



**Department
of Public Service**

Three Empire State Plaza, Albany, NY 12223-1350
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June 10, 2024

VIA EMAIL

Hon. Michelle L. Phillips
Secretary to the Commission
3 Empire State Plaza
Albany, NY 12223-1350

Re: Matter No. 21-01188 – In the Matter of the Indian Point Closure Task Force and Indian Point Decommissioning Oversight Board.

Dear Secretary Phillips:

Please accept for filing in the above-captioned matter, the April 25, 2024 Indian Point Decommissioning Oversight Board meeting transcript. Should you have any questions regarding this filing, please contact me. Thank you.

Respectfully submitted,

A handwritten signature in blue ink that reads "Tom Kaczmarek".

Tom Kaczmarek
Executive Director
Indian Point Decommissioning Oversight Board

1 4/25/2024 - Indian Point

2 STATE OF NEW YORK

3 PUBLIC SERVICE COMMISSION

4 INDIAN POINT DECOMMISSIONING OVERSIGHT BOARD

5
6 MEETING

7
8 Thursday, April 25, 2024

9 6:05 p.m. until 9:20 p.m.

10 Cortlandt Town Hall

11 1 Heady Street

12 Cortland, New York 10567

13 Or

14 Via Zoom

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1 4/25/2024 - Indian Point

2 APPEARANCES:

3 FOR DEPARTMENT OF PUBLIC SERVICE:

4 TOM KACZMAREK

5 TOM CONGDON

6 JOHN SIPOS

7 FOR DEPARTMENT OF ENVIRONMENTAL CONSERVATION:

8 KELLY TURTURRO

9 FOR DEPARTMENT OF LABOR:

10 JANE THOMPSON

11 FOR CORTLANDT MANOR:

12 RICHARD BECKER, SUPERVISOR

13 FOR THE HENDRICK HUDSON CENTRAL SCHOOL DISTRICT:

14 MICHAEL TROMBLEE

15 FOR VILLAGE OF BUCHANAN:

16 THERESA KNICKERBOCKER, MAYOR

17 FOR WESTCHESTER COUNTY:

18 SUSAN SPEAR

19 FOR UTILITY WORKERS UNION OF AMERICA, LOCAL 1-2

20 BILL SMITH, VICE PRESIDENT

21 FOR WESTCHESTER PUTNAM CENTRAL LABOR COUNCIL:

22 THOMAS CAREY, PRESIDENT

23 FOR RIVERKEEPER:

24 RICHARD WEBSTER

25 FOR NEW YORK STATE DISTRICT 40:

1 4/25/2024 - Indian Point

2 FROM THE VILLAGE OF SUFFERN:

3 SUSAN SHAPIRO

4 FROM THE CITY OF WHITE PLAINS:

5 HERSCHEL SPECTER

6 FROM MOHEGAN LAKE:

7 JANE SIMS

8 FROM CORTLANDT MANOR:

9 MARILYN ELIE

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1 4/25/2024 - Indian Point

2 (The meeting commenced at 6:05
3 p.m.)

4 CHAIR CONGDON: Thank you all and
5 welcome to this meeting of the Decommissioning
6 Oversight Board. I'm Tom Congdon, I'm Chair of the
7 Decommissioning Oversight Board and the Executive
8 Deputy of the New York State Department of Public
9 Service. I appreciate everyone's attendance tonight.
10 I'm going to turn it over to Tom Kaczmarek to do a
11 roll call and to go over some meeting logistics.

12 Tom Kaczmarek?

13 MR. KACZMAREK: Thanks, Tom.

14 As Tom said, my name is Tom Kaczmarek
15 and I serve as the Executive Director of the D.O.B.
16 As I call your name, just please indicate your
17 presence, quickly.

18 Tom Congdon?

19 CHAIR CONGDON: Present.

20 MR. KACZMAREK: John Sipos?

21 MR. SIPOS: Present.

22 MR. KACZMAREK: Senator Harckham?

23 SENATOR HARCKHAM: Here.

24 MR. KACZMAREK: Assemblywoman
25 Levenberg?

1 4/25/2024 - Indian Point

2 ASSEMBLYWOMAN LEVENBERG: Here.

3 MR. KACZMAREK: Kelly Turturro?

4 MS. TURTURRO: Present.

5 MR. KACZMAREK: Alex Damiani?

6 MR. DAMIANI: Here.

7 MR. KACZMAREK: Jane Thompson?

8 MS. THOMPSON: Present.

9 MR. KACZMAREK: Mark Pattison?

10 Linda Malave?

11 MS. MALAVE: Here.

12 MR. KACZMAREK: Jennifer Wach?

13 MS. WACHA: In attendance.

14 MR. KACZMAREK: Thank you.

15 Joe Leary?

16 MR. LEARY: Here.

17 MR. KACZMAREK: Dave Lochbaum?

18 Richard Webster?

19 MR. WEBSTER: Yeah, here.

20 MR. KACZMAREK: Theresa Knickerbocker?

21 MS. KNICKERBOCKER: Here.

22 MR. KACZMAREK: Richard Becker?

23 MR. BECKER: Here.

24 MR. KACZMAREK: Susan Spear?

25 MS. SPEAR: Here.

1 4/25/2024 - Indian Point

2 MR. KACZMAREK: County Boardmember

3 Ulaj?

4 Colin Smith?

5 Superintendent Tromblee?

6 MR. TROMBLEE: Present.

7 MR. KACZMAREK: Bill Smith?

8 MR. SMITH: Here.

9 MR. KACZMAREK: Tom Carey?

10 MR. CAREY: Here.

11 MR. KACZMAREK: And Lou Picani?

12 CHAIR CONGDON: Thank you, Tom.

13 MR. KACZMAREK: Thank you. Before I

14 turn it back to Chair Congdon, as he mentioned, I

15 just want to provide a few -- a few brief reminders

16 to our panelists and participants to promote a smooth

17 meeting.

18 To our in-person Board members and

19 guest presenters, please speak into the mic to ensure

20 your comments are clearly heard and accurately

21 recorded. And also indicate your name when you are

22 speaking. That will support our transcription of

23 this meeting.

24 To our panelists joined by Zoom,

25 please keep your mics muted unless you are speaking.

1 4/25/2024 - Indian Point

2 To our Zoom participants, please
3 reserve the chat feature for reporting technical
4 issues to our A.V. team. Any questions captured in
5 the Q and A field are able to be saved and reviewed.

6 And with that, Tom, I'll turn it right
7 back to you.

8 CHAIR CONGDON: Great. Thanks very
9 much, Tom. And thanks for all you do to set us up
10 for success. We can't do these meetings without you,
11 Tom. We really appreciate all your work.

12 We have a big agenda again, this
13 evening. We're going to cover some housekeeping for
14 the closure Task Force. We're going to hear from the
15 state agencies on some of their oversight activities
16 since our last meeting. We are going to hear from
17 Holtec on activities at the site, since the last
18 meeting, and what's planned for the coming months.

19 And then, we're going to turn it over
20 to some -- two -- two guest presenters. The first
21 will be Arnie Gundersen from Fairewinds Energy.

22 Welcome, Arnie. Thank you for being
23 here.

24 And we will also hear from our own
25 Bridget Frymire from the Department of Public Service

1 4/25/2024 - Indian Point
2 to talk about alternatives to the planned discharge -
3 - the previously planned discharge of wastewater to
4 the Hudson.

5 Then, we will have the remainder of
6 the time, this evening, for public statements. A
7 number of you have pre-registered. We will take them
8 in the order of registration and get through as many
9 of them as we can.

10 Next slide.

11 On the Indian Point Closure Task
12 Force, as folks know, there are -- there are
13 technically two bodies, the Task Force and the
14 Decommissioning Oversight Board. The Task Force, by
15 statute, has to provide annual reports. We tend to
16 issue those for public comment before they are
17 finalized. And I want to make a public announcement
18 that they will -- the next annual report will be
19 issued in draft form for public comment today or
20 tomorrow. And so folks should look out for that.

21 There should be no surprises in the
22 annual update. If you are regular attendees to these
23 meetings and if you pay attention to our website,
24 it's all information that we've discussed. But it's
25 a nice inventory of activities of the D.O.B. and Task

1 4/25/2024 - Indian Point

2 Force work and we'll welcome feedback through the
3 public comment process before we finalize it.

4 Comments will be due -- well, the
5 deadline will be in the public notice that will
6 accompany the issuance.

7 Next slide, please.

8 Okay. I'm going to turn it over to --
9 is it John that's going to start? John Sipos to
10 provide an overview of some of the State activities.

11 MR. SIPOS: Thank you, Tom.

12 Good evening, everyone, nice to see
13 you all again. So this part of the meeting --.

14 CHAIR CONGDON: Hi, County Legislator,
15 welcome.

16 MS. ULAJ: Good evening. Forgive me.
17 Parking was --.

18 CHAIR CONGDON: No -- no -- no,
19 please, please. No worries at all. I'm glad you
20 arrived because I -- I failed to introduce
21 Superintendent Tromblee, as well. And you and he are
22 both newer members to the D.O.B., and I want to
23 welcome you to -- to your first meeting. So thank
24 you.

25 MS. ULAJ: Thank you so much.

1 4/25/2024 - Indian Point

2 MR. SIPOS: All right. So this
3 portion of the meeting will be providing some State
4 Agency oversight descriptions that have occurred
5 since the last meeting. First -- first up is
6 reported on the tip hotline.

7 As of Monday, there were no tips or
8 whistleblower complaints of that sort. So we're
9 going to turn it over to the next page, which is the
10 monitoring update and these are the printouts of the
11 four remaining Reuter Stokes monitors.

12 And these results are consistent, in
13 fact entirely consistent with previous reports
14 that we have provided to the Oversight Board and to
15 the community. So there are no changes there.

16 Turning quickly to the next page on
17 the oversight aspects, State Agencies have been in
18 contact with Holtec regarding minimum trust fund
19 balances.

20 We have had meetings with them about
21 it. And again, this is a unique safeguard that the
22 State built into the Joint Proposal and the
23 Commission accepted as part of this Order to ensure
24 that there are sufficient funds for decommissioning
25 and site restoration.

1 4/25/2024 - Indian Point

2 We provide here a list of the meetings
3 that have occurred with Holtec. And one occurred
4 earlier -- earlier this -- earlier this month. And
5 Holtec, as we noted in the last bullet, has also
6 reported that it remains in compliance with minimum
7 trust fund balance obligations.

8 What we provide on slide 11 is a
9 summary. And this is of Decommissioning Trust Fund
10 balances. This is based on reports that Holtec made
11 to the Nuclear Regulatory Commission, the federal
12 oversight agency, and all -- as all reports to that
13 agency, such reports must be accurate and -- and
14 fulsome given the federal oversight agency's
15 authorities and the obligations and the regulations
16 there.

17 So when you sum up the totals on the
18 bottom line of the chart that we have here, it's
19 approximately, I believe, \$1.8 billion. And the
20 reports are also on the D.O.B. website. They're also
21 on the N.R.C.'s ADAMS website and are easily
22 available for review.

23 So turning to our D.P.S. oversight
24 activities, you know, we are joined here tonight by
25 our resident site inspector, Inspector Cliff Chapin.

1 4/25/2024 - Indian Point

2 And also, as Tom said, we have our chief, Bridget
3 Frymire here will be giving a presentation later on.

4 But staff has been looking at the
5 financial protection aspects, as indicated. There
6 has been an emergency plan revision. And there have
7 been -- as well as the property damage insurance
8 aspects.

9 State regulators have been present at
10 monthly meetings that Holtec has provided as -- along
11 with other interested governmental entities who are
12 able to join that. And Holtec has provided
13 information to the State at those meetings.

14 Also, one thing that may not have
15 gotten a lot of awareness, recently, Holtec and
16 Consolidated Edison filed a petition to provide for
17 the transfer of control of the switchyard area. And
18 this goes back to when Entergy transferred the
19 property or the site to Holtec.

20 It actually, given the way the site
21 was defined, it brought along the -- the segment of
22 the property, the segment of the site that involved
23 the switchyard equipment. So this proposal here,
24 which has been publicly noticed in the New York State
25 Register, is a sort of a realignment and adjustment

1 4/25/2024 - Indian Point
2 between Holtec and Con Ed regarding the control of
3 that -- of those systems and those components.

4 And at the bottom, we do provide the
5 number for the State agency proceeding here, it's a
6 proceeding before the Public Service Commission. If
7 anyone wishes to comment, there's an opportunity
8 there to look at it.

9 Moving on, there has been significant
10 decommissioning activity work that has occurred at
11 the site since we last spoke and over the last year.
12 There are a number of segmentation actions that have
13 occurred.

14 These are all -- most of these, I
15 should note, are inside -- inside existing
16 structures, either the turbine building or the
17 containment structures themselves, including the Unit
18 2 reactor head cutting, Unit 2 cavity leak repair
19 preparations, the Unit 3 feedwater heater removal.
20 And there was also a safety walkdown for -- for
21 Indian Point Unit 1.

22 So that is -- that is work that is
23 continuing on as part of decommissioning. As -- as
24 folks know and I believe, as we discussed at the
25 previous two meetings, the N.R.C., with the support

1 4/25/2024 - Indian Point
2 of its inspector staff, has been looking at a
3 compliance issue concerning the fabrication, by
4 fabrication, I mean construction, the making of the
5 dry casks. And we provide here, the -- some updates
6 on that.

7 N.R.C. did issue a notice and a safety
8 determination regarding this issue, which really is -
9 - it's going to the -- to the factory and what goes
10 on in the factory in -- in a certain construction
11 aspect regarding the dry casks.

12 And again, as we -- I believe, as we
13 said at the last meeting, the N.R.C., that's the
14 federal regulator, has determined that there was a --
15 an extremely low safety significance essentially, not
16 a significant safety issue problem from the N.R.C.
17 That is what the N.R.C. determined.

18 CHAIR CONGDON: If I may, John, N.R.C.
19 will be coming to our next meeting, as well. And
20 we'll have further discussion of this and other
21 N.R.C. activities in June.

22 MR. SIPOS: And I think that pretty
23 much completes the circle from a D.P.S. perspective.
24 I'm going to turn it over to Kelly Turturro from the
25 Department of Environmental Conservation to touch on

1 4/25/2024 - Indian Point

2 some D.E.C. aspects.

3 MS. TURTURRO: Thank you, John.

4 Good evening, everyone. So in terms
5 of the administrative consent order requirements, the
6 investigation, as I've mentioned in the past, will be
7 done under Remedial Investigation Work Plans.

8 Back in October of 2023, D.E.C.
9 approved a draft Remedial Investigation Work Plan for
10 one portion of the site. That is the Lafarge Former
11 Spectra Construction area, which Holtec refers to as
12 A.O.C. 118. So that was -- that work plan was
13 approved by D.E.C. in October of 2023.

14 The consent order requires that Holtec
15 provide D.E.C. two weeks' notice prior to field
16 activities. Holtec provided D.E.C. that notification
17 on March 13th of 2024, and they began investigation
18 activities on March 28th, 2024.

19 Those investigation activities, Holtec
20 reported to D.E.C., included soil borings, collection
21 of soil samples, and installation of groundwater
22 monitoring wells. And D.E.C. anticipates, based on
23 the schedule that Holtec shared, that we will have a
24 report summarizing the investigation by July of 2024.

25 Next slide, please.

1 4/25/2024 - Indian Point

2 So in terms of the SPDES permit
3 process, Holtec had -- had submitted additional
4 information that D.E.C. requested back in November.

5 Our staff continue to review that
6 information. As I've mentioned in the past, as soon
7 as we have a draft SPDES permit prepared, we will
8 issue that SPDES permit for public comment and -- and
9 take public comment on the draft SPDES permit.

10 And next slide, Tom.

11 And then, finally, D.E.C. continues to
12 oversee the closure and assessment of all of the
13 petroleum tanks that are on the site.

14 Thank you, Tom.

15 CHAIR CONGDON: Thank you, Kelly.

16 I'm going to open it up to the D.O.B.
17 members for discussion. Yes, Pete?

18 SENATOR HARCKHAM: Thank you very much
19 for all the presentations. Hello, everybody. Thanks
20 for being here.

21 Quick comment, and then, a quick
22 question if I may? The comment is based on
23 conversations with the mayor and the superintendent
24 who were concerned about state financial support, if
25 the process lagged on.

1 4/25/2024 - Indian Point

2 I spoke with -- at the budget hearing,
3 with the -- I asked on the record the Commissioner --
4 Public Service Commissioner Rory Christian, if, from
5 their perspective, they would be open to having that
6 conversation about some form of extended relief
7 should the process drag on. He said they'd be
8 willing to have that conversation. So premature to
9 say anything more than that at this point, but --
10 but, you know, those conversations can happen if they
11 need to.

12 So the question I have for John, you
13 mentioned the emergency plant revision. What -- what
14 was that, again?

15 MR. SIPOS: So the reference was to
16 the emergency plan -- planning -- oh, it's emergency
17 plant. Sorry, I was probably rushing through there.

18 SENATOR HARCKHAM: I'm sorry; did I
19 miss -- miss that?

20 MR. SIPOS: So the --?

21 SENATOR HARCKHAM: Well, the emergency
22 plan, what -- what is going on with the emergency
23 plan? Thank you.

24 MR. SIPOS: As -- as Holtec exceeded
25 the requirement to move the fuel that was in the

1 4/25/2024 - Indian Point
2 densely packed spent fuel pools, to the dry cask
3 storage facility outside, they, Holtec, you know, met
4 -- met the deadline. In fact, they met it by more
5 than a year in advance so they completed that early.

6 But once spent nuclear fuel is out of
7 the pool, and into the casks, it changes the -- it
8 changes the way that the emergency plan would work.
9 And actually, it really -- the -- the plan -- the
10 focus of the plan really shrinks down.

11 SENATOR HARCKHAM: Yeah, because --.

12 MR. SIPOS: You no longer have the
13 fuel packed together so tightly in the pools. So
14 that the plan can evolve and it really -- it really
15 does shrink down.

16 SENATOR HARCKHAM: Okay. Thank you.

17 CHAIR CONGDON: Yes?

18 ASSEMBLYWOMAN LEVENBERG: Thanks so
19 much for that update. And I'm also supportive of the
20 comment that Senator Harckham made to try to extend
21 the -- the funding over the course of a longer
22 period.

23 I just was curious for the -- all the
24 work that's currently being done, do we have a number
25 of employees on site, how many people are actually on

1 4/25/2024 - Indian Point

2 site doing all of the work of -- and also I have a
3 list of questions. So that's number one.

4 My second question is where did the U2
5 reactor head go -- Unit 2 reactor had go? And -- and
6 I'm just curious about that.

7 And then, the -- in terms of the
8 N.R.C., the dry cask construction violations, are we
9 able to see that report, also? Are we able to see,
10 you know, exactly what -- what the violations were,
11 and have some kind of an understanding of why the
12 N.R.C. felt like that -- that they were
13 insignificant?

14 And -- and then -- that question got
15 answered. And in terms of the SPDES permit, I know
16 it's a lot, but I'm just going to throw them all out
17 there and you can answer them. The -- what -- what
18 is -- exactly is the permit now for? It says it
19 governs discharges from the main facility.
20 Discharges of what? I'm not clear what that is.
21 That's it.

22 CHAIR CONGDON: Why don't we start
23 with the last one, with Kelly, and then we can move
24 to the other ones. And I actually think some of your
25 questions are going to be more appropriate for the

1 4/25/2024 - Indian Point

2 Holtec presentation when -- when they're at the
3 table.

4 ASSEMBLYWOMAN LEVENBERG: Okay.

5 CHAIR CONGDON: To answer employee
6 numbers and things of that nature.

7 ASSEMBLYWOMAN LEVENBERG: Are they not
8 -- did you say they're not coming?

9 CHAIR CONGDON: They're here tonight.

10 ASSEMBLYWOMAN LEVENBERG: Okay.

11 CHAIR CONGDON: They're going to come
12 up to the table for their presentation next --

13 ASSEMBLYWOMAN LEVENBERG: Got it.

14 Okay.

15 CHAIR CONGDON: -- on the agenda,
16 yeah.

17 ASSEMBLYWOMAN LEVENBERG: Yeah, I --
18 that's fine.

19 CHAIR CONGDON: Okay.

20 MS. TURTURRO: So Assemblywoman, in
21 terms of the -- the SPDES permit, that's exactly why
22 D.E.C. had asked for that full technical review. We
23 had a SPDES permit in place, governing the -- the
24 operations at the facility. And with the change to -
25 - and from an operating facility to a decommissioning

1 4/25/2024 - Indian Point
2 facility, we wanted to understand exactly the nature
3 of discharges that were happening at the facility.

4 We asked Holtec for that information.
5 They submitted it and our staff is now reviewing it.
6 But there continue to be and -- and Holtec can
7 comment on this, as well. But there -- there
8 continue to be discharges, not necessarily as -- as
9 we have talked about in the past from the spent fuel
10 pools, but just normal operations of any facility can
11 have discharges. Not from the -- the radioactive
12 areas of the plant, but just normal areas of the
13 facility.

14 MR. SIPOS: Okay. And so I'm going to
15 take the rest of the questions, probably, in reverse
16 order. I think the last question you asked was about
17 the N.R.C. enforcement process and I'll provide a
18 little more information on that.

19 So the N.R.C. did release a report and
20 I believe it is available from the hyperlink that we
21 have on our slide here. I will also note -- and just
22 -- just to put some context in the -- the violation
23 that the N.R.C. is looking at regarding Holtec's
24 manufacturing processes involves changing how a
25 certain subcomponent is attached inside the dry cask.

1 4/25/2024 - Indian Point

2 And the change was from a weld to a
3 bolt. And this is to ensure that the internal
4 lattice work, the framework for the dry -- for the
5 spent nuclear fuel remains aligned within -- within
6 the cask. And so Holtec changed, as I said, you
7 know, weld to bolt.

8 And that is -- that is what N.R.C. is
9 asserting is a violation, that that occurred without
10 a prior notification to the N.R.C., and a prior
11 N.R.C. approval.

12 I'll also note that, recently, I
13 believe it was this year, on behalf of the State of
14 New York, I participated in a conference call with
15 the N.R.C. and with other sites around the country.
16 And, you know, on behalf of New York, I advocated to
17 the N.R.C. enforcement team. I said, you know, what
18 you do from an enforcement perspective, you do from
19 an enforcement perspective, but don't come to the
20 Decommissioning Trust Fund, you know, if there's any
21 financial consequence.

22 So I just, you know, I appreciate your
23 question and I want you to know that D.P.S. staff is
24 watching them and is seeking to ensure that the
25 Decommissioning Trusts are maintained and are not

1 4/25/2024 - Indian Point

2 sort of used for other purposes.

3 You asked about the --?

4 ASSEMBLYWOMAN LEVENBERG: I mean, just
5 before you get off that, but just as a follow-up, I
6 mean, obviously, you know, I agree with you on -- on
7 that point. But, you know, is this a Boeing
8 situation? I mean, I don't think any of us want to
9 see a door flying open on dry cask storage if, you
10 know, the bolt versus the weld is not the best thing.

11 You know, I think it's more to the
12 point of what is the safest and why was the change
13 made without the oversight?

14 MR. SIPOS: So I'm not going -- I
15 appreciate it. I -- I understand the comment and,
16 you know, probably in some way agree with you. I --
17 I'm not -- by reporting what N.R.C. is doing, I'm not
18 necessarily saying that N.R.C. or Holtec is -- is
19 right. I'm just trying to report the facts --

20 ASSEMBLYWOMAN LEVENBERG: I got it.

21 MR. SIPOS: -- to everyone and to
22 provide some background as to, to what is going on
23 here. Certainly, and -- and -- and I should -- I
24 think it's appropriate to again note that the N.R.C.
25 has looked at it. They have an inspector who is

1 4/25/2024 - Indian Point
2 detail oriented. And -- and ultimately, N.R.C.
3 concluded, and I'm just reporting it here, that it
4 was -- this violation was of low safety significance.

