you in the room know.
5 It's five phases. The first phase was
6 the crest gate installation where a
7 notch was carved out of the systems
8 spillway. That was completed. Site
9 preparation was the second phase. That
10 is ongoing now. The third phase of this
11 will be to install a low-level outlet at
12 this dam. Currently there is no
13 low-level outlet. The fourth part of
14 the project which would work
15 simultaneously with the third part of
16 the project is refurbishing the
17 Shandaken Tunnel and intake chambers,
18 and then finally the site restoration.

19 So, as I said, right now this is
20 the spillway here (Indicating). The dam
21 comes over here and continues off the
22 screen. An intake chamber would be
23 located here (Indicating). This intake

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 chamber would sit at the bottom of the
3 reservoir again with the tunnel out to a
4 gate chamber and then another tunnel
5 down to a release chamber at this
6 approximate location. The idea here
7 would be to tee off of this new tunnel
8 from the gate chamber to the release
9 chamber.

10 This particular development, the
11 alternatives that we looked at so far
12 doesn't look promising. We're going
13 forward. We are continuing to look at
14 some other alternatives to see if we
15 could make a viable project here. But
16 the alternatives that we reviewed so far
17 make this a real tough case.

18 Okay. That's an overview of the
19 proposed project. I'd like to get into
20 the FERC regulatory framework a bit by
21 talking about the preliminary permit
22 which is really the first step in
23 considering hydroelectric generation.

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 The permit is not an indication
3 of FERC's approval of the project and it
4 does not permit construction. What it
5 does do is it maintains priority while
6 we do studies in support of filing a
7 license application.

8 With the permit, once we have
9 that, and we do have that now, we can
10 begin collecting data around the project
11 including the environmental setting of
12 the project areas, engineering data,
13 economic information, and who the
14 stakeholders are, that information is
15 all compiled into what's called a
16 pre-application document. Using the
17 pre-application document as a baseline
18 and engage in the stakeholders, then
19 additional data that might be required
20 to support a license application is put
21 together.

22 This is a very simple overview
23 of the licensing process, a simple

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 block-flow diagram. Some are a bit more
3 technical than what is presented here,
4 but in order to apply a kind of easy
5 visual look at the major components of
6 the process, we begin with a permit
7 application and then the pre-application
8 document, or PAD, which again is up
9 front here, and I'll just say now, the
10 pre-application document is also
11 available on our web site. So if you go
12 to www.NYC.GOV/DEP, you'll come to our
13 home page, on the left side of that
14 page, there is something that says "A to
15 Z index," click on that. Click on "H"
16 for hydro, and the PAD is added there.
17 Okay.

18 So beginning now using the
19 information that we've already gathered
20 that's out there about the projects and,
21 you know, since DEP operates these
22 reservoirs, there's a wealth of data out
23 there, collecting that, compiling it

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 together, and bringing in stakeholders
3 that we can identify and putting that
4 pre-application document together, we
5 can then begin to develop what study
6 plans might be necessary to support that
7 license application. So this is the
8 step in the process where we are today.

9 After study plans are developed,
10 then we can file for a draft license
11 application. After a license
12 application is approved by the Federal
13 Energy Regulatory Commission, that
14 begins the environmental review process
15 that's led by the Federal Energy
16 Regulatory Commission. Once that
17 environmental review component is
18 completed, FERC approves that and then
19 approves a final license application at
20 that point, then are authorized to begin
21 your plans for construction of the
22 project.

23 Okay. Proposed operations, I'd

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 like to, you know, point out at this
3 point that the primary mission for us is
4 to supply high quality drinking water to
5 customers. That is the primary mission.
6 That will continue to be the primary
7 mission. The hydro power would be
8 secondary to that.

9 On the Delaware development, the
10 operation of the Delaware basin
11 developments will fit into the operating
12 regime, wherever that may be. You know,
13 currently it's the Flexible Flow
14 Management Program. Releases will
15 remain consistent with whatever the
16 current protocol is. The magnitude, the
17 timing for the frequency of downstream
18 releases are not going to be altered for
19 hydroelectric generators, and currently
20 the existing conservation and direct
21 releases are the water that will be
22 captured to generate power.

23 Under the Schoharie Development,

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

what we looked at is capturing the water that would be available from our Snowpack Management Program. Again, the pre-application document -- we went over this a bit, but I will just say again -- it provides background information on the existing projects, the reservoirs and the dams. It discusses again the economics, the engineering, the environmental and operational information and then by compiling that, it helps identify potential impact. It goes through a number of environmental impacts and they're listed on the screen here (Indicating). It's quite comprehensive; geology and soils, water resources, fish and aquatic resources, wildlife and botanical resources, wetlands, Riparian and Littoral habitats, rare, threatened and endangered species, recreation and land use, aesthetic, cultural, socioeconomic

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 and tribal resources. Based on this
3 look, proposed studies answers to
4 support the license application are
5 developed. For us, right now, there's a
6 way that we're envisioning a lot of
7 those developments. The proposed
8 studies that we've identified really
9 center around construction-related
10 activities.

11 The Project Feasibility
12 Evaluation, we are conducting a
13 feasibility analysis. I've alluded to
14 that as I discussed each of the proposed
15 project sites. I'm looking at design
16 alternatives. Really the conveyance
17 system from the powerhouse locations to
18 the release sites, the number and size
19 of the turbines, estimated average
20 annual generation, developmental costs,
21 and some other key factors.

22 This is a time line for the
23 pre-licensing process. And just to go

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 back to this point, we are in the
3 pre-licensing period here. All the work
4 that we're doing now is to support a
5 submission of a draft license
6 application.

7 Where we are today, there --
8 it's -- by February 15, any written
9 comments that anybody might have,
10 request for studies needs to be
11 submitted by that date. And then
12 between February and March, we'll take
13 that information and we'll develop study
14 plans based on that. Approximate time,
15 April, we'll have draft study plans
16 completed and we'll finalize our plans
17 by May so that we can get out and
18 conduct whatever studies might be
19 required during that field season. That
20 will last through that field season,
21 then we'll submit a draft license
22 application in the fall of 2011, then
23 they'll be another opportunity for

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 comments on that draft license
3 application. Those need to be submitted
4 to DEP and the Federal Energy Regulatory
5 Commission, and then we'll submit our
6 finalized pre-application in the spring
7 of 2012.

8 So as I mentioned before, after
9 we submit our draft license application,
10 that's when the environmental review
11 part of the Federal Energy Regulatory
12 Commission's framework begins. FERC
13 will review the application. If they
14 accept the application, then they will
15 begin the NEPA scoping process. They'll
16 come out with a Ready For Environmental
17 Analysis Notice, there will be a comment
18 period on that, and then FERC will take
19 that information, they'll review it, and
20 then they'll issue a Final Environmental
21 Assessment or Environmental Impact
22 Statement, depending on the scope of the
23 final project, and after that they'll

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 make a final decision on the license
3 application.

4 So that concludes what I have to
5 say about the project today, with the
6 application document and overview of the
7 FERC process. And at this time, I would
8 like to open it up to the floor and take
9 comments and get some input.

10 MS. JOHNSTONE: One piece of
11 information I neglected to say was that
12 in addition to this required joint
13 meeting today for the licensing permit
14 project, we've also chosen to conduct a
15 couple of public meetings. One occurred
16 last night in Sullivan County. One is
17 tonight at Schoharie County. And also
18 the site visit, the Delaware Basin
19 Reservoir site visits took place
20 yesterday. The Schoharie Development is
21 taking place today. So we decided to
22 have two additional public meetings, one
23 last night and one tonight, in order to

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 give an increased opportunity for
3 feedback and information on the project.

4 MR. FIORE: Just to add to that,
5 the tour of the Schoharie site begins at
6 2:30 this afternoon. There is via
7 shuttle bus to go from Gilboa Town Hall
8 over to the site. And then this
9 evening, the public meeting begins at 7
10 p.m. at Schoharie County Office Building
11 up in the Town of Schoharie, not in
12 Gilboa.

13 Just please, again, when you
14 speak, say your name and your
15 affiliation for the court reporter.

16 MR. LEONARD: Hi. My name is
17 Ron Leonard. I'm with Eco-NRG and a
18 couple of other non-profit groups.

19 I'd like to just get a
20 background of this city which has been
21 in the hydro business for a while, what
22 your existing operations are on this
23 side of the Hudson, what their power

FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.

1 Proceedings

2 availability has been and what they're
3 present status is.

4 MR. FIORE: Well, what I'm going
5 to tell you about that is there are
6 currently hydro developments on the
7 system. DEP owns two of those. That's
8 on the Neversink tunnel outlet and the
9 East Delaware tunnel outlet. There's
10 five in total. They are all on
11 conveyance systems. None of them are at
12 dams on releases, so this is different
13 than our existing ones. As far as
14 specific capacities, I don't have that.

15 MR. LEONARD: You don't know if
16 they're operating there?

17 MS. JOHNSTONE: Yes.
18 Absolutely.

19 MR. FIORE: They're all
20 operating. There is one generator in
21 Valhalla that NYPA owns and they are
22 removing that one.

23 MR. LEONARD: You said all of

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 those are sort of different including
3 the Ashokan one?

4 MR. FIORE: Yes.

5 MR. LEONARD: At the bottom of
6 the dam, there's a difference.

7 MR. FIORE: Yes. Those are all
8 on the water conveyance tunnels. Those
9 are under a different FERC regulatory
10 process and the operation is different
11 in that they're in these tunnels rather
12 than on a route release to downstream.

13 MR. LEONARD: Can I ask
14 something different about the -- two of
15 the existing projects. It's sort of
16 somewhat unusual, from my experience as
17 a previous developer of hydro, where you
18 have Neversink and Pepacton as the one
19 of three megawatts, those are really not
20 economically viable projects. In my
21 past experience in the amount of dollars
22 that you're going to have to invest in
23 environmental impact, infrastructure

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 studies, et cetera, requires those
3 projects like that one --

4 MR. FIORE: You know, we worked
5 very hard to manage our system not to
6 lose water. And so for any water supply
7 system, building hydroelectric on the
8 release side is a challenge, because of
9 the amount of water that is available.
10 But we are looking at what water is
11 available and how frequently that water
12 will be available and that will then
13 determine what the -- how viable the
14 project is. What I'll say also is that
15 we are looking at this project
16 differently than an investor-owned
17 developer may look at it. Typically
18 they look for a seven-year payback
19 period. And in that framework, we would
20 not make any sense, but we have the
21 ability to look further out.

22 MR. LEONARD: So a follow-up to
23 that: Is there any commitment with

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 these projects that has a public benefit
3 aspect as a local fisherman and member
4 of Trout Unlimited, I'm interested in,
5 you know, releases just like you are,
6 but I'm also interested in things that
7 benefit the reservoir system, that help
8 temperature in terms of releases, as you
9 are aware, that you're renovating or
10 revamping Schoharie, I believe, and you
11 have problems with releases from the
12 reservoir through the Shandaken Tunnel
13 down to the Ashokan Reservoir in terms
14 of temperatures. I recommended this
15 years ago that the city invest in
16 something like this and then take the
17 money from production of a 12-megawatt
18 facility and put it into multiple
19 releases stages and reservoir. Is there
20 any public benefit aspect of any of
21 those projects?

22 MR. FIORE: In general, I would
23 say yes, there's a public benefit to

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 these projects. To answer your specific
3 question on Schoharie, this project
4 itself is looking at releases from the
5 dam side and not releases south to --

6 MR. LEONARD: Infrastructure
7 improvements that occur because you're
8 getting into problems, there's nothing
9 outside of the project to benefit the
10 public?

11 MR. FIORE: I'm not sure I know
12 what you're really saying.

13 MR. LEONARD: Okay. For
14 example, New York City, when they were
15 originally putting in the reservoir
16 system in the Ashokan area, promised
17 that the local communities would benefit
18 from that; besides fishing and other
19 amenities, that they would actually be
20 able to get a reduced cost of energy.
21 Is that a commitment that you could make
22 in any of these systems that will be a
23 public benefit?

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 MR. FIORE: I mean, the Shokan
3 one, the city doesn't own, so I'm not
4 sure how that was made.

5 MR. LEONARD: Holistically.

6 MR. FIORE: So you understand
7 that we don't own that. That's a NYPA
8 --

9 MR. LEONARD: I understand that.

10 MR. FIORE: How the generation
11 is to be used is still under
12 investigation, but it will have to be
13 consistent with both state and city law.

14 MR. LANG: And federal
15 requirements as well.

16 MS. BARTHOLOMEW: Can you ask
17 the people in the front to speak up so
18 we can hear in the back. Thank you.

19 MR. FIORE: I'll try to do that.
20 There is a sign-in sheet that has been
21 going around. Please, if you haven't
22 signed that yet, please sign that before
23 you leave.

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 MR. LANG: There's other people

3 --

4 MR. FIORE: So if you came in
5 after we started and you haven't signed
6 in, please do that.

7 MR. BARTHOLOMEW: Howard
8 Bartholomew, from Dam Concerned
9 Citizens.

10 I have a question regarding the
11 Schoharie Reservoir, the hydroelectric.

12 Page 34 of the preliminary
13 application document, we have some
14 figures regarding the potential for
15 hydroelectric generation. The Schoharie
16 says 23,535,000 kwh. In Cannonsville
17 supposed to had 25 million. So what are
18 the serious problems that we are --
19 perhaps prevent you from utilizing
20 Schoharie water, since that is such a
21 productive township?

22 MR. FIORE: When you look at
23 hydroelectric development -- and, Mark,

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 you can jump in anytime you want -- but
3 what you're looking at is how much water
4 is available and how often that water is
5 available. That really determines kind
6 of a sweet spot of how you would build
7 your hydroelectric. That combined with
8 what the capital cost would be to
9 develop the project along with what the
10 energy forecasts are, really determine
11 whether or not the project is viable.

12 So at this point, from what we
13 looked at, the order that is available
14 and the frequency that it would be
15 available, currently does not look like
16 it's a real good project.

17 MR. BARTHOLOMEW: We would be
18 aware that the problem would be spillage
19 that would occur and a conscious
20 snowmelt, and we have surplus water that
21 develops and then becomes waste water,
22 discharged north through the Schoharie
23 and Mohawk branches. But this passes

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 only through Cannonsville. In terms of
3 overall annual output to obtain it for
4 three months of the year, that could be
5 utilized.

6 Are there any other engineering
7 difficulties regarding soils and rocks
8 and geologic issues that you are aware
9 of, or encountered, in terms of location
10 of that powerhouse?

11 MR. WAMSER: Yeah. There is a
12 big grade difference between where the
13 outlet would be and where the powerhouse
14 would be. There's what you don't see in
15 the cost of construction. There's a lot
16 of topographic differences in elevation
17 that have to be accounted for. And as
18 Anthony said earlier, the biggest thing
19 is there's very little flow that comes
20 out of Schoharie, and when it does come
21 out, it comes out in a big flood. So
22 you don't always want to design a hydro
23 plant to only be operating, you know,

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 two months of the year.

3 MR. BARTHOLOMEW: And then the
4 second thing regarding the back tunnels,
5 the 5, 10, 15 tunnels, has any
6 consideration been given to mow that
7 service? As you were aware of the 1065
8 elevation out in Portal (sic) and
9 whether, roughly about a 1134 pool in
10 Schoharie, so you don't have a big
11 reservoir, tunnel. Has any
12 consideration been given to some kind of
13 low-head because that is a continuous
14 discharge of water there?

15 MR. FIORE: It's not part of
16 this project.

17 MR. BARTHOLOMEW: Then why
18 hasn't it been considered? That's
19 obviously an area where it runs
20 constantly.

21 MR. FIORE: That may be
22 something that we consider in the
23 future, but part of this -- part of this

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 is the project of design. Thank you.

3 MR. BARTHOLOMEW: Thank you.

4 RON LEONARD: Ron Leonard,
5 again. I was wondering if there are
6 other environmental aspects to those
7 projects that are not stated. Obviously
8 these projects probably can't be
9 evaluated by the low-head hydro
10 institutes. Are there other
11 environmental registrations that you
12 would go through in the project above
13 and beyond the FERC low-impact hydro?

14 MR. WAMSER: Low-impact hydro is
15 something that they haven't applied for,
16 but it could be something they look
17 into.

18 MR. LEONARD: Is there any other
19 environmental registrations or other
20 things that you're going to go after in
21 construction of those projects?