5 They looked at the various failure
6 mechanisms, what would happen if the cask tipped
7 over. And they concluded, and again, speaking for
8 N.R.C., that bolt versus weld would not have a
9 significant negative environmental impact. So just
10 to round that out.

11 You also asked about the U2 -- Unit 2
12 reactor head. So that is being separated and
13 segmented. I do not know, sitting here right now,
14 whether those parts have departed the site.

15 But that is -- that is the general
16 approach that there are reactor vessel internals,
17 they get cut up, they get put in boxes, and they get
18 shipped to an appropriate disposal site.

19 And I'm sorry to say, but to your
20 first question, which I'm coming to last, the exact
21 number of head count employees of today, I don't have
22 that right here at the moment. Either we can get
23 that or maybe --.

24 CHAIR CONGDON: We'll pose the
25 question to Holtec when they're at the table.

1 4/25/2024 - Indian Point

2 ASSEMBLYWOMAN LEVENBERG: Thank you.

3 CHAIR CONGDON: And I believe all of
4 the N.R.C. inspection reports have been placed on our
5 website, the D.O.B. So to your other question about
6 will we see the report, it's -- it's -- it's been
7 distributed to the D.O.B. members on the website.
8 Thank you.

9 MR. WEBSTER: I actually have a
10 question for Kelly.

11 CHAIR CONGDON: Yeah.

12 MR. WEBSTER: Kelly, we've got the
13 picture of one of these A.O.C.s, but can you give us
14 more of an overall framework, how many A.O.C.s are
15 there, you know, what's the schedule for -- for
16 actually carrying out characterization, who sets the
17 schedule?

18 MS. TURTURRO: So that would be a
19 question for Holtec in terms of their schedule for
20 submitting us the investigative work plans.

21 MR. WEBSTER: So you don't have any
22 control over the schedule?

23 MS. TURTURRO: No.

24 MR. WEBSTER: And do you know how many
25 -- how many --?

1 4/25/2024 - Indian Point

2 MS. TURTURRO: Not off the top of my
3 head, but I can certainly get that for you, Richard.

4 MR. WEBSTER: More or less.

5 MS. TURTURRO: Yeah.

6 MR. WEBSTER: So there's no estimate
7 for when they might finish characterization of the
8 site?

9 MS. TURTURRO: You would have to ask
10 Holtec that question.

11 MR. WEBSTER: Okay. You don't have
12 any estimate?

13 MS. TURTURRO: No.

14 MR. WEBSTER: Okay.

15 CHAIR CONGDON: Mayor?

16 MAYOR KNICKERBOCKER: The village
17 board had sent a letter to the governor and I'm sure,
18 Dana and Pete, you've seen that, and were asking for
19 the extension because we were under the assumption
20 that this was going to be a prompt decommissioning.
21 As we can see, this is going off the rails, fast. So
22 we do appreciate your support with that.

23 It's important to us. We only have a
24 few more years of the cessation fund and we were
25 hoping for release of some of the parcels. But

1 4/25/2024 - Indian Point
2 things are not working out that way. So we
3 appreciate whatever support you can give to the
4 village.

5 And also, I will speak for the
6 superintendent of the school district.

7 MR. TROMBLEE: You did it much better
8 than I, so thank you.

9 CHAIR CONGDON: And -- and we
10 responded to the mayor's letter and indicated the
11 State will continue, through the D.O.B., exploring
12 opportunities to continue supporting the taxing
13 jurisdictions. Excuse me.

14 The cessation fund, though, I will
15 point out is a statewide program and it is a state
16 statute administered by the E.S.D. And there are
17 several communities, not just the Indian Point
18 community, several communities that have been getting
19 support out of that program, which provides seven
20 years of assistance.

21 So I'm not sure that that's a feasible
22 option, but there are other mechanisms to support the
23 taxing jurisdictions, including the school district
24 and the village, that we will continue discussing and
25 keeping open mind to any way we can help from the

1 4/25/2024 - Indian Point
2 State.

3 MR. TROMBLEE: Yes, just to confirm,
4 being near the table, that is a fully funded
5 cessation fund due to a small tax on the utility
6 bill.

7 CHAIR CONGDON: Yeah, I wouldn't call
8 it a tax, but it is a -- it's through our ratemaking
9 powers of the Public Service Commission that -- I'll
10 just quickly give you the mechanism. So the State
11 program is the cessation program. That's in
12 permanent statute.

13 And one of the first things this body
14 started to discuss around 2017-18 was whether the --
15 it's great that the law exists, but is there money
16 and can a district actually plan for having all seven
17 years of the assistance that's laid out in the
18 statute.

19 And we were explaining, initially, at
20 the time that you can count on it. However, it's
21 still subject to annual appropriations in the budget.
22 The budget is only adopted for one year at a time.
23 And -- and that was a big issue for this community
24 and the community raised that as a huge concern
25 because you couldn't financially plan if you were

1 4/25/2024 - Indian Point
2 subject to annual appropriations. And you weren't
3 sure that you'd have that full seven years of
4 assistance.

5 And so I and my colleagues brought
6 that back to the State Energy Planning Board, which
7 is a totally separate body, which under State Energy
8 Law, adopts regular state energy plans that all
9 agencies then must take actions to support.

10 We have to -- our actions have to be
11 consistent with the State Energy Plan. Through the
12 work of this body, the State Energy Plan was made
13 aware of the -- one of the, say, weaknesses of the
14 cessation program for communities. And to help make
15 that a better and stronger program, they made an
16 amendment to the State Energy Plan to indicate that
17 the Public Service Commission could be an appropriate
18 funding mechanism.

19 Since we're talking about the closure
20 of power plants, there's a nexus to our ratemaking
21 powers. And the State Energy Plan asked us to look
22 into having a separate revenue stream that wasn't
23 dependent on the State appropriations.

24 So in February 2021, I believe, the
25 State P.S.C. followed the State Energy Plan guidance

1 4/25/2024 - Indian Point
2 and adopted an Order that created this assessment,
3 not a tax, that, you know, is paid for by all
4 ratepayers in the state. So it's, you know, not
5 noticeable on everyone else's bill.

6 But it is a small, small pennies
7 charge on all consumers that results in an
8 appropriate level of funding that now gives us the
9 ability to say, yes, it is fully funded. So it's a
10 long-winded answer, but to explain how that -- the
11 genesis of that.

12 MR. TROMBLEE: Thank you.

13 CHAIR CONGDON: So any other questions
14 for the State Agencies? Thank you all.

15 At this time, I'd like to call up
16 Holtec. Frank and Pat, welcome. Thank you.

17 MR. SPAGNUOLO: Hi; good evening,
18 everybody. Frank Spagnuolo, I'm the Site Vice
19 President at Indian Point.

20 So what I'm going to talk about today,
21 I'm going to talk about some of the work that's going
22 on, the workers here in the audience that are
23 supporting us. We'll talk about what we're doing
24 with vessel seg, Unit 1 demolition.

25 And I'm going to introduce

1 4/25/2024 - Indian Point
2 conventional plant demolition. Last time, I
3 introduced the Unit 1 demo. I'll introduce the
4 conventional this time. And as we do more and more
5 phases of demo, I'll introduce that and give you
6 updates between board meetings.

7 I'll talk about what the results or
8 the actions we took due to the earthquake, the update
9 on the pipeline, CertainTeed update, Lafarge
10 remediation. We'll talk about the finance report
11 that was issued, a brief liquid waste discussion
12 update, N.R.C. inspections actions and violations,
13 and then, a safety topic.

14 So I'd like to get right -- to answer
15 your question, Ms. Levenberg, I would say about 400
16 workers at the plant -- at the site right now.

17 So Unit 2, you can see the -- the
18 pictures there. We've completed -- on Unit 2, we've
19 completed the control rod drive shafts. Those ride
20 through the head. That's removed.

21 We suspended plans to commence upper
22 internal segmentation on Unit 2. When we did flood
23 up, we had a small leak on the cavity liner. This
24 leak goes to a tank that's below the liner designed
25 for it.

1 4/25/2024 - Indian Point

2 So we drained back down. We built
3 scaffold. And we are, right now, doing weld repairs
4 on any imperfections that we see. This has been a
5 longstanding issue at Unit 2. It doesn't exist at
6 Unit 3. We're going to do a permanent repair
7 because, at this point, we don't know, once we flood
8 up the cavity -- do the vessel seg on Unit 2, we
9 don't know when we're going to drain it back down.
10 So we don't want any leakage in order to have to re-
11 circuit back to the pool. So that work should be
12 complete by May -- the end of May.

13 On Unit 3, at the last meeting, we
14 were just validating that the core barrel removal
15 stand modification was complete.

16 That was. We returned it to the core
17 and we prepared for -- for vessel seg. While we were
18 working in Unit 2, we stopped and we moved back
19 everything over to Unit 3. And now lower internal
20 segmentation is in progress.

21 And if you can see the upper left
22 picture there, that shows the saw in the vertical
23 position. And what you're looking at, what it's
24 cutting, if you look at the one that's to the right,
25 that is the actual core. So that's where the fuel

1 4/25/2024 - Indian Point
2 was -- was staged in the baffle formation. And those
3 are the walls of the -- what we call the up -- lower
4 internals or the core barrel.

5 And the bottom left picture is
6 actually the Unit 2 cavity liner repair. So as you
7 can see, we cut away a section. That blue sealant
8 was supposed to seal all the leaks in the cavity. It
9 failed in several areas, so we peeled it away.

10 We're doing weld repairs in four
11 different spots. Then we're going to coat it again
12 with a better sealant this time, a better epoxy
13 coating. We'll flood up and we'll check for any
14 leaks, and then, we'll make -- we'll go from there.
15 The plan is, like I said, the end of May, we should
16 know we're done and -- and then, we'll move ahead.

17 Okay. So if we can go to the next
18 slide, I'll talk a little bit about the head.

19 So on Unit 2, we expect to complete
20 the liner repairs and flood up, like I said, by the
21 end of May. And the head segmentation never really
22 commenced. We did some -- some segmentate -- some
23 extraneous parts of the head, we cut off. But we --
24 once we identified that we had a leak, in order to
25 drain back down, we needed -- we would need to put

1 4/25/2024 - Indian Point

2 the head back on the core on the vessel to -- for
3 shielding for the workers.

4 So once we made that decision, we
5 actually put the head back on the core. So that
6 segmentation, once we're done with cavity liner
7 repair, we'll put a team of workers on that.

8 That will be segmented up and if you -
9 - we did talk about this on Unit 3. I don't remember
10 the exact number of boxes, but it's a class A waste.
11 That will be boxed up and it will be sent to Texas
12 through our normal shipping process. Don't -- it
13 should be complete by the end of the year, roughly.

14 CHAIR CONGDON: Frank, just for our
15 listening audience, can you explain what class A is?

16 MR. SPAGNUOLO: I might. So there's
17 several layers -- several levels of waste. Most of
18 our waste is what we call exempt waste. It's the
19 lowest level of waste. Level A is the next highest
20 level. Level B.C. is the next highest level. And
21 then, there's greater than class C.

22 So right now we're cutting greater
23 than class C waste in the Unit 3 vessel. The baffle
24 walls that held the fuel for 40 years is considered
25 greater than class C. It's about as hot as fuel.

1 4/25/2024 - Indian Point

2 And it goes into the same type of containers. It
3 goes into a dry fuel container, a little different
4 insert model that -- that holds it.

5 So there'll be six, what we call
6 greater than class C containers for each Unit 2 and
7 Unit 3 vessel internals that will be stored. And
8 that will be shipped with the fuel when the D.O.E.
9 ever picks up the fuel.

10 The A -- the A boxes, they can ship --
11 there's D.O.T.-approved shipping method for that.
12 It's very simple. And then, there's also what we
13 call B.C. boxes. That's a higher level of waste, not
14 as high as greater than class C. These are all
15 industry terms; I didn't make them up. I apologize.

16 Those are stored on site until the
17 transportation -- there's a -- we need a license for
18 a transportation mode. So right now, there's no B.C.
19 shipments that are going on in the -- in the country.

20 So we have a what we call the interim
21 -- we call it -- it's our old flex building. It was
22 a rad waste storage building with three-foot thick
23 walls. And it's stored in there. And we can store
24 all of our waste and it'll be there until we -- we
25 ship.

1 4/25/2024 - Indian Point

2 And we'll be working with Pilgrim,
3 Oyster, and then, Indian Point to ship B.C. waste
4 over the next decade, really.

5 CHAIR CONGDON: That was really
6 helpful. Thank you.

7 MR. SPAGNUOLO: No problem.

8 So the pictures here, that is -- can
9 you go back one? Sorry. So that is the Unit 2 head
10 as we're putting it back on the cavity. And that's
11 just another close-up of the saw that's cutting
12 through the baffle walls and the -- and the core
13 barrel, itself.

14 So Unit 1 demo, as you remember, I
15 introduced this last at the last D.O.B. So Unit 1
16 started to be built in 1956, put in service in 1962.
17 A little different design, but ultimately is a four-
18 loop pressurized water reactor.

19 And what you're looking at in the
20 picture, on the upper picture, is an actual view of
21 the steam generators there -- horizontal steam
22 generators, which are a different design than Indian
23 Point Two and Three.

24 And those insulated pipes that run up
25 the top vertical, they're called vertical risers.

1 4/25/2024 - Indian Point

2 They go to a steam drum, so each steam generator,
3 there's four of them, have three independent
4 components, two drums on the bottom, one drum on the
5 top.

6 And right now, what we're doing is
7 we're -- we're getting ready to cut all those risers
8 so that we can remove the steam generators. And
9 we'll remove the lower sections. We'll support the
10 top section, cut the risers, remove the lower
11 sections, and then, remove the upper sections. And
12 that will occur over the next two years.

13 2025, we plan on removing 11 and 12
14 boiler. And then, '26 we plan on removing 13 and 14.
15 So we're doing all the prep work now, and then, we'll
16 remove them as we go. They'll be shipped as exempt
17 waste. Con Ed, in '93, '4, '5 timeframe, did a full
18 system decon on that and was able to lower fields.
19 So that -- that's not going to be high-level waste.

20 So the work we're doing, we're
21 continuing to cut the loops. You can see the bottom
22 picture. There's a good graphic of the -- the -- the
23 component on the right, with little plywood covers
24 over it, is actually the hot and cold legs that go to
25 the Unit 1 core. And on the left, that piece of

1 4/25/2024 - Indian Point

2 white insulation or white plastic is actually
3 covering up one of the steam generators.

4 So there was loops in there, pumps,
5 and valves. All that's been removed on 11, 12, and
6 13. We'll continue -- we'll complete 14 before the
7 next meeting.

8 And, of course, in 1962, asbestos was
9 really good. So this is all asbestos covered
10 insulation. We're building a tent right now, and
11 then, we'll do the asbestos abatement on 11. And
12 then, we'll work our way around.

13 And I did report on the last one,
14 there was a polar crane mod that was in place. That
15 is complete and that's fully functional.

16 So I talked about most of what's going
17 on through the next D.O.B., 13 and 14 loops. And the
18 picture on the -- one back, sorry. I'm -- you're
19 ahead of me. That's actually one of the cold legs.
20 There are vertical runs of cold leg. We're removing
21 those around all four loops.

22 And then, the pictures on the -- on
23 the left are a heat exchanger that was also asbestos
24 legs. We did the abatement. We removed it. Now,
25 we're able to remove that. So the process is you

1 4/25/2024 - Indian Point

2 remove the hazards, then you remove the components.

3 So I'll introduce some work we're
4 doing on the conventional plant. Actually, John
5 talked about some of it. So we had talked about
6 we're working up at GT2-3, across the street from the
7 plant.

8 That demo of the GT2-3 and the fuel
9 oil tank, that's all complete. The cement pads with
10 GT2-3 are still there. Right now, we're set with
11 what we're doing up there. We have one underground
12 storage tank that we need to remove. We're going to
13 work with -- with D.E.C. on that. And then, we'll
14 pretty much be done with that for a while.

15 We are working with Con Ed. They have
16 several components that they have to disconnect, kind
17 of what John was talking about. Almost everything
18 coming in and out of the switchyard will be
19 disconnected, the overhead lines and all of the 138,
20 345-kV lines and a lot of internal components will be
21 all removed. We're working with Con Ed and we'll
22 proceed to try to get that done by September.

23 So since we don't -- if you visit the
24 plant, you would not need to go through the same
25 security that you had to do before. So that has

1 4/25/2024 - Indian Point
2 reduced. You would be able to walk into the G.S.B.
3 And then, once you're badged as a visitor, you'd be
4 able to go right into the plant. So all of that
5 security equipment is no longer necessary. So we're
6 actually supporting Palisades and -- and removing it.
7 And so whatever we can remove, we'll remove.

8 Picture on the upper right is just one
9 of our station batteries. There's probably about 15
10 station battery banks.

11 And probably three will remain and
12 everything else we're just removing to remove the
13 hazards. Again, that's hydrogen gas generation and
14 the sulfuric acid. So we'll remove them and we're
15 recycling them.

16 So I gave you a snapshot. There's 49
17 above-ground storage tanks between Unit 2 and Unit 3.
18 31 have already been removed; 8 are planned for 2024.
19 And there's 14 total underground storage tanks and 4
20 are planned for removal in 2024. And we're also
21 continuing to remove equipment.

22 The picture on the bottom right is one
23 of our feed water heaters. There are 12 on Unit 2,
24 12 on Unit 3. So far, we've removed 6 on Unit 3.
25 The other six should be removed here in a week or

1 4/25/2024 - Indian Point

2 two. They're all cut out, big piece of equipment,
3 big -- they're just big horizontal heat exchangers.
4 And again, we're recycling those.

5 So we expect to complete the Unit 3
6 feedwater heater job before the next meeting and
7 start Unit 2 feedwater heaters. And if you're on
8 site today, you would see a 160-foot-long, 400-ton
9 crane that's being assembled in the parking lot.
10 That's being assembled to do work on the roof of the
11 G.S.B. We're putting new air conditioning units up
12 there. And then, that crane will go down to the dock
13 and we'll start removing the Unit 3 dock components.

14 The traveling screens, since we don't
15 need circ water anymore, we'll move the traveling
16 screens, circ water motors go down to the Unit 1
17 screen millhouse, remove the traveling screens, river
18 water pumps.

19 So all of those components will be
20 removed over the next several months. We'll bring
21 pictures, show these are big components. We need a
22 big crane for it. So that's the goal. The focus is
23 that everything we need this big crane for to remove
24 it, and then, we'll recycle.

25 And so earthquake response. So as

1 4/25/2024 - Indian Point

2 everyone knows, we had an earthquake, 4.8 magnitude
3 earthquake centered in Jersey on April 5th. At the
4 site, it was registered as 3.6 magnitude earthquake.
5 So I got a lot of questions on that.

6 IPEC has -- was seismically designed
7 to stand an earthquake of peak ground acceleration,
8 0.15g horizontal and 0.10g vertical, which probably
9 means nothing to everybody here. But they don't --
10 engineers don't use the Richter Scale. They use Gs
11 in horizontal and vertical. So the value is based on
12 the ability to stand a category seven earthquake on a
13 Modified Mercalli Intensity scale. Again, nobody
14 else uses that, but engineers.

15 The ISFSI pads are built to the
16 standard, as well. So the Unit 2, Unit 3 plants were
17 built to that standard. The ISFSI pad was built to
18 that standard. It basically roughly is equivalent to
19 a 6.0 magnitude earthquake.

20 So plant staff were on site. They
21 have -- we have a procedure, an A.O.P., Abnormal
22 Operating Procedure Seismic 1, which basically lists
23 all the equipment in the plant. And the operators
24 and security did their tours. There was no issues.
25 And then, the design engineer did his -- his portion

1 4/25/2024 - Indian Point

2 of that and there were no issues.

3 Okay. This one, I might need the
4 pointer for. So I tried to get -- I tried to --
5 okay. It doesn't work. So all right, so --.

6 CHAIR CONGDON: You can use the -- he
7 can use the cursor, maybe.

8 MR. SPAGNUOLO: Yes. So that little
9 pond there, affectionately we know that -- we call
10 that Darra's Pond (phonetic spelling) after the late
11 Darra Gray, who was our environmental and identified
12 an issue with that pond. So now, furthermore, that
13 will be called Darra's Pond.

14 So that is basically a groundwater
15 receptacle. And the road right behind it, to the
16 south -- this is -- this is looking south. That road
17 is the gypsum plant access road. And got a call in
18 January from CertainTeed. And I went over there and
19 their -- their road was -- had water over it. And
20 then, you can see it was pooling on the -- on the
21 south side of the road.

22 So we contacted the Village of
23 Buchanan. We looked for city water leaks. We looked
24 for any other leaks in the plant. This is so far
25 away from the plant, there's no plant components.

1 4/25/2024 - Indian Point

2 This is as far south as you can get. We did sample
3 it. There is no radioactive component to it,
4 whatsoever.

5 And then, we put a drone up because
6 you really can't see this as clear. That's a drone
7 shot. And we could see that Darra's Pond was
8 overflowing to the east and south. So it's
9 overflowing because, since September of 2023, we've
10 had 7.5 inches of rain more than the 30-year high
11 value. I didn't get that myself. We called a
12 hydrologist from T.R.C. to help us determine what's
13 going on.

14 The other -- the big concern was the
15 pipeline. That's also the route that the pipeline
16 takes. So we brought in Enbridge. Enbridge did
17 their evaluation. There is no safety concerns with
18 the pipeline. The only concern really is the Gypsum
19 Plant Road. It's not being undermined. So T.R.C. is
20 going to give me a report that we'll review and see
21 what we can do with it.

22 Does not communicate with the Hudson.
23 It basically flows south through the -- there's
24 another pond, and then, it flows to the ball field,
25 which I'm sure you know is flooded. And then, that

1 4/25/2024 - Indian Point

2 eventually gets to Lake Meahagh -- Meahagh. So
3 that's where -- that's the flow it's taking.

4 Everything right now is just -- it's
5 saturated. So we expect, with warmer weather, this
6 will -- this will clear up and, you know, we don't
7 have rain. But so far, there's no concerns.

8 And Kelly already talked about the
9 Parcel D. Where that -- on the other south side of
10 the road is also Parcel D. That is one of our
11 Remedial Investigation Work Plans. So that -- like
12 Kelly said, that plan, all the samples have been
13 obtained. We should get a final report in July. We
14 don't expect to do any remediation. The only reason
15 this -- you were asking about A.O.C.s and I don't
16 have a number off the top of my head. I'm not
17 prepared for that, but we'll get it through Kelly.

18 The only reason that was an A.O.C. is
19 because when Spectra built the pipeline, that was
20 their laydown area. And technically, Entergy at the
21 time didn't have a presence out there. So we don't
22 know what happened.

23 So we said it's an A.O.C. in case any
24 of these trucks had hydraulic leaks, motor oil leaks,
25 they spilled diesel fuel while they were fueling up

1 4/25/2024 - Indian Point

2 their equipment. So that's what we're looking for.

3 If the Remedial Investigation Work
4 Plan comes back with work for us to do, then we
5 submit a plan to -- to D.E.C. and that'll get
6 approved. And then, we'll do the remediation. Then
7 we'll do the sampling again and we'll have the
8 results. And then, that that piece of property will
9 be one of the A.O.C.s, that will be clear.