22 MR. WAMSER: No. Not that we're
23 aware of. Again, I will say, you know,

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 that the projects, you have to get a 401
3 Water Quality Certificate through the
4 state, Environmental Conservation
5 Agency. So, in terms of that, yes, but
6 no.

7 MR. FIORE: What Kevin mentioned
8 that on the Delaware Basin, the Delaware
9 River Basin Commission, that you have to
10 work with as well. Thank you.

11 MR. ZIMMERMAN: I'm Jeff
12 Zimmerman. I'm representing Delaware
13 River Basin Commission. On the Delaware
14 Reservoir, there has been some questions
15 and issues raised on the Delaware
16 system, whether the release works at the
17 three reservoirs, Neversink, Pepacton
18 and Cannonsville, could be increased in
19 size to have a greater release
20 capability. Has any consideration been
21 given to document that kind of activity
22 to this project?

23 MR. FIORE: No. I mean, as I

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 had said earlier on the Pepacton
3 project, we're still evaluating. Remove
4 one of those release valves that existed
5 and we substitute that with a turbine,
6 how that impacts our release capacity,
7 and so we're working to solve that,
8 whether there is a bypass that's put
9 around that, or the other remaining
10 valve is increased in size. But that's
11 really it.

12 MR. ZIMMERMAN: Has anybody
13 taken a look at the dam to see whether
14 there is room available to add
15 additional release valves, for example?

16 MR. FIORE: I can tell you that
17 the space is extremely tight and that's
18 one of the real challenges at the
19 Neversink site.

20 MR. ZIMMERMAN: That's the case
21 at Cannonsville as well as Pepacton?

22 MR. FIORE: All the facilities
23 are pretty tight with space.

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 MS. KNUTSON: Hi. This is
3 Lingard Knutson from EPA. I would say
4 just say if you write down the FERC web
5 site, kind of go through it where people
6 kind of register themselves. You could
7 register through the FERC web site using
8 their project number, which I believe is
9 actually on they're agenda. You can
10 register yourself and actually get all
11 the updates from FERC whenever he keys
12 in on something, or someone makes a
13 comment, or FERC talks to the DEP, it's
14 actually on that site. So it can be
15 emailed to you. You get each letter as
16 it comes through. It's very helpful
17 when you're trying to stay abreast of
18 this stuff.

19 MR. HAYES: Jack Hayes, Ulster
20 County Legislator.

21 I'm going to refer to a Times
22 Record article, which is not a very safe
23 thing to do in regards to veracity, but

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 there's a big difference between --

3 MS. JOHNSTONE: Sir, could you
4 just speak up so everyone else can hear
5 you? They can't hear you in the back.

6 MR. HAYES: I was just wondering
7 what the difference was in the proposed
8 outputs. There was one stated as 63
9 megawatts, and then yours is 38. Does
10 that have to do with your limitations of
11 your site?

12 MR. FIORE: The question was
13 difference in total megawatt capacities.
14 The way that we decide the projects was
15 look at how much water is available, how
16 often that water is available, and that
17 would give you a capacity factor for the
18 development. That then combined with
19 what the type of cost would be to
20 develop that set along, obviously, with
21 energy forecast pricing, really is the
22 best way to size that project.

23 MR. WAMSER: On the proposal we

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 have not every ounce of water is going
3 through a turbine. There may be times
4 when spillage is occurring in the
5 spillway in addition to the amount of
6 water going through a turbine. If you
7 were to try to capture every ounce of
8 water going through, you may have six to
9 four turbines at a site, one of those
10 turbines may be operating only at -- to
11 capture that high flow. It's just not
12 economic to have -- to capture all of
13 the flow.

14 MR. HAYES: Thank you.

15 MR. BARTHOLOMEW: Howard
16 Bartholomew, Dam Concerned Citizens, and
17 we represent Schoharie Reservoir.

18 The Delaware County Electric
19 Cooperative last year proposed, almost
20 two years now, using the site and type
21 of spillage that go on, that outset is
22 going to be taken out shortly, but that
23 type of inner spillage from the

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 spillmills developing for maximum
3 generation. And since, perhaps, DEP
4 doesn't find it economically feasible to
5 develop hydropower itself, would they be
6 open to discussions of the Delaware
7 County Electric Cooperative to exploring
8 these possibilities?

9 MR. FIORE: What I'll say, that
10 we're exploring all options to make this
11 a viable project.

12 MR. BARTHOLOMEW: If you didn't
13 find it viable, would you allow some
14 other entity? Because, the Catskills,
15 in looking through your book, and see
16 that 35 percent of the people employed
17 are employed by the government, we know
18 what the economic conditions are overall
19 on the watershed and immediate area on
20 both sides of the watershed. Which
21 would be amenable to allowing some other
22 body to develop a hydroelectric patch
23 under the water system because we know

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 what the primary magnet is, because this
3 would be a benefit of lower costs and
4 energy costs.

5 MR. FIORE: What I'll say is
6 that, whether we developed it or someone
7 else develops it, that mission does not
8 change. So the primary mission is to
9 supply that water for the customers for
10 good drinking water.

11 MR. BARTHOLOMEW: We know that.

12 MR. FIORE: Right. I want to
13 make it clear that it doesn't matter who
14 develops it, that's the primary mission.

15 MR. BARTHOLOMEW: It's a basic
16 feeling of cynicism that this whole
17 project, the preliminary application
18 document, you know, was drawn up to
19 simply shut out the Delaware County
20 Electric Cooperative Cooperative for the
21 development of the Schoharie Project.
22 That's the tenor feeling and sentiment
23 of the people who agreed to Delaware,

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 agreed to Schoharie County, adjacent
3 reservoirs. I just wanted to let you
4 know that.

5 MR. FIORE: And thank you. And
6 the practicality of the matter is that
7 we don't develop a project. It's open.
8 It's an open FERC regulatory process. I
9 mean, there is not this thing where the
10 city can stop somebody from looking at
11 the development of a project. It's --
12 that's under the control of the Federal
13 Energy Regulatory Commission. But I
14 will just say again we are looking at
15 all alternatives to try to make these
16 viable projects. And being a
17 municipality, as I had spoken about
18 earlier, we look at project developments
19 in a little bit different way than
20 investor-owned or other utility might be
21 able to do.

22 MR. BARTHOLOMEW: Thank you.

23 MR. LEONARD: Ron Leonard again.

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 I'm curious as to who takes possession
3 of the power output.

4 MR. FIORE: That's yet to be
5 determined.

6 The question was about power
7 output from the facility. You know, the
8 power, that we haven't gotten to yet,
9 how exactly that would happen, but again
10 I would say it has to be consistent with
11 state, city and federal laws.

12 MR. LEONARD: So what number are
13 you using in your evaluation for power
14 outputs?

15 MR. FIORE: For what?

16 MR. LEONARD: What's the number?
17 In other words, where you discuss
18 payback or what's the number you're
19 using for your power output values?

20 MR. WAMSER: We're looking at a
21 time horizon, so we're looking at a
22 range. So it's varying every single
23 year.

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 MR. LEONARD: So, starting with
3 project completion, what's the number?

4 MR. LANG: The starting point
5 we're looking at what the current market
6 price is. And right now, in these
7 zones, I believe, it's in the five to
8 six dollar range, or I think it's lower.

9 MR. WAMSER: Lower.

10 MR. LANG: A little bit lower
11 than that. But that's where our
12 starting point is, what the liquid
13 market price is today.

14 MR. LEONARD: So based on that,
15 what is your payback, your one and a
16 half megawatt system?

17 MR. FIORE: Just a correction to
18 that. I think we're looking at the
19 range of energy forecast prices in the
20 time that the project possibly could be
21 constructed and out from there, so not
22 really at today's prices.

23 But we're still in the early

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 stages of that feasibility analysis.

3 We're not prepared to talk about the
4 details of that yet.

5 MR. LEONARD: Well, we just
6 discussed that you could, you know, look
7 at your economics in a different manner
8 because you're a city agency, but
9 basically you're spending taxpayers
10 dollars, so you must have some
11 justification for doing those projects.
12 So if you can't get a payback, you
13 shouldn't be doing it. You have a
14 30-year payback? You have a 50-year
15 payback? What's the range?

16 MR. FIORE: I'm sorry. I
17 understand exactly what you're looking
18 at.

19 MR. WAMSER: We're looking at
20 over a 30 or 50-year time frame.

21 MR. BOSCH: I'm Adam Bosch,
22 reporter with Times Herald Record
23 newspaper, and I have two questions;

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 one, do you guys have a rough idea how
3 much construction this project will
4 cost; and two, if I understand you
5 correctly, because these turbines will
6 be placed in the sections of the
7 reservoirs that make releases, is what
8 you're saying that the production of
9 these turbines will depend on, for
10 instance, drought signs, non-drought
11 signs which determine how much water you
12 release downstream? I just want to make
13 sure.

14 MR. FIORE: I think there are
15 still a lot of factors that we have to
16 analyze in order to present a definitive
17 number on the capital construction side.
18 But, I'm not sure I understood your
19 second question. What I'll say is what
20 I said before, is that you have to look
21 at how much water is available and how
22 often that water is available.

23 MR. BOSCH: What I'm asking is

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 what factors determine how much water is
3 available?

4 MR. FIORE: Oh, I mean, it's a
5 historical record of the in-flows and
6 releases from the reservoir systems and
7 we, you know, have models to analyze
8 that and analyze that into the future.

9 MR. MURPHY: Tom Murphy, New
10 York City DEP. I suspect he's inquiring
11 that's what the minimum low-cost
12 procedures would be governed by current
13 operating rules, so drought conditions
14 and drought releases would apply. That
15 would be your available water.

16 MR. FIORE: Okay. Thank you.

17 MR. ZIMMERMAN: Jeff Zimmerman
18 again. This may be a question for Tom.
19 I'm not sure. During the construction
20 of any of these particular works at the
21 Delaware Reservoirs, for example, how --
22 is there a plan for how the city will
23 continue to maintain the release

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 requirements for downstream releases?

3 MR. WAMSER: Water construction
4 conveyance, during construction, the
5 FFMP and the requirements downstream
6 will be met that haven't been.

7 MR. ZIMMERMAN: So you'd put in
8 some sort of bypass?

9 MR. WAMSER: We have to
10 construct something to maintain a water
11 flow downstream that meets the FFMP.

12 MR. LEONARD: I'm having fun.
13 Ron Leonard again. I'm curious as to
14 how you're going to proceed with
15 construction if this proves to be
16 viable. Are you going to put out an
17 RFP, put it up for bids, petitions, how
18 the city will do construction?

19 UNIDENTIFIED SPEAKER: Can you
20 speak up so we can hear you back here?

21 MR. FIORE: The question was if
22 we get to construction, how would that
23 process take place?

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 We would have to follow city
3 protocol, so yeah, that's a -- either a
4 competitive bid or we would put out a
5 request for proposal, an RFP.

6 MR. LEONARD: So the City would
7 not do the construction?

8 MR. FIORE: The --

9 MR. LEONARD: City would not --

10 MR. FIORE: City employees?

11 MR. LEONARD: City, yes,
12 whatever, outside.

13 MR. FIORE: Yes. Did you hear
14 that in the back?

15 MR. BARTHOLOMEW: No.

16 MS. BARTHOLOMEW: We can't hear
17 what he's saying.

18 MR. FIORE: Okay. He just asked
19 again would it be city staff basically
20 doing the construction. The answer is
21 no. We put out a competitive bid or a
22 request for proposal process to select
23 contractors to do the construction.

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 MR. BOSCH: Adam Bosch, for The
3 Record one more time. When this first
4 gentleman here asked this first question
5 about what the electricity would be used
6 for. You said it would be consistent
7 with state and federal laws. I'm
8 curious, what do those state and federal
9 laws allow you to do? Do those state
10 and federal laws allow you to then sell
11 that electricity back to the public and
12 the houses that surround the communities
13 that surround the reservoirs? What do
14 those statutes allow you to do? What
15 actions would be consistent with those
16 laws?

17 MR. LANG: What we're looking at
18 is the city would be a generator that
19 would be subject to regulation under the
20 Federal Energy Regulatory Commission in
21 the wholesale market. The New York
22 Independent System Operator controls the
23 sale of electricity in the markets

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

unless you have what's known as a bilateral sale, a direct contract between the city and someone that is purchasing the power. We haven't gotten to that stage yet to determine exactly what we're going to be doing to the output. It will either be sold into the NYISO market or the city could consider entering it into some type of bilateral arrangement for a direct sale from someone else. Anyway you do it, you need to comply with federal requirements, in terms of how those sales occur, pricing, things like that. This plant probably will not be subject to public service commission jurisdiction. In a general sense, that is still an issue we are looking at. In part, it will also depend on the design of it. As you could see, for those of you that looked through the pre-application document, in two of the

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 sites, we're considering connecting into
3 NYSEG distribution system rather than
4 the transmission system. The
5 distribution system is subject to PSC
6 jurisdiction. So we're still looking at
7 what implications that has for us in
8 terms of what PSC requirements that we
9 would need to comply with. Like, you
10 know, whether there's some safety
11 requirements, this would apply to
12 anybody that's interconnecting into the
13 electric system. That's one example, to
14 say the least.

15 MR. BOSCH: Okay. Thank you.
16 Thank you very much.

17 MR. CHACE: Phil Chace, Upper
18 Delaware Council and I represent the
19 Town of Deer Park. I was an intervener
20 in 1991, with the law once being
21 licensed for a short time. FERC was
22 very much involved. They came up with
23 -- from zero releases to 100 CFS for

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 Stony Bridge Reservoir. The bottom
3 reservoir, while 100 CFS, which goes
4 into the Delaware. A few years later,
5 maybe a decade later, Pennsylvania Power
6 and Light was being re-licensed on the
7 Lackawaxen River, and this had two
8 generators on that one. And FERC was
9 very much involved with the meetings
10 with the Upper Delaware Council. We
11 went through four years of meetings that
12 FERC was involved, FERC engineers. And
13 in both cases, one was in Rockland and
14 the Lackawaxen River, recreation was
15 considered and given a highest releases
16 as well as fishery requirements.

17 My question is: What is going
18 to be the involvement of FERC in
19 relation as to this? That's one
20 question.

21 I thought I heard you say just a
22 minute ago something about drought
23 releases. And I've been involved with

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 this since the early '60s, and the
3 releases that we got were drought
4 releases. And there was like this 10
5 million gallons a day. If you multiply
6 that by 1.5, that gives you the CFS, 15
7 CFS during the summer and one-third of
8 that in the wintertime, just about
9 nothing. And the same as Pepacton. The
10 same as Cannonsville. When I hear
11 drought releases, that's always been New
12 York City DEP's philosophy. You can't
13 have drought releases and have any
14 infrequent environment on any of those
15 rivers. They have to be effective. We
16 live in the Catskills. New York City
17 may not realize that we exist. It's
18 very important to us to have these
19 resources and that's the way it should
20 be.

21 So I'll go back to that
22 question. What will be the involvement
23 with FERC? Will we be able to sit down

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 with FERC and listen to the adds and
3 discussions on what the outcomes will
4 be?

5 MR. LANG: Right now, as Anthony
6 has said during the presentation, we're
7 in the pre-application phase, and we're
8 doing it under something called the
9 traditional licensing process. What
10 that means, this is an informational and
11 exchange process that is run by the City
12 as the developer. The FERC does not
13 have a direct role in the process at
14 this time. They're aware of what's
15 going on. They were aware of the
16 meetings yesterday and today. We will
17 continue to keep them apprised of what
18 we're doing through this pre-application
19 process. They're role comes in once we
20 file the license application. And once
21 we file the license application, it is
22 then and their domain and they will be
23 controlling the process. Specifically

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 as to what they're going to be doing, I
3 can't answer that. None of us can
4 answer that, and that's really a
5 question you need to defer to FERC for a
6 direct answer from them. We suspect, as
7 there have been in other cases, that
8 they will be actively involved once we
9 file the application. In terms of the
10 process, that they will use the number
11 of meetings, the types of interactions
12 they have, that is something outside of
13 our control, and it's really a question
14 that has to go to the FERC staff
15 directly.

16 MS. JOHNSTONE: As far as the
17 releases go, we are currently referring
18 to the Delaware River Basin Reservoirs.
19 New York City cannot unilaterally decide
20 what we're going to release out of
21 reservoir. It's a Decree party
22 unanimous agreement that we're all
23 involved in. Currently we are operating

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 under the Flexible Flow Management Plan,
3 which is what we will continue to
4 operate under. There are provisions in
5 there, and Tom can help me on the
6 specifics, or if we get into drought
7 conditions, this energy that you're
8 referring to is under a previous flow
9 regime for this Delaware Basin Reservoir
10 at Neversink. The current release
11 regime under the Flexible Flow
12 Management plan is based on storage,
13 existing storage in the reservoirs, the
14 seasons, and percentage, percentage
15 stored in the reservoirs.

16 Tom, do you want to add to that?

17 MR. DeJOHN: I think you pretty
18 well covered it.

19 The only other aspect to that is
20 drought conditions, both releases and
21 diversions all get cut back to manage
22 the river and New York City's water
23 needs through a difficult time. So it's

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 not just on the release side. You also
3 need the reduction on the diversion
4 side.

5 MS. JOHNSTONE: And that is all
6 through a unanimous agreement by all of
7 the Decree parties, New York City, New
8 York State, New Jersey, Delaware and
9 Pennsylvania.

10 MR. BARTHOLOMEW: Howard
11 Bartholomew, Dam Concerned Citizens.
12 Regarding the previous comments
13 concerning FERC, we know that FERC's
14 requirements such as safety
15 specifications for dam safety and
16 construction are somewhat higher than
17 those mandated by the present New York
18 State Department of Environmental
19 Conservation for reservoir
20 rehabilitation. So if you were to adopt
21 a generating scheme at the Schoharie
22 Reservoir, you would then be subject not
23 only to cancellations, you then have to

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 have a higher factor of safety against
3 failure of those issues, you would be
4 subject to FERC inspection, and you
5 weren't to have hydroelectric facilities
6 located there because that's also what's
7 considered to be a reason for your
8 denial of housing hydropower from
9 Schoharie Reservoir as the second
10 highest.

11 And secondly, people feel like
12 part of the survey that -- regarding the
13 requirements from the Catskill residents
14 from the Catskill magazine, 1972, '73 --
15 this article is certainly older than
16 some of the people in this room.

17 This article says: Half of New
18 York City's water reservoirs were viewed
19 as being described as some of the finest
20 fishing mass. Now the pattern of water
21 release from these reservoirs are
22 disgusting and is responsible for almost
23 impossible fishing conditions. With

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 cooperation, we could have the finest
3 fishery in the Delaware facility. It
4 won't cost anyone. In the case of New
5 York City, realizing New York City's
6 drinking water is a prime resource of
7 importance.

8 So that is the sound of people
9 35 years, 36 years ago regarding the
10 operation. In some instances, if you
11 know you have to release water under the
12 Delaware River Basin, that kind of
13 thing, but specifically in the Schoharie
14 system, we could use continuous release
15 in some form during periods of multiple,
16 in Schoharie, conservation releases.
17 And you think they would be viable and
18 work in concert with hydropower
19 generation. So that's one of the
20 reasons we like to take a sort of
21 holistic or symbiotic approach to supply
22 water. We think, when possible, power
23 should be generated, and restricted.

FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.

1

Proceedings

2

Mostly, it should be given first

3

priority, after all, we are the host

4

community for your reservoir system for

5

years. We think that we should get

6

first dibs at cheap power. That's only

7

a certain payback for you not having to

8

substitute water based on regulations.

9

So I just wanted to make a point.

10

MR. FIORE: Tom, you want to

11

talk to dam safety?

12

MR. DeJOHN: My name is Tom

13

DeJohn, ~~DEC~~ ^{DEP} Western Operations, dam

14

safety.

15

The current facilities in New

16

York State right now, west of the

17

Hudson, are designed to meet an existing

18

~~DEC~~ ^{DEC} dam safety regulation, ongoing

19

projects, and plant projects and

20

rehabilitation throughout the watershed.

21

Obviously, the one you're most familiar

22

with is up in Schoharie County.

23

The FERC regulations we're just

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 starting to review -- at least I'm just
3 starting to review those at this time.
4 I had comments written on some of them,
5 but there are differences between the
6 existing facilities and new construction
7 facilities, that you're alluding to,
8 concerns with different factors in
9 safety overturned, and whatnot. That
10 probably may or may not be appropriate
11 in some of these instances, but it's my
12 understanding that if a project were to
13 come to fruition at any of these
14 facilities, that we would have to abide
15 by the FERC regulations as they stand.

16 MR. BARTHOLOMEW: Thank you.

17 MR. DeJOHN: You're welcome.

18 MR. LEONARD: Ron Leonard. It
19 wasn't clear from your description of
20 the projects when certain decision
21 processes are going to be made. For
22 example, you're describing that Pepacton
23 needs possibly to replace more than two

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 valves, interject certain valves in
3 other systems. I'm not sure how the
4 numbers jive. For example, when you
5 describe Neversink has a 200-foot
6 elevation and Neversink, in the
7 description on page 34, says the average
8 height, hydraulic height is 166 feet,
9 can you give us an idea in the process
10 that you're going through right now when
11 you make decisions, when you finalize
12 connections, when you pick a vendor for
13 the turbines, what's the process like?

14 MR. FIORE: For those that
15 couldn't hear the question, it's really
16 asking about when we make decisions
17 about specific project components, you
18 know, in design of the projects, what's
19 the vendors, and so forth.

20 MR. WAMSER: We're in the very
21 initial stages. This is coming with
22 really both the licensing and the
23 feasibility at the same time. We've

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 just gone to vendors now to get
3 information on costs. We want to
4 tighten things up a little bit by
5 getting vendor quotes. But in terms of
6 the length of timing, it's still -- you
7 know, we're still a year off.

8 MR. LEONARD: So in terms of the
9 process, when do you think you would
10 finalize the engineering? You know, how
11 would -- what time frame are we talking
12 about here because you have to do
13 something by 2012, as I understand it?

14 MR. WAMSER: I think by 2012, we
15 have to make a decision as to whether we
16 consider going forward with that. So
17 roughly in that time frame is when we'll
18 make a decision.

19 MR. LANG: Well, wait. Let's be
20 clear about decisions. There's
21 different decisions. There's designing
22 decisions and these engineering
23 decisions, and then going out and doing

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

procurement. The procurement likely will not be done until we actually have a license. Because to go out and buy turbines and generators before we've actually gotten the license, if we don't get the license, then what are we going to do with the equipment. So those decisions are years away. In terms of the design and engineering, when we file our application for the license, we need to present these projects that we propose to build and that will all be laid out. What we're doing now and what we will be doing over the next year or so, is the studies, not just the environmental studies, but also the design studies and analyses to look at the different options that Anthony talked about earlier, to see what is the best equipment to use that would satisfy the flow requirements, the other requirements for operation. We look at

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 maintenance issues. You know, we have
3 existing facilities there, what is going
4 to be the most compatible with those
5 facilities. So those decisions in terms
6 of the design of the units and the
7 engineering of the units will be made in
8 the next year or year and a half, you
9 will see those in 2012 when we file our
10 final application. You'll actually see
11 them in 2011 when we file a draft
12 application which you'll all have the
13 opportunity to review. So that's really
14 the time frame that we're looking at for
15 the preliminaries.

16 As Anthony said, with respect to
17 the vendors, because this is the City of
18 New York, they have procurement
19 guidelines and procurement requirements.
20 That will all be a very public process
21 as required to be, but we're -- I think
22 -- I can't even say by about how many
23 years, but we're probably at least four

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 or five years down the road for that.

3 MR. SULLIVAN: If I could just
4 add something. My name is Tom Sullivan.
5 I'm with Gomez and Sullivan.

6 What Kevin and Mark just
7 explained is absolutely correct. Beyond
8 that, you know, when we get ready to
9 file the license application, we're
10 going to have a very educated, you know,
11 opinion as to what these developments
12 should look like. That opinion would be
13 informed by the actual Order Issuing
14 License from FERC. That order will have
15 conditions on it that may influence our
16 design one way or another. Once we have
17 that in hand together with the 401 Water
18 Quality Certificate from the state, then
19 the design could be finalized, bid
20 packaging could be put together, and
21 vendors, turbine generator vendors, you
22 know, construction contractors, they
23 could all be sourced at that time.

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 So as Kevin says, I mean some of
3 that, you know, we know though where we
4 are for 2012, and then it goes into
5 FERC's hands, and then after FERC's
6 hands, we go onto a finalized design and
7 bidding process. That's very typical
8 for a FERC project.

9 MR. LEONARD: As a follow-up, is
10 there any other decisional instructions,
11 is there any other instructions that are
12 connected with these projects that are
13 going on or connected to things like
14 maintenance, other projects that are
15 ongoing? Is there any connection
16 between these projects and other ongoing
17 work?

18 MR. FIORE: No. The question
19 was are these projects connected with
20 any other ongoing construction projects
21 and maintenance.

22 MR. LANG: Anthony, the only
23 caveat on that is that at Schoharie, the

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 city is already looking at doing a low
3 level -- as you mentioned earlier, a
4 low-level release and it's -- when we
5 had the picture up of it, the concept
6 that we're looking at is to tap off with
7 that line for a plant.

8 MR. FIORE: Right. All I'll say
9 is the low-level release project is
10 independent.

11 MR. LANG: Right. That's all I
12 wanted to mention.

13 MR. LEONARD: That hydro
14 development --

15 MR. LANG: That's still being
16 looked at whether the project or how the
17 project is going.

18 MR. LEONARD: The low-level
19 release would be connected to the
20 Shandaken Tunnel?

21 MS. JOHNSTONE: No. No.

22 MR. LEONARD: Just wanted to
23 make sure.

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 MS. JOHNSTONE: Schoharie Creek.

3 MR. FIORE: Again, we're talking
4 about Schoharie, we're talking about the
5 dam side and the construction related to
6 building an intake with, or a release, a
7 release chamber.

8 MR. LEONARD: Okay.

9 MR. PLUMMER: Dan Plummer with
10 Friends of the Upper Delaware River and
11 Trout Unlimited. I just wondered if you
12 guys have any idea if and when this
13 actually -- the work is completed, and
14 if you have some systems installed in
15 any of the reservoirs that would be
16 future consideration for new release
17 plans to meet energy demands?

18 MR. FIORE: I think, as I said
19 before, you know, the development of
20 this project is to put in what our
21 current release operating plan is. And
22 as that plan evolves over time, the
23 hydroelectric will be secondary to that.

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 It will fit into whatever that operating
3 scheme is.

4 MR. PLUMMER: Yes, sir.

5 MR. DARROW: I'm Bert Darrow.
6 One quick question, and you must have
7 discovered this. If this goes, what
8 will be the effect of temperatures on
9 rivers below those turbines?

10 MR. WAMSER: Well, currently as
11 we -- right now, as we propose, most of
12 you are utilizing the existing low-level
13 outlet work, so it should not change the
14 temperatures, even if you're seeing
15 right now, releases should be the same
16 with a turbine in place. We're just
17 tapping off the existing structure
18 that's taking the water out of the
19 reservoir and down the stream.

20 MR. DARROW: I understand that.

21 MR. WAMSER: I mean, it's just a
22 pass-through of water through a blade.
23 Any heat is really -- you can see it in

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 a powerhouse, it can get very hot from a
3 generator, but you're not going to see
4 an increase in heat because of turbine.

5 MR. BARTHOLOMEW: Howard
6 Bartholomew again. Going back to high
7 school physics, maybe some of us
8 remember what Joule was, J-o-u-l-e, was
9 the final propeller, you could
10 incrementally in such -- in accessible
11 amounts measure increase in water
12 temperature effectively. And
13 temperatures would become -- it will be
14 some, and probably be less than 10
15 degree -- centimeters. It would be the
16 most inconsequential. Only thing it
17 will do is slow the flow down to the
18 water. Other than that, turbines won't
19 effect temperatures.

20 MR. CHASE: Phil Chase, I like
21 to just bring in a little history which
22 it still relates to that, that is
23 Neversink was constructed, they had the

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 power plant built into -- when Pepacton
3 was constructed, the east branch tunnels
4 had a power plant that could surround
5 that also. Eventually Cannonsville had
6 a low-head generator. I think it was
7 80, which doesn't amount to much. Now
8 the interesting thing is I asked the
9 FERC engineers up in Lake Wallenpaupack
10 and Lackawaxen about the re-licensing of
11 the Neversink Power Plant and the East
12 River Power Plant. And the interesting
13 answer was because they're on tunnels,
14 it's not an involvement of FERC, your
15 re-licensing. So they're exempt from
16 FERC. I was hoping we didn't get into
17 that. But in this case, the eastern
18 tunnels, consequently, FERC should have
19 a major involvement on that, with your
20 help, with the power of the City on
21 procurement matters to have involvement.
22 The interesting thing on the Lackawaxen
23 -- it's a three-mile aqueduct which is

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 like a tunnel with a power plant at the
3 bottom of it but that was not considered
4 the same as the New York City tunnels,
5 for some reason.

6 Anyway, this was just a little
7 bit of information.

8 MR. FIORE: Thank you. I'll
9 just say that, you know, this is a
10 Federal Energy Regulatory Commission
11 process. Thank you for the credit that
12 you give to your neighbor. But, I think
13 they're a hundred percent accurate. The
14 Federal Energy Regulatory Commission
15 oversees that. Make no mistake about
16 it. We are under their regulatory
17 framework to develop these projects.
18 What you have alluded to, there are
19 what's in FERC terminology it's call
20 exemptions. That terminology is a bit
21 of a misnomer. There are conduit
22 exemptions and there is small
23 hydroelectric exemptions. They're still

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 under FERC jurisdiction and there are
3 still conditions that are put on those
4 exemptions. Again, that's a really poor
5 term, but it is a FERC terminology.
6 There are still conditioning terms that
7 are associated with those.

8 You know, maybe, Tom, you might
9 want to elaborate on the history of that
10 and the purpose.

11 MR. SULLIVAN: The difference is
12 on the -- there is no real re-licensing
13 for exemptions, but the process to get
14 an exemption, is exactly like the
15 process to get a license. The only
16 thing you're exempted from is like
17 ongoing FERC reporting requirements with
18 an exemption. So here we're going for
19 licenses. You know, right now we're
20 going for licenses. Even if we were
21 going for exemptions, the process is the
22 same. FERC involvement is the same.
23 The conditioning authority for an

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 exemption falls more on the fish and
3 wildlife service and the DEC under the
4 exemption that it does under a FERC
5 license, but that's really the only
6 thing. The process is the same process.

7 MR. LEONARD: Ron Leonard. My
8 question is, who is the entity that's
9 going to operate this facility if it
10 comes to construction and could these
11 facilities be sold off to other entities
12 in the future if they did construct it?

13 MR. FIORE: Whose going to
14 operate it, we don't know yet. That
15 will come later in the process, you
16 know, after the procurement for
17 construction. We'll look for the same
18 with operations of it, or maybe operated
19 by city staff. We don't know that
20 answer, yet. The sale of the
21 developments would have to be consistent
22 with tax laws. These are developments
23 that will be bonded by the City, and so

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 there is requirements around the private
3 use of facilities bonded by the
4 taxpayers.

5 MR. LANG: You'll have to meet
6 FERC requirements as well.

7 MR. LEONARD: Can you go through
8 the process of funding the construction
9 of these facilities and the bonding of
10 it?

11 MR. FIORE: In terms of?

12 MR. LEONARD: How it works, what
13 type of bond they go for or what is the
14 process? You know, how does the money
15 flow?

16 MR. FIORE: You don't have the
17 right guy here for that.

18 MR. LEONARD: But you have your
19 whole staff there.

20 MR. FIORE: That's our office of
21 management and budget. That's our
22 office of management and budget, a
23 separate city agency. They're the ones

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 that do that. I can't answer that
3 question. It's very early in this
4 process as well, but that's the office
5 of management and budget.

6 MR. BARTHOLOMEW: I have in my
7 hand an article from The Record, I read
8 something in the paper last week. I
9 have to agree with Paul Rush, that the
10 current stage of water temperatures was,
11 I guess, raised by hydroelectric
12 generation at the time of the Delaware
13 County Electric Cooperative applied for
14 a permit. Upon this article shortly
15 after DEP's announcement plan, DEP's
16 deputy commissioner, Paul Rush honored
17 that water temperature would be a chief
18 concern for developing fish population.