10 Okay. So this is a cut-and-paste
11 directly out of the report that we filed on March
12 29th. So every year, we have to report in accordance
13 with 10 CFR 50 Section 82, Termination of License on
14 behalf -- you know, the company on behalf of Indian
15 Point submits the annual report.

16 So the estimates provided use all
17 December 31st, 2023 numbers, just as John showed you.
18 The estimates provide, according to A.C.I., we do not
19 have any further action required to demonstrate
20 adequate funding. John already talked about the
21 trust fund balances as of the 31st. If you actually
22 read the report, the very last line of Tables 3 A, B,
23 and C are the trust fund balances at the end of
24 everything.

25 Right now, full license termination,

1 4/25/2024 - Indian Point
2 based on D.O.E. doing their part of fuel transfer, is
3 2063. And that would be the trust fund balances at
4 the end of that. So and also, as John alluded to, we
5 are maintaining our 400 million for the 10 years
6 following transaction close date.

7 Okay. So liquid waste discharge, I
8 did want to close the loop on two items that I
9 brought up at the last meeting about tritium removal.
10 So there were two vendors that approached us with
11 sound ideas on how to remove tritium from the water.

12 So on November 10th, we met with
13 Veolia. We discussed the potential tritium removal.
14 They would use a Modular Detritiation System. And
15 when we actually explained the scope of it, this
16 works in the lab, it doesn't work in the commercial
17 process.

18 So they basically made a decision to
19 move away from tritium issues.

20 Then we had a further -- I think it
21 was at the December D.O.B., Nathan Plummer was here
22 with some of his support. So we met with him. He
23 was the hemp guy, as everybody remembers him. It's
24 basically called phytoremediation.

25 So we did narrow it down. The hemp is

1 4/25/2024 - Indian Point

2 not the only product that can be grown. Wheat can,
3 alfalfa. So we continued with a conversation with
4 him, getting away from hemp to get that off the table
5 to understand what the technology was.

6 So on the 24th, we met with him. We
7 requested more information because I need to know how
8 big the equipment is, what the power consumption
9 rates are, what the cycle is, what the cost is.

10 On April 22nd, we did have, we -- we --
11 -- they provided the proposal. They kind of changed
12 the plan a lot. They no longer want to grow plants.
13 They want to use sawdust of -- of hemp again, or
14 soybean, and then, basically just sprinkle it with
15 liquid waste.

16 And so we're -- we're -- it's not the
17 same type of plan. But they did introduce another
18 player into this and he uses electrical molecular
19 disassociation to enhance tritium removal. So I'm
20 talking to them, see if any of these plans are sound.
21 Nobody in the country is using them.

22 So and then, as everyone knows, on
23 April 18th, we did file a lawsuit in the Southern
24 District of New York regarding Chapter 279 of the
25 laws of 2023. And a lot of the questions, we're just

1 4/25/2024 - Indian Point
2 not going to be able to discuss due to pending
3 litigation on liquid waste. Okay?

4 So N.R.C. inspection reports -- so
5 N.R.C. inspection reports are public documents once
6 we get them. They -- they'll -- they do their --
7 every quarter, they issue a report. They debrief us
8 at the end of the quarter. We just had a debrief
9 last week. The N.R.C. has 45 days to issue a report.
10 Then it's a public document.

11 So the only public document that's
12 available right now is the one from February 22nd of
13 2024. That was the fourth quarter exit report, which
14 discussed the charitable donations. This is just a
15 cut-and-paste out of that. Now, we had the exit
16 debrief on the preliminary report for the first
17 quarter. And that final report, I will be able to
18 discuss at the next D.O.B.

19 And then, the last slide talks about a
20 supplemental employee received an injury to the right
21 hand. That was also on John's slide. That was
22 operating a tool with a 30-foot shaft and one
23 operator on one end of the tool went in the wrong
24 direction and twisted someone's finger. So he's
25 okay. He's back -- he never left -- you know, he

1 4/25/2024 - Indian Point

2 never lost any work time. And it was an easy enough
3 fix to just not use that tool. There's a better way.

4 And as you can see, the 2024, Dose
5 Report, since we're in the first quarter, this is our
6 quarterly Dose Report and we're well on track. And
7 that's really all I have.

8 CHAIR CONGDON: Thank you, Frank.

9 Questions for our Holtec folks?

10 ASSEMBLYWOMAN LEVENBERG: I have one,
11 really quick one.

12 CHAIR CONGDON: Sure.

13 ASSEMBLYWOMAN LEVENBERG: What's a
14 supplemental employee?

15 MR. SPAGNUOLO: A contractor.

16 ASSEMBLYWOMAN LEVENBERG: And when you
17 mentioned those 400 employees, does that include
18 supplemental?

19 MR. SPAGNUOLO: Correct.

20 MR. BECKER: Frank, thank you for the
21 report. And I was very pleased to see that you guys
22 are looking at alternative ways of dealing with the
23 tritium because I don't think there's any established
24 other way of doing it. And we don't want to keep
25 this tritium water there forever.

1 4/25/2024 - Indian Point

2 So we're -- we're pleased to hear that
3 you're moving on because I know, in a lot of the
4 projections that Holtec has made, the fact that
5 currently, since you can't discharge into the river,
6 it's going to delay the process eight years. But I
7 wasn't sure how that -- where that eight years came
8 from, since there isn't an alternative right now for
9 getting rid of the tritium.

10 And the second question is a follow-
11 up. I did a lot of research on this online.
12 Certainly not an expert, but I do know that certain
13 countries are mixing it with cement-like materials,
14 turning it basically into a concrete block that can
15 be buried and naturally decompose deep into the
16 ground or be transported elsewhere.

17 MR. SPAGNUOLO: Did I have a question
18 there? I'm sorry?

19 MR. BECKER: Yeah, well, the question
20 is have you looked into that, and how you came up
21 with the eight years?

22 MR. SPAGNUOLO: I'm sorry. The eight
23 years. So I talked about it in the last slide.
24 Eight years was based on what we project the lawsuit,
25 you know, somewhere in that window to take. The

1 4/25/2024 - Indian Point
2 eight years is based on the fact that I -- without --
3 if I can't release liquid waste, I'm not going to be
4 able to take down the Unit 2 or Unit 3 V.C.s, Unit 2
5 or Unit 3 spent fuel pools, and I won't be able to
6 take down any of the support structures. So --
7 nuclear site support structures, because eventually,
8 no matter what, we have to move this waste around
9 from the tanks that they're in now, to process it.

10 Even in Arnie's, what he's going to
11 talk about, all that waste would need to be processed
12 through our existing systems. So we need the current
13 infrastructure that we have. So in order to do that,
14 I also need power, so that impacts the turbine
15 buildings.

16 That's why, when I talked about what
17 we're doing on the conventional side, the feedwater
18 heater bays are really outside buildings. They're
19 tied to the turbine hall, but I could literally gut
20 those buildings without impact.

21 The Unit 2, Unit 3, Unit 1 docks
22 really aren't support. Unit 2 docks supports us for
23 dilution, but the Unit 1 and 3 docks don't. I could
24 remove all of that in the condensate polisher
25 building.

1 4/25/2024 - Indian Point

2 So what we can do, we will do. The
3 security buildings, I can remove them. I don't need
4 them. Where it locks me up is when I just can't --
5 when I need to keep the infrastructure available to
6 process waste, no matter where I put it.

7 MR. SIPOS: And just for
8 clarification, Frank, when you use the term V.C.,
9 could you tell us what that is?

10 MR. SPAGNUOLO: Those are the big
11 domes you see. Those are the footprints. They're
12 called vapor containments, domes. Yeah, sorry.

13 MR. WEBSTER: Can I just ask for
14 clarification on that? So aren't you processing the
15 -- at some point, you have to process the tritium
16 waste, right, and take the -- take everything apart
17 from the tritium. Are you doing that now or are you
18 just waiting?

19 MR. SPAGNUOLO: I don't have any
20 ability to do that now. I can -- I can process waste
21 and put it back in the same tank and it would not be
22 -- it would not be adequate to release.

23 So once you process waste -- we
24 process waste on Unit 2. We put it in what we call
25 the waste distillate tank. That tank is -- is

1 4/25/2024 - Indian Point
2 recircled three times, sampled for all components,
3 including P.C.B.s, then it's released. If I take
4 that and put it back in any tank, then I have to
5 start the process over. You're not really buying
6 anything.

7 MR. WEBSTER: Well, if you had a clean
8 tank, you would be buying something; right?

9 MR. SPAGNUOLO: If I had a what?

10 MR. WEBSTER: If you had a clean tank.

11 MR. SPAGNUOLO: A heating tank?

12 CHAIR CONGDON: A clean tank, a
13 different tank, a new tank.

14 MR. SPAGNUOLO: But even -- I don't
15 want to steal Arnie's -- the end of his thing, but at
16 the end, I still need to be able to release that
17 tank.

18 MR. WEBSTER: I know but --.

19 MR. SPAGNUOLO: So I still need
20 dilution flow. I still need to meet my SPDES permit.
21 I still need to meet all the N.R.C. requirements so -
22 -.

23 MR. WEBSTER: I understand that, but
24 what you're saying is you can't process the waste and
25 I'm just trying to figure out why. The reason why is

1 4/25/2024 - Indian Point

2 because you don't have a clean place to put it;
3 right?

4 MR. SPAGNUOLO: Yeah, right now, I --
5 it's not the solution. It's a -- I don't want to end
6 -- I don't want to go -- you know, it's not -- it's
7 not an end solution because --

8 MR. WEBSTER: Understood.

9 MR. SPAGNUOLO: -- the tanks need to
10 get released somehow, somewhere, they need to,
11 someday. We can make this our grandchildren's
12 problem if that's what we decide to do.

13 MR. WEBSTER: Well, I guess my
14 question is could we come up with an interim solution
15 that would then allow you to move more quickly on the
16 -- on the -- on the demolition?

17 MR. SPAGNUOLO: We're going to give
18 you our diatribe.

19 MR. O'BRIEN: Yeah, at the advice of
20 counsel, we're not going to be able to discuss
21 anything related to wastewater disposal.

22 MR. SPAGNUOLO: That's where we're at.

23 MS. KNICKERBOCKER: Thank you, Frank,
24 for the update. And I'm sorry, were you done,
25 Richard? If you had more --.

1 4/25/2024 - Indian Point

2 MR. WEBSTER: Actually, I believe I'll
3 just ask one more question. I actually have two
4 questions. One is, on the site remediation, could
5 you answer the questions that Kelly told me to ask
6 you?

7 MR. SPAGNUOLO: Well I answered it, I
8 don't have the number of A.O.C.s that we have. But
9 each A.O.C. is scheduled in our schedule and it's all
10 tied to partial site release. So Parcel D was
11 basically a southern piece of property that's not
12 impacted by any equipment. So we chose to do that.

13 And we'll continue to do other areas
14 of concern that don't have any impact. There's a --
15 I'll give you an example of an area of concern.

16 There's a 1500-gallon oil tank that
17 used to heat one of the training buildings on site.
18 I don't know, 15 years ago, it overflowed. The
19 vendor that was filling it up, overflowed it and
20 spilled 100 gallons, whatever it was. It's well
21 documented. That is now an area of concern. So in
22 order to remediate that, I need to get rid of the
23 tank and do our -- so most of the A.O.C.s are of that
24 nature.

25 MR. WEBSTER: Right. And I'm actually

1 4/25/2024 - Indian Point

2 most interested in the A.O.C.s that are causing
3 impacts, unsurprisingly. So for the most
4 contaminated A.O.C.s, do you have any schedule for
5 some characterization of those?

6 MR. SPAGNUOLO: Yeah, it's all -- it's
7 all in our P.S.D.A.R. schedule and --.

8 MR. WEBSTER: That can change; right?

9 MR. SPAGNUOLO: Absolutely.

10 MR. WEBSTER: So the current -- is the
11 current schedule the same as the P.S.D.A.R.?

12 MR. SPAGNUOLO: The current schedule
13 that we have right now is what we just issued in
14 March of this year to the N.R.C. So any changes --
15 any material changes to that, we have the ability to
16 move items around in the schedule.

17 MR. WEBSTER: Right.

18 MR. SPAGNUOLO: Based on priority.
19 There are no A.O.C.s that are impacting the
20 environment. They're legacy issues. They were
21 cleaned up.

22 MR. WEBSTER: No -- no, that's not
23 true.

24 MR. SPAGNUOLO: Okay.

25 MR. WEBSTER: What about the -- the

1 4/25/2024 - Indian Point
2 spent fuel pool leak that goes down into the Hudson?

3 MR. SPAGNUOLO: I don't actually know
4 if that's an A.O.C. See, but A.O.C.s -- A.O.C.s are
5 Areas of Concern.

6 Yeah, the entire nuke site is an area
7 of concern, the entire nuke site. Underneath the
8 reactor is an area of concern.

9 MR. WEBSTER: Right. And I'm asking
10 you what's the schedule. Do you know?

11 MR. SPAGNUOLO: I don't have that. I
12 don't have that information.

13 MR. WEBSTER: Could you -- could you
14 give me that information after the meeting?

15 MR. SPAGNUOLO: We'll see what we have
16 public.

17 MR. WEBSTER: Last question. I think
18 at the last meeting, you told me that you couldn't
19 estimate the amount of tritiated water on site. As
20 you saw from a letter that I checked -- from a letter
21 I sent you a couple of days ago, I checked back and
22 Rich Burroni, your predecessor, had provided an
23 estimate. So how come Rich Burroni can provide an
24 estimate and you can't?

25 MR. O'BRIEN: At the advice of

1 4/25/2024 - Indian Point

2 counsel, we will not be discussing anything related
3 to wastewater disposition.

4 MR. WEBSTER: Well, with respect, that
5 is not a legal issue. That is a factual issue about
6 your -- your statements at this -- at this meeting.
7 And is your counsel here?

8 MR. O'BRIEN: No.

9 MR. WEBSTER: So how are you getting
10 this advice?

11 MR. O'BRIEN: I've been told to, at
12 the advice of counsel, defer anything related to
13 anything relating to water disposition.

14 MR. WEBSTER: That's not relating to
15 water disposition.

16 MR. O'BRIEN: You're asking me about
17 water on site --

18 MR. WEBSTER: Again, that's not --

19 MR. O'BRIEN: That's fine.

20 MR. WEBSTER: If the advice of council
21 is water disposition, I'm not asking about that.

22 MR. O'BRIEN: Okay.

23 MR. WEBSTER: I'm asking about your
24 ability to estimate the amount of water on the site.

25 MR. O'BRIEN: Which would then be need

1 4/25/2024 - Indian Point

2 to be disposed, which is what I'm not going to
3 comment on.

4 MR. WEBSTER: I'm not asking about
5 disposal.

6 CHAIR CONGDON: So could I just
7 interject because it's not constructive. The issue
8 is that in answering the question at past meetings,
9 Mr. Barone provided a number of 1.3 million gallons
10 on site. Other comments by Holtec, over time, have
11 also clarified that was at a moment in time and that
12 there is other activity on site producing more
13 wastewater that is added to whatever that number was
14 when Rich provided it.

15 So can I just ask you, the number is
16 increasing, yes?

17 MR. SPAGNUOLO: Yes.

18 CHAIR CONGDON: And the number is
19 increasing because you're not releasing anything that
20 you can't release, pursuant to the law in place?

21 MR. SPAGNUOLO: Correct.

22 CHAIR CONGDON: Richard, is that -- I
23 mean, you understand that there's additional water
24 being --

25 MR. WEBSTER: Okay.

1 4/25/2024 - Indian Point

2 CHAIR CONGDON: -- added from the
3 processes that they're using; right?

4 MR. WEBSTER: If Mr. Barone could
5 provide an estimate of the volume then, why can't you
6 provide an estimate now?

7 MR. SPAGNUOLO: Because we're under a
8 --.

9 MR. WEBSTER: No, but you could
10 provide an estimate last time, before you sued.

11 MR. SIPOS: Okay. I -- I think,
12 Richard, you've made your point. I think Mr. O'Brien
13 has made his point that he's communicating from their
14 lawyers. And I think maybe we could --

15 MR. WEBSTER: I'm happy to move on.

16 MR. SIPOS: -- in the interest of
17 efficiency, we could move on.

18 CHAIR CONGDON: And the mayor had a
19 question, as well.

20 MS. KNICKERBOCKER: Yes. Well, I just
21 want to say thank you -- of course, I've said, thank
22 you for the update, but also we had -- the Village
23 Board had toured CertainTeed. And that was our
24 question, like, we knew that the property line was
25 right there, the water that was coming into the

1 4/25/2024 - Indian Point

2 CertainTeed lot. So thank you for explaining that.

3 I'll bring that information back to the board.

4 Also, I'm hoping -- first of all, I'm
5 pleased that you're looking at other alternatives of
6 how to get rid of the wastewater, the -- the tritium,
7 and by these other processes that you're looking at
8 that, and you'll continue to look at that.

9 And I know you had said that this
10 isn't done anywhere else in the country, but we have
11 been -- this -- this decommissioning process, we --
12 we've kind of been trailblazers. So maybe perhaps
13 going forward, there might be some type of technology
14 that will work and that we can -- or we can further
15 look into it.

16 But thank you for at least, you know,
17 being open to -- to looking at that. Thank you.

18 CHAIR CONGDON: Susan?

19 MS. SPEAR: Thank you. Is the
20 seismological measuring equipment still functional on
21 site?

22 MR. SPAGNUOLO: No.

23 MS. SPEAR: So where did you get the
24 3.6 number from?

25 MR. SPAGNUOLO: From the website that

1 4/25/2024 - Indian Point

2 is put out by the National Geologic Service. It
3 actually has thousands of points. You can find what
4 it was at your house on this website.

5 MS. SPEAR: Interesting. Thank you.

6 MR. SPAGNUOLO: I didn't know it
7 existed until after the earthquake, either.

8 MS. SPEAR: One more question, the
9 above Class C waste that's not the spent fuel rods,
10 where is that being stored on site?

11 MR. SPAGNUOLO: That'll be stored on
12 the ISFSI pad.

13 MS. SPEAR: So it's boxed up and on --
14 physically on the ISFSI pad?

15 MR. SPAGNUOLO: It will. Right now,
16 there's two cans that are greater than Class C waste,
17 each from the Unit 1 -- I'm sorry -- Unit 2 and the
18 Unit 3 spent fuel pool. There'll be six more from
19 Unit 3, six more from Unit 2 and that was planned in
20 the design of the ISFSI pad.

21 MS. SPEAR: Thank you.

22 CHAIR CONGDON: Yes, Legislator?

23 MS. ULAJ: Thank you so much.

24 Regarding the lawsuit you filed on April 18th, are
25 you able to speak to how those legal fees are being

1 4/25/2024 - Indian Point

2 funded? Are any part of the decommissioning trust
3 fund being used to support that lawsuit?

4 MR. O'BRIEN: I -- I don't have that
5 answer. Honestly, I don't -- I don't know offhand.
6 Yeah, it would come from the company because that's
7 who's filing the suit, so.

8 CHAIR CONGDON: I think that was an
9 excellent question. And I think we should follow up
10 on that and learn more about the -- how the -- how
11 the litigation is being paid for.

12 Other questions? Yes, Superintendent?

13 MR. TROMBLEE: I'm going to -- I'm
14 going to ask a new-guy question here.

15 CHAIR CONGDON: Okay.

16 MR. TROMBLEE: The -- the inspection
17 report regarding the use of the trust fund for
18 community outreach activities is not the intention of
19 the trust fund and it's a violation of that. Does
20 that preclude Holtec from providing any other
21 outreach activities outside of that trust fund? So
22 could they use general operating funds to support
23 community outreach?

24 MR. O'BRIEN: The company can -- I'll
25 say it doesn't preclude outside if we choose to do

1 4/25/2024 - Indian Point

2 so.

3 MR. TROMBLEE: Okay. Thank you.

4 Thank you.

5 CHAIR CONGDON: Other questions?

6 Okay. Thank you, Frank.

7 Thanks, Pat.

8 Arnie Gundersen is here from
9 Fairewinds Energy. And at the request of community
10 members, we've invited Arnie to make a presentation.
11 He's given a -- a couple of other presentations that
12 we've circulated videos of to the D.O.B. So we're
13 familiar with your work and we appreciate you coming.

14 I want to do a -- just -- just make an
15 announcement by the State. You're going to hear two
16 presentations tonight about alternatives to the
17 wastewater discharge. One is storage on site, which
18 will be presented by Arnie Gundersen. Another is
19 further examination of what occurred at Vermont
20 Yankee, which was shipment offsite.

21 And I want to make clear that this is
22 a Decommissioning Oversight Board that is not the
23 decision maker as to how the water will eventually be
24 disposed of. We are an information sharing body and
25 we are here to facilitate information exchange.

1 4/25/2024 - Indian Point

2 And we're really grateful, Mr.

3 Gundersen, that you made the trip to -- to join us
4 and to share your knowledge with us. And I want to
5 open the floor to you. Thank you.

6 MR. GUNDERSEN: Well, thank you. Do I
7 need this closer?

8 CHAIR CONGDON: You do need to speak
9 into the mic. I will ask our A.V. folks to opine.

10 MR. GUNDERSEN: Okay. Wow. Yeah,
11 thank you for inviting me to speak to you tonight. I
12 want to thank the groups that contacted Fairewinds in
13 the past year, seeking our information and the belief
14 that in technical knowledge that Fairewind has.

15 I want to thank Governor Hochul and
16 the D.O.B. and all the advocates that have been
17 seeking to protect the -- the Hudson River by
18 inviting me here to answer questions. I'd like to
19 give a shout out to my union brethren, my -- for 44
20 years, my dad was a member of the -- he was a master
21 mechanic in the Oil, Chemical, and Atomic
22 International Union, which rolled into the
23 A.F.L.C.I.O. back in -- in -- right around the change
24 of the century.

25 I walked the line with him when I was

1 4/25/2024 - Indian Point

2 a kid. In my union history, I was the first union
3 kid to ever get a scholarship from my father's
4 company. Before that, it was all managers and -- and
5 -- and -- and doctors.

6 So each summer out of high school, I
7 was a Teamster back when Jimmy ran the union. And
8 between my Teamster wages, plus the union kid
9 scholarship, plus about half that my parents were
10 able to chip in, I was able to get out of school debt
11 free. So I'm -- I'm deeply appreciative of -- of
12 Teamsters and -- and what unions have done.

13 After I became a whistleblower, I was
14 a high school math teacher and a member of the
15 N.E.A., which is the teachers union. And I was
16 invited by the N.E.A. to -- to write an article in
17 the -- in a magazine. So I appreciate the people
18 that gave us the 40-hour work week. Thank you very
19 much.

20 The Board has my C.V. It's 16 pages
21 long. And this is going to be a speed date. Okay.
22 We're going to -- we're going to do a real quick
23 interview.

24 I graduated R.P.I. Rensselaer, up in
25 Troy, New York with honors cum laude. I was the

1 4/25/2024 - Indian Point
2 first in the nuclear engineering department. I
3 earned my reactor operators license. I was a
4 recipient of Atomic Energy Commission Fellowship for
5 my master's degree up there.

6 I was the author of one of the
7 chapters of the very first Department of Energy
8 Decommissioning handbook. And I was coauthor of
9 three peer-reviewed papers about the spread of
10 radiation and bestselling author in -- in Japan about
11 the Fukushima meltdown. And I hold a patent on a
12 nuclear power safety device.