19 Once the City was in the
20 driver's seat, if the city occupied the
21 driver's seat, no habitat studies were
22 needed. So that's an apparent
23 contradiction reported in the newspapers

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 just last week. This perceived,
3 ingenuous hydro flip-flop is
4 embarrassing, in Delaware. But we have
5 respect for the engineers and
6 professionals, and sometimes we think
7 that you're put out in a very
8 uncomfortable position of saying one
9 thing and then having to say something
10 else. How would your response be
11 accurate when you start hydrogeneration
12 thermal regulation -- when the
13 cooperative wants to apply for the
14 preliminary document, now it's an issue?

15 MR. FIORE: So the proposal by
16 the Delaware County Electric
17 Cooperative, a huge site, and that would
18 be taking water from higher off the
19 reservoir where there's warmer water.
20 So that's why there would be concerns
21 about the impact of thermal regulation
22 downstream.

23 In our pre-application document,

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 we said that we were going to look at
3 alternatives sites, including leveraging
4 the existing infrastructure, and that
5 depending on the design, thermal
6 regulation would be of concern even in
7 our application. Because we're
8 proposing to use the existing
9 infrastructure of where the intake drips
10 where the lower releases are at the
11 bottom of the reservoir, that's where
12 the cold water is. And based on that
13 design and based on what we discussed
14 here about not having the turbine
15 increase the temperature of that water,
16 we don't have the same concern.

17 MR. BARTHOLOMEW: They call it
18 stream of water Schoharie Creek because
19 of its depth. It's higher than your
20 lower levels, first of all. Secondly,
21 any water coming north over the
22 Schoharie Reservoir, when you have
23 surplus water, would be cool and the

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 condition exists that there is no water
3 -- water on spillways and -- months of
4 the year -- six months of the year, we
5 have a very strange phenomenon
6 hydraulically or hydrologically
7 occurring having more water going under
8 the bridge at Prattsville, New York,
9 which is 29 miles from dam water. In
10 Burtonsville, 75 miles from dam water.
11 There's more water going in the
12 reservoir than it is 60 miles
13 downstream, 60 miles downstream in a
14 dam. So --

15 MS. JOHNSTONE: I think that the
16 concern specifically on thermal, the
17 state confirms the Delaware, where
18 there's already a cold water fishery
19 established, where there's already a
20 release regime established with cold
21 water releases. We don't have a release
22 regime established at Schoharie and that
23 is where, you know, habitat studies

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 would have to occur before anything
3 could be put in there referring to
4 thermal temperatures of the water before
5 anything is put in there and how that
6 would affect downstream of Schoharie.

7 MR. FIORE: Thank you, Tina.

8 MR. BARTHOLOMEW: I have a copy
9 of the Stipulation of Discontinuance
10 with DEP, by historian Robert E. Platt
11 (Phonetic Spelling), 1980, advised the
12 City at this time when it was so
13 unwilling, it applied the basins with
14 Cannonsville Reservoir with Delaware,
15 that they sued DEC. DEC finally stated
16 in that agreement, that they would
17 release water into Delaware. Thank God.
18 The worse problems than you were alluded
19 to. But at the same time, releases from
20 the Schoharie Reservoir were sort of a
21 Cinderella cap including ones for, you
22 know, all West of Hudson reservoirs. We
23 don't get any water north of Gilboa Dam

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 six months of the year. I have pictures
3 with me, two 15-inch -- not thought of
4 very previously until a couple years ago
5 -- a viable fishery for releases to
6 work, that from the London Bridge up to
7 the Gilboa dam. So this is a viable
8 fishing dam that was neglected, but
9 people are aware of this, becoming
10 increasingly aware of it now. So I
11 suspect you know that. Thank you.

12 MR. LEONARD: Ron Leonard. Can
13 you give us an idea whether the FERC
14 process you will have numbers, cost
15 numbers to be present?

16 MR. WAMSER: I would say we are
17 probably a year away of being better
18 accurate, getting better numbers, yes.

19 MR. LEONARD: But in 2010, 2012
20 when will you have some -- have some
21 reasonable numbers?

22 MR. WAMSER: I'll say probably
23 the latter part of 2011.

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 MR. FIORE: I just want to point
3 out, before anybody leaves, you know, if
4 you didn't say what you wanted to say
5 here or if you want to add to whatever
6 you have said, this is the contact
7 information. You can send any comments
8 to us and we'll get these.

9 MR. DEBROSKY: Glenn Debrosky,
10 TU. Is there any consideration on
11 releases on the Roundout Reservoir, if
12 you know? If at all?

13 MR. FIORE: That's not part of
14 this project.

15 MR. DEBROSKY: I believe there
16 is a release. I don't know if it's 10
17 million gallons a day or what.

18 MS. KNUTSON: It's 10 million
19 gallons a day and 15 million gallons a
20 day depending -- and 14 million gallons
21 a day depending on the season.

22 MR. PLUMMER: Dan Plummer again.
23 I'm just curious, when this work here

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

takes place, how transparent this process would be. I know when we found out that there was going to be aqueduct closures for repairs, and when we realized the volume of water that should have been converted for those aqueducts and saw that there was extra water, and the FUDR submitted a proposal at that time to try to get those releases into the rivers for conservation purposes and the fishery, we were told by Paul Rush that there were reasons, and he couldn't get into it at the time as to why we couldn't have that water released at that time before the work was actually happening because we weren't sure whether closures were happening, or at least they couldn't give us that information for national security reasons, and we wondered if this would be kind of under the same type of rules and such, what the transparency will be?

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

1 Proceedings

2 MR. FIORE: The Federal Energy
3 Regulatory Commission is in the process,
4 an open and published process. There
5 may be critical infrastructure
6 components for that, you know, certain
7 engineering details.

8 MR. PLUMMER: I mean, that can
9 be revealed, documenting when this will
10 take place.

11 MR. FIORE: Absolutely.
12 Absolutely.

13 MR. LANG: And I would just add
14 to that, for this meeting, for earlier
15 things that we've done, we have
16 published notice in five papers in the
17 region where the hydro proposed projects
18 are located. We are also maintaining an
19 email distribution list, another reason
20 we would encourage folks today to please
21 sign in on the sign-in sheet, which
22 hopefully is still circulating around
23 the room. We will also send out an

FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.

Proceedings

1
2 email to people on our distribution list
3 of events that are occurring, indicated
4 to help ensure that folks are aware of
5 what's going on.

6 MR. FIORE: All right. Well,
7 I'd like to thank everybody for coming,
8 and if there's no further questions,
9 again, I want to re-emphasize that if,
10 for some reason, you didn't get to speak
11 today, or voice your concerns, or
12 whatever, you can send in comments, this
13 is the contact information.

14 MR. BARTHOLOMEW: Could you give
15 us some idea of what this afternoon's
16 program is of because you have given the
17 hour, because of the drive home?

18 MR. FIORE: Yes. We covered
19 that at the very beginning. I'm sorry.
20 So I'll just re-state that: This
21 afternoon, beginning at 2:30, we will be
22 ~~visit~~ ^{having} the site ^{visit} for Schoharie to Gilboa
23 dam itself. There will be a shuttle bus

**FERC PROJECT NO. 13287 - December 16, 2009
9 A.M.**

Proceedings

1
2 to carry people from the Gilboa Town
3 Hall over to the site. And then, this
4 evening, there will be another meeting
5 at the Schoharie County Office Building
6 in the Town of Schoharie beginning at
7 7:30 this evening -- 7 O'clock this
8 evening. It will be the same
9 presentation that I just gave you.

10 Thank you again everyone. I
11 appreciate you being here.

12 (Time noted: 11:40 A.M.)
13
14
15
16
17
18
19
20
21
22
23

9 A.M.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

C E R T I F I C A T E

I, ROBYN HARRELL, a Notary Public within and for the State of New York, do hereby certify that the within is a true and accurate transcript of the proceedings held on December 16, 2009.

That I am not related to any of the parties to this action by blood or marriage; and that I am in no way interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my hand.

— *Robyn Harrell* —
LL

<p>1</p> <p>1 7: 7 1,200 11:18 1,280 12: 7 1,448 16: 2 1.5 58: 6 10 37: 5;58: 4; 76:14;88:16,18 100 56:23;57: 3 1065 37: 7 11:40 92:12 1100 9: 8 1134 37: 9 1150 9:18 1158 9:20 11-foot 11: 4 12 8: 3 12-megawatt 31:17 13 9:23 14 88:20 140 7: 6;8:10;12:10 15 24: 8;37: 5;58: 6; 88:19 150 15:22 155 15:22 15-inch 87: 3 166 67: 8 175-foot 9:11 18 12: 8 1800 13:19 1926 15:18 1964 8:23;13:17 1965 11:14 1972 63:14 1980 86:11 1991 56:20</p>	<p>320 8:16 34 34:12;67: 7 35 14: 2;44:16;64: 9 36 64: 9 372 12:12 38 42: 9</p> <p>4</p> <p>401 39: 2;71:17 45 9:10;11:20 450 10: 5</p> <p>5</p> <p>5 37: 5 50 13:14 50-year 49:14,20 550 9:19</p> <p>6</p> <p>60 85:12,13 60s 58: 2 63 42: 8</p> <p>7</p> <p>7 27: 9;92: 7 7:30 92: 7 700 15:21 73 63:14 75 85:10 750 11: 7</p> <p>8</p> <p>80 77: 7 800 15:16 88 8: 5</p> <p>9</p> <p>93 14: 4 96 10: 2</p> <p>A</p> <p>abide 66:14 ability 30:21 able 32:20;46:21; 58:23 above 38:12 abreast 41:17 Absolutely 28:18; 71: 7;90:11,12 accept 25:14 accessible 76:10 accounted 36:17 accurate 78:13; 83:11;87:18 actions 54:15 actively 60: 8</p>	<p>activities 23:10 activity 39:21 actual 71:13 actually 14:12; 32:19;41: 9,10,14; 69: 3, 6;70:10;74:13; 89:16 Adam 49:21;54: 2 add 27: 4;40:14; 61:16;71: 4;88: 5; 90:13 added 19:16 addition 10:21; 26:12;43: 5 additional 11: 2; 18:19;26:22;40:15 adds 59: 2 adjacent 10: 8;46: 2 adopt 62:20 advised 86:11 aesthetic 22:23 affect 86: 6 affiliation 5: 2;27:15 afternoon 27: 6; 91:21 afternoon's 91:15 again 11:20;13:17; 14: 8;15:14;17: 3; 19: 8;22: 4, 6, 9; 27:13;38: 5,23;46:14, 23;47: 9;51:18;52:13; 53:19;74: 3;76: 6; 79: 4;88:22;91: 9; 92:10 against 63: 2 Agency 39: 5;49: 8; 81:23 agenda 5:17;41: 9 ago 31:15;57:22; 64: 9;87: 4 agree 82: 9 agreed 45:23;46: 2 agreement 60:22; 62: 6;86:16 alarm 3:14 allow 44:13;54: 9, 10,14 allowing 44:21 alluded 23:13; 78:18;86:18 alluding 66: 7 almost 43:19;63:22 along 35: 9;42:20 altered 21:18 alternative 13: 9 alternatives 17:11, 14,16;23:16;46:15; 84: 3 always 36:22;58:11 amenable 44:21 amenities 32:19 amount 29:21;30: 9; 43: 5;77: 7</p>	<p>amounts 76:11 analyses 69:18 analysis 23:13; 25:17;49: 2 analyze 50:16;51: 7, 8 announcement 82:15 annual 23:20;36: 3 Anthony 5: 8,14; 6: 8;36:18;59: 5; 69:19;70:16;72:22 apparent 82:22 application 4:15; 18: 7,20;19: 7;20: 7, 11,12,19;23: 4;24: 6, 22;25: 3, 9,13,14; 26: 3, 6;34:13;45:17; 59:20,21;60: 9;69:11; 70:10,12;71: 9;84: 7 applications 4:12 applied 38:15; 82:13;86:13 apply 19: 4;51:14; 56:11;83:13 appreciate 92:11 apprised 59:17 approach 64:21 appropriate 66:10 approval 18: 3 approved 20:12 approves 20:18,19 approximate 10:11; 17: 6;24:14 approximately 7: 9; 8:10,16;9: 9,21;10: 2; 11:22;12:10;15:21; 16: 2 April 24:15 aquatic 22:18 aqueduct 77:23; 89: 4 aqueducts 89: 7 area 7:14;10: 3, 4; 12:11;14: 3;32:16; 37:19;44:19 areas 18:12 around 13: 8;18:10; 23: 9;33:21;40: 9; 81: 2;90:22 arrangement 55:11 article 41:22;63:15, 17;82: 7,14 Ashokan 8: 8;29: 3; 31:13;32:16 aspect 31: 3,20; 61:19 aspects 38: 6 Assessment 25:21 assist 5: 7 associated 79: 7 authority 79:23 authorized 20:20</p>	<p>availability 28: 2 available 19:11; 22: 3;30: 9,11,12; 35: 4, 5,13,15;40:14; 42:15,16;50:21,22; 51: 3,15 average 23:19;67: 7 aware 31: 9;35:18; 36: 8;37: 7;38:23; 59:14,15;87: 9,10; 91: 4 away 3:18;69: 9; 87:17</p> <p>B</p> <p>back 6: 6, 9;24: 2; 33:18;37: 4;42: 5; 52:20;53:14;54:11; 58:21;61:21;76: 6 background 22: 7; 27:20 BARTHOLOMEW 33:16;34: 7, 8; 35:17;37: 3,17;38: 3; 43:15,16;44:12; 45:11,15;46:22; 53:15,16;62:10,11; 66:16;76: 5, 6;82: 6; 84:17;86: 8;91:14 Based 23: 2;24:14; 48:14;61:12;65: 8; 84:12,13 baseline 18:17 basic 45:15 basically 49: 9; 53:19 basin 21:10;26:18; 39: 8, 9,13;60:18; 61: 9;64:12 basins 86:13 bathroom 3: 9 become 76:13 becomes 35:21 becoming 87: 9 begin 18:10;19: 6; 20: 5,20;25:15 beginning 19:18; 91:19,21;92: 6 begins 20:14;25:12; 27: 5, 9 below 12: 6;75: 9 benefit 31: 2, 7,20, 23;32: 9,17,23;45: 3 Bert 75: 5 besides 32:18 best 42:22;69:21 better 87:17,18 beyond 38:13;71: 7 bid 53: 4,21;71:19 bidding 72: 7 bids 52:17 big 36:12,21;37:10;</p>
<p>2</p> <p>2,800 9: 6;13:18 2:30 27: 6;91:21 2000-square 7:14 200-foot 13:20;67: 5 2010 87:19 2011 24:22;70:11; 87:23 2012 25: 7;68:13, 14;70: 9;72: 4;87:19 2030 15:20 204 11:22 22 7: 4 23,535,000 34:16 240 9:17 2400 11:16 25 34:17 29 85: 9</p>	<p>3</p> <p>30 49:20 30-year 49:14</p>			

<p>42: 2 biggest 36:18 bilateral 55: 3,10 billion 7: 6, 7, 8; 8: 5, 11,16;10: 2;12:10; 14: 2 bit 12:15;15:14; 17:20;19: 2;22: 6; 46:19;48:10;68: 4; 78: 7,20 blade 75:22 block-flow 19: 2 body 44:22 bond 81:13 bonded 80:23;81: 3 bonding 81: 9 book 44:15 BOSCH 49:21,21; 50:23;54: 2, 2;56:15 botanical 22:19 both 14:13;33:13; 44:20;57:13;61:20; 67:22 bottom 9:12;10:13; 12:20;13:21;15: 2; 17: 2;29: 5;57: 2; 78: 3;84:11 branch 77: 3 branches 35:23 Bridge 57: 2;85: 8; 87: 6 bring 76:21 bringing 20: 2 broken 7:15 budget 81:21,22; 82: 5 build 35: 6;69:13 building 3:13;27:10; 30: 7;74: 6;92: 5 built 12: 4;77: 2 Bureau 3: 5 Burtonsville 85:10 bus 27: 7;91:23 business 27:21 buy 69: 4 bypass 13: 8;40: 8; 52: 8</p>	<p>cancellations 62:23 Cannonsville 4: 6; 8:14,22;12:16,18; 34:16;36: 2;39:18; 40:21;58:10;77: 5; 86:14 cap 86:21 capability 39:20 capacities 28:14; 42:13 capacity 8: 5,10,15; 10: 2;12: 9;13:23; 40: 6;42:17 capital 35: 8;50:17 capture 43: 7,11,12 captured 21:22 capturing 22: 2 care 3: 7 carry 92: 2 carved 16: 7 case 3:12;15: 6; 17:17;40:20;64: 4; 77:17 cases 57:13;60: 7 Catskill 7:18;8: 6; 63:13,14 Catskills 44:14; 58:16 caveat 72:23 center 23: 9 centimeters 76:15 certain 65: 7;66:20; 67: 2;90: 6 certainly 63:15 Certificate 39: 3; 71:18 cetera 30: 2 CFS 56:23;57: 3; 58: 6, 7 Chace 56:17,17 challenge 30: 8 challenges 40:18 chamber 10: 9,17, 22;13: 2;14: 7,10,14, 20,20;16:22;17: 2, 4, 5, 8, 9;74: 7 chambers 16:17 change 45: 8;75:13 characteristics 7: 2; 9: 3 CHASE 76:20,20 cheap 65: 6 chief 82:17 chosen 26:14 Cinderella 86:21 circulating 90:22 Citizens 34: 9; 43:16;62:11 City 7:11;14:17; 27:20;31:15;32:14; 33: 3,13;46:10;47:11; 49: 8;51:10,22;52:18; 53: 2, 6, 9,10,11,19;</p>	<p>54:18;55: 4, 9;58:12, 16;59:11;60:19;62: 7; 64: 5;70:17;73: 2; 77:20;78: 4;80:19,23; 81:23;82:19,20;86:12 City's 4: 3;61:22; 63:18;64: 5 clarify 15: 5 clear 45:13;66:19; 68:20 Click 19:15,15 closures 89: 5,18 cold 84:12;85:18,20 collecting 18:10; 19:23 combined 35: 7; 42:18 coming 67:21; 84:21;91: 7 comment 25:17; 41:13 comments 4:16,21, 23;6: 5;24: 9;25: 2; 26: 9;62:12;66: 4; 88: 7;91:12 Commission 4: 2; 20:13,16;25: 5;39: 9, 13;46:13;54:20; 55:17;78:10,14;90: 3 commissioner 82:16 Commission's 25:12 commitment 30:23; 32:21 common 14:21 communities 32:17; 54:12 community 65: 4 compatible 70: 4 competitive 53: 4,21 compiled 18:15 compiling 19:23; 22:12 completed 16: 8; 20:18;24:16;74:13 completion 48: 3 comply 55:13;56: 9 component 13:10; 20:17 components 19: 5; 67:17;90: 6 comprehensive 22:17 concept 73: 5 concern 82:18;84: 6, 16;85:16 Concerned 34: 8; 43:16;62:11 concerning 62:13 concerns 4:16;66: 8; 83:20;91:11 concert 8:19;64:18 concludes 26: 4 condition 85: 2</p>	<p>conditioning 79: 6, 23 conditions 44:18; 51:13;61: 7,20;63:23; 71:15;79: 3 conduct 24:18;26:14 conducted 11: 9 conducting 23:12 conduit 78:21 confirms 85:17 connected 72:12,13, 19;73:19 connecting 56: 2 connection 72:15 connections 67:12 conscious 35:19 consequently 77:18 conservation 21:20; 39: 4;62:19;64:16; 89:11 consider 37:22; 55: 9;68:16 consideration 37: 6, 12;39:20;74:16;88:10 considered 37:18; 57:15;63: 7;78: 3 considering 17:23; 56: 2 consistent 21:15; 33:13;47:10;54: 6,15; 80:21 consisting 7: 4 consists 8: 3,13 constantly 37:20 constraints 15: 8 construct 52:10; 80:12 constructed 48:21; 76:23;77: 3 construction 18: 4; 20:21;36:15;38:21; 50: 3,17;51:19;52: 3, 4,15,18,22;53: 7,20, 23;62:16;66: 6;71:22; 72:20;74: 5;80:10,17; 81: 8 construction-related 23: 9 consultant 5:11,12 contact 88: 6;91:13 continue 21: 6; 51:23;59:17;61: 3 continues 16:21 continuing 17:13 continuous 37:13; 64:14 contract 55: 3 contractors 53:23; 71:22 contradiction 82:23 control 46:12;60:13 controlled 8: 4 controlling 59:23</p>	<p>controls 54:22 converted 89: 7 convey 14:16 conveyance 23:16; 28:11;29: 8;52: 4 cool 84:23 cooperation 64: 2 Cooperative 43:19; 44: 7;45:20,20;82:13; 83:13,17 copies 6: 9,12,16,18 copy 86: 8 correction 48:17 correctly 50: 5 cost 32:20;35: 8; 36:15;42:19;50: 4; 64: 4;87:14 costs 23:20;45: 3, 4; 68: 3 Council 56:18;57:10 count 3:19 counties 7:10 County 26:16,17; 27:10;41:20;43:18; 44: 7;45:19;46: 2; 65:22;82:13;83:16; 92: 5 couple 26:15;27:18; 87: 4 court 27:15 covered 61:18; 91:18 covering 4:19 credit 78:11 Creek 74: 2;84:18 crest 11:22;12: 6; 13:21;16: 6 critical 90: 5 Croton 7:17,23 cultural 22:23 curious 47: 2;52:13; 54: 8;88:23 current 4:11;13: 5; 21:16;48: 5;51:12; 61:10;65:15;74:21; 82:10 currently 16: 3,12; 21:13,19;28: 6;35:15; 60:17,23;75:10 customers 8:20; 21: 5;45: 9 cut 61:21 cyclopean 15:19 cynicism 45:16</p>
<p style="text-align: center;">C</p> <p>call 78:19;84:17 called 18:15;59: 8 came 3:15;15: 3; 34: 4;56:22 can 7:21;9:13;13: 4; 15:12;18: 9;20: 3, 5, 10;24:17;29:13; 33:16,18;35: 2;40:16; 41: 9,14;42: 4;46:10; 52:19,20;60: 3;61: 5; 67: 9;75:23;76: 2; 81: 7;87:12;88: 7; 90: 8;91:12</p>				<p style="text-align: center;">D</p> <p>dam 4: 6;8:22;9: 3, 7, 8;11:15,16,16,19, 22;12:14,15;13:17,18, 21;14: 8;15:19;16: 2, 12,20;29: 6;32: 5; 34: 8;40:13;43:16;</p>

<p>62:11,15;65:11,13,18; 74: 5;85: 9,10,14; 86:23;87: 7, 8;91:23 dams 22: 9;28:12 Dan 74: 9;88:22 DARROW 75: 5, 5, 20 data 18:10,12,19; 19:22 date 24:11 day 7: 8;58: 5; 88:17,19,20,21 Debrosky 88: 9, 9,15 DEC 65:13;80: 3; 86:15,15 decade 57: 5 decide 42:14;60:19 decided 26:21 decision 26: 2; 66:20;68:15,18 decisional 72:10 decisions 67:11,16; 68:20,21,22,23;69: 9; 70: 5 Decree 60:21;62: 7 Deer 56:19 defer 60: 5 definitive 50:16 degree 76:15 DeJOHN 61:17; 65:12,13;66:17 Delaware 7:22;8:12; 21: 9,10;26:18;28: 9; 39: 8, 8,12,13,15; 43:18;44: 6;45:19,23; 51:21;56:18;57: 4,10; 60:18;61: 9;62: 8; 64: 3,12;74:10;82:12; 83: 4,16;85:17;86:14, 17 deliver 7: 7;8:19 demands 74:17 denial 63: 8 DEP 3: 5;5:10; 19:21;25: 4;28: 7; 41:13;44: 3;51:10; 65:18;86:10 Department 62:18 depend 50: 9;55:20 depending 25:22; 84: 5;88:20,21 DEP's 58:12;82:15, 15 depth 84:19 deputy 82:16 describe 67: 5 described 63:19 describing 66:22 description 66:19; 67: 7 design 23:15;36:22; 38: 2;55:20;67:18; 69:10,18;70: 6;71:16,</p>	<p>19;72: 6;84: 5,13 designed 65:17 designing 68:21 details 49: 4;90: 7 determine 30:13; 35:10;50:11;51: 2; 55: 6 determined 47: 5 determines 35: 5 develop 20: 5; 24:13;35: 9;42:20; 44: 5,22;46: 7;78:17 developed 20: 9; 23: 5;45: 6 developer 29:17; 30:17;59:12 developing 44: 2; 82:18 Development 15:17; 17:10;21: 9,23;26:20; 34:23;42:18;45:21; 46:11;73:14;74:19 developmental 23:20 developments 21:11;23: 7;28: 6; 46:18;71:11;80:21,22 develops 35:21; 45: 7,14 diagram 19: 2 diameter 10:16; 12: 3 dibs 65: 6 difference 9:11; 11:21;29: 6;36:12; 42: 2, 7,13;79:11 differences 36:16; 66: 5 different 12:15; 14: 9;28:12;29: 2, 9, 10,14;46:19;49: 7; 66: 8;68:21;69:19 directly 30:16 difficult 61:23 difficulties 36: 7 difficulty 15: 7 direct 21:20;55: 3, 11;59:13;60: 6 directly 60:15 Director 3: 4;5: 9 discharge 37:14 discharged 35:22 discharges 12: 5 Discontinuance 86: 9 discovered 75: 7 discuss 47:17 discussed 23:14; 49: 6;84:13 discusses 22: 9 discussions 44: 6; 59: 3 disgusting 63:22</p>	<p>distribution 56: 3, 5; 90:19;91: 2 diversion 62: 3 diversions 61:21 document 6: 3,14, 19;18:16,17;19: 8,10; 20: 4;22: 5;26: 6; 34:13;39:21;45:18; 55:23;83:14,23 documenting 90: 9 dollar 48: 8 dollars 29:21;49:10 domain 59:22 done 13:12;69: 3; 90:15 door 3:16;6: 9,12 doors 3: 9 down 3:16,16; 10:16;12: 5,19;14:16; 17: 5;31:13;41: 4; 58:23;71: 2;75:19; 76:17 downstream 14:23; 21:17;29:12;50:12; 52: 2, 5,11;83:22; 85:13,13;86: 6 draft 20:10;24: 5,15, 21;25: 2, 9;70:11 drainage 10: 4; 12:11;14: 3 drawn 45:18 drinking 21: 4; 45:10;64: 6 drips 84: 9 drive 3:18;91:17 driver's 82:20,21 drought 50:10; 51:13,14;57:22;58: 3, 11,13;61: 6,20 during 24:19;51:19; 52: 4;58: 7;59: 6; 64:15</p>	<p>49: 7 Eco-NRG 27:17 educated 71:10 effect 75: 8;76:19 effective 58:15 effectively 76:12 either 53: 3;55: 8 elaborate 79: 9 Electric 43:18;44: 7; 45:20;56:13;82:13; 83:16 electricity 54: 5,11, 23 elevation 9:11,18, 20;11:21;12: 6;13:20; 15:23;36:16;37: 8; 67: 6 else 42: 4;45: 7; 55:12;83:10 email 90:19;91: 2 emailed 41:15 embankment 9: 6 embarrassing 83: 4 emergency 3:12 employed 44:16,17 employees 53:10 encountered 36: 9 encourage 90:20 endangered 22:22 Energy 4: 2;20:13, 15;25: 4,11;32:20; 35:10;42:21;45: 4; 46:13;48:19;54:20; 61: 7;74:17;78:10,14; 90: 2 engage 18:18 engineering 5:11; 18:12;22:10;36: 6; 68:10,22;69:10;70: 7; 90: 7 engineers 57:12; 77: 9;83: 5 ensure 91: 4 entering 55:10 entities 80:11 entity 44:14;80: 8 environment 58:14 environmental 18:11;20:14,17; 22:11,14;25:10,16,20, 21;29:23;38: 6,11,19; 39: 4;62:18;69:17 envisioning 23: 6 EPA 41: 3 equipment 69: 8,21 established 85:19, 20,22 estimated 23:19 et 30: 2 evacuation 3:13 evaluated 13: 2; 38: 9 evaluating 40: 3</p>	<p>Evaluation 23:12; 47:13 even 70:22;75:14; 79:20;84: 6 evening 27: 9;92: 4, 7, 8 events 91: 3 Eventually 77: 5 everybody 3: 3;7:21; 91: 7 everyone 42: 4; 92:10 evolves 74:22 exactly 47: 9;49:17; 55: 6;79:14 example 32:14; 40:15;51:21;56:13; 66:22;67: 4 exchange 59:11 exempt 77:15 exempted 79:16 exemption 79:14,18; 80: 2, 4 exemptions 78:20, 22,23;79: 4,13,21 exist 58:17 existed 40: 4 existing 10: 9,11,16, 22;12:22,23;14: 7; 21:20;22: 8;27:22; 28:13;29:15;61:13; 65:17;66: 6;70: 3; 75:12,17;84: 4, 8 exists 85: 2 experience 29:16,21 explained 71: 7 exploring 44: 7,10 extra 6:12;89: 8 extremely 40:17</p> <hr/> <p style="text-align: center;">F</p> <hr/> <p>facilities 9: 4;14:21; 40:22;63: 5;65:15; 66: 6, 7,14;70: 3, 5; 80:11;81: 3, 9 facility 5:22;10: 7; 14:11;15: 9,12;31:18; 47: 7;64: 3;80: 9 factor 42:17;63: 2 factors 23:21;50:15; 51: 2;66: 8 failure 63: 3 fall 24:22 falls 80: 2 familiar 6:22;65:21 far 17:11,16;28:13; 60:16 Feasibility 23:11,13; 49: 2;67:23 feasible 44: 4 February 24: 8,12 Federal 4: 2;20:12,</p>
<p>Min-U-Script®</p>		<p>www.premiereporting.com PREMIER REPORTING 845-687-0707 Reporters from LI to Albany and all points in between!</p>	<p>(96) dams - Federal</p>	