13 Professionally, for 20 years after
14 college, I -- I started as an associate engineer and
15 wound up as a senior V.P. of a company, a nuclear
16 company that was licensed by the N.R.C. to dismantle
17 nuclear facilities, including shipping port and --
18 and other non-reactor nuclear facilities.

19 And this is important. When I was a
20 senior V.P., we had tough engineering problems and
21 you get half a dozen engineers in a room and -- and,
22 within a week or so, you figure out a solution. So I
23 just don't buy that argument, oh, we can't do it.

24 My -- my groups created the first
25 thing that could catch a fuel canister that was

1 4/25/2024 - Indian Point
2 dropped from 100 feet high, two-story spent fuel
3 racks, free standing sliding racks, which was the
4 first in the world, missile shields, turbine nozzle
5 dams -- steam generator nozzle dams, rather.

6 So when I hear it can't be done, I
7 just know the power of a -- of a group of engineers
8 to come up with -- with solutions.

9 New York State, I think my nuclear
10 career started in New York State when, at eight years
11 old, my mother took me to the Brooklyn Navy yard to
12 see the Nautilus, which was just a nuclear-powered
13 sub that had just gone from Seattle under the ice
14 pack and popped up in the Atlantic.

15 And then, of course, I was at
16 Rensselaer. I was on the sailing team. We used to
17 sail on the Hudson River. The reactor I worked at
18 was in Schenectady. And I joined New York State
19 Electric and Gas, and where I met my wife, and who's
20 Fairwinds's co-founder.

21 We were -- we were married in Owego.
22 We dated in Oswego and we were married in Owego. Our
23 son was born in Johnson City and I spent many, many
24 family vacations on the Sacandaga Reservoir. So it
25 really is the Empire State and it's nice to be here

1 4/25/2024 - Indian Point

2 today.

3 I got to stop one rumor. There was a
4 rumor floating around. We're -- we're -- we're
5 whistleblowers, my wife and I. We lost our home, we
6 lost our savings, we went -- we lost our pension, and
7 I own no stock in anything. I -- I get by on Social
8 Security.

9 There was a rumor around that I was
10 pushing the Eberline Lab that we've channeled our
11 work through because I own stock in the company. And
12 I own stock in nothing. I can't afford it. So let's
13 put that rumor to rest.

14 Briefly on Holtec, I -- I need to note
15 that Holtec has never designed a nuclear power plant,
16 never constructed a nuclear power plant, never
17 operated a nuclear power plant, and never wholly
18 decommissioned a nuclear power plant as of today.

19 Holtec's chief financial officer's
20 suing the company, alleging that he was forced to
21 overinflate the company's assets by three-quarters of
22 a billion dollars. I think an important comparison
23 here is what happened at Zion.

24 Zion is a nuclear plant just north of
25 Chicago. And it's a 2-unit, 4-loop, Westinghouse

1 4/25/2024 - Indian Point
2 plant, pretty much identical to Indian Point 2 and 3.
3 Zion was 2 units. And the -- the company that
4 dismantled -- it has been completely dismantled by a
5 company called Zion Solutions and -- not Holtec --
6 Zion solutions for \$800 million.

7 So when I -- when I hear the -- the --
8 the amount of money available here, I'm really in awe
9 of what the Zion Solutions was able to accomplish for
10 \$800 million.

11 I -- I also need to talk about the
12 Nuclear Regulatory Commission, which came up in
13 discussions earlier. The N.R.C. distorted federal
14 law to allow Holtec to license a temporary spent fuel
15 storage facility in the southwest. Luckily,
16 concerned citizens and states were able to get that
17 reversed.

18 Holtec is licensed to take apart the
19 Palisades Plant, and it appears that the N.R.C. is
20 ready to green light, without any legal precedence,
21 the restart up of -- of the Palisades reactor.

22 In -- in addition, State of Michigan
23 has given Holtec 300 million, and the Department of
24 Energy has given them billions, as well. I don't
25 know why. For a company that never designed, never

1 4/25/2024 - Indian Point
2 constructed, never operated a nuke, they sure have a
3 -- a great cash flow.

4 We've talked about N.R.C. integrity.
5 I need to point out that in -- in 2017, the Inspector
6 General did a report that they -- they surveyed all
7 of the Nuclear Regulatory Commission staff. 15%
8 percent of the staff was afraid to talk about the
9 safety problems. 50% of the staff was afraid to put
10 their concern in writing. 85% of the staff would
11 advise a friend not to put it in writing. And every
12 single member of the N.R.C. staff that put a concern
13 in writing in something called a D.O.P. -- Differing
14 Professional Opinion, D.P.O. -- every single person
15 experience retribution within the N.R.C.

16 So, you know, if you think you're
17 getting an honest broker here, I -- I think you
18 really need to reevaluate the existence of the tooth
19 fairy.

20 I was -- as a senior vice president, I
21 told you I was a whistleblower. As a senior V.P., I
22 found violations to the license, told the N.R.C.
23 about it. They blew me off. I went to Congress,
24 John Glenn, and I was sued for a million and a half
25 dollars in a SLAPP suit. That's a strategic

1 4/25/2024 - Indian Point

2 litigation against public participation, which is
3 something that you'll probably learn a lot about in
4 the next couple of months.

5 And John Glenn praised me. The head
6 of the N.R.C. praised me. And yet, the N.R.C. didn't
7 lift a finger to protect my family and I from
8 bankruptcy. So I don't have a lot of faith in the
9 integrity of that -- of that organization.

10 Specifics on Indian Point, why are we
11 here? The reason we're here is because Holtec wanted
12 to take the least expensive alternative and dump
13 radioactive waste into the Hudson. We, Fairewinds,
14 the company my wife founded, were approached by
15 citizens who were opposed to that.

16 And the -- the -- the -- the industry
17 statement was that there was no other alternative.
18 And -- and to the credit of some of the citizens
19 here, they came to us and said are there
20 alternatives? And based on -- based on my
21 experience, but based mainly on my wife working with
22 the citizens groups, she thought we could evaluate
23 it. And -- and in fact, I think we have a good
24 alternative, which I'll talk about coming up.

25 So based on, you know, 50-plus years

1 4/25/2024 - Indian Point
2 of experience, I graduated in '71. 50-plus years of
3 experience, I think there is an alternative to the --
4 to the inexpensive route of dumping it into the
5 Hudson. And that's why I'm here today.

6 The -- the panel gave me a dozen
7 really great questions that -- some of the questions
8 are quite long. I've -- I've got the format here in
9 a question-and-answer format. Rather than read a
10 three-paragraph question, I'll try to summarize it in
11 interest of time to get through the -- the example.
12 But my -- my thanks to the -- the panel for some
13 really well-thought-out questions.

14 I'm going to start on slide five.
15 Slide four, by the way, is a great explanation of the
16 -- the analysis Fairewinds had put forward. Based on
17 what happened at Vermont Yankee, where they had
18 unexpected tritium that they needed to store, they
19 put drums -- put tanks in the basement of the turbine
20 building and collected it there. They didn't have
21 town approval.

22 They didn't have N.R.C. approval
23 because they already controlled the building. And
24 based on that, I thought -- I was a member of the
25 Vermont Public Oversight Panel -- I thought that was

1 4/25/2024 - Indian Point
2 a viable alternative here, and it certainly is worth
3 pursuing. So question one -- I'm on five now --
4 "Would contaminated water in the spent fuel pools be
5 processed through filters and demineralizers to
6 remove the majority of radioactivity prior to being
7 placed in the building's storage tanks?"

8 The water in these tanks has already
9 been filtered and demineralized several times but it
10 will continue to hold radioactivity because no filter
11 and no demineralizer is entirely capable of removing
12 the radioactivity. I would expect that before the --
13 the water was transferred to the tanks that I
14 proposed, there would be one other filtration and
15 demineralization to capture whatever was stirred up
16 from the contamination and spent fuel pool and the
17 associated tanks.

18 I'm proposing storing the tanks --
19 storing the fuel in multiple tanks with an empty tank
20 as a reserve and a berm around them in case there's
21 leakage. And I propose they use the empty turbine
22 building to do that, based on what happened at
23 Vermont Yankee when they used the turbine building
24 without town approval and without N.R.C. approval.

25 The -- the spare tank is an extra

1 4/25/2024 - Indian Point
2 layer of protection, and also the berm is an extra
3 layer of protection that I -- that I suggest we do.
4 Once the tanks are filled, they're static. So some
5 of the questions they -- that -- that Board presented
6 suggest that that flooding could occur, overflowing
7 could occur.

8 Once they're filled, they're filled.
9 You're not -- the tanks in question at other sites
10 have overflowed because people were pumping water in
11 and taking water out, which is different than what --
12 what I'm proposing will happen at -- at Indian Point.

13 The vent line on a tank is designed so
14 that as the volume of water goes up, the air can
15 leave. But once the tank is static, you put a
16 diaphragm seal on that to prevent further
17 evaporation, which is something I'll get back to in -
18 - in couple of minutes. It's important to remember
19 these tanks are static once they're filled.

20 Okay. Second question, Q2, the -- I
21 have suggested 30 samples; the proposal was 3. And
22 why did I suggest 30 samples versus 3 as this water
23 is being transferred over?

24 The reason for that is tank
25 recirculation may be effective if the liquid is

1 4/25/2024 - Indian Point
2 really homogeneous. And I'm not sure the material is
3 homogeneous. I think you're going to find
4 contamination in the corners of the fuel pool or at
5 the bottom of the tank.

6 So as you turn over the tank, you're
7 really not getting to the material at the bottom of
8 the tank. You'll get gravity separation. So as the
9 tank is drained, it is entirely foreseeable that the
10 first batch of radiation coming through will be
11 different than the middle, and will certainly be
12 different than the bottom, which is why I -- I
13 propose taking 30 samples.

14 It's not a big deal. I mean, it
15 probably adds two days to the process and a couple
16 thousand bucks in -- in -- in analysis. And out of a
17 \$2 billion budget, you're -- you're just never going
18 to see it. So 30 versus 3, it's because you can't
19 assure yourself that you're getting homogenous
20 mixing. And -- and a good survey will likely detect
21 that.

22 Question 3, this was great, about a
23 storage tank being overfilled, and there's also been
24 examples where tanks at Fukushima were overfilled,
25 how will the radioactively contaminated water be

1 4/25/2024 - Indian Point

2 transferred into the storage tank that I proposed
3 being stored in the building.

4 Indian -- the Indian Point tank was in
5 use for years and it was used to -- to fill and it
6 was not a static tank. They were filling it and --
7 and discharging from it. Now, I'm proposing three
8 brand new tanks with brand new instrumentation, which
9 minimizes, but doesn't eliminate the possibility of -
10 - of overflowing.

11 But considering the public interest in
12 that process for the day you're filling those tanks,
13 it sure wouldn't hurt to have somebody standing there
14 watching to make sure that the tanks didn't overflow.

15 Separately, though, it would get -- on
16 to the other piece of that is I'm proposing a berm
17 around these tanks to collect what may overflow.

18 As far as the part of the question
19 suggested, what policies and procedures for
20 transferring liquid, Holtec's already going to do
21 that. They're already transferring waste from Unit 3
22 to Unit 2. Well, I -- I believe the transfer
23 procedures that are in place can be modified to -- to
24 pump it to -- to the turbine building, which is my
25 suggestion.

1 4/25/2024 - Indian Point

2 So they had planned to transfer water
3 anyway. I'm just changing where it's ultimately --
4 ultimately going. You know, the goal is to protect
5 the Hudson River. And -- and having new tanks that
6 are -- are robust and a berm around them will avoid
7 the -- the possibility of something running across
8 the floor, out the door, across the parking lot, and
9 into the river.

10 And that's really our goal is to
11 protect the river, you know, from a commercial
12 standpoint, from visitors to the facility, as well.
13 And -- and, you know, it's a great tourist
14 attraction. I loved sailing on it.

15 The next question is a little bit
16 longer and probably the most important answer I've
17 got here. How long would tritiated water be stored
18 in the turbine building's tanks? I -- I -- two
19 things I need to talk about first is, first, all
20 water contains tritium. In very low quantities, it's
21 created by cosmic rays.

22 So the river in the Hudson now is --
23 has tritium in it. The tritium in the tanks in the
24 building are tens of thousands of times more
25 radioactive than that.

1 4/25/2024 - Indian Point

2 And the second is it's not just
3 tritium in those tanks. Yes, there is tritium in the
4 tank, but there's -- there's other isotopes, as well.
5 So to just call it tritiated water really isn't -- is
6 -- is a misnomer.

7 Now, I don't -- I am not advocating
8 any specific duration. As far as I'm concerned, it's
9 undefined and it's unspecified. But I believe that
10 the immediate release is unwarranted, it's
11 unnecessary, and it's unscientific.

12 Now, I'm an engineer. I -- I was
13 taught that -- that tritium couldn't get through the
14 skin and the -- the -- the beta particle was very
15 weak, except -- I know I have no knowledge of that,
16 except I was taught that in 1971.

17 Now, if you look at what's happened
18 since then, there -- there's a lot of information
19 coming out that suggests that tritium is not as
20 benign as I was led to believe as a -- as an
21 engineer. There's a -- the -- the misconceptions
22 seem to have their root, like a lot of things in
23 nuclear power with the bomb program.

24 Scientific American did a great
25 article about the history of the E.P.A. tritium

1 4/25/2024 - Indian Point
2 standards. And -- and they quote a guy named David
3 Kocher at Oak Ridge, who said, as a health physicist
4 who studied tritium for years, in the 1970s the
5 E.P.A. did not rely on any health standards in
6 setting its original standards.

7 Instead, the E.P.A. back calculated
8 acceptable levels of tritium in water from radiation
9 exposure, delivered in the already extent
10 radionuclides from the weapons testing program. And
11 then he adds -- this is important. This is -- this
12 is a guy at Oak Ridge, a doctor at Oak Ridge. Kocher
13 says it's not a health-based standard; it's based on
14 what was easily achievable.

15 So a couple of -- of individuals who I
16 really respect, Dr. Gordon Edwards in Montreal, Dr.
17 Ian Fairle in the U.K., Dr. Arjun Makhijani in
18 Washington, D.C., and Dr. Tim Mousseau in South
19 Carolina have all said, based on what we know now, we
20 really need to take another look at tritium because
21 it's not as benign as we think.

22 And -- and there's two other pieces,
23 one of which is unique to the Hudson River. And
24 that's this thing called synergistic toxicity. We
25 know the Hudson has P.C.B.s in it, they're not good

1 4/25/2024 - Indian Point

2 for you. We know that tritium is not good for you.
3 And the combination of those two have a synergistic
4 effect. They don't add up, one plus one is two.
5 They multiply.

6 So this issue of synergistic toxicity
7 for the Hudson is -- is critical to my mindset about
8 not releasing that stuff until we've done more
9 scientific analysis.

10 Dr. Makhijani wrote a phenomenal book
11 on tritium that was published last year. And I --
12 I'd advise reading it. I -- I did. And he talks
13 about how while the beta particle doesn't travel very
14 far, if the tritium gets inside the cell, it can do a
15 lot of -- of damage.

16 Okay. Next question. On question 5,
17 what would happen to tritiated water being stored in
18 the turbine building's tanks. I -- I think this was
19 about the retention period. And as I said in the
20 previous question, I don't know what that retention
21 period should be, but I do know that releasing it now
22 is unscientific and unwarranted.

23 And what I -- what I suggest is that,
24 after scientists really look at the synergistic
25 toxicity with the -- with the P.C.B.s in the Hudson,

1 4/25/2024 - Indian Point
2 and the organically bound tritium, and -- and analyze
3 that, at that point, we'll be able to, as a
4 community, get together and say, hey, it's a no-
5 brainer, we can release it, or my God, I'm glad we
6 kept it on site, let's hold it longer.

7 But that decision doesn't have to be
8 made now. Let's wait for the science to catch up and
9 store it until then. We need precise, reliable
10 information and data that are available after the
11 analysis.

12 Question 6 is a -- is a long one, and
13 I'm going to shorten it for time's sake. It gets
14 back to the seismic issues. There's this thing
15 called the D.B.E., a Design Basis Earthquake, or an
16 S.S.E., Safe Shutdown Earthquake. And three times in
17 nuclear history, nuclear plants have experienced an
18 earthquake as bad or worse than what they were
19 designed for.

20 One was at North Anna, one was at
21 Sumner, and one was at Perry. Then the question is
22 what would happen to the tanks at Indian Point if a
23 bigger earthquake, one it wasn't designed for, were
24 to hit? And I -- I looked at all three of those and
25 -- and this was great research, by the way.

1 4/25/2024 - Indian Point

2 I -- I looked at all three. And
3 within a couple of days, the turbine buildings had
4 started up, the plants were continuing to generate
5 electricity. So even when the design basis event hit
6 like the 6.0 that we heard earlier, the turbine
7 buildings are robust enough to ride through it. Even
8 at Fukushima, which had a 9 offshore, the turbine
9 buildings remained intact. So I'm not worried about
10 the structural integrity of the -- of the turbine
11 buildings.

12 Put that design-based event in context
13 though, the river -- the bridges over this river
14 would likely be damaged or collapsed. The
15 infrastructure in towns would likely either -- either
16 potable water or sewage water would likely fail. Gas
17 lines would break and there'd be fires. It would not
18 be a pleasant thing for the -- the Hudson River
19 Valley, but I do believe that turbine building will -
20 - will ride through it.

21 The -- the -- the -- the quake at
22 North Anna actually cracked the Washington monument
23 that was 400 miles away. And yet, within -- within a
24 short period of time, the plant started back up. So
25 I believe the turbine building is robust enough to

1 4/25/2024 - Indian Point
2 withstand a -- a design basis event without releasing
3 the -- the tritium that -- tritiated water and other
4 radioactivity that I'm proposing to be in it.

5 There are other alternatives. I chose
6 the turbine building because of the Vermont Yankee
7 experience, that Vermont Yankee had stored tritium in
8 its turbine building, didn't get town approval,
9 didn't get N.R.C. approval.

10 However, I mean, if you want more
11 robust buildings that the containment is there, and
12 the auxiliary building is there, but I think Holtec
13 would like to be knocking those down. And once
14 they've gutted the turbine hall, it's essentially
15 about a -- about as big as a 10-court indoor tennis
16 facility. It's a huge empty space, and to put tanks
17 in there didn't seem to me to be too difficult.

18 But again, I'm not opposed to storing
19 it in the containment or in the aux building or
20 something like that. But the turbine building
21 certainly seemed robust enough and was available.

22 Question 7, again, great research,
23 thank you, about unheated -- freezing pipes and
24 unheated buildings, how would instruments monitoring
25 the level inside the tank be protected during cold

1 4/25/2024 - Indian Point

2 water -- weather?

3 First off, this is a static tank, so
4 you really don't need level instrumentation screwed
5 into the side of the tank. You could put somebody at
6 the top of the -- you know, pipe to -- to drop it
7 down every so often. But the goal is you're going to
8 be looking around the berm to see if there's leakage.
9 But, you know, Holtec's got \$2 billion. I think they
10 could keep the heat on. That's answer number one.

11 But the -- the failures were -- were
12 in unmonitored systems like the Dresden example.
13 And, you know, I'm proposing once a -- once a day you
14 have a -- a person on -- on a shift go by and just
15 look at the berm to see if there's -- if there's any
16 water.

17 Next question, another one of these
18 great -- great research about problems at Oyster
19 Creek that went -- went undetected. The tanks in
20 question in question eight were -- were not static.
21 You know, they were pumping water in, taking water
22 out. So having active height monitors, water volume
23 monitors was critical.

24 And that's -- that's really not what
25 we're experiencing here. It's a -- it's a matter of

1 4/25/2024 - Indian Point

2 once that tank is full, once a day look for leaks and
3 -- and -- and once every so often go in and measure
4 the -- the amount of freestanding -- the amount of
5 air above the water.

6 Those kinds of things are -- are much
7 more simple than the -- the examples quoted here.

8 Question 9, Holtec has a dry storage
9 technology used in The Ukraine. Is it a viable
10 method for Indian point? And I looked at it and, no,
11 the Holtec storage technology in Ukraine for dry
12 storage is not really applicable for -- for storing
13 liquids.

14 Question 10, we heard from another
15 nuclear expert that there are risks including
16 evaporation and leaks. Can water be stored in tanks
17 without evaporation or leaks?

18 Once the proposed tanks are filled,
19 they're going to be surrounded by a berm. The level
20 doesn't fluctuate. And vents on a tank are designed
21 to allow when water is pumped in, the oxygen goes
22 out. When water comes out, oxygen goes in.

23 This is a static tank. You can put a
24 diaphragm on the end of the -- the vent to allow for
25 some expansion, contraction due to temperature, but

1 4/25/2024 - Indian Point

2 you're not going to have a significant amount of
3 evaporation.

4 So between -- I don't believe
5 evaporation will be significant. I discuss that a
6 little bit later here. And also leakage, if there is
7 any, in a -- in a new tank that's not being stressed
8 by volume changes, and it's unpressurized. In -- in
9 a tank of that nature, leakage, if it were occur --
10 were to occur, would be minimal and would be caught
11 in a berm, and either the tank could be sealed or the
12 fluid could be transferred to the extra tank.

13 And then, of course, it's not hard to
14 put a water sensor at the bottom of the berm, so if
15 you get flooded, you -- you detect it between shifts.
16 If they're there once a day and a leak occurs between
17 shifts, a water -- a water monitor would alert that -
18 - the staff.

19 If there is evaporation from the tank,
20 what amount of tritium is released? I think
21 evaporation may be about 2 gallons compared to 1.3
22 million gallons. So the issue of evaporation from a
23 tank that has a diaphragm seal on it is about one
24 millionth of the issue of releasing it to the -- to
25 the Hudson River.

1 4/25/2024 - Indian Point

2 Question 12, when I -- when I wrote
3 this, I was proposing new storage capability. I have
4 not proposed reusing old tanks that are presently in
5 use at Indian Point. And I propose putting three new
6 tanks with a berm around them at Indian Point.

7 It -- and I've suggested they'd be in
8 the turbine building because of the Vermont Yankee
9 experience. But other buildings are also options.
10 But I think Holtec wants to get rid of those
11 buildings, the containment and the auxiliary building
12 because they're the ones where the -- the
13 radioactivity is -- is highest.

14 I -- I understand that Riverkeeper may
15 have suggested using an existing tank. And I haven't
16 studied it, but if it's bermed to prevent any leakage
17 that -- from getting out, I -- I guess I'd have to
18 study it a little further, but it seems to be a
19 viable alternative.

20 But the -- the key -- my first goal is
21 to keep it out of the Hudson until we get better --
22 better science on -- on tritium -- organically-bound
23 tritium, and synergistic toxicity.

24 Are you aware of any advancements in
25 technology to remove Tritium from water? Tritium is

1 4/25/2024 - Indian Point
2 10% heavier -- tritiated water is 10% heavier than
3 water. Hence, they call it heavy water. And so
4 because it's heavier, it boils at 214 instead of 212.
5 So it is possible to -- to distill water out from the
6 tritiated water. It's awfully expensive.

7 And I'm aware of no other technology
8 that's -- that is reasonably priced. You know, hemp
9 and things like that, if hemp works, the tritium just
10 moved from the tank into the hemp, and now you've got
11 -- what are you going to do with the hemp?

12 So it's -- it's not -- none of those
13 eliminate tritium, but over time, you just have to
14 wait for it to decay -- to decay. So it's possible
15 to separate out tritium. There are technologies
16 available. It's awfully expensive, and -- and -- and
17 most of them are not -- not viable -- not
18 commercially viable, I guess I'd say.