<p>15;25: 4,11;33:14; 46:12;47:11;54: 7, 8, 10,20;55:13;78:10, 14;90: 2 feedback 4:13;27: 3 feel 4:14;63:11 feeling 45:16,22 feet 9: 6, 9,10,17,18, 19,20;10:15;11: 7,16, 18,20,23;12: 7;13:14, 18,19;15:16,20,21,22, 22;16: 2;67: 8 FERC 4:13;6: 2; 17:20;20:18;25:12, 18;26: 7;29: 9;38:13; 41: 4, 7,11,13;46: 8; 56:21;57: 8,12,12,18; 58:23;59: 2,12;60: 5, 14;62:13;63: 4;65:23; 66:15;71:14;72: 8; 77: 9,14,16,18;78:19; 79: 2, 5,17,22;80: 4; 81: 6;87:13 FERC's 18: 3;62:13; 72: 5, 5 few 9: 2;57: 4 FFMP 52: 5,11 field 24:19,20 figures 34:14 file 20:10;59:20,21; 60: 9;69:10;70: 9,11; 71: 9 filing 18: 6 final 20:19;25:20, 23;26: 2;70:10;76: 9 finalize 24:16;67:11; 68:10 finalized 25: 6; 71:19;72: 6 finally 16:18;86:15 find 44: 4,13 finest 63:19;64: 2 Fiore 5: 8,16;6:10, 13,17;27: 4;28: 4,19; 29: 4, 7;30: 4;31:22; 32:11;33: 2, 6,10,19; 34: 4,22;37:15,21; 39: 7,23;40:16,22; 42:12;44: 9;45: 5,12; 46: 5;47: 4,15;48:17; 49:16;50:14;51: 4,16; 52:21;53: 8,10,13,18; 65:10;67:14;72:18; 73: 8;74: 3,18;78: 8; 80:13;81:11,16,20; 83:15;86: 7;88: 2,13; 90: 2,11;91: 6,18 first 3: 7;16: 5; 17:22;54: 3, 4;65: 2, 6;84:20 fish 22:18;80: 2; 82:18 fisherman 31: 3</p>	<p>fishery 57:16;64: 3; 85:18;87: 5;89:12 fishing 32:18;63:20, 23;87: 8 fit 15:12;21:11;75: 2 five 13:22;16: 5; 28:10;48: 7;71: 2; 90:16 Flexible 21:13;61: 2, 11 flip-flop 83: 3 flood 36:21 floor 4:21;26: 8 flow 11: 5;21:13; 36:19;43:11,13; 52:11;61: 2, 8,11; 69:22;76:17;81:15 focus 6: 6 folks 90:20;91: 4 follow 53: 2 follow-up 30:22; 72: 9 forecast 42:21;48:19 forecasts 35:10 form 64:15 forth 15:13;67:19 forward 13:11; 17:13;68:16 found 89: 3 four 4: 5;43: 9; 57:11;70:23 four-foot 12: 3 fourth 16:13 frame 49:20;68:11, 17;70:14 framework 17:20; 25:12;30:19;78:17 frequency 21:17; 35:14 frequently 30:11 Friends 74:10 from2 7: 6 front 6:11;19: 9; 33:17 fruition 66:13 FUDR 89: 9 full 14: 2 fun 52:12 funding 81: 8 further 30:21;91: 8 future 37:23;51: 8; 74:16;80:12</p>	<p>general 31:22;55:18 generate 21:22 generated 64:23 generating 62:21 generation 17:23; 23:20;33:10;34:15; 44: 3;64:19;82:12 generator 15:10; 28:20;54:18;71:21; 76: 3;77: 6 generators 10:21; 11: 2;21:19;57: 8; 69: 5 gentleman 54: 4 geographical 7:14 geologic 36: 8 geology 22:17 Gilboa 4: 7;27: 7,12; 86:23;87: 7;91:22; 92: 2 given 37: 6,12; 39:21;57:15;65: 2; 91:16 gives 58: 6 giving 5:20 Glenn 88: 9 God 86:17 goes 13: 8;22:14; 57: 3;72: 4;75: 7 Gomez 5:10;71: 5 good 35:16;45:10 governed 51:12 government 44:17 grab 3: 9 grade 36:12 greater 39:19 groups 27:18 guess 82:11 guidelines 70:19 guy 81:17 guys 50: 2;74:12</p>	<p>heat 75:23;76: 4 height 67: 8, 8 help 31: 7;61: 5; 77:20;91: 4 helpful 41:16 helps 22:13 Herald 49:22 Hi 27:16;41: 2 high 8:20;15:23; 21: 4;43:11;76: 6 higher 62:16;63: 2; 83:18;84:19 highest 57:15;63:10 historian 86:10 historical 51: 5 history 76:21;79: 9 holistic 64:21 Holistically 33: 5 home 19:13;91:17 honored 82:16 hopefully 90:22 hoping 77:16 horizon 47:21 host 65: 3 hot 76: 2 hour 91:17 housekeeping 3: 8 houses 54:12 housing 63: 8 Howard 34: 7;43:15; 62:10;76: 5 Hudson 4: 4;7:18; 27:23;65:17;86:22 huge 83:17 hundred 78:13 hydraulic 67: 8 hydraulically 85: 6 Hydro 4: 4, 5, 9; 19:16;21: 7;27:21; 28: 6;29:17;36:22; 38: 9,13,14;73:13; 83: 3;90:17 hydroelectric 17:23; 21:19;30: 7;34:11,15, 23;35: 7;44:22;63: 5; 74:23;78:23;82:11 hydrogeneration 83:11 hydrologically 85: 6 hydropower 44: 5; 63: 8;64:18</p>	<p>implications 56: 7 importance 64: 7 important 8:17; 13:10;58:18 impossible 63:23 impoundment 9:22; 12: 7;13:22 impoundments 7: 5 improvements 32: 7 includes 4: 5 including 18:11; 29: 2;84: 3;86:21 inconsequential 76:16 increase 76: 4,11; 84:15 increased 27: 2; 39:18;40:10 increasingly 87:10 incrementally 76:10 Independent 54:22; 73:10 index 19:15 indicated 91: 3 Indicating 3:11;7:19, 22;8: 9;9: 7,16;10:10; 11:17,18;12: 3,18; 13:12;14:11,12,19; 16:20,23;22:16 indication 18: 2 in-flows 51: 5 influence 71:15 information 5: 4; 18:13,14;19:19;22: 7, 12;24:13;25:19; 26:11;27: 3;68: 3; 78: 7;88: 7;89:20; 91:13 informational 59:10 informed 71:13 infrastructure 29:23; 32: 6;84: 4, 9;90: 5 infrequent 58:14 ingenuous 83: 3 initial 67:21 inner 43:23 input 26: 9 inquiring 51:10 inspection 63: 4 install 16:11 installation 16: 6 installed 74:14 instance 50:10 instances 64:10; 66:11 institutes 38:10 instructions 72:10,11 intake 10:11,13; 14:13,15,20,23;16:17, 22,23;74: 6;84: 9 interactions 60:11 interconnecting 56:12</p>
		H		
		<p>habitat 82:21;85:23 habitats 22:21 half 48:16;63:17; 70: 8 Hall 27: 7;92: 3 hallway 3:11,16 hand 71:17;82: 7 hands 72: 5, 6 happen 47: 9 happening 89:17,18 happens 3:15 hard 30: 5 Hayes 41:19,19; 42: 6;43:14 head 3:19 hear 6: 6;33:18; 42: 4, 5;52:20;53:13, 16;58:10;67:15 heard 57:21</p>		
	G			
	<p>gain 13:20 gallons 7: 6, 7, 8; 8: 5,11,16;10: 3; 12:10;14: 2;58: 5; 88:17,19,19,20 gate 16: 6;17: 4, 8 gathered 19:19 gave 92: 9</p>			
		I		
		<p>idea 17: 6;50: 2; 67: 9;74:12;87:13; 91:15 identified 23: 8 identify 20: 3;22:13 immediate 44:19 impact 22:13;25:21; 29:23;83:21 impacts 22:15;40: 6</p>		

<p>interconnection 11:10 interested 31: 4, 6 interesting 77: 8,12, 22 interject 67: 2 intervener 56:19 into 7:16;12: 5; 15:12;17:19;18:15; 21:11;31:18;32: 8; 38:17;51: 8;55: 8,10; 56: 2,12;57: 4;61: 6; 72: 4;75: 2;77: 2,16; 86:17;89:10,14 introduce 5: 6 invest 29:22;31:15 investigation 33:12 investor-owned 30:16;46:20 involved 56:22; 57: 9,12,23;60: 8,23 involvement 57:18; 58:22;77:14,19,21; 79:22 issue 25:20;55:19; 83:14 issues 36: 8;39:15; 63: 3;70: 2 issuing 71:13</p>	<p>kwh 34:16 L Lackawaxen 57: 7, 14;77:10,22 laid 69:14 Lake 77: 9 lakes 8: 4 land 22:22 Lang 5:12;6: 8,11, 15;33:14;34: 2;48: 4, 10;54:17;59: 5;68:19; 72:22;73:11,15;81: 5; 90:13 large 7:13 last 8:13;24:20; 26:16,23;43:19;82: 8; 83: 2 later 57: 4, 5;80:15 latter 87:23 law 33:13;56:20 laws 47:11;54: 7, 9, 10,16;80:22 least 56:14;66: 2; 70:23;89:19 leave 3:15;33:23 leaves 88: 3 led 20:15 left 3:10;19:13 legal 5:12 Legislator 41:20 length 68: 6 LEONARD 27:16, 17;28:15,23;29: 5,13; 30:22;32: 6,13;33: 5, 9;38: 4, 4,18;46:23, 23;47:12,16;48: 2,14; 49: 5;52:12,13;53: 6, 9,11;66:18,18;68: 8; 72: 9;73:13,18,22; 74: 8;80: 7, 7;81: 7, 12,18;87:12,12,19 less 76:14 letter 41:15 level 9:15;73: 3 levels 84:20 leveraging 84: 3 license 18: 7,20; 20: 7,10,11,19;23: 4; 24: 5,21;25: 2, 9; 26: 2;59:20,21;69: 4, 6, 7,11;71: 9,14; 79:15;80: 5 licensed 56:21 licenses 79:19,20 licensing 6: 2;18:23; 26:13;59: 9;67:22 Light 57: 6 likely 69: 2 limitations 42:10 line 4:10;8: 7,13; 11: 2, 4, 7;23:22;73: 7</p>	<p>Lingard 41: 3 liquid 48:12 list 90:19;91: 2 listed 22:15 listen 59: 2 little 3:11;12:14; 36:19;46:19;48:10; 68: 4;76:21;78: 6 Littoral 22:20 live 58:16 lobby 3:17 local 31: 3;32:17 locate 10: 7 located 12:17,19; 14:10,17;16:23;63: 6; 90:18 location 10:12; 13:11;17: 6;36: 9 locations 23:17 London 87: 6 long 9: 6,17,19,23; 11:16;12: 8;13:19,22; 15:20 look 17:12,13;19: 5; 23: 3;30:17,18,21; 34:22;35:15;38:16; 40:13;42:15;46:18; 49: 6;50:20;69:18,23; 71:12;80:17;84: 2 looked 17:11;22: 2; 35:13;55:22;73:16 looking 3:20;11: 6, 12;13: 6;15:11,15; 23:15;30:10,15;32: 4; 35: 3;44:15;46:10,14; 47:20,21;48: 5,18; 49:17,19;54:17; 55:19;56: 6;70:14; 73: 2, 6 lose 30: 6 lot 3:17;6:21;23: 6; 36:15;50:15 low 73: 2 low-cost 51:11 lower 9:15,16;45: 3; 48: 8, 9,10;84:10,20 low-head 37:13; 38: 9;77: 6 low-impact 38:13,14 low-level 16:11,13; 73: 4, 9,18;75:12</p>	<p>72:14,21 major 19: 5;77:19 makes 41:12 manage 30: 5;61:21 Management 21:14; 22: 4;61: 2,12;81:21, 22;82: 5 mandated 62:17 manifold 10:23 manner 49: 7 many 16: 4;70:22 March 24:12 Mark 5:10;34:23; 71: 6 market 48: 5,13; 54:21;55: 9 markets 54:23 masonry 15:19,20 mass 63:20 matter 45:13;46: 6 matters 77:21 maximum 44: 2 may 4:17;21:12; 24:17;30:17;37:21; 43: 3, 8,10;51:18; 58:17;66:10,10, 71:15;90: 5 maybe 57: 5;76: 7; 79: 8;80:18 mean 33: 2;39:23; 46: 9;51: 4;72: 2; 75:21;90: 8 means 59:10 measure 76:11 meet 13: 4;65:17; 74:17;81: 5 meeting 3:23;4: 8; 5: 7,18;6: 6;26:13; 27: 9;90:14;92: 4 meetings 26:15,22; 57: 9,11;59:16;60:11 meets 52:11 megawatt 42:13; 48:16 megawatts 29:19; 42: 9 member 31: 3 mention 73:12 mentioned 5:17; 25: 8;39: 7;73: 3 met 52: 6 might 18:19;20: 6; 24: 9,18;46:20;79: 8 mile 7:15 miles 9:23;10: 5; 12: 8,12;13:22;14: 4; 85: 9,10,12,13 million 7: 9,10; 34:17;58: 5;88:17,18, 19,20 minimum 11: 5; 51:11 minute 57:22</p>	<p>misnomer 78:21 mission 21: 3, 5, 7; 45: 7, 8,14 mistake 78:15 mixed 15:18 models 51: 7 Mohawk 35:23 money 31:17;81:14 months 36: 4;37: 2; 85: 3, 4;87: 2 more 19: 2;54: 3; 66:23;80: 2;85: 7,11 Morning 3: 2;5:18 most 65:21;70: 4; 75:11;76:16 Mostly 65: 2 moving 11:13;13:11, 16 mow 37: 6 much 13:13;35: 3; 42:15;50: 3,11,21; 51: 2;56:16,22;57: 9; 77: 7 multiple 31:18;64:15 multiply 58: 5 municipality 46:17 Murphy 51: 9, 9 must 49:10;75: 6 Myself 5: 7</p>
<p>J Jack 41:19 Jeff 39:11;51:17 Jersey 62: 8 jive 67: 4 Johnson 5: 8 JOHNSTONE 3: 2, 3;26:10;28:17;42: 3; 60:16;62: 5;73:21; 74: 2;85:15 joint 3:23;26:12 Joule 76: 8 J-o-u-l-e 76: 8 jump 35: 2 jurisdiction 55:18; 56: 6;79: 2 justification 49:11</p>	<p>left 3:10;19:13 legal 5:12 Legislator 41:20 length 68: 6 LEONARD 27:16, 17;28:15,23;29: 5,13; 30:22;32: 6,13;33: 5, 9;38: 4, 4,18;46:23, 23;47:12,16;48: 2,14; 49: 5;52:12,13;53: 6, 9,11;66:18,18;68: 8; 72: 9;73:13,18,22; 74: 8;80: 7, 7;81: 7, 12,18;87:12,12,19 less 76:14 letter 41:15 level 9:15;73: 3 levels 84:20 leveraging 84: 3 license 18: 7,20; 20: 7,10,11,19;23: 4; 24: 5,21;25: 2, 9; 26: 2;59:20,21;69: 4, 6, 7,11;71: 9,14; 79:15;80: 5 licensed 56:21 licenses 79:19,20 licensing 6: 2;18:23; 26:13;59: 9;67:22 Light 57: 6 likely 69: 2 limitations 42:10 line 4:10;8: 7,13; 11: 2, 4, 7;23:22;73: 7</p>	<p>lose 30: 6 lot 3:17;6:21;23: 6; 36:15;50:15 low 73: 2 low-cost 51:11 lower 9:15,16;45: 3; 48: 8, 9,10;84:10,20 low-head 37:13; 38: 9;77: 6 low-impact 38:13,14 low-level 16:11,13; 73: 4, 9,18;75:12</p>	<p>mean 33: 2;39:23; 46: 9;51: 4;72: 2; 75:21;90: 8 means 59:10 measure 76:11 meet 13: 4;65:17; 74:17;81: 5 meeting 3:23;4: 8; 5: 7,18;6: 6;26:13; 27: 9;90:14;92: 4 meetings 26:15,22; 57: 9,11;59:16;60:11 meets 52:11 megawatt 42:13; 48:16 megawatts 29:19; 42: 9 member 31: 3 mention 73:12 mentioned 5:17; 25: 8;39: 7;73: 3 met 52: 6 might 18:19;20: 6; 24: 9,18;46:20;79: 8 mile 7:15 miles 9:23;10: 5; 12: 8,12;13:22;14: 4; 85: 9,10,12,13 million 7: 9,10; 34:17;58: 5;88:17,18, 19,20 minimum 11: 5; 51:11 minute 57:22</p>	<p>N name 3: 3;5: 2; 27:14,16;65:12;71: 4 national 89:20 necessary 20: 6 need 13: 3;25: 3; 55:13;56: 9;60: 5; 62: 3;69:11 needed 82:22 needs 3: 8;6: 9; 13: 7;24:10;61:23; 66:23 neglected 26:11; 87: 8 neighbor 78:12 NEPA 25:15 net 12: 8;13:23 Neversink 4: 7;8:14; 13:15;28: 8;29:18; 39:17;40:19;61:10; 67: 5, 6;76:23;77:11 New 4: 3;7:11;10: 8, 19;17: 7;32:14;51: 9; 54:21;58:11,16; 60:19;61:22;62: 7, 7, 8,17;63:17;64: 4, 5; 65:15;66: 6;70:18; 74:16;78: 4;85: 8 newspaper 49:23 newspapers 82:23 next 8: 7;69:15; 70: 8</p>
<p>K keep 59:17 Kevin 5:12;39: 7; 71: 6;72: 2 key 23:21 keys 41:11 kind 19: 4;35: 5; 37:12;39:21;41: 5, 6; 64:12;89:22 Kingston 3: 6 known 55: 2 KNUTSON 41: 2, 3; 88:18</p>	<p>left 3:10;19:13 legal 5:12 Legislator 41:20 length 68: 6 LEONARD 27:16, 17;28:15,23;29: 5,13; 30:22;32: 6,13;33: 5, 9;38: 4, 4,18;46:23, 23;47:12,16;48: 2,14; 49: 5;52:12,13;53: 6, 9,11;66:18,18;68: 8; 72: 9;73:13,18,22; 74: 8;80: 7, 7;81: 7, 12,18;87:12,12,19 less 76:14 letter 41:15 level 9:15;73: 3 levels 84:20 leveraging 84: 3 license 18: 7,20; 20: 7,10,11,19;23: 4; 24: 5,21;25: 2, 9; 26: 2;59:20,21;69: 4, 6, 7,11;71: 9,14; 79:15;80: 5 licensed 56:21 licenses 79:19,20 licensing 6: 2;18:23; 26:13;59: 9;67:22 Light 57: 6 likely 69: 2 limitations 42:10 line 4:10;8: 7,13; 11: 2, 4, 7;23:22;73: 7</p>	<p>M magazine 63:14 magnet 45: 2 magnitude 21:16 main 6: 5 maintain 51:23; 52:10 maintaining 90:18 maintains 18: 5 maintenance 70: 2;</p>	<p>mean 33: 2;39:23; 46: 9;51: 4;72: 2; 75:21;90: 8 means 59:10 measure 76:11 meet 13: 4;65:17; 74:17;81: 5 meeting 3:23;4: 8; 5: 7,18;6: 6;26:13; 27: 9;90:14;92: 4 meetings 26:15,22; 57: 9,11;59:16;60:11 meets 52:11 megawatt 42:13; 48:16 megawatts 29:19; 42: 9 member 31: 3 mention 73:12 mentioned 5:17; 25: 8;39: 7;73: 3 met 52: 6 might 18:19;20: 6; 24: 9,18;46:20;79: 8 mile 7:15 miles 9:23;10: 5; 12: 8,12;13:22;14: 4; 85: 9,10,12,13 million 7: 9,10; 34:17;58: 5;88:17,18, 19,20 minimum 11: 5; 51:11 minute 57:22</p>	<p>N name 3: 3;5: 2; 27:14,16;65:12;71: 4 national 89:20 necessary 20: 6 need 13: 3;25: 3; 55:13;56: 9;60: 5; 62: 3;69:11 needed 82:22 needs 3: 8;6: 9; 13: 7;24:10;61:23; 66:23 neglected 26:11; 87: 8 neighbor 78:12 NEPA 25:15 net 12: 8;13:23 Neversink 4: 7;8:14; 13:15;28: 8;29:18; 39:17;40:19;61:10; 67: 5, 6;76:23;77:11 New 4: 3;7:11;10: 8, 19;17: 7;32:14;51: 9; 54:21;58:11,16; 60:19;61:22;62: 7, 7, 8,17;63:17;64: 4, 5; 65:15;66: 6;70:18; 74:16;78: 4;85: 8 newspaper 49:23 newspapers 82:23 next 8: 7;69:15; 70: 8</p>