19 The Village of Buchanan has passed a
20 resolution, last year, expressing its intent not to
21 approve any permit for on-site storage of tritiated
22 water. Do you agree with the village's -- that the
23 village's position should be respected? Does the
24 N.R.C. or local authorities take precedence?

25 Well, I agree with the will of a half

1 4/25/2024 - Indian Point
2 a million people who signed the petition to stop
3 Holtec. That should be respected. The Town of
4 Buchanan had benefited from low taxes for years and,
5 until the situation is -- is evaluated further, I --
6 I don't believe that the -- you know, the precedent
7 that the Town of Buchanan suggests about passing the
8 law is -- is reasonable.

9 I -- again, I chose this because it
10 happened elsewhere. The turbine building at Vermont
11 Yankee was used for storage of tritiated water in --
12 in the past. Okay. I -- I've never suggested
13 outside storage. I think building new tanks outside
14 invites the Town and invites the N.R.C. to get
15 involved in the process.

16 And considering my experience with the
17 N.R.C. and its close relationship with Holtec, I
18 don't think you're going to have an honest broker at
19 the N.R.C. And I think they and the Town will go out
20 of their way to stop new tankage outside. So that's
21 why I chose an existing building with -- with -- with
22 tankage inside the building.

23 Given Holtec's long legislative
24 history of manipulating the N.R.C. to achieve
25 favorable -- favorable outcomes, I -- I don't expect

1 4/25/2024 - Indian Point

2 that a new facility, a new tank outdoors at -- at
3 Indian Point will -- will ever be approved.

4 Hence, if we keep it in a building
5 that's already approved, that problem goes away.

6 I think I'll just skip over 14.3
7 because I already discussed it. These never before
8 things that the Nuclear Regulatory Commission has --
9 has given to Holtec are -- are being reversed on
10 decision within the circuits. But it's citizens,
11 it's like the -- the people in this room, it's
12 citizens that are forcing the -- the action. It's
13 not the Nuclear Regulatory Commission.

14 I was one of the five members of the
15 Vermont Yankee Oversight Panel for years. The panel
16 approved Vermont Yankee's license to run for 20 more
17 years. And I signed it. So I approved Vermont
18 Yankee to run for 60 years and it -- it ultimately
19 shut down well before that.

20 But I approved that, with appropriate
21 upgrades, it was ready to go for another 20 years.
22 I've been to Indian Point. I've looked at Indian
23 Point. And I -- I chose the alternative, I've chosen
24 to preclude any licensing ramifications by using the
25 interior of a pre-existing building for new tanks

1 4/25/2024 - Indian Point

2 given that there's a precedent already in -- in
3 Vermont Yankee.

4 Until we get this synergistic toxicity
5 straightened out, the organic bound nature of it, and
6 the overall tritium standards, which had no basis in
7 science when they were originally proposed, until
8 those issues are -- are addressed, I -- I -- I think
9 it's unreasonable, unnecessary to release that water
10 into the -- into the Hudson.

11 My goal is to protect the Hudson's
12 economics, its tourist industry, its agricultural
13 viability, and its -- and its population, and animal
14 population, as well, from -- from something which has
15 not been adequately analyzed by the N.R.C.

16 And I want to thank, again, my wife
17 for -- for creating Fairewinds and for the -- the
18 people in the community for -- for seeking us out.
19 You know, a hundred million -- sorry -- 500,000
20 signatures is a -- is a deeply meaningful value. And
21 it gets not just Governor Hochul's attention, but --
22 but the attention of all the -- all the people
23 throughout the country. So thank you guys for -- for
24 what you've done.

25 Thanks to the Oversight Board for

1 4/25/2024 - Indian Point
2 having me here and for all those advocates who seek
3 to protect the Hudson River by inviting me here
4 today.

5 CHAIR CONGDON: Thank you, Mr.
6 Gundersen.

7 I'd like to -- I'd like to open the
8 floor for a few short questions or comments. And
9 then I'm going to turn it to Bridget Frymire. And
10 then there can be further discussion for both
11 speakers after Bridget's presentation.

12 But a few quick reactions to Arnie,
13 Supervisor Becker?

14 DR. BECKER: Thank you very much, Tom.
15 And thank you, Arnie, for your
16 presentation.

17 And I've been consumed, the Town Board
18 of Cortlandt's been consumed with this issue of the
19 tritiated water. And as a physician, I know about
20 tritium and radioactive and beta radiation. And I
21 also read about what you talked about, that even
22 though beta radiation does not penetrate the skin, it
23 can be absorbed through drinking.

24 And the question is the half-life
25 within cells is not long, but it's probably long

1 4/25/2024 - Indian Point

2 enough to cause genetic changes. And that's the
3 issue. And I've said this before. There really is
4 no safe established lower limits of any form of
5 radiation, whether it's X-ray, gamma, or beta in this
6 case.

7 Second of all, you know, I -- I think
8 two of the points that I take from you that I agree
9 with is, number one, it has no place in the -- in the
10 river. And the Town Board felt this way, we had a
11 rally on May 6th. So many of the organizations from
12 Food and Water, Scenic Hudson, Riverkeeper, every --
13 I know I'm missing dozens that were there -- stood up
14 and we had every Congressman from Manhattan to Albany
15 supporting us, as well as multiple state senators and
16 assemblymembers.

17 And when Senator Harckham and
18 Assemblywoman Levenberg got the rules -- the law
19 changed, so that they cannot dump into the river,
20 that was a huge step.

21 So now Holtec is going to challenge
22 that law and it'll go to the courts. I don't know
23 how the court will opine. They're not going to look
24 at it as a nuclear issue. They're not going to look
25 at it as a -- as a safety issue. They're going to

1 4/25/2024 - Indian Point

2 look at does a federal level of government supersede
3 a local or state level. That's where the decision is
4 going to come by.

5 And that's not what this should be
6 about. It's about the environment and the safety of
7 the public, which takes me to the next logical step,
8 your healthy distrust of the N.R.C.

9 The N.R.C. is a government
10 organization that responds to Congress. So the next
11 step of all the activists, all the environmentalists,
12 and the residents of the town and of the state and
13 all the other communities that are going to face
14 decommissioning is telling Congress to pass
15 legislation to direct the N.R.C. that they can't
16 discharge nuclear material into waterways,
17 nationwide.

18 You know, we should take this and take
19 it further than just our local community.

20 And the final thing is the storage on
21 site is a reasonable alternative, but I don't want it
22 to be the permanent solution because that does help -
23 - hurt Buchanan, which is a major part of our town.
24 So if it is stored on site, that's just somewhat
25 better than keeping it in the pools, but it's not the

1 4/25/2024 - Indian Point

2 permanent solution.

3 And when you started your talk about
4 where we have to find technologies and get our
5 engineers to find -- you know, to figure out what to
6 do with tritium, you know, tritium comes from
7 lithium, if my understanding, through the lithium
8 nuclear process. And it's really just H3. It's
9 similar to hydrogen. People are talking about
10 converting it into water, turning it into peroxide,
11 turning it into other materials, or just mixing it
12 with silicates and burying it almost like concrete.

13 So there are other solutions. So I
14 think the -- the points I want to make, very quickly,
15 are we got to get the N.R.C. to listen to Congress by
16 making Congress aware of the issues nationwide. And
17 this will force the industry to come up with other
18 solutions. Thank you.

19 CHAIR CONGDON: Thank you.

20 Mayor?

21 MS. KNICKERBOCKER: I have many --
22 many questions, so I --.

23 CHAIR CONGDON: And there will be more
24 discussion after -- after Bridget's presentation, as
25 well.

1 4/25/2024 - Indian Point

2 MS. KNICKERBOCKER: I just want to
3 follow up on something Rich said, because I have been
4 sitting at these meetings, even before 2017, you
5 know, the N.R.C. updates. And it's a consistent
6 theme consistently, you know, N.R.C. can't be
7 trusted. N.R.C. is this. They're in bed with the
8 nuclear plants.

9 And you know what? That's way above
10 our pay grade here, way above, for anybody, any
11 activist, any elected official here. So Richard, you
12 are correct. If people feel that there is an issue
13 with the N.R.C., that needs to be addressed through
14 other authorities, the President, the Congress, the
15 Senate, whatever it is because I consistently hear
16 this. We can beat that drum forever.

17 So if people feel that it's an issue,
18 then we need to take it from here and go further with
19 that.

20 I do have some questions, also. I
21 heard what you said about the Village of Buchanan
22 received tax dollars. Yes, we did. Yes, we did.
23 And we also -- I wasn't born yet -- we also accepted
24 that responsibility in the early -- the mid '50s when
25 Con Edison purchased the property, went online in

1 4/25/2024 - Indian Point

2 '62. Nobody knew what nuclear power was at the time.

3 So we were given money to have a
4 nuclear power plant in the backyard. And over the
5 years, you know, people understood more and more what
6 nuclear power was and what nuclear power can be going
7 forward in the future. You know, you see there's new
8 technologies and all.

9 But you talk about -- you talk about
10 the -- the storage tanks. And one thing I was
11 interested in, you said three storage tanks, you were
12 -- you assume would be three. What are the sizes of
13 those storage tanks? What -- the sizes of the
14 storage tanks that you're proposing?

15 MR. GUNDERSEN: Well, Holtec
16 originally said -- Holtec originally said 1.3 --

17 MS. KNICKERBOCKER: Yeah, we'll use
18 1.3, yeah.

19 MR. GUNDERSEN: -- you know, divided
20 by 3, it's like a 400,000-gallon tank.

21 MS. KNICKERBOCKER: Okay. Inside the
22 -- the turbine buildings.

23 MR. GUNDERSEN: Yes.

24 MS. KNICKERBOCKER: So not -- I'm not
25 sure if the Village of Buchanan would be able to

1 4/25/2024 - Indian Point
2 regulate at that point, but I know the N.R.C. would
3 have some type of control over that. I'm sure they
4 would have a voice in that.

5 But with Vermont Yankee, you had
6 mentioned, were you -- when the original agreement
7 was done, was that part of the original agreement
8 that the water would be stored on site, or was the
9 original agreement there that it would be discharged
10 into the river there?

11 MR. GUNDERSEN: Vermont Yankee was a
12 zero liquid discharge --

13 MS. KNICKERBOCKER: Okay.

14 MR. GUNDERSEN: -- plant.

15 MS. KNICKERBOCKER: I know it's a
16 different plant from what we have.

17 MR. GUNDERSEN: So there -- I -- there
18 was -- they -- they were never allowed to discharge
19 into the Connecticut River.

20 MS. KNICKERBOCKER: Okay. So in the
21 end, how much tritium -- how much water did they end
22 up having?

23 MR. GUNDERSEN: Ultimately, they
24 shipped it off site. I -- I don't --.

25 MS. KNICKERBOCKER: But it's nowhere

1 4/25/2024 - Indian Point

2 near 1.3 million?

3 CHAIR CONGDON: Bridget's going to get
4 into that.

5 MS. KNICKERBOCKER: Okay. Thank you
6 very much. I will have more questions, but I -- I
7 definitely will have more questions. I have things
8 written down, but I just wanted to ask those few.
9 Thank you.

10 CHAIR CONGDON: Thank you, Mayor.
11 Superintendent?

12 MR. TROMBLEE: Thank you, Arnie, for
13 the presentation. Just two quick questions. You
14 had mentioned, in your study, that the storage
15 would -- the storage solution would survive an
16 earthquake, but that gas pipelines might fail and
17 might cause bigger issues.

18 We do have a pipeline running
19 underneath, probably very close to where we'd be
20 storing the -- the tanks. Any consideration to that
21 in your study?

22 MR. GUNDERSEN: I didn't take any
23 consideration of the gas pipeline when I was looking
24 at this.

25 MR. TROMBLEE: And then the other

1 4/25/2024 - Indian Point
2 question is the footprint of Vermont Yankee, about --
3 about how big -- what is going on at Vermont Yankee
4 right now? Is there development, is there any reuse
5 of the property, or is -- is it sitting idle?

6 MR. GUNDERSEN: Vermont Yankee is
7 being dismantled as we -- as we speak. It's a single
8 unit. And it's a boiling water reactor, versus
9 these. Boiling water reactors are, in general, more
10 contaminated than pressurized water reactors. It's a
11 single unit.

12 And they had a significant release on
13 site, back in 2010. They'd released not just
14 tritium, but strontium 90, cobalt 60, cesium 137. So
15 there's a groundwater wedge that's heading toward the
16 -- toward the river, and it's possible that the
17 groundwater is also contaminated.

18 So you know, it -- when I chose to
19 compare it to Zion, Zion was a pretty clean plant and
20 Units 2 and 3 are pretty clean plants compared to the
21 example of Unit 1, which -- which, you know, is
22 ancient and had its -- had its problem early on, or
23 Vermont Yankee.

24 So the -- the -- the best example, if
25 you're going to do a head to head, was -- was Zion 1

1 4/25/2024 - Indian Point
2 and 2, compared to Indian Point 2 and 3.

3 MR. TROMBLEE: So -- so let's talk
4 about Zion. What's -- what's the status of Zion's
5 property?

6 MR. GUNDERSEN: Zion is squeaky clean.

7 MR. TROMBLEE: It's redeveloped?

8 MR. GUNDERSEN: The site is in the
9 process of being turned over. The -- the
10 decommission -- the dismantlement of the facility is
11 done. The N.R.C. is still evaluating the -- the
12 survey data to determine whether or not to release
13 the site for public use.

14 MR. TROMBLEE: Is -- is any part of
15 the goal -- yes, to protect the Hudson, but is any
16 part of the goal to reclaim the property for any
17 particular type of use?

18 MR. GUNDERSEN: At Zion, yes.

19 MR. TROMBLEE: Thank you.

20 CHAIR CONGDON: Thank you,
21 Superintendent.

22 John Sipos, and we're going to want to
23 start Bridget's presentation, to stay on schedule,
24 within the next couple of minutes. So John, do you
25 have a couple of quick --?

1 4/25/2024 - Indian Point

2 MR. SIPOS: Just a couple of
3 clarifying questions. First of all, Mr. Gundersen,
4 thank you for coming here tonight. Welcome to
5 Westchester and to New York State. Thanks for coming
6 down from Vermont.

7 You -- you started your presentation
8 off by asking a question, are there alternatives.
9 And you discussed that there were tanks in the
10 basement of Vermont Yankee, and that was an
11 alternative that you're -- you're building off of.

12 Those tanks were in the turbine
13 building, correct?

14 MR. GUNDERSEN: Yes.

15 MR. SIPOS: And the turbine building
16 today is demolished; correct?

17 MR. GUNDERSEN: Today?

18 MR. SIPOS: Today, April 25th --?

19 MR. GUNDERSEN: I don't know where --
20 what the status is, yeah.

21 MR. SIPOS: Is the water still in the
22 basement of the turbine building?

23 MR. GUNDERSEN: No -- no, it's been --
24 .

25 MR. SIPOS: So the water is gone from

1 4/25/2024 - Indian Point

2 the basement of the turbine building?

3 MR. GUNDERSEN: Yeah.

4 MR. SIPOS: Okay. And just in prep
5 for today, I went back and I looked at a video that
6 you prepared a year ago with Courtney Williams, runs
7 roughly 20 minutes. And you described that there
8 were three alternatives for Indian Point.

9 One was releasing it in a controlled
10 way to the Hudson River. The second was also a
11 Vermont Yankee alternative. And you described it as
12 that Vermont Yankee shipped the tritiated water via
13 tanker trucks to a licensed facility down in
14 Tennessee.

15 Do you recall that statement?

16 MR. GUNDERSEN: I know that to be
17 true, yeah.

18 MR. SIPOS: And you know that to be
19 true. Okay. And then the third was to -- the third
20 option you proposed was to keep the fuel -- keep the
21 water in the fuel pools at Indian Point. I think
22 that was your third option. Do you recall that?

23 MR. GUNDERSEN: Yes, those are the
24 three options, yeah.

25 MR. SIPOS: And then at the end of

1 4/25/2024 - Indian Point
2 that video, you said either the last two
3 alternatives. And that would be trucking the water
4 to the facility in Tennessee or keeping the fuel --
5 keeping the water in the fuel pool would be -- I
6 think you -- the words you used are better than the
7 controlled release to the river. Do you recall that?

8 MR. GUNDERSEN: I'm -- I'm sure, if I
9 had to rank them, dumping it into the river is -- is
10 far and away --.

11 MR. SIPOS: You're not for that?
12 You're not for dumping it into the river; correct?

13 CHAIR CONGDON: I -- I got that.

14 MR. SIPOS: Because you want to
15 protect that.

16 MR. GUNDERSEN: And the -- the
17 indigenous communities here feel it's an
18 environmental justice issue to take that material and
19 give it to somebody else to give the contamination to
20 somebody else.

21 MR. SIPOS: I -- I want to come back.
22 Just -- but -- what you did in tiering them -- or you
23 know, a relative evaluation, you suggested that the
24 Vermont Yankee approach, which was to truck it off
25 site, or keeping it in the fuel pool were the better

1 4/25/2024 - Indian Point

2 two options.

3 MR. GUNDERSEN: Yes.

4 MR. SIPOS: Is that correct? All
5 right. Thank you very much. Those are my questions.

6 CHAIR CONGDON: Thanks, John.

7 And we're almost on schedule. We do
8 want to reserve the last half hour of tonight's
9 meeting for a public statement hearing. And so
10 Bridget, with that in mind, I know you have a number
11 of slides to get through.

12 And I want to thank you for doing some
13 research on the Vermont Yankee options as a good
14 segue from -- from John's questions.

15 And thank you again to Mr. Gundersen.

16 I just want to remind the audience
17 that Bridget does work for the Department of Public
18 Service, but she is not opining on any of these
19 alternatives. She's presenting research that she
20 conducted about the Vermont Yankee site.

21 So with that as my introduction,
22 Bridget, please proceed.

23 MS. FRYMIRE: Thank you, Tom. All
24 right. Good evening, everyone. My name is Bridget
25 Frymire, and I am the Chief of Nuclear Affairs and

1 4/25/2024 - Indian Point
2 Emergency Preparedness for the Department of Public
3 Service.

4 Tonight, I will be giving a
5 presentation on another option for disposal of
6 wastewater at Indian Point. Specifically, I will be
7 discussing the possibility of shipping wastewater off
8 site during nuclear decommissioning.

9 Before I begin, I would like to thank
10 Alyse Peterson from NYSERDA, who isn't here tonight.
11 She's usually sitting at this table; Cliff Chapin
12 from the Department of Public Service; and Tony
13 Leschinskie from Vermont's Department of Public
14 Service.

15 This presentation would not have come
16 together or been nearly as informative without your
17 assistance and patience with my many, many, at times,
18 seemingly, endless questions.

19 As an initial caveat, as Tom said, in
20 discussing this option, I'm providing information to
21 facilitate discussion on, one possible option for
22 disposal of wastewater at the Indian Point site.
23 This presentation does not necessarily reflect the
24 position of the Department of Public Service.

25 Next slide, please. Go back one.

1 4/25/2024 - Indian Point

2 Okay. All right. During this
3 presentation, I will be discussing past
4 decommissioning experience and information from both
5 the Vermont Yankee plant, and also, from West Valley
6 here in New York.

7 Further, as is necessary with any
8 option, there are many things to take into
9 consideration, and we're going to be running through
10 many of those, as well.

11 Next slide, please.

12 First things first. Is this a
13 feasible option? Yes. Has it been done successfully
14 elsewhere? Also, yes. Has it been done successfully
15 by Holtec? Not yet.

16 Next slide, please.

17 Vermont Yankee seems to be the topic
18 of discussion tonight, so I'm glad that we have a few
19 slides here describing a little bit more about the
20 plant. And before I dive into what Vermont Yankee
21 has done during decommissioning, here is some
22 information summarizing the plant itself.

23 The Vermont Yankee Nuclear Power Plant
24 is both similar and different from Indian Point. It
25 is a boiling water reactor located in Vernon,

1 4/25/2024 - Indian Point
2 Vermont, and was permanently shut down in 2014. The
3 plant was bought by NorthStar in 2019. The right-
4 side column shows us that Vermont Yankee is quite a
5 few years ahead of Indian Point's decommissioning
6 process, with partial site release set for 2026.

7 In the background of this slide,
8 you'll see Vermont Yankee when it was operating. The
9 Connecticut River is right in foreground there. The
10 reactor build -- building, the biggest building
11 pictured with the white stipe on the top is in the
12 foreground, with the cooling towers to the left, and
13 the turbine and administrative buildings to the
14 right.

15 The picture -- the picture on the
16 right is an exciting look at where Vermont Yankee is
17 in their decommissioning process.

18 Next slide.

19 This one has a lot of words. Stay
20 with me here for a minute. It is impossible to talk
21 about the decommissioning experience and wastewater
22 shipping at Vermont Yankee without, first, discussing
23 the three categories of wastewater at that site.

24 When the Vermont Yankee reactor plant
25 permanently shut down, the turbine building cooled

1 4/25/2024 - Indian Point
2 and contracted, and numerous in-leakage paths
3 developed. Groundwater leaked into the buildings and
4 was contaminated. This water was labeled as
5 contaminated intrusion water and can be seen on the
6 slide in the yellow row.

7 To deal with this groundwater
8 intrusion, a diversion system was installed to
9 prevent groundwater from entering the buildings.
10 This water is collected by NorthStar, prior to
11 entering any Vermont Yankee building, and is labeled
12 in the first row in green, uncontaminated diversion
13 water.

14 Lastly, there is process water. This
15 is the water that has been collected and stored from
16 draining and decontamination of abandoned plant
17 systems. For this category of water, I find it
18 easiest to think of spent fuel pool water or the
19 water that was used to cool the reactor plant when it
20 was operating. That's in the bottom row there.

21 Okay. So those are the three
22 categories. What did Vermont Yankee do with this
23 water? Starting on the top, the uncontaminated
24 diversion water was discharged to the Connecticut
25 River with a permit from the State of Vermont. Both

1 4/25/2024 - Indian Point

2 the contaminated intrusion water and the process
3 water are shipped off site for disposal.

4 Next slide, please.

5 Okay. So as I said, contaminated
6 water, process water, both shipped off site at
7 Vermont Yankee.

8 Shipping wastewater offsite, and I
9 believe this is what you just said, this was always a
10 part of the plan. NorthStar knew this, coming in,
11 when they purchased the plant in 2019.

12 Vermont Yankee -- this is per the
13 N.R.C., Vermont Yankee is the only U.S. commercial
14 decommissioning nuclear power plant to have performed
15 this type of bulk liquid radioactive waste disposal
16 and shipping. So Vermont Yankee is shipping
17 wastewater off site and they have been since the
18 start of their decommissioning. But how much waste
19 water?

20 The contaminated intrusion water, they
21 -- actually the State of Vermont just released a
22 report in January 2024. And this report stated that
23 NorthStar had shipped a total of 3.3 million gallons
24 of contaminated intrusion water off site. That's
25 total so far.

1 4/25/2024 - Indian Point

2 With regard to process water shipping,
3 again, think spent fuel pool water, reactor plant
4 water, they shipped 900,000 gallons of this water off
5 site in 2021 and 2022. Approximately, 300,000
6 gallons of that was from the spent fuel pool.

7 And in 2023, NorthStar shipped the
8 last of its process water inventory, approximately
9 100,000 gallons, to Waste Control Specialists in
10 Texas. Like I said, this was the last process water
11 inventory at the Vermont Yankee site.

12 This means that the spent fuel pool is
13 now empty, thereby facilitating further
14 decommissioning and demolition of the reactor
15 building.

16 Next slide.

17 Where does Vermont Yankee wastewater
18 go, and how is it moved? Over the years, Vermont
19 Yankee was owned by Entergy before it was bought by
20 NorthStar. So that's -- when it says they're -- the
21 different owners, I'm talking about Entergy and
22 NorthStar. Different owners ship this water to
23 different destinations, South Carolina, Tennessee,
24 Idaho, and Texas. These owners use a combination of
25 truck and tanker rail to ship the wastewater off

1 4/25/2024 - Indian Point

2 site.

3 NorthStar currently uses tanker rail
4 for wastewater shipping. And I really -- I love this
5 picture just to, like, draw your attention to it real
6 quick. What you'll see, and you can see the reactor
7 building, which we already kind of discussed. But
8 right in the foreground here, you can see the rail
9 line that goes right onto the Vermont Yankee site.

10 And then at the base of the reactor
11 building, you can see two black -- black tanker cars.
12 Those are -- those kind of exemplify what NorthStar
13 is using right now to ship wastewater off site.

14 Next slide.

15 All right. How much is Vermont Yankee
16 spending on wastewater shipping? Unfortunately,
17 there is no public record of exact shipping costs and
18 how much NorthStar has spent on this endeavor. The
19 Decommissioning Trust Fund Annual Reports submitted
20 to the Nuclear Regulatory Commission do not separate
21 out this information.

22 We did find two separate newspaper
23 articles from a Vermont not -- non-profit news outlet
24 that provides some insight into cost. In 2017, an
25 article referenced Vermont Yankee spending

1 4/25/2024 - Indian Point
2 approximately \$4 per gallon to truck contaminated
3 water to Tennessee.

4 Further, in 2018, another article
5 references that Vermont Yankee spent \$3.5 million to
6 ship approximately, almost 800,000 gallons of water
7 off site. And just for everyone, that 2018 article,
8 if you do the math, that also kind of corresponds to
9 \$4 per gallon.

10 And before we go on, it should be
11 known that these wastewater shipping costs are drawn
12 from the Vermont Yankee Decommissioning Trust Fund.

13 Next slide, please. Thank you.

14 Additional information on wastewater
15 shipping was provided to us by a New York
16 decommissioning experience at West Valley.

17 In 2020 and 2021, approximately 23,000
18 gallons of radioactive wastewater, in a similar class
19 to that that we have an Indian Point, was shipped via
20 tanker truck offsite to the tune of \$10 per gallon.

21 This liquid was shipped by the West
22 Valley Demonstration Project, the D.O.E., to Energy
23 Solutions for treatment and solution -- treatment and
24 disposal.

25 Now back to Indian Point. I'm very

1 4/25/2024 - Indian Point

2 aware that I am standing between you and the public
3 statement hearing. So I'm not going to go into all
4 of this. You know Indian Point. You're familiar
5 with its history and its decommissioning milestones.

6 Next slide.

7 As we've already stated tonight,
8 Indian Point has approximately 1.3 million gallons of
9 wastewater for disposal on site right now. This
10 water is currently stored in several locations on
11 site.

12 It is important to note that Holtec
13 has stated additional wastewater will be generated by
14 upcoming decommissioning activities. So we should
15 probably think of the 1.3 million gallons as the low
16 end.

17 Unlike Vermont Yankee, shipping
18 wastewater outside was not considered in Holtec's
19 initial decommissioning plan. The licensee had
20 planned to discharge this water to the Hudson River.

21 However, in August of 2023, Governor
22 Hochul signed a new law, prohibiting the discharge of
23 any radioactive substance into the Hudson River in
24 connection with decommissioning a nuclear power
25 plant.

1 4/25/2024 - Indian Point

2 So is it possible to ship wastewater
3 from Indian Point? Yes, it is. As with any waste
4 disposal option, there are several considerations to
5 take into account when discussing the shipping of
6 wastewater during decommissioning.

7 I'll start with the regulatory
8 considerations. If Holtec were to ship this water
9 off site, and they shipped it to either Tennessee or
10 Texas facilities, these facilities are licensed for
11 radiological waste disposal. So Holtec would not
12 need or require prior N.R.C. approvals.

13 If Holtec chose to send this water to
14 Idaho, that would require an additional N.R.C.
15 approval from the N.R.C. And I feel as though this
16 is worth mentioning because, typically, when you talk
17 about additional regulatory approvals, that means
18 more time and it means more money.

19 Transport considerations. Indian
20 Point does not have a rail spur on site. What you
21 saw in that picture of Vermont Yankee, Indian Point
22 doesn't have that. So as with other waste from
23 decommissioning, trucks will need to be used to
24 transport the waste to a transfer facility with rail
25 and with applicable radiological permits. And as

1 4/25/2024 - Indian Point

2 with any movement of liquid, there's always a risk of
3 possible leaks or spills.

4 Next slide.

5 Fiscal considerations. From what we
6 could gather, the estimated cost to ship wastewater
7 is between \$4 and \$10 per gallon. With Indian
8 Point's 1.3 million gallons that they have currently,
9 this could cost the site between \$5 and \$13 million.
10 I'll caveat that by saying that the \$4 estimate is
11 based on Vermont Yankee's 2017 and 2018 costs, and
12 these do not account for subsequent inflation.
13 Further, these estimates do not take into account the
14 extra work of first trucking the Indian Point
15 wastewater to rail.

16 Lastly, there is a financial risk of a
17 lengthy decommissioning timeline. Shipping the water
18 off site will almost certainly shorten the
19 decommissioning timeline at Indian Point and thus
20 alleviate this financial risk.

21 Wastewater storage and disposal. If
22 Holtec were to ship the wastewater off site, on-site
23 storage would no longer be a concern or an issue. If
24 shipped off site, this water would be evaporated, or
25 it would be solidified and buried at a licensed

1 4/25/2024 - Indian Point
2 disposal facility.

3 Lastly, licensee considerations.
4 Holtec is the owner of Indian Point. Holtec may
5 utilize any option permitted by state and federal
6 law.

7 That concludes my presentation and I'm
8 happy to take any questions.

9 CHAIR CONGDON: Thank you, Bridget.
10 Susan?

11 MS. SPEAR: Thank you so much,
12 Bridget. Really appreciate all your work on this.
13 Two questions. What happens to the wastewater when
14 it gets to the facilities?

15 MS. FRYMIRE: Okay. Good question.

16 MS. SPEAR: What did they do with it?
17 Do they discharge it into a river? Do they retain it
18 on site? What do they do?

19 MS. FRYMIRE: No. Okay. So as of now
20 -- and again, I have to thank Alyse Peterson because
21 we did a lot of work looking at -- into where this
22 would go, what would happen. So there are three --
23 three -- three waste management companies that could
24 be used in this situation.

25 So we have Waste Control Specialists.

1 4/25/2024 - Indian Point

2 They're located in Texas. The Texas facility stated
3 that once the water arrives, it would be offloaded
4 into a storage tank, analyzed, and then, fed into a
5 process building to undergo solidification. The
6 resulting material would then be used as landfill.

7 CHAIR CONGDON: Landfill where?

8 MS. FRYMIRE: In a RCRA cell. I'm
9 sorry, everyone. In a RCRA cell. So in like a
10 radiological facility.

11 MS. SPEAR: Uh-huh.

12 MR. SIPOS: At a licensed -- yeah,
13 licensed --

14 MS. FRYMIRE: At a licensed
15 radiological waste facility.

16 MR. SIPOS: -- facility.

17 MS. SPEAR: Uh-huh. Okay. So that's
18 Texas. There's also another company called Energy
19 Solutions. They have facilities in Utah and in
20 Tennessee.

21 If the water went to Utah, it would be
22 very similar to what was -- what I just described in
23 Texas, solidification. If it went to Tennessee, it
24 would go to an evaporation plant.

25 Lastly is Idaho. And at this

1 4/25/2024 - Indian Point

2 facility, the water would either be used as process
3 water or evaporated in a retention pot.

4 MS. SPEAR: Thank you. One more
5 question.

6 MS. FRYMIRE: Uh-huh.

7 MS. SPEAR: Would you anticipate the
8 water from Indian Point would be considered Class A
9 when shipped?

10 MS. FRYMIRE: I asked that question
11 multiple times. And yes, Class A was the answer
12 every time.

13 MS. SPEAR: Thank you, Bridget.

14 MS. FRYMIRE: Yes.

15 CHAIR CONGDON: Assemblywoman
16 Levenberg?

17 ASSEMBLYWOMAN LEVENBERG: Thank you.

18 And thanks so much for that
19 presentation, Bridget. How many trucks, maybe -- I
20 don't know if you know this, but how many trucks are
21 already transporting Class A material off site, or
22 any other class for that matter from Indian Point?

23 MS. FRYMIRE: I can't give you an
24 answer on that right now. I'm sure we can -- we
25 could get that information for you.

1 4/25/2024 - Indian Point

2 ASSEMBLYWOMAN LEVENBERG: Great. And
3 -- and just in terms of the -- the work that's
4 already been done, do we know if there have been any
5 leaks or spills or any accidents or anything else
6 from any of the trucking off site to date from the
7 decommissioning process?

8 Because I know that there have been
9 plenty of trucks that have transported materials off
10 site.

11 MS. FRYMIRE: Are you asking this
12 specifically to Indian Point, or are you asking the
13 question specific to the wastewater shipping that's
14 been done historically in the -- in the commercial
15 nuclear industry?

16 ASSEMBLYWOMAN LEVENBERG: Well, since
17 you asked them, I'm now asking it about both.

18 MS. FRYMIRE: Okay.

19 ASSEMBLYWOMAN LEVENBERG: Okay.

20 MS. FRYMIRE: So at Indian Point, I
21 don't believe that they've shipped any wastewater off
22 site, and because of that, there have been no leaks
23 or spills. And we did an in-depth look to try to
24 find any issues with this wastewater and there was
25 nothing public that we could find.

1 4/25/2024 - Indian Point

2 CHAIR CONGDON: From the Vermont
3 Yankee experience.

4 ASSEMBLYWOMAN LEVENBERG: From Vermont
5 Yankee. Okay. I think the only question -- I don't
6 know if I'm allowed to go back and ask the question
7 for Arnie, but I did have a question.

8 CHAIR CONGDON: Of course.

9 ASSEMBLYWOMAN LEVENBERG: Okay. Just
10 in terms of --.

11 CHAIR CONGDON: Arnie, for you.

12 ASSEMBLYWOMAN LEVENBERG: There was --
13 I think that Holtec had said that a couple of the
14 options that you mentioned were not possible because
15 of the turbine billing -- building being needed to
16 move water during the decommissioning process.

17 I didn't know if you wanted to comment
18 on that. And also, how long it would take, based on
19 your estimation, to actually build those storage
20 tanks in the turbine building.

21 MR. GUNDERSEN: Okay. Transferring it
22 between the units is a matter of a day or two, you
23 know, the -- to pump a million gallons is not a -- it
24 is not a -- or half a million gallons from one unit
25 to the other is a -- is a -- a short duration

1 4/25/2024 - Indian Point
2 project.

3 Construction of the tanks is, you
4 know, a couple months after the building has been
5 gutted because all of the material inside that --
6 that facility is clean and is sold as scrap. So once
7 the building's gutted, it's a matter of leveling the
8 floor, building the tank, and putting the berms in.

9 CHAIR CONGDON: Dana, my recollection,
10 and I know on advice of counsel, you're not allowed
11 to discuss this. So if you can clarify, please join
12 us at the mic.

13 But my recollection from the previous
14 discussions was that Holtec was contending that the
15 systems that are currently used to treat the
16 wastewater, store it in the tank that is then used to
17 hold the treated wastewater, and then, to pump it
18 into the discharge canal, are all part of systems
19 that would be decommissioned.

20 If they didn't have -- they want to --
21 they can't take out those systems that are within
22 other components that would need to be
23 decommissioned.

24 So if Mr. Gundersen's approach of a
25 short-term or shorter-term storage in that scenario,

1 4/25/2024 - Indian Point
2 where further research would be conducted, and if
3 there were a time in the multiple-year timeframe when
4 the scientific consensus under his suggestion said,
5 yeah, we can go back to the original plan, treat and
6 release, the systems that contain all of the water
7 pumping and -- and -- and get it to the discharge
8 canal may not be intact.

9 Frank, is that what you've previously
10 reported?

11 MR. WEBSTER: Yeah, but Mr.
12 Gundersen's proposal is to pre-treat the water before
13 you put it in the storage tank. So if you pre-
14 treated all the water, then you wouldn't have to
15 retain all of that stuff.

16 CHAIR CONGDON: But there's pumping
17 equipment that takes it from that tank after
18 treatment and gets it to the discharge canal. And
19 there's pumping water for dilution that occurs. And
20 so what about those systems?

21 MR. WEBSTER: Right. They wouldn't
22 have to retain treatment systems. They'd have to get
23 a way to get it to the discharge canal. Now, if they
24 were, I assume they would just build a new system for
25 that.

1 4/25/2024 - Indian Point

2 At the time of discharge, that's what
3 they would do.

4 ASSEMBLYWOMAN LEVENBERG: Okay. So
5 theoretically. And then there's one more -- more
6 question, sort of for Frank, I guess. You had
7 mentioned about the areas of concern. You sort of
8 mentioned that the Units 1 and 2, once removed,
9 underneath those two units, would be areas of
10 concern.

11 Is that -- and -- and you sort of
12 mentioned like different levels of concern. Is that
13 -- I mean, is that something that would theoretically
14 make it difficult to put another commercial venture
15 on top of that? I'm just curious.

16 You know, and I know -- I know that
17 talked a little bit about Zion and that. I -- I just
18 don't --.

19 CHAIR CONGDON: Maybe -- maybe just
20 explain what an area of concern is and the relevance
21 of that term. Would that be helpful?

22 ASSEMBLYWOMAN LEVENBERG: Sure.

23 MR. SPAGNUOLO: An area of concern is
24 any -- anything that's been identified over the
25 course of the last 60 years where a spill occurred.

1 4/25/2024 - Indian Point

2 CHAIR CONGDON: Spill of anything of
3 concern like petroleum or --.

4 ASSEMBLYWOMAN LEVENBERG: Right, but
5 he was saying under Units 1 and 2. I'm not thinking
6 that that's petroleum concern there. I don't know
7 what else --.

8 MR. SPAGNUOLO: Got it. So -- so
9 basically anything on the nuke side of the plant.

10 ASSEMBLYWOMAN LEVENBERG: Right.

11 MR. SPAGNUOLO: Right. Just trying to
12 keep it at a -- a simple level. We need to remove
13 all the components. We need to remove all --
14 everything inside of every building needs to get
15 removed. All the hazards need to be removed, all the
16 major components need to be removed, then we remove
17 the building.

18 Now, you're left with the foundation.
19 Underneath that foundation, we need to remove the
20 foundation and then we need to sample everything to
21 make sure that nothing is there. That's part of, I'm
22 going to say D.E.R. 10, and it's a state requirement,
23 it's also a federal requirement.

24 Feds require us to get to 25 MR. If
25 you stand in one spot for one year, you'll never get

1 4/25/2024 - Indian Point
2 more. State requires ten. So that's -- that's kind
3 of all the same thing.

4 That'll all be in the written plan,
5 it's all part of our partial site release plan. It's
6 not specifically a listed A.O.C., but it's treated
7 almost the same. A.O.C.s are little spots where
8 we've had history of mostly oil spills that were --
9 that were treated, or any kind of a contaminant. But
10 again, I don't have the table of them or where they
11 are.

12 ASSEMBLYWOMAN LEVENBERG: Right.
13 Sure.

14 MR. SPAGNUOLO: But ultimately, no
15 matter what you're looking at, that -- that block of
16 35 acres of all the congested buildings, once they're
17 all cleared, they would need to be remediated.

18 And it's basically the same process as
19 an A.O.C., needs to go through every soil sample,
20 soil bores, drilling wells, all that needs to get
21 done and of -- and the remediation if you find
22 anything.

23 ASSEMBLYWOMAN LEVENBERG: And you
24 actually just reminded me that -- the ISFSI pads,
25 there's some -- there's some plan to actually move

1 4/25/2024 - Indian Point

2 that spent fuel, the dry casks at some point. Is
3 that right? Is that correct?

4 MR. SPAGNUOLO: Well, that's the
5 D.O.E.'s responsibility.

6 ASSEMBLYWOMAN LEVENBERG: Okay. Got
7 it. But was that supposed to be moved to a Holtec
8 site or something? No?

9 MR. SPAGNUOLO: The D.O.E., the
10 federal government hasn't determined where that
11 location will be.

12 ASSEMBLYWOMAN LEVENBERG: Okay. And -
13 - and speaking of, you also mentioned that the D.O.E.
14 has -- hasn't done any moving of anything yet, and
15 you were expecting that they might have done it at
16 some point? Like, where are they? Why haven't they
17 moved this? I think you mention that.

18 MR. SIPOS: So, maybe I could hop in
19 on that.

20 ASSEMBLYWOMAN LEVENBERG: Okay.

21 MR. SIPOS: When the federal
22 government licensed the Indian Point reactors, it
23 told the community -- the host community that the
24 spent nuclear fuel would not be stored on site. And
25 that is in the environmental impact statement that is

1 4/25/2024 - Indian Point
2 stated by the Atomic Energy Commission.

3 The Department, the -- the United
4 States Department of Energy is the ultimate recipient
5 and custodian of the spent nuclear fuel. It goes
6 back to the federal government. However, the
7 Department of Energy, since 1974, has not identified,
8 constructed, or received a permit for the permanent
9 disposal of spent nuclear fuel.

10 So that is why we have the ISFSI at
11 Indian Point and at 70 other reactor sites across the
12 country, and the waste is accumulating there. There
13 is no Yucca for the fuel -- Yucca Mountain in -- in
14 Nevada.

15 And it is not yet clear when -- I'm
16 choosing my words carefully. I'm going to say when
17 the United States Department of Energy will take
18 title and control and custody of that.

19 So in the Holtec decommissioning plan,
20 they note that, as does every other reactor owner in
21 the country, that this is a, you want to call it a --
22 a doughnut hole on -- on the part of the United
23 States Department of Energy.

24 They don't have a place for their --
25 for the waste that Congress has assigned them to

1 4/25/2024 - Indian Point

2 take.

3 CHAIR CONGDON: But interestingly, the
4 Department of Energy is actively studying and working
5 on the transport plan when they do have a place to
6 go. And -- and they did come and give a presentation
7 to us. I think it was before you joined the Board.

8 And so it's in our archives, and I
9 think it's worth reviewing their presentation to us
10 just for your -- for your information.

11 MS. FRYMIRE: They actually just
12 published the report.

13 CHAIR CONGDON: Sorry?

14 MS. FRYMIRE: The updated report just
15 came out recently from their many visits across the
16 country.

17 CHAIR CONGDON: Good. So we'll --
18 we'll circulate that to the D.O.B.

19 I want to move on to -- I'm sorry,
20 Richard. The -- the public signed up, they pre-
21 registered, they came. I'm sorry, Senator Harckham,
22 and I have a brief -- I -- I have a brief question
23 for Arnie, as well, for clarification, but go ahead,
24 Senator.

25 MR. HARCKHAM: Thank you. I'm not

1 4/25/2024 - Indian Point

2 going to be long. That was a very interesting
3 presentation. John, I applaud your optimism by
4 saying 60 years, I put that in the 'if' category.

5 THE REPORTER: I'm sorry; I can't hear
6 you.

7 MR. HARCKHAM: You know, as a lawyer,
8 I have to be careful.

9 UNIDENTIFIED SPEAKER: Pete, I think
10 your microphone is turned off.

11 MR. HARCKHAM: Are we off?

12 THE REPORTER: You are off.

13 MR. HARCKHAM: We are off. All right.
14 Where there is a will, there's a way. Thank you very
15 much.

16 Quick question on -- on the finances.
17 And -- and you kind of caveated that with the, you
18 know, it was -- it was really confidential
19 information and you cobbled together from -- from
20 different sources.

21 So I -- I appreciate where you're
22 coming from. You know, one of the points you made
23 is, yes, this is technically feasible. Two, you sort
24 of isolated a window of costs. Now, that -- that's
25 just one ramification; right? Are the -- are the

1 4/25/2024 - Indian Point
2 costs and they're the, you know, the -- the -- the --
3 the -- the -- the trucking emissions and, you know,
4 there are other things, qualitative factors and
5 quantitative factors.

6 But I -- I think it would be
7 interesting to -- to sort of see if we could quantify
8 the cost differential between the methodology that
9 you discussed, the methodology that -- that Arnie's
10 talking about, you know, or -- or -- you know, and I
11 -- I don't mean to be facetious when I say this, or
12 eight years of litigation.

13 You know, that -- that all of these
14 things have -- have a time implication, a cost
15 implication, you know, and I think -- I think it
16 would just be really interesting if we could put
17 together a matrix of qualitative and quantitative
18 factors dealing with all of the three options.

19 So thank you.

20 CHAIR CONGDON: Thanks -- thanks,
21 Senator. It's a good suggestion.

22 I have a quick -- quick clarification
23 question for Mr. Gundersen. You mentioned the
24 concern about synergistic toxicity, and I'm
25 interested in that. I believe I understand what that

1 4/25/2024 - Indian Point

2 is.

3 And for, you know, the viewing public,
4 it is two contaminants of concern, each has health --
5 potential health consequences, but when combined,
6 either one or both end up having worse health
7 consequences; right?

8 And you mentioned the potential
9 concern with tritium interacting with P.C.B.s. And I
10 -- want to clarify whether that is based on any
11 research you've done that showed or studied that
12 potential synergistic toxicity, or is it more of a
13 precautionary principle that you don't know, it
14 hasn't been looked at, and -- and we should know the
15 answer.

16 MR. GUNDERSEN: I -- I looked up
17 synergistic toxicity, slash, tritium and -- and
18 there's no research on -- on that. I -- I did talk
19 to Dr. Arjun Makhijani about -- about it and -- and a
20 P.C.B. molecule has a bunch of hydrogens that could
21 easily be replaced by a -- by a tritium molecule.

22 So the amplification of the effect of
23 -- of P.C.B.s with -- with tritium is entirely --
24 entirely feasible. But no, I'm 75 years old and
25 working alone, so no, I don't have the research lab

1 4/25/2024 - Indian Point

2 to do that.

3 CHAIR CONGDON: Okay. Thanks for the
4 clarification.

5 MR. SIPOS: Just two quick follow-ups,
6 Mr. Gundersen. I was looking at a video, it was a
7 different video actually, from last fall. This is
8 the one with the white bookshelves in the background.

9 And I think I saw -- I jotted down
10 that you said, for on-site storage, that they, quote,
11 may start to leak over time, close quote. Do you
12 recall that?

13 MR. GUNDERSEN: I didn't prep by
14 reading -- by watching the old ones. If you wrote it
15 down, I -- I believe you.

16 MR. SIPOS: Okay.

17 MR. GUNDERSEN: Yeah, which is why I
18 wanted the berm.

19 MR. SIPOS: Okay.

20 MR. GUNDERSEN: You know, the -- the
21 goal is to have that -- have that back-up.

22 MR. SIPOS: Just wanted to confirm
23 that. Just one other point. You mentioned the
24 seismic integrity of the -- of the turbine building.
25 I think you're aware of a longstanding N.R.C. study

1 4/25/2024 - Indian Point
2 for plants in the central and eastern United States.

3 It's called Generic Safety Issue 199,
4 and it goes back to the United States Geological
5 Survey, identifying increased seismic hazard risks
6 for the eastern plants. Do you recall that?

7 MR. GUNDERSEN: I -- I know that --
8 that Entergy was able to skate by those standards for
9 -- for decades. So yes, there is a -- there -- there
10 is a body of scientific evidence that suggests
11 earthquakes may be worse than what the N.R.C. has
12 suggested they could be.