<p>night 26:16,23 nine 7: 9 non-drought 50:10 None 28:11;60: 3 non-profit 27:18 normal 12: 9;13:23 north 35:22;84:21; 86:23 notch 16: 7 note 8:17 noted 92:12 Notice 25:17;90:16 number 22:14; 23:18;41: 8;47:12,16, 18;48: 3;50:17;60:10 numbers 67: 4; 87:14,15,18,21 NYISO 55: 9 NYPA 28:21;33: 7 NYSEG 56: 3</p>	<p>only 36: 2,23;43:10; 61:19;62:23;65: 6; 72:22;76:16;79:15; 80: 5 onto 72: 6 open 4:20;6: 4; 26: 8;44: 6;46: 7, 8; 90: 4 operate 61: 4;80: 9, 14 operated 8:18;80:18 operates 19:21 operating 13: 5; 21:11;28:16,20; 36:23;43:10;51:13; 60:23;74:21;75: 2 operation 11:14; 21:10;29:10;64:10; 69:23 operational 22:11 Operations 3: 4; 5:23;20:23;27:22; 65:13;80:18 Operator 54:22 opinion 71:11,12 opportunity 24:23; 27: 2;70:13 options 44:10;69:19 order 19: 4;26:23; 35:13;50:16;71:13,14 originally 32:15 others 14: 9 ounce 43: 2, 7 out 3:16,17;10:12; 16: 7;17: 3;19:20,22; 21: 2;24:17;25:16; 30:21;36:20,21,21; 37: 8;43:22;45:19; 48:21;52:16;53: 4,21; 60:20;68:23;69: 4,14; 75:18;83: 7;88: 3; 89: 4;90:23 outcomes 59: 3 outlet 16:11,13; 28: 8, 9;36:13;75:13 output 36: 3;47: 3, 7, 19;55: 8 outputs 42: 8;47:14 outset 43:21 outside 7:11;32: 9; 53:12;60:12 over 5:14;6:23;7: 6, 7,13,21;11:18,23; 16:21;22: 5;27: 8; 49:20;69:15;74:22; 84:21;92: 3 overall 36: 3;44:18 overlooks 10:15 oversees 78:15 overturned 66: 9 overview 4: 8,10; 5:19,21,23;6: 2; 17:18;18:22;26: 6</p>	<p>own 33: 3, 7 owns 28: 7,21</p> <p style="text-align: center;">P</p> <p>packaging 71:20 PAD 19: 8,16 page 19:13,14; 34:12;67: 7 panel 5: 6 paper 82: 8 papers 90:16 Park 56:19 parking 3:17 part 4:15;8: 2;14:17; 16:13,15;25:11; 37:15,23,23;55:20; 63:12;87:23;88:13 particular 13:10; 17:10;51:20 parties 62: 7 party 60:21 passes 35:23 pass-through 75:22 past 29:21 patch 44:22 pattern 63:20 Paul 82: 9,16;89:12 payback 30:18; 47:18;48:15;49:12, 14,15;65: 7 Pennsylvania 57: 5; 62: 9 people 6:21;7: 9; 33:17;34: 2;41: 5; 44:16;45:23;63:11, 16;64: 8;87: 9;91: 2; 92: 2 Pepacton 4: 6;8:14; 11:13;14: 5;29:18; 39:17;40: 2,21;58: 9; 66:22;77: 2 perceived 83: 2 percent 44:16;78:13 percentage 61:14,14 perhaps 34:19;44: 3 period 24: 3;25:18; 30:19 periods 64:15 permit 4:12;17:21; 18: 2, 4, 8;19: 6; 26:13;82:14 petitions 52:17 phase 16: 5, 9,10; 59: 7 phases 16: 5 phenomenon 85: 5 Phil 56:17;76:20 philosophy 58:12 Phonetic 86:11 physics 76: 7 pick 67:12 picture 73: 5</p>	<p>pictured 14:11 pictures 87: 2 piece 26:10 place 26:19,21; 52:23;75:16;89: 2; 90:10 placed 8:23;13:16; 15:18;50: 6 plan 13: 6;51:22; 61: 2,12;74:21,22; 82:15 Planning 5: 9 plans 5:22;20: 6, 9, 21;24:14,15,16;74:17 plant 36:23;55:16; 65:19;73: 7;77: 2, 4, 11,12;78: 2 Platt 86:10 Please 3:18;4:23; 27:13;33:21,22;34: 6; 90:20 Plummer 74: 9, 9; 75: 4;88:22,22;90: 8 pm 27:10 point 20:20;21: 2, 3; 24: 2;35:12;48: 4,12; 65: 9;88: 2 pointing 7:20 pool 12: 5, 9;37: 9 poor 79: 4 population 82:18 Portal 37: 8 portion 9:17,19 position 83: 8 possession 47: 2 possibilities 44: 8 possible 64:22 possibly 48:20; 66:23 post 5:22,22 potential 22:13; 34:14 power 21: 7,22; 27:23;47: 3, 6, 8,13, 19;55: 5;57: 5;64:22; 65: 6;77: 2, 4,11,12, 20;78: 2 powerhouse 10: 8, 20;23:17;36:10,13; 76: 2 practicality 46: 6 Prattsville 85: 8 pre-application 6: 3, 14,19;18:16,17;19: 7, 10;20: 4;22: 5;25: 6; 55:23;59: 7,18;83:23 pre-licensing 23:23; 24: 3 preliminaries 70:15 preliminary 11:11; 17:21;34:12;45:17; 83:14 preparation 16: 9</p>	<p>prepared 49: 3 present 28: 3;50:16; 62:17;69:12;87:15 presentation 4:19; 5:15;6:15;59: 6;92: 9 presented 19: 3 presenting 15:13 pretty 5:20;40:23; 61:17 prevent 34:19 previous 12:15; 29:17;61: 8;62:12 previously 87: 4 price 48: 6,13 prices 48:19,22 pricing 42:21;55:15 primary 21: 3, 5, 6; 45: 2, 8,14 prime 64: 6 priority 18: 5;65: 3 private 81: 2 probably 38: 8; 55:16;66:10;70:23; 76:14;87:17,22 problem 35:18 problems 31:11; 32: 8;34:18;86:18 procedures 51:12 proceed 52:14 Proceedings 3: 1; 4: 1;5: 1;6: 1;7: 1; 8: 1;9: 1;10: 1;11: 1; 12: 1;13: 1;14: 1; 15: 1;16: 1;17: 1; 18: 1;19: 1;20: 1; 21: 1;22: 1;23: 1; 24: 1;25: 1;26: 1; 27: 1;28: 1;29: 1; 30: 1;31: 1;32: 1; 33: 1;34: 1;35: 1; 36: 1;37: 1;38: 1; 39: 1;40: 1;41: 1; 42: 1;43: 1;44: 1; 45: 1;46: 1;47: 1; 48: 1;49: 1;50: 1; 51: 1;52: 1;53: 1; 54: 1;55: 1;56: 1; 57: 1;58: 1;59: 1; 60: 1;61: 1;62: 1; 63: 1;64: 1;65: 1; 66: 1;67: 1;68: 1; 69: 1;70: 1;71: 1; 72: 1;73: 1;74: 1; 75: 1;76: 1;77: 1; 78: 1;79: 1;80: 1; 81: 1;82: 1;83: 1; 84: 1;85: 1;86: 1; 87: 1;88: 1;89: 1; 90: 1;91: 1;92: 1 process 4:16;6: 2; 11: 9;18:23;19: 6; 20: 8,14;23:23;25:15; 26: 7;29:10;46: 8;</p>
--	--	---	---	--

52:23;53:22;59: 9,11, 13,19,23;60:10;67: 9, 13;68: 9;70:20;72: 7; 78:11;79:13,15,21; 80: 6, 6,15;81: 8,14; 82: 4;87:14;89: 3; 90: 3, 4 processes 66:21 procurement 69: 2, 2,70:18,19;77:21; 80:16 production 31:17; 50: 8 productive 34:21 professionals 83: 6 Program 21:14; 22: 4;91:16 Project 4: 4, 5, 9,12, 17;5:19;7: 3;16:14, 16;17:15,19;18: 3,10, 12;20:22;23:11,15; 25:23;26: 5,14;27: 3; 30:14,15;32: 3, 9; 35: 9,11,16;37:16; 38: 2,12;39:22;40: 3; 41: 8;42:22;44:11; 45:17,21;46: 7,11,18; 48: 3,20;50: 3;66:12; 67:17;72: 8;73: 9,16, 17;74:20;88:14 projects 19:20;22: 8; 29:15,20;30: 3;31: 2, 21;32: 2;38: 7, 8,21; 39: 2;42:14;46:16; 49:11;65:19,19; 66:20;67:18;69:12; 72:12,14,16,19,20; 78:17;90:17 promised 32:16 promising 17:12 propeller 76: 9 proposal 10: 6,18; 12:13,21;14: 5;42:23; 53: 5,22;83:15;89: 9 propose 69:13; 75:11 proposed 4: 9; 17:19;20:23;23: 3, 7, 14;42: 7;43:19;90:17 proposing 84: 8 protocol 21:16;53: 3 proves 52:15 provides 22: 7 provisions 61: 4 PSC 56: 5, 8 public 26:15,22; 27: 9;31: 2,20,23; 32:10,23;54:11; 55:17;70:20 published 90: 4,16 pulls 14:16 purchasing 55: 5 purpose 4: 7;79:10	purposes 14:13; 89:11 put 11:14;18:20; 31:18;40: 8;52: 7,16, 17;53: 4,21;71:20; 74:20;79: 3;83: 7; 86: 3, 5 putting 20: 3;32:15 Q quality 8:20;21: 4; 39: 3;71:18 quick 3: 7;5:20; 6:18;75: 6 quite 22:16 quotes 68: 5 R raised 39:15;82:11 range 47:22;48: 8, 19;49:15 ranging 7: 5 rare 22:21 rather 29:11;56: 3 read 82: 7 Ready 25:16;71: 8 Real 3: 7;17:17; 35:16;40:18;79:12 realize 7:20;58:17 realized 89: 6 realizing 64: 5 really 6: 5;17:22; 23: 8,16;29:19;32:12; 35: 5,10;40:11;42:21; 48:22;60: 4,13;67:15, 22;70:13;75:23;79: 4; 80: 5 reason 63: 7;78: 5; 90:19;91:10 reasonable 87:21 reasons 64:20; 89:13,21 recommended 31:14 record 5: 3;41:22; 49:22;51: 5;54: 3; 82: 7 recreation 22:22; 57:14 reduced 32:20 reduction 62: 3 re-emphasize 91: 9 refer 41:21 referring 60:17; 61: 8;86: 3 refurbishing 16:16 regarding 34:10,14; 36: 7;37: 4;62:12; 63:12;64: 9 regards 41:23 regime 21:12;61: 9, 11;85:20,22	region 90:17 register 41: 6, 7,10 registrations 38:11, 19 regulation 54:19; 65:18;83:12,21;84: 6 regulations 65: 8,23; 66:15 Regulatory 4: 2; 17:20;20:13,16;25: 4, 11;29: 9;46: 8,13; 54:20;78:10,14,16; 90: 3 rehabilitation 16: 3; 62:20;65:20 related 74: 5 relates 76:22 relation 57:19 release 10: 9,17,22; 12:17,19,23;13: 4, 5; 14: 7,10,14,20;17: 5, 8;23:18;29:12;30: 8; 39:16,19;40: 4, 6,15; 50:12;51:23;60:20; 61:10;62: 2;63:21; 64:11,14;73: 4, 9,19; 74: 6, 7,16,21;85:20, 21;86:17;88:16 released 89:15 Releases 21:14,18, 21;28:12;31: 5, 8,11, 19;32: 4, 5;50: 7; 51: 6,14;52: 2;56:23; 57:15,23;58: 3, 4,11, 13;60:17;61:20; 64:16;75:15;84:10; 85:21;86:19;87: 5; 88:11;89:10 releasing 14:22 re-licensed 57: 6 re-licensing 77:10, 15;79:12 remain 21:15 remaining 40: 9 remember 76: 8 Remove 40: 3 removing 28:22 renovating 31: 9 repairs 89: 5 replace 12:13,22; 14: 6;66:23 reported 82:23 reporter 27:15;49:22 reporting 79:17 represent 43:17; 56:18 representing 39:12 request 24:10;53: 5, 22 required 3:23;18:19; 24:19;26:12;70:21 requirements 13: 4; 33:15;52: 2, 5;55:14; 56: 8,11;57:16;62:14; 63:13;69:22,23; 70:19;79:17;81: 2, 6 requires 30: 2 Reservoir 8: 8, 9,22; 9:22;10: 4,12,14; 11:14;12:12;13:16; 14: 4,18;15: 2;17: 3; 26:19;31: 7,12,13,19; 32:15;34:11;37:11; 39:14;43:17;51: 6; 57: 2, 3;60:21;61: 9; 62:19,22;63: 9;65: 4; 75:19;83:19;84:11, 22;85:12;86:14,20; 88:11 reservoirs 8: 3; 14:15;19:22;22: 8; 39:17;46: 3;50: 7; 51:21;54:13;60:18; 61:13,15;63:18,21; 74:15;86:22 residents 63:13 residing 7:10 resource 64: 6 resources 22:18,18, 19;23: 2;58:19 respect 70:16;83: 5 response 83:10 responsible 63:22 re-state 91:20 restoration 16:18 restricted 64:23 revamping 31:10 revealed 90: 9 review 6:19;20:14, 17;25:10,13,19;66: 2, 3;70:13 reviewed 17:16 RFP 52:17;53: 5 right 3:10,10;6:11, 16;10:10;11: 6;15:15; 16:19;23: 5;45:12; 48: 6;59: 5;65:16; 67:10;73: 8,11;75:11, 15;79:19;81:17;91: 6 Riparian 22:20 River 7:18;39: 9,13; 57: 7,14;60:18;61:22; 64:12;74:10;77:12 rivers 58:15;75: 9; 89:11 road 71: 2 Robert 86:10 Rockland 57:13 rocks 36: 7 role 59:13,19 rolled 9: 5 Ron 27:17;38: 4, 4; 46:23;52:13;66:18; 80: 7;87:12 room 6:21;16: 4; 40:14;63:16;90:23	rough 50: 2 roughly 37: 9;68:17 Roundout 8:15; 88:11 route 29:12 rules 51:13;89:22 run 13:13;59:11 runs 37:19 Rush 82: 9,16;89:12 S safe 41:22 safety 56:10;62:14, 15;63: 2;65:11,14,18; 66: 9 sale 54:23;55: 3,11; 80:20 sales 55:15 same 11: 3;58: 9,10; 67:23;75:15;78: 4; 79:22,22;80: 6,17; 84:16;86:19;89:22; 92: 8 satisfy 69:21 saw 89: 8 saying 32:12;50: 8; 53:17;83: 8 scheme 62:21;75: 3 Schoharie 8: 8; 15:17;21:23;26:17, 20;27: 5,10,11;31:10; 32: 3;34:11,15,20; 35:22;36:20;37:10; 43:17;45:21;46: 2; 62:21;63: 9;64:13,16; 65:22;72:23;74: 2, 4; 84:18,22;85:22;86: 6, 20;91:22;92: 5, 6 school 76: 7 scope 25:22 scoping 25:15 screen 16:22;22:15 screening 11:11 season 24:19,20; 88:21 seasons 61:14 seat 82:20,21 second 16: 9;37: 4; 50:19;63: 9 secondary 21: 8; 74:23 secondly 63:11; 84:20 sections 50: 6 security 89:20 seeing 75:14 select 53:22 sell 54:10 send 88: 7;90:23; 91:12 sense 30:20;55:18 sentiment 45:22
---	--	--	---