13 MR. SIPOS: For the eastern plants,
14 including Indian Point Site; correct?

15 MR. GUNDERSEN: Oh, I would put every
16 plant in that category, not just the eastern plants.

17 MR. SIPOS: Thank you.

18 CHAIR CONGDON: Okay. I would like to
19 do, we're -- we're about 10 minutes behind, so I'm
20 going to ask the D.O.B. to stick 10 minutes late, so
21 we can do 30 full minutes of public statement
22 hearing.

23 And I'm going to turn it over to Tom
24 to please run the show on that. Thank you.

25 MR. KACZMAREK: Thanks, Tom.

1 4/25/2024 - Indian Point

2 And I'll ask the first few individuals
3 to come line up or be prepared. Jacquelyn --
4 Jacquelyn Drechsler, Tina Volz-Bongar, and Susan
5 Shapiro, we'll begin with you in that order. Just as
6 a reminder, we'll -- speakers will be cut off after
7 three minutes.

8 We're going to try getting to as many
9 as we can in the 30-minute period we have allotted.
10 And we're going to try out a feature tonight.
11 There's going to be a timer on the screen.

12 Please keep an eye on it. I will
13 mention, at thirty seconds remaining, to begin
14 wrapping up your remarks.

15 So with that, you may begin.

16 MS. DRECHSLER: I don't think I can
17 keep an eye on the screen and on my words, so I'll
18 rely on you to do that. So my name is Jacqui
19 Drechsler. I live in Valley Cottage, New York.

20 Thank you to the members of the D.O.B.
21 for tonight's meeting.

22 Thank you to Governor Hochul for
23 signing the Save the Hudson Bill. The community
24 stands behind you, Governor Hochul, and New York
25 state in defending the Save the Hudson bill.

1 4/25/2024 - Indian Point

2 Thank you to Arnie Gundersen for
3 coming to present on safe on-site storage as a
4 potential option.

5 And thank you to Bridget as well for
6 your presentation. I personally and others, many
7 others do not believe that transportation is a viable
8 or safe option.

9 However, tonight I speak words from
10 Chief Dwaine Perry of the Munsee Ramapough Lenape
11 Nation, who is also a board member of Riverkeeper. I
12 quote. We are water protectors, protectors of
13 rivers. Holtec has a job to do and must do it well.
14 They must not toxify our river, the river that flows
15 both ways, the Hudson River. We must protect our
16 river for future generations.

17 What is proposed is environmental
18 murder, which creates genetic and generational damage
19 with serious health consequences for us, our
20 children, and for future generations. Are you, we,
21 more interested in having a healthy future with
22 healthy children, or more interested in Holtec
23 putting profits before people?

24 Not storing this radioactive
25 wastewater and radioactive waste in general, seems to

1 4/25/2024 - Indian Point

2 be a fiscal opportunity for Holtec. Is Holtec's
3 profit margin more important than our future? This
4 must be resolved in a manner that allows safe
5 decommissioning with the least harm.

6 The other option that is on the agenda
7 tonight, transporting by tanker and rail,
8 transporting this waste only offers dangers to the
9 communities that these transports go through.

10 A final thought, a prayer. We are all
11 responsible for all air, water, earth, for all plant
12 life, aquatic life, wildlife, bird and insect life,
13 and for human life to survive and to have good and
14 healthy lives for all generations to come. End
15 quote.

16 And a final thought from me. I insist
17 that a citizens and experts group be created in light
18 of so many environmental threats. And because this
19 is basically a nuclear waste dump where there is
20 nowhere to actually move the casks, we must create a
21 panel a group dedicated to the safety --

22 MR. KACZMAREK: Thirty seconds.

23 MS. DRECHSLER: -- of the community
24 and up to our environment. I think it needs to be
25 similar to the Vermont Yankee panel that Mr.

1 4/25/2024 - Indian Point

2 Gunderson chaired.

3 I also think that it was wonderful
4 that, before Indian Point was built, there was quite
5 an environmental study, a 20-mile radius study of the
6 soil, air, water, and animals, et cetera.

7 I believe there should be a 60-year
8 review, a new environmental study to see what has
9 changed and what has happened in the intervening 60
10 years.

11 MR. KACZMAREK: That's time. Thank
12 you.

13 MS. DRECHSLER: So thank you very
14 much.

15 CHAIR CONGDON: Thank you, Jacqui.
16 Thank you.

17 MR. KACZMAREK: Tina Volz-Bongar,
18 followed by Susan Shapiro, and Herschel Specter.

19 MS. VOLZ-BONGAR: So I really want to
20 thank the Decommissioning Oversight Board for
21 bringing Mr. Gundersen here. It's wonderful that we
22 have an independent expert testifying to this Board.
23 And so I thank you profusely for that.

24 So my question would be, since we have
25 the presence of an independent expert here, is there

1 4/25/2024 - Indian Point

2 anything that you've heard tonight that you think is
3 really important for the community to look at and to
4 pursue, Mr. Gundersen?

5 MR. GUNDERSEN: Yeah, there were two
6 things. First was the issue of evaporation,
7 evaporating the -- the spent fuel pool water.
8 There's another element in there called technetium
9 99.

10 Technetium 99 hooks up with oxygen and
11 makes an oxide, which volatilizes at 104 degrees, so
12 that if you evaporate this fuel pool water and
13 there's tech 99 in it, you're likely to also
14 volatilize the tech 99 with the tritium.

15 So it's -- it's a problem that also
16 needs to be evaluated when you look at evaporation.

17 One real quick thing, the -- the --
18 the Hudson River flows by the plant and magically
19 gets diverted with about 80,000 gallons of water get
20 taken from the Hudson River. It gets relabeled as
21 the circulating water.

22 That was the water that cooled the
23 plant back when it needed cooling. It doesn't need
24 cooling now, but the circulating water goes by the
25 plant. Somehow, it's no longer the Hudson River.

1 4/25/2024 - Indian Point

2 And the -- Holtec will take the 70,000
3 gallons of circulating water, which is essentially
4 the Hudson River, and dump into it about 150 gallons
5 of tritiated water from the fuel pool and somehow
6 claim that they're not contaminating the Hudson
7 River.

8 The circulating water system is not
9 safety-related, so that the N.R.C. has no
10 jurisdiction over the circulating water system, which
11 I think is an important thing, going forward.

12 MS. VOLZ-BONGAR: Okay. Thank you,
13 Mr. Gundersen.

14 MR. KACZMAREK: Susan Shapiro?

15 MS. SHAPIRO: Thank you. Hi, I'm
16 Susan Shapiro. First of all, I want to say this idea
17 of shipping tritium off site is a total red herring.
18 While we have the spent casks -- the spent fuel
19 casks, the 76 or so spent fuel casks, this site is
20 not being returned to any other use.

21 So let's be realistic about this.
22 Right now, Holtec has decided that, instead of
23 working with us, they're going to sue, and they're
24 going to delay for eight years. They're going to sue
25 for the right to pollute the Hudson River. That's

1 4/25/2024 - Indian Point

2 what they're asking for in this litigation.

3 They may very well be using our money
4 for that lawsuit. So their claim that they're going
5 to delay is just a -- a -- a ploy. So I don't think
6 we should be moved by that. And Holtec has really
7 shown its hand that they don't really care about this
8 region or the people here.

9 Definitely, by their cursory
10 inspection after the earthquake, they just did a
11 visual inspection. Enbridge, the pipeline people,
12 actually could do tests based on pressure, and they
13 put a camera through. But Holtec's casks are
14 designed, so they cannot be inspected.

15 We currently have casks that can never
16 be inspected. So we don't know the integrity of what
17 happened with the spent fuel inside those casks, and
18 nor can we ever. So and the -- yes, and the N.R.C.
19 approved those casks.

20 And the N.R.C., as have been said here
21 tonight by many people, is not doing their job, nor
22 as you said, the doughnut hole, Mr. Sipos. It's more
23 like a black hole for nuclear waste.

24 There is no place that the federal
25 government has figured out, after 70 years, what to

1 4/25/2024 - Indian Point

2 do with this nuclear waste. So what's happening?

3 The State is being held responsible. We, here, the
4 people in the state are being held responsible.

5 So one of the things I'd like to ask
6 is that you bring back to the governor that the State
7 needs to do comprehensive, real-time monitoring. Not
8 just the remaining four monitors around the plant,
9 but we need real-time monitoring that the State runs
10 independently and not relying on Holtec to do it.

11 I also think that the State should be
12 petitioning the D.O.E. to give the State the funds
13 that have been put -- that they are giving to reactor
14 owners. Because that lawsuit has already been won,
15 that if you're holding spent fuel on your property,
16 which is our -- the State's property, that this waste
17 is now standing on. We are now -- Indian Point now
18 is a nuclear waste, maybe it's an interim dump, or
19 maybe it's a permanent dump. But right now, that
20 waste isn't going anywhere. It has nowhere to go.

21 MR. KACZMAREK: Thirty seconds.

22 MS. SHAPIRO: So that's what I'm
23 asking is that we, now as the State, take on this
24 role, because we know what's happening. You know, we
25 can't keep putting blinders on and saying there's

1 4/25/2024 - Indian Point

2 going to be a solution. There is no solution.

3 The only solution is for us to use the
4 best technology available to keep this waste as
5 safely away from human and people and the
6 environment. And so it's really our turn as a State
7 to do this.

8 MR. KACZMAREK: Thank you.

9 MS. SHAPIRO: Your -- thank you. And
10 New York state has the right to do this. So please,
11 I -- I ask -- one -- can I just ask one last
12 question? I do not know why there's not been a
13 discussion about moving the tritium all into the
14 spent fuel pool three. So at least if we need a hot
15 cell, we'll still have a hot cell.

16 There's a -- why -- why not get it out
17 of the leaking pool, which is two, and put it into
18 spent fuel three, and store it there until --

19 MR. KACZMAREK: Ms. Shapiro?

20 MS. SHAPIRO: -- there's a solution.

21 MR. KACZMAREK: Thank you.

22 Herschel -- Herschel Specter, followed
23 by Nancy Vann and Courtney Williams. Is Mr. Specter
24 here? Oh, thank you.

25 MR. SPECTER: Good evening. I'm

1 4/25/2024 - Indian Point

2 Herschel Specter. I'm a professional engineer in the
3 State of New York. I've been coming to these
4 meetings, on and off, for quite a while. And what I
5 always come away with is that we're not dealing with
6 the fundamental issue.

7 And the fundamental issue is the fear
8 of radiation. I've come to meetings. And let me
9 say, if people are afraid, and many of the people
10 here have expressed this to me, the natural result of
11 that is resentment, distrust.

12 So I think one of the things I decided
13 to do, between the last time I came and -- and
14 tonight, was to try to close the gap in terms of
15 knowledge. And I'm not a radiation specialist. So
16 I'm going to try. And forgive me; I'm not perfect.

17 But when I first thought about it, I
18 thought about a person like a cook doing things which
19 we've all done, and he cuts himself. But he knows,
20 like we all know, that within a short time, you'll
21 get healed. The body repairs itself. That's the
22 truth that we all know.

23 But what if the cook had really messed
24 up and cut his wrist? He could possibly bleed to
25 death. So what is really important is are we dealing

1 4/25/2024 - Indian Point
2 with a small cut, radiologically, or a big cut? I'm
3 going to tell you we're dealing with a very small
4 cut.

5 And it's -- the issues that we're
6 talking about are not like radiation from a nuclear
7 bomb, like Hiroshima or Nagasaki. It's not like the
8 radiation from an accident like Chernobyl or
9 Fukushima or Three Mile Island. It's much smaller.
10 These are low-level wastes and low radiation levels.
11 What do we know about them?

12 Well, actually, what we do know is
13 that we can't find any discernible radiation health
14 effects at low doses. It shocks people. There are
15 none after Chernobyl. They can't find them after all
16 these years.

17 What we also know is that there are
18 locations on this earth, like in Iran, which the
19 radiation levels is 70 times higher than what it is
20 for background here. No increase in health effects.

21 MR. KACZMAREK: Thirty seconds.

22 MR. SPECTER: So what we really need,
23 I think, is missing. It is let's get somebody down
24 here, perhaps the N.R.C. or D.O.E., who knows about
25 radiation, who then can say here's our standards and

1 4/25/2024 - Indian Point

2 here's why, and here's why you're protected.

3 We don't have that now, but until you
4 do that, you're going to have fear and distrust and
5 anger. Thank you.

6 MR. KACZMAREK: Thank you.

7 Nancy Vann, followed by Courtney
8 Williams and James Rogulski.

9 MS. VANN: Hi, I'm Nancy Vann, and I
10 live in Peekskill, approximately, 2.8 miles, as the
11 crow flies, from Indian Point.

12 Recently, on April 18th, the New York
13 Times ran an article called The Fantasy of Reviving
14 Nuclear Energy. What we've heard here tonight about
15 shipping this water off to Texas, I would call the
16 fantasy of getting rid of nuclear reactions or
17 nuclear dangers here.

18 And on -- in March of 2023, the State
19 of New Mexico passed legislation blocking Holtec from
20 establishing a consolidated interim storage in the
21 State of New Mexico. Despite that, on May 9th, 2023,
22 Holtec received a license from the N.R.C. for interim
23 storage.

24 However, on March 27th, the Fifth
25 Circuit Court of Appeals vacated Holtec's license.

1 4/25/2024 - Indian Point

2 They said that the N.R.C. doesn't have the ability to
3 license that type of storage facility. And that was
4 the same thing that happened for a comparable Texas
5 storage facility where, in August 2023, the D.C.
6 Court said that the N.R.C. could not grant licenses
7 for storing nuclear waste in Texas.

8 We are not going to be able to ship
9 this waste to Texas. We're not going to be able to
10 ship the water to Texas. These -- these particular
11 lawsuits -- I'm a retired Wall Street lawyer and I've
12 looked at these lawsuits. They are in -- very much
13 in coordination with the current Supreme Court
14 rulings that limit the ability of government agencies
15 to do things which they haven't been specifically
16 permitted to do by Congress.

17 MR. KACZMAREK: Thirty seconds.

18 MS. VANN: So Congress, when we hear
19 that Congress has to act to stop this, well, Congress
20 hasn't acted so we can't do this. It's exactly the
21 opposite.

22 There's just no place that we're going
23 to be able to ship this water to. We need to deal
24 with that fact. Thank you.

25 MR. KACZMAREK: Thank you.

1 4/25/2024 - Indian Point

2 Courtney Williams?

3 MS. WILLIAMS: Okay. Thank you for
4 the opportunity to speak and for this meeting. I've
5 got a few different things and then maybe, at the end
6 of my three minutes, folks can answer.

7 Not mentioned at this meeting so far,
8 school monitoring. Parents had asked for that in
9 September. We still have nothing. I would ask that
10 the -- the State do what they can to expedite things
11 because we were supposed to have this at the start of
12 the school year. It's now the end of the school
13 year. We have nothing.

14 Nancy Vann brought up the findings.
15 Holtec's appeal was lost. They can't send the spent
16 fuel anywhere. Well, how does that impact? Because
17 they've been telling us all along, they're going to
18 ship it off, change federal law, et cetera, et
19 cetera. None of that's happened.

20 In terms of the synergistic effects
21 that Mr. Gundersen brought up, off the top of my
22 head, I can think of Indian Point, which has been
23 leaking, not just little cuts kinds of radiation into
24 groundwater for decades. The gas pipelines. We have
25 Wheelabrator, the largest industrial air polluter in

1 4/25/2024 - Indian Point
2 the county. We have the gypsum plant that sprinkles
3 us with gypsum dust on a nightly basis. The B.A.S.F.
4 chemical plant, we have the Hudson River full of
5 P.C.B.s, and the Bowline fracked gas power plant on
6 the other side of the river.

7 And those are just what I could think
8 of off the top of my head, all within less than five
9 miles of Indian Point. So we can synergize that.

10 I did mention to Mr. Specter, who
11 thinks that the -- the National Academies of Science
12 is some kind of Rockefeller conspiracy. But they did
13 put out a report saying we have not done enough to
14 study low-level radiation.

15 So I'm looking at a headline right
16 now, U.S. needs new \$100 million research program to
17 study health effects of exposure to low doses of
18 radiation, says new report.

19 So -- and then, one thing that I was
20 totally flabbergasted by is the considerations for
21 the report on transporting the wastewater. Missing
22 from the list, we had transport, we had fiscal, we
23 had wastewater storage and disposal, we had licensee.

24 You know what wasn't on the list?
25 Residents, either the ones that live here or that

1 4/25/2024 - Indian Point

2 live -- the schmucks that get stuck with whatever
3 gets shipped to Tennessee. Also, not on the list,
4 public health and safety.

5 So if we're going to make the matrix
6 that Senator Harckham brought up, maybe we can
7 consider like those of us that live here and the
8 health impacts of --

9 MR. KACZMAREK: Thirty seconds.

10 MS. WILLIAMS: -- of this. So that's
11 what I got.

12 MR. KACZMAREK: Thank you.

13 Next is James Rogulski, followed by
14 Suzannah Glidden and Kim Fraczek.

15 CHAIR CONGDON: We will answer every
16 question that's posed, as we always do in our -- in -
17 - in our follow-up to the meetings. It's a public
18 statement hearing.

19 MS. WILLIAMS: (unintelligible)

20 CHAIR CONGDON: On the school
21 monitoring, we can bring that to the June meeting and
22 we can -- I assume you can have communications with
23 the school that has their contract, as well.

24 And just one point of clarification,
25 the original urgency around that was prior to the

1 4/25/2024 - Indian Point
2 schedule change on decommissioning when heavy
3 demolition was going to be commencing. The concern
4 around the monitoring was around the heavy demolition
5 and the plan was to get the monitoring in place
6 before that occurred.

7 The State contracted a monitoring
8 contract. We're not commencing that until the heavy
9 decommissioning goes forward.

10 MS. WILLIAMS: (unintelligible)

11 CHAIR CONGDON: The baseline data, if
12 you recall, we agreed to take the \$500,000 that was
13 originally for monitoring -- in response to the
14 community concerns around getting baseline data, we
15 said the State will pay for the contract that we
16 already secured and procured for the monitoring and
17 will give the \$500,000 to the school district to
18 secure a separate contract to do baseline assessment
19 at B.V. and to do further community monitoring that
20 they agreed to do in partnership with the community.

21 So I don't know if the superintendent
22 wants to add anything to this, but we can provide a
23 fuller presentation at the June meeting on the
24 agenda.

25 MR. TROMBLEE: Courtney, as we

1 4/25/2024 - Indian Point
2 discussed before, we do have a meeting with the
3 vendor for both the equipment and also with the
4 baseline that's upcoming. And I did invite the
5 D.E.C. as well. I think I did that just before I
6 came this evening in approximately two -- on April
7 30th, we'll have that meeting.

8 CHAIR CONGDON: Sorry about that.

9 MR. KACZMAREK: You may begin.

10 MR. ROGULSKI: Thank you. Members of
11 the Indian Point Decommissioning Oversight Board,
12 thank you for having me. My name is James Rogulski.

13 I'm a 20-year veteran English teacher
14 at Hendrick Hudson High School, and I am the
15 president of the Hendrick Hudson Education
16 Association, the 250-plus member teachers union that
17 serves the students and community of the Hendrick
18 Hudson School District.

19 Along with the secretaries,
20 custodians, teachers' aides, and administrators, over
21 400 people have a career here. I come today to ask
22 for the Board's consideration for my members and the
23 school district's future.

24 Currently, the district faces possible
25 financial peril. Indian Point provided approximately

1 4/25/2024 - Indian Point

2 30% of the district's budget. Holtec, in its stead,
3 is only providing a small fraction of that with their
4 PILOT payments.

5 Because of this, the district is
6 currently being held afloat by using funds from the
7 New York State cessation fund. And at \$60 million,
8 it made up for just two years-worth of Indian Point
9 revenue. And the district's also using its local
10 fund balance.

11 These two funds are set to run dry in
12 about five years. During these next five years, the
13 district must raise taxes, cut services and programs,
14 or both, to remain solvent. This year, the tax levy
15 for the community was approximately \$50 million.

16 According to the district's business
17 manager's calculations, that number must rise to
18 approximately \$75 million in that 5-year span, a 50%
19 increase. This will require multiple years of tax
20 levy increases over the New York State tax cap and
21 will be difficult and contentious, if even possible.

22 And this is all happening on the heels
23 of Covid's insidious effect on schools. Esteemed
24 colleagues of mine have already left Hen-Hud and
25 others are currently applying for work elsewhere.

1 4/25/2024 - Indian Point

2 Perhaps, a longer-term financial plan to help create
3 a soft landing is in order.

4 The H.H.A. would like the opportunity
5 to meet with you and other stakeholders to help work
6 to secure Hen-Hud's future. To best serve the
7 community, our schools need stability. Financial
8 insecurity is the antithesis of that. Indian Point's
9 reactors, once thrummed with prosperity, helping to
10 provide opportunity for our local community.

11 MR. KACZMAREK: Thirty seconds.

12 MR. ROGULSKI: We beared the risk to
13 reap the reward. Now its spent concrete casks of
14 radioactive fuel represent an albatross for Buchanan
15 and the Hendrick Hudson School District.

16 The risk is still present. And the
17 future is now uncertain. I believe that should be
18 rectified. Thank you for listening.

19 MR. KACZMAREK: Thank you.

20 Suzannah Glidden, followed by Kim
21 Fraczek and Marilyn Elie.

22 MS. GLIDDEN: Good evening. United
23 for Clean Energy and Stop Holtec Coalition have
24 always promoted not sending our nuclear waste to
25 other communities, which also endangers the states

1 4/25/2024 - Indian Point

2 through which it passes, but to take care of it
3 ourselves where it was generated.

4 This doesn't mean dumping it into and
5 harming the Hudson River where, as Arnie explained,
6 there's synergistic toxicity, combining a huge load
7 of spent fuel pool wastewater with P.C.B.s.

8 The river provides drinking water for
9 towns, habitat for living species, subsistence
10 fishing, and is the mainstay for tourism and the
11 economy.

12 As Arnie Gundersen clearly explains,
13 it can easily and safely be stored inside tanks in a
14 turbine building, not requiring a permit.

15 Testing the groundwater that has
16 tritium and testing the fuel pool water by an
17 independent lab, as Arnie recommends, is also very
18 important to have the sampling taken correctly and
19 the extra contaminants revealed beyond what the New
20 York State lab tests for.

21 If alarming sea rise in the future is
22 taken into consideration, store the tanks on the roof
23 of the tallest turbine building, or build a second
24 story to enclose them.

25 Let's be realistic and acknowledge

1 4/25/2024 - Indian Point

2 that the country will never come to agreement on a
3 permanent or temporary storage area for the spent
4 fuel rods that would endanger indigenous people,
5 communities, and the environment.

6 To avoid catastrophe of sea rise
7 reaching Indian Point stored fuel rods, transfer the
8 rods into safer casks, create higher ground pads on
9 site, and move the stored fuel rods to them.

10 Finance it by cutting down on the
11 military pentagon defense weapon manufacture budget,
12 and tax the rich. Compensate the host town,
13 Buchanan, generously to replenish their tax base.

14 It is way past time to prevent
15 corporations from ruining our environment, ruining
16 our health and our lives with their waste. May New
17 York State prevail over Holtec's behavior to avoid
18 responsible and easy onsite storage.

19 MR. KACZMAREK: Thirty seconds.

20 MS. GLIDDEN: Let us get on with our
21 lives and resolve these matters and not allow delay.
22 Let it set precedent for other nuclear plants. Let
23 the people and environment prevail over corporate
24 bottom line profit incentive. And may it be so.
25 Thank you.

1 4/25/2024 - Indian Point

2 MR. KACZMAREK: Is Kim Fraczek here?
3 Marilyn Elie? Okay.

4 MS. ELIE: Thank you to the Board for
5 this meeting and for your oversight, and I'll get
6 back to oversight later, of -- of Indian Point.
7 There have been people concerned with Indian Point
8 with what it would do to the community since the
9 '50s.

10 It's not a new thing for, I will say,
11 it was a small minority, but there are those of us
12 who have advocated against Indian Point since then.
13 I stand on the shoulders of many who have gone
14 before. Al Warren was one who carried a petition
15 saying, do not allow this plant to come into my town.
16 He lived in Buchanan.

17 And what happened is what happened.
18 And all the decades since, people said we need the
19 jobs, we need the money, and Al was blown aside. And
20 I, as one who'd been working on this for the last 35
21 years, understand that because I experienced a lot of
22 it myself. There -- and it's been a difficult
23 struggle.

24 Finally, the plant is closed and
25 that's a good thing. And here we are, looking at

1 4/25/2024 - Indian Point

2 what to do with the remains, which were very visible
3 from the very beginning. This is not a shock or a
4 surprise to those of us who have looked at it and
5 followed the -- followed the development and come to
6 this Board, come to these meetings to talk and say,
7 look at this.

8 I was shocked and surprised when the
9 Town actually hired somebody to say, oh, how can we
10 use the -- the property at Indian Point, and got back
11 things about condos and riverwalks and things like
12 that. And that was despite the fact that many of us
13 had stood before here and said, look at what you
14 have, look at how deadly for how long it is.

15 So I don't need to -- I don't need to
16 go on about that. But what I do want to bring to the
17 point -- to bring to this point is that I think
18 what's happening with the tritiated water is just a
19 foretaste, a forecast of what's going to happen with
20 the spent fuel pools.

21 The federal government lied. They
22 said they would take it away and -- and it wouldn't
23 be a problem. Well, it was a lie.

24 MR. KACZMAREK: Thirty seconds.

25 MS. ELIE: And I -- and not only that,

1 4/25/2024 - Indian Point

2 but there is no plan B. And I'm really -- as the
3 Mayor of Buchanan is tired of hearing people beat up
4 on the N.R.C., I'm tired of hearing that, oh, that's
5 another route you have to take. There is no other
6 way to reach the N.R.C. It's not possible. You
7 cannot -- you cannot do anything about them because
8 they are a fortified institution.

9 We can talk about that if you want to,
10 but not now.

11 MR. KACZMAREK: That's -- that's time,
12 ma'am.

13 MS. ELIE: So my time is up. What I
14 want to say and what I want to remind you about --

15 MR. KACZMAREK: Ma'am --.

16 MS. ELIE: -- is that the N.R.C. is --
17 we all -- it's very apparent tonight, corrupted by
18 its ties to the industry.

19 MR. KACZMAREK: Ms. Elie?

20 MS. ELIE: And it cannot be changed by
21 the people in this room, and there is no way to do
22 that. And I just want to leave with you the fact
23 that --

24 MR. KACZMAREK: Ms. Elie, we're --
25 we're over time.

1 4/25/2024 - Indian Point

2 MS. ELIE: -- you are the
3 Decommissioning Oversight Board. You're not an
4 advisory board. I -- I know. I know what Tom says,
5 and I hear you. I hear you when you're saying that
6 and you've got a lot of bureaucratic regulations you
7 have to follow.

8 But I just want to remind you about
9 your name. You are the Decommissioning Oversight
10 Board. And just as tritiated water needs to be
11 maintained on site --

12 MR. KACZMAREK: Ms. Elie?

13 MS. ELIE: -- so does high -- high --
14 so does the high-level radiation waste. Thank you.

15 I'm sorry I went over.

16 MS. KNICKERBOCKER: I'm just going to
17 --.

18 MR. KACZMAREK: Our final two speakers
19 this evening will be Nate -- Nate --.

20

21 MS. KNICKERBOCKER: One second?

22 Marilyn, I -- I -- I -- I don't care if you beat up
23 on the N.R.C., but I'm just -- all I wanted to say is
24 that, if we need to remedy -- remedy it, if there's
25 an issue, if there's a problem, people -- it's not --

1 4/25/2024 - Indian Point

2 it's not done here. We need to take it more on a
3 federal level with our elected officials. That's all
4 I'm saying.

5 MS. ELIE: Well, it starts here.
6 Let's --.

7 MR. CONGDON: Okay. Let's keep --
8 keep going. We have two more speakers.

9 MR. KACZMAREK: Our final two speakers
10 this evening will be Nathan Plummer and Tracy Brown.

11 Nathan Plummer, are you with us still
12 this evening?

13 All right. Tracy Brown? And while
14 Tracy's coming up, I'm -- I'm aware there's some
15 other online individuals who are hoping to speak.
16 We'll provide other opportunities for you after Ms.
17 Brown. Thank you.

18 MS. BROWN: Okay. Thank you. Thank
19 you to the Decommissioning Board for bringing Arnie
20 Gundersen and thank you for coming and doing this
21 work and presenting your expert opinion for all of
22 us. Much appreciated.

23 I'm Tracy Brown. I'm with Hudson
24 Riverkeeper. Riverkeeper is dedicated to protecting
25 the Hudson River from source to sea and safeguarding

1 4/25/2024 - Indian Point

2 drinking water. We've been a leader in addressing
3 the many environmental impacts of Indian Point for
4 decades throughout its operation, into its closure,
5 and we're proud members of the D.O.B.

6 Riverkeeper is appalled by Holtec's
7 disingenuous tactics to blame the Save the Hudson Act
8 for the proposed five-year delay in the
9 decommissioning timeline when it is clear that Holtec
10 itself artificially has manufactured the
11 circumstances for the delay in challenging this law
12 that has such overwhelming public support and
13 refusing to consider onsite storage for the tritiated
14 water.

15 We have spent enough time on this
16 issue and New York has made it clear that a discharge
17 into the Hudson is not acceptable for our
18 communities. Decommissioning is a complex process
19 and we must move on to the many other issues still
20 outstanding.

21 Starting with the contaminated
22 radioactive groundwater that is currently already
23 migrating into the Hudson River that has been putting
24 the river and nearby communities at risk for decades,
25 D.E.C. and Holtec must prioritize addressing this

1 4/25/2024 - Indian Point

2 groundwater.

3 Riverkeeper strongly calls on Holtec
4 to keep the decommissioning process moving forward
5 and looks forward to continuing working
6 collaboratively with the D.O.B. entities to ensure a
7 safe, timely, and thorough decommissioning and site
8 restoration. Thank you.

9 MR. KACZMAREK: Thank you.

10 Thank you all very much.

11 CHAIR CONGDON: Thank you. I believe
12 that is all of the in-person registered speakers.

13 Tom, is that correct?

14 MR. KACZMAREK: That's correct.

15 CHAIR CONGDON: So I see someone
16 raising their hand. I'm sorry. You want to do a
17 three-minute? We can take. Thank you. Great.

18 MS. SIMS: Hello. Thank you,
19 everybody for spending your time and energy on this
20 project, since it will keep us all alive, hopefully.

21 The main thing that cannot be
22 overlooked, although I appreciate the idea of
23 corporate -- you know, corporate profit. That's why
24 you do it. More important than that is public safety
25 and public health.

1 4/25/2024 - Indian Point

2 There is nothing that is more
3 important than that. That includes all of us here.
4 That includes everybody at wherever something would
5 be shipped, and everybody in between this point and
6 that point because they are endangered when things
7 are shipped.

8 One thing that really caught my eye, I
9 appreciate Mr. Spagnuolo, your showing up and talking
10 to us. But I'm really curious as to what was so
11 humorous with your -- your friend who grabbed the mic
12 when -- when law ideas came up.

13 You were smirking and laughing almost
14 the entire time he was speaking, and I'm really
15 looking for the humor in this because I'm missing it.
16 Would you please share with us what was so
17 outrageously humorous to you?

18 I don't know your name, so I -- or I
19 would. Yeah, you, yeah, you. You were the one who
20 was laughing and --.

21 MR. O'BRIEN: (unintelligible)

22 MS. SIMS: Oh, and that -- that was
23 funny? Okay. Thank you. That's your answer then.
24 Well, it's a shame that our welfare is such a dang
25 joke.

1 4/25/2024 - Indian Point

2 I am also a Vermontster. Now, I live
3 in Westchester, but I was in the thick of the Vermont
4 Yankee stuff. And you know, the Connecticut River
5 will never be the same.

6 We cannot let that happen to the
7 Hudson River. The Hudson River is the life blood,
8 not only of New York State and the Hudson Valley, but
9 also of the surrounding bays, water, groundwater,
10 everything.

11 I mean, there -- there's so much life
12 and so much -- so much important -- important, not
13 just historically, but just biologically. The Hudson
14 River Valley is one of the most beautiful places
15 there is. I think we all agree on that or we
16 wouldn't live here.

17 But please, please let us work
18 together to do whatever is the least harmful because,
19 you know, even low-level radiation, you don't -- you
20 don't get cured from it. Once you are poisoned by
21 radiation, you are poisoned.

22 MR. KACZMAREK: Thirty seconds.

23 MS. SIMS: And it doesn't really take
24 a \$100 million study to know that. That is basically
25 common knowledge that's already been found out

1 4/25/2024 - Indian Point

2 accidentally. So thank you for your time and your
3 attention.

4 CHAIR CONGDON: Thank you. Thank you.
5 Please state your --

6 MS. SIMS: And keep living.

7 CHAIR CONGDON: Please -- please state
8 your name for the record, please?

9 MS. SIMS: Oh, my name is Jane Sims.
10 I live in Mohegan Lake, which is -- oh, it's got to
11 be -- my house has got to be a good three-and-a-half
12 miles from here.

13 CHAIR CONGDON: Thank -- thank you
14 very much.

15 MS. SIMS: Thank you.

16 CHAIR CONGDON: So folks, we -- we do
17 offer many other opportunities to submit comments and
18 questions. Any comments -- I'm sorry -- questions
19 that were raised at the mic tonight during the public
20 statement hearing, we will endeavor to answer. We
21 have Q and A on our website. You can submit
22 questions or comments written, in written form,
23 through the D.O.B. website.

24 UNIDENTIFIED SPEAKER:

25 (unintelligible)

1 4/25/2024 - Indian Point

2 CHAIR CONGDON: Yeah. We -- we -- we
3 are overtime. We had 30 minutes scheduled out. We
4 already went past that.

5 And if -- Tom, you can go to the next
6 slide. Next meeting is June 13th. And with that, we
7 are adjourned. Thank you very much.

8 (The meeting adjourned at 9:20
9 p.m.)

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1 4/25/2024 - Indian Point

2 STATE OF NEW YORK

3 I, DANIELLE CHRISTIAN, do hereby certify that the
4 foregoing was reported by me, in the cause, at the time
5 and place, as stated in the caption hereto, at Page 1
6 hereof; that the foregoing typewritten transcription
7 consisting of pages 1 through 169, is a true record of all
8 proceedings had at the hearing.

9 IN WITNESS WHEREOF, I have hereunto
10 subscribed my name, this the 2nd day of May, 2024.

11

12 DANIELLE CHRISTIAN, Reporter

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A	
A.C.I 47:18	activities 8:15,17 9:25 10:10 12:24 15:21 16:16,18,19 65:18 65:21 117:14
A.F.L.C.I.O 67:23	activity 14:10 61:12
A.O.C 16:12 46:18,23 57:9 59:4 129:6,19	actual 33:25 37:20
A.O.C.s 26:13,14 46:15 47:9 57:8,23 58:2,4,19 59:4,4 129:7	ADAMS 12:21
A.O.P 43:21	add 83:4 154:22
A.V 8:4 67:9	added 61:13 62:2
abandoned 112:16	addition 72:22
abatement 39:11,24	additional 17:3 61:23 116:14 117:13 118:14,17
ability 31:9 43:12 54:20 58:15 60:24 150:2,14	addressed 94:8 99:13
able 8:5 13:12 20:9,9 38:18 39:25 41:2,4 50:2,17 53:4,5 55:16 56:20 64:25 68:10,10 72:9,16 84:3 100:25 137:8 150:8,9,23	addressing 165:2,25
Abnormal 43:21	adds 78:15 82:11
above-ground 41:17	adequate 47:20 54:22
Absolutely 58:9	adequately 94:15
absorbed 95:23	adjourned 170:7,8
Academies 152:11	adjustment 13:25
acceleration 43:7	administered 28:16
acceptable 82:8 165:17	administrative 16:5 111:13
accepted 11:23 99:23	administrators 155:20
access 44:17	adopted 29:22 31:2
accident 148:8	adopts 30:8
accidentally 169:2	advance 19:5
accidents 123:5	advancements 90:24
accompany 10:6	advice 56:19 59:25 60:10,12,20 125:10
accomplish 72:9	advise 73:11 83:12
account 118:5 119:12,13	advisory 163:4
accumulating 131:12	advocated 23:16 160:12
accurate 12:13	advocates 67:16 95:2
accurately 7:20	advocating 81:7
achievable 82:14	Affairs 108:25
achieve 92:24	affectionately 44:9
acid 41:14	afford 71:12
acknowledge 158:25	afloat 156:6
acres 129:16	afraid 73:8,9 147:9
act 150:19 165:7	agencies 8:15 11:18 30:9 31:14 150:14
acted 150:20	agency 11:4 12:12,13 14:5
action 47:19 93:12	agency's 12:14
actions 14:12 30:9,10 32:8,12	agenda 8:12 21:15 140:6 154:24
active 87:22	ago 57:18 59:21 106:6
actively 132:4	agree 24:6,16 91:22,25 96:8 168:15
activist 99:11	agreed 154:12,20
activists 97:11	agreement 101:6,7,9 159:2
	agricultural 94:12
	ahead 34:16 39:19 111:5 132:23
	aides 155:20

<p>air 42:11 77:14 88:5 140:11 141:6 151:25 Al 160:14,19 alarming 158:21 Albany 96:14 albatross 157:14 alert 89:17 Alex 6:5 alfalfa 49:3 aligned 23:5 alive 166:20 alleging 71:20 alleviate 119:20 allotted 138:9 allow 56:15 72:14 88:21,24 159:21 160:15 allowed 101:18 124:6 125:10 allows 140:4 alluded 48:4 alternative 51:22 52:8 74:12,17 74:24 75:3 76:2 90:19 93:23 97:21 105:11 106:11 alternatives 9:2 63:5 66:16 74:20 86:5 105:8 106:8 107:3 108:19 Alyse 109:10 120:20 amendment 30:16 AMERICA 2:19 American 81:24 amount 59:19 60:24 72:8 88:4,4 89:2,20 amplification 135:22 analysis 75:16 78:16 83:9 84:11 analyze 84:2 analyzed 94:15 121:4 ancient 103:22 anger 149:5 animal 94:13 animals 141:6 Anna 84:20 85:22 announcement 9:17 66:15 annual 9:15,18,22 29:21 30:2 47:15 115:19 answer 20:17 21:5 31:10 32:14 57:5 65:5 67:18 80:16 87:10 122:11,24 135:15 151:6 153:15 167:23 169:20 answered 20:15 57:7 answering 61:8 anticipate 122:7</p>	<p>anticipates 16:22 antithesis 157:8 anybody 99:10 anymore 42:15 anyway 80:3 apart 54:16 72:18 apologize 36:15 appalled 165:6 apparent 162:17 appeal 151:15 Appeals 149:25 APPEARANCES 2:2 appears 72:19 applaud 133:3 applicable 88:12 118:25 applying 156:25 appreciate 5:9 8:11 23:22 24:15 27:22 28:3 66:13 68:17 120:12 133:21 166:22 167:9 appreciated 164:22 appreciative 68:11 approach 25:16 107:24 125:24 approached 48:10 74:14 appropriate 20:25 24:24 25:18 30:17 31:8 93:20 appropriations 29:21 30:2,23 approval 23:11 75:21,22 76:24 76:24 86:8,9 118:15 approvals 118:12,17 approve 91:21 approved 16:9,13 47:6 93:3,5,16 93:17,20 144:19 approximately 12:19 114:5,8 116:2,6,17 117:8 149:10 155:6 155:25 156:15,18 April 1:8 43:3 49:10,23 64:24 105:18 149:12 155:6 aquatic 140:12 archives 132:8 area 13:17 16:11 46:20 57:15,21 59:7,8 127:20,23 159:3 areas 22:12,12 34:9 57:13 59:5 127:7,9 argument 69:23 Arjun 82:17 135:19 Arnie 3:11 8:21,22 66:8,10,18 95:12,15 102:12 124:7,11 132:23 139:2 158:5,12,17 164:19 Arnie's 53:10 55:15 134:9</p>
--	--

arrived 10:20
arrives 121:3
article 68:16 81:25 115:25
 116:4,7 149:13
articles 115:23
artificially 165:10
asbestos 39:8,9,11,23
aside 160:19
asked 18:3 21:22 22:4,16 24:3
 25:11 30:21 122:10 123:17
 151:8
asking 27:18 46:15 59:9 60:16
 60:21,23 61:4 105:8 123:11,12
 123:17 144:2 145:23
aspect 15:11
aspects 11:18 13:5,8 16:2
assembled 42:9,10
ASSEMBLY 3:3
assemblymembers 96:16
Assemblywoman 3:4 5:24 6:2
 19:18 21:4,7,10,13,17,20 24:4
 24:20 26:2 51:10,13,16 96:18
 122:15,17 123:2,16,19 124:4,9
 124:12 127:4,22 128:4,10
 129:12,23 130:6,12,20
asserting 23:9
assessment 17:12 31:2 154:18
assets 71:21
assigned 131:25
assistance 28:20 29:17 30:4
 109:17
associate 69:14
associated 76:17
Association 155:16
assume 100:12 126:24 153:22
assumption 27:19
assure 78:19
Atlantic 70:14
Atomic 67:21 69:4 131:2
attached 22:25
attendance 5:9 6:13
attendees 9:22
attention 9:23 94:21,22 115:5
 169:3
attraction 80:14
audience 31:22 35:15 108:16
audio 11:12
August 117:21 150:5
author 69:6,10
authorities 12:15 91:24 99:14

aux 86:19
auxiliary 86:12 90:11
available 12:22 22:20 50:12
 54:5 72:8 84:10 86:21 91:16
 146:4
avoid 80:6 159:6,17
aware 30:13 90:24 91:7 98:16
 117:2 136:25 164:14
awareness 13:15
awe 72:8
awfully 91:6,16

B

B 47:22 162:2
B.A.S.F 152:3
B.C 35:20 36:13,18 37:3
B.V 154:19
back 7:14 8:7 13:18 16:8 17:4
 30:6 33:2,9,11,18 34:25 35:2
 35:5 37:9,10 39:18 47:4 50:25
 54:21 55:4 59:21 63:3 67:23
 68:7 77:17 82:7 84:14 85:24
 103:13 106:5 107:21 109:25
 116:25 124:6 126:5 131:6
 137:4 142:23 145:6 160:6
 161:10
back-up 136:21
background 24:22 111:7 136:8
 148:20
backyard 100:4
bad 84:18
badged 41:3
baffle 34:2 35:23 37:12
balance 12:7 156:10
balances 11:20 12:10 47:21,23
 48:3
ball 45:24
bankruptcy 74:8
banks 41:10
Barone 61:9 62:4
barrel 33:14 34:4 37:13
base 115:10 159:13
based 12:10 16:22 17:22 43:11
 48:2 52:24 53:2 58:18 74:20
 74:20,21,25 75:16,24 76:22
 82:13,19 119:11 124:18 135:10
 144:12
baseline 154:11,14,18 155:4
basement 75:19 105:10,22 106:2
basically 43:18,22 44:14 45:23

48:18,24 49:14 52:14 57:11
 128:9 129:18 140:19 168:24
basis 84:15 85:5 86:2 94:6
 152:3
batch 78:10
batteries 41:9
battery 41:10
bays 53:18 168:9
beared 157:12
beat 99:16 162:3 163:22
beautiful 168:14
Becker 2:12 6:22,23 51:20 52:19
 95:13,14
bed 99:7
began 16:17
beginning 161:3
behalf 23:13,16 47:14,14
behavior 159:17
belief 67:13
believe 12:19 14:24 15:12 22:20
 23:13 26:3 30:24 57:2 79:22
 81:9,20 85:19,25 89:4 92:6
 113:9 123:21 134:25 136:15
 139:7 141:7 157:17 166:11
benefited 92:4
benign 81:20 82:21
berm 76:20 77:2 79:16 80:6 87:8
 87:15 88:19 89:11,14 90:6
 136:18
bermed 90:16
berms 125:8
best 24:10 103:24 146:4 157:6
bestselling 69:10
beta 81:14 83:13 95:20,22 96:5
better 28:7 30:15 34:12,12 51:3
 90:21,22 97:25 107:6,25
beyond 158:19
big 8:12 29:23 42:2,3,3,21,22
 42:23 45:14 49:8 54:10 78:14
 86:15 103:3 148:2
bigger 84:23 102:16
biggest 111:10
bill 2:20 7:7 29:6 31:5 138:23
 138:25
billing 124:15
billion 12:19 71:22 78:17 87:9
billions 72:24
biologically 168:13
bird 140:12
bit 34:18 80:15 89:6 110:19
 127:17
black 115:11,11 144:23
blame 165:7
bleed 147:24
blew 73:23
blinders 145:25
block 52:14 129:15
blocking 149:19
blood 168:7
blown 160:19
blue 34:7
board 1:4 3:5 5:6,7 7:18 9:14
 11:15 27:17 30:6 32:6 62:23
 63:3 66:22 68:20 77:5 94:25
 95:17 96:10 132:7 139:11
 141:20,22 155:11 160:4 161:6
 163:3,4,10 164:19
Board's 155:22
Boardmember 7:2
bodies 9:13
body 29:13 30:7,12 66:24 137:10
 147:21
Boeing 24:7
boiler 38:14
boiling 103:8,9 110:25
boils 91:4
bolt 23:3,7 24:10 25:8
bomb 81:23 148:7
book 83:10
bookshelves 136:8
bores 129:20
borings 16:20
born 70:23 99:23
bottom 12:18 14:4 34:5 38:4,21
 41:22 78:5,7,12 89:14 112:20
 159:24
bought 111:3 114:19
bound 84:2 94:5
Bowline 152:5
boxed 35:11 64:13
boxes 25:17 35:10 36:10,13
brainer 84:5
brand 79:8,8
break 85:17
brethren 67:19
bridges 85:13
Bridget 3:13 8:25 13:2 95:9
 108:10,17,22,24 120:9,12
 122:13,19 139:5
Bridget's 95:11 98:24 102:3

<p>104:23 brief 7:15 32:11 132:22,22 Briefly 71:14 bring 42:20 63:3 145:6 153:21 161:16,17 bringing 141:21 164:19 broker 73:17 92:18 Brooklyn 70:11 brought 13:21 30:5 45:16 48:9 151:14,21 153:6 Brown 3:15 164:10,13,17,18,23 Buchanan 2:15 44:23 91:19 92:4 92:7 97:23 99:21 100:25 157:14 159:13 160:16 162:3 bucks 78:16 budget 18:2 29:21,22 78:17 156:2 159:11 build 111:10 124:19 126:24 158:23 building 14:16 36:21,22 39:10 53:25 75:20,23 76:22,23 79:3 79:24 80:24 85:19,25 86:6,8 86:12,19,20 90:8,11 92:10,13 92:21,22 93:4,25 105:11,13,15 105:22