<p>separate 14:17; 81:23</p> <p>series 10:17</p> <p>serious 34:18</p> <p>serves 14:12</p> <p>service 8:23;15:18; 37: 7;55:17;80: 3</p> <p>serving 7: 8;10:20; 11: 2</p> <p>set 7: 2;42:20</p> <p>setting 18:11</p> <p>seven-year 30:18</p> <p>Shandaken 16:17; 31:12;73:20</p> <p>sheet 3:19;33:20; 90:21</p> <p>Shokan 33: 2</p> <p>short 56:21</p> <p>shorter 13:13</p> <p>shortly 43:22;82:14</p> <p>showed 12:16</p> <p>shut 45:19</p> <p>shuttle 27: 7;91:23</p> <p>sic 37: 8</p> <p>side 7:17,20;19:13; 27:23;30: 8;32: 5; 50:17;62: 2, 4;74: 5</p> <p>sides 44:20</p> <p>sign 33:22;90:21</p> <p>signed 33:22;34: 5</p> <p>sign-in 3:19;33:20; 90:21</p> <p>signs 50:10,11</p> <p>similar 14: 5</p> <p>simple 18:22,23</p> <p>simply 45:19</p> <p>simultaneously 16:15</p> <p>single 47:22</p> <p>sit 17: 2;58:23</p> <p>site 14: 6;15: 4, 7; 16: 8,18;19:11;26:18, 19;27: 5, 8;40:19; 41: 5, 7,14;42:11; 43: 9,20;83:17;91:22; 92: 3</p> <p>sites 4: 6;23:15,18; 56: 2;84: 3</p> <p>sits 10:13</p> <p>six 43: 8;48: 8;85: 4; 87: 2</p> <p>size 7: 5;11: 3; 23:18;39:19;40:10; 42:22</p> <p>slightly 14: 9</p> <p>slow 76:17</p> <p>small 78:22</p> <p>smaller 11: 5</p> <p>snowmelt 35:20</p> <p>Snowpack 22: 4</p> <p>socioeconomic 22:23</p> <p>soils 22:17;36: 7</p>	<p>sold 55: 8;80:11</p> <p>solicit 4:13</p> <p>solve 40: 7</p> <p>somebody 46:10</p> <p>someone 41:12; 45: 6;55: 4,12</p> <p>sometimes 83: 6</p> <p>somewhat 29:16; 62:16</p> <p>sorry 49:16;91:19</p> <p>sort 29: 2,15;52: 8; 64:20;86:20</p> <p>sound 64: 8</p> <p>sourced 71:23</p> <p>south 32: 5</p> <p>space 15: 8,14; 40:17,23</p> <p>speak 27:14;33:17; 42: 4;52:20;91:10</p> <p>SPEAKER 52:19</p> <p>speaking 15:10</p> <p>species 22:22</p> <p>specific 28:14;32: 2; 67:17</p> <p>Specifically 59:23; 64:13;85:16</p> <p>specifications 62:15</p> <p>specifics 61: 6</p> <p>Spelling 86:11</p> <p>spending 49: 9</p> <p>spillage 35:18;43: 4, 21,23</p> <p>spillmills 44: 2</p> <p>spillway 9: 8,13,14, 16;11:17,23;12: 2, 7; 16: 8,20;43: 5</p> <p>spillways 85: 3</p> <p>split-level 9:14</p> <p>spoke 4:20</p> <p>spoken 46:17</p> <p>spot 35: 6</p> <p>spread 7:12,13</p> <p>spring 25: 6</p> <p>square 10: 5;12:12; 14: 4</p> <p>staff 53:19;60:14; 80:19;81:19</p> <p>stage 7: 2;55: 6; 82:10</p> <p>stages 31:19;49: 2; 67:21</p> <p>stakeholders 18:14, 18;20: 2</p> <p>stand 66:15</p> <p>start 5:20;8:21; 83:11</p> <p>started 34: 5</p> <p>starting 48: 2, 4,12; 66: 2, 3</p> <p>state 5: 2;33:13; 39: 4;47:11;54: 7, 8, 9;62: 8,18;65:16; 71:18;85:17</p>	<p>stated 38: 7;42: 8; 86:15</p> <p>Statement 25:22</p> <p>status 4:11;28: 3</p> <p>statutes 54:14</p> <p>stay 41:17</p> <p>stenographer 5: 3</p> <p>step 17:22;20: 8</p> <p>still 13: 2, 3,12;15: 9, 13;33:11;40: 3;48:23; 50:15;55:19;56: 6; 68: 6, 7;73:15;76:22; 78:23;79: 3, 6;90:22</p> <p>stiling 12: 5</p> <p>Stipulation 86: 9</p> <p>Stony 57: 2</p> <p>stop 46:10</p> <p>storage 9:23;12: 8; 13:23;61:12,13</p> <p>stored 61:15</p> <p>strange 85: 5</p> <p>stream 75:19;84:18</p> <p>structure 10:11,13; 14:13,15;75:17</p> <p>studies 4:14;18: 6; 23: 3, 8;24:10,18; 30: 2;69:16,17,18; 82:21;85:23</p> <p>study 11:10;20: 5, 9; 24:13,15</p> <p>stuff 41:18</p> <p>subject 54:19;55:16; 56: 5;62:22;63: 4</p> <p>submission 24: 5</p> <p>submit 24:21;25: 5, 9</p> <p>submitted 24:11; 25: 3;89: 9</p> <p>substitute 40: 5; 65: 8</p> <p>subsystem 8: 6,12</p> <p>subsystems 7:16; 8:18</p> <p>sued 86:15</p> <p>Sullivan 5:11;26:16; 71: 3, 4, 5;79:11</p> <p>summer 58: 7</p> <p>Supply 3: 5;5:21; 7: 4,12;21: 4;30: 6; 45: 9;64:21</p> <p>support 18: 6,20; 20: 6;23: 4;24: 4</p> <p>supposed 34:17</p> <p>sure 6:21;13: 3; 32:11;33: 4;50:13,18; 51:19;67: 3;73:23; 89:17</p> <p>surplus 35:20;84:23</p> <p>surround 54:12,13; 77: 4</p> <p>survey 63:12</p> <p>suspect 51:10;60: 6; 87:11</p>	<p>Sustainability 5: 9</p> <p>sweet 35: 6</p> <p>symbiotic 64:21</p> <p>system 5:21;6:22; 7: 4,13,15,17,19,22, 23;8: 2;10:23;23:17; 28: 7;30: 5, 7;31: 7; 32:16;39:16;44:23; 48:16;54:22;56: 3, 4, 5,13;64:14;65: 4</p> <p>systems 16: 7; 28:11;32:22;51: 6; 67: 3;74:14</p>	<p>toe 9: 9;11:19; 13:19;15:21</p> <p>together 18:21; 20: 2, 4;71:17,20</p> <p>told 89:12</p> <p>Tom 51: 9,18;61: 5, 16;65:10,12;71: 4; 79: 8</p> <p>tonight 26:17,23</p> <p>took 26:19</p> <p>top 9:10,12;11:20; 12:17</p> <p>topographic 36:16</p> <p>total 7: 5;8: 4,10,15; 28:10;42:13</p> <p>tough 17:17</p> <p>tour 27: 5</p> <p>towards 10: 4</p> <p>Town 27: 7,11; 56:19;92: 2, 6</p> <p>township 34:21</p> <p>traditional 59: 9</p> <p>transmission 11: 7; 13:13;15:16;56: 4</p> <p>transparency 89:23</p> <p>transparent 89: 2</p> <p>tribal 23: 2</p> <p>Trout 31: 4;74:11</p> <p>try 33:19;43: 7; 46:15;89:10</p> <p>trying 41:17</p> <p>TU 88:10</p> <p>tunnel 10:14,19; 12: 2, 4;16:17;17: 3, 4, 7;28: 8, 9;31:12; 37:11;73:20;78: 2</p> <p>tunnels 29: 8,11; 37: 4, 5;77: 3,13,18; 78: 4</p> <p>turbine 11: 5;12:23; 13: 8;14: 8;15:10,11; 40: 5;43: 3, 6;71:21; 75:16;76: 4;84:14</p> <p>turbines 10:20; 23:19;43: 9,10;50: 5, 9;67:13;69: 5;75: 9; 76:18</p> <p>turn 5:13</p> <p>two 10:20;11: 2, 3; 12:22;14: 6,12;26:22; 28: 7;29:14;37: 2; 43:20;49:23;50: 4; 55:23;57: 7;66:23; 87: 3</p> <p>type 42:19;43:20, 23;55:10;81:13;89:22</p> <p>types 60:11</p> <p>typical 72: 7</p> <p>Typically 30:17</p>
T				
<p>talk 4: 3;49: 3;65:11</p> <p>talked 69:20</p> <p>talking 17:21;68:11; 74: 3, 4</p> <p>talks 41:13</p> <p>tap 73: 6</p> <p>tapping 75:17</p> <p>tax 80:22</p> <p>taxpayers 49: 9; 81: 4</p> <p>technical 19: 3</p> <p>tee 10:19,22;17: 7</p> <p>temperature 31: 8; 76:12;82:17;84:15</p> <p>temperatures 31:14; 75: 8,14;76:13,19; 82:10;86: 4</p> <p>tenor 45:22</p> <p>term 79: 5</p> <p>terminology 78:19, 20;79: 5</p> <p>terms 31: 8,13;36: 2, 9;39: 5;55:14;56: 8; 60: 9;68: 5, 8;69: 9; 70: 5;79: 6;81:11</p> <p>thermal 83:12,21; 84: 5;85:16;86: 4</p> <p>third 16:10,15</p> <p>though 35:22;72: 3</p> <p>thought 57:21;87: 3</p> <p>threatened 22:21</p> <p>three 7:16;8: 3,18; 29:19;36: 4;39:17</p> <p>three-mile 77:23</p> <p>throughout 65:20</p> <p>tight 15:14;40:17,23</p> <p>tighten 68: 4</p> <p>Times 41:21;43: 3; 49:22</p> <p>timing 21:17;68: 6</p> <p>Tina 3: 3;5: 8,16,17; 6: 4;86: 7</p> <p>today 3:22;5: 3, 7; 6: 6;10: 7;20: 8;24: 7; 26: 5,13,21;48:13; 59:16;90:20;91:11</p> <p>today's 48:22</p>	<p style="text-align: center;">U</p>	<p>Ulster 41:19</p>		

<p>unanimous 60:22; 62: 6 uncomfortable 83: 8 under 13: 5;16: 3; 21:23;29: 9;33:11; 44:23;46:12;54:19; 59: 8;61: 2, 4, 8,11; 64:11;78:16;79: 2; 80: 3, 4;85: 7;89:22 underground 12: 4 understood 50:18 undertaken 4:15 unfiltered 7: 3 UNIDENTIFIED 52:19 unilaterally 60:19 units 70: 6, 7 unless 55: 2 Unlimited 31: 4; 74:11 unusual 29:16 unwilling 86:13 up 4:20;6: 4;7:15; 8: 7;9:10;12:17;15: 4; 19: 8;26: 8;27:11; 33:17;42: 4;45:18; 52:17,20;56:22; 65:22;68: 4;73: 5; 77: 9;87: 6 updates 41:11 Upon 82:14 upper 9:15,19; 56:17;57:10;74:10 use 3: 9;22:23; 60:10;64:14;69:21; 81: 3;84: 8 used 33:11;54: 5 Using 18:16;19:18; 41: 7;43:20;47:13,19 utility 46:20 utilized 36: 5 utilizing 34:19;75:12</p>	<p>visits 26:19 visual 19: 5 voice 91:11 volume 89: 6</p> <p style="text-align: center;">W</p> <p>wait 68:19 Wallenpaupack 77: 9 Wamser 5:10;36:11; 38:14,22;42:23; 47:20;48: 9;49:19; 52: 3, 9;67:20;68:14; 75:10,21;87:16,22 wants 83:13 warmer 83:19 waste 35:21 Water 3: 5;5:21;7: 4, 12;8:20;14:16,22; 21: 4,21;22: 2,17; 29: 8;30: 6, 6, 9,10, 11;34:20;35: 3, 4,20, 21;37:14;39: 3;42:15, 16;43: 2, 6, 8;44:23; 45: 9,10;50:11,21,22; 51: 2,15;52: 3,10; 61:22;63:18,20;64: 6, 11,22;65: 8;71:17; 75:18,22;76:11,18; 82:10,17;83:18,19; 84:12,15,18,21,23; 85: 2, 3, 7, 9,10,11,18, 21;86: 4,17,23;89: 6, 8,15 watershed 7:15; 10: 3;12:11;14: 3; 44:19,20;65:20 way 3:15;23: 6; 42:14,22;46:19; 58:19;71:16 wealth 19:22 web 19:11;41: 4, 7 week 82: 8;83: 2 welcome 3: 5;66:17 weren't 63: 5;89:17 West 4: 3;65:16; 86:22 Western 65:13 wetlands 22:20 whatnot 66: 9 what's 18:15;47:16, 18;48: 3;49:15;55: 2; 59:14;63: 6;67:13,18; 78:19;91: 5 whenever 41:11 wherever 21:12 whole 45:16;81:19 wholesale 54:21 whose 3:21;80:13 wide 9: 9,10;11:19, 20;13:19 width 15:20</p>	<p>wildlife 22:19;80: 3 wintertime 58: 8 within 15: 8 wondered 74:11; 89:21 wondering 38: 5; 42: 6 words 47:17 work 12:17;15: 4; 16:14;24: 3;39:10; 64:18;72:17;74:13; 75:13;87: 6;88:23; 89:16 worked 30: 4 working 40: 7 works 12:19;39:16; 51:20;81:12 worse 86:18 write 41: 4 written 24: 8;66: 4 wwwNYCGOV/DEP 19:12</p> <p style="text-align: center;">Y</p> <p>year 36: 4;37: 2; 43:19;47:23;68: 7; 69:15;70: 8, 8;85: 4, 4;87: 2,17 years 31:15;43:20; 57: 4,11;64: 9, 9; 65: 5;69: 9;70:23; 71: 2;87: 4 yesterday 15: 4; 26:20;59:16 York 4: 3;7:11; 32:14;51:10;54:21; 58:12,16;60:19; 61:22;62: 7, 8,17; 63:18;64: 5, 5;65:16; 70:18;78: 4;85: 8</p>	<p style="text-align: center;">Z</p> <p>zero 56:23 ZIMMERMAN 39:11, 12;40:12,20;51:17, 17;52: 7 zones 48: 7</p>	
<p style="text-align: center;">V</p> <p>Valhalla 28:21 values 40: 4;47:19 valve 40:10 valves 10:17;12:22; 14: 7;40:15;67: 2, 2 varying 47:22 vendor 67:12;68: 5 vendors 15:10,11; 67:19;68: 2;70:17; 71:21,21 veracity 41:23 via 27: 6 viable 17:15;29:20; 30:13;35:11;44:11, 13;46:16;52:16; 64:17;87: 5, 7 viewed 63:18 visit 26:18;91:22</p>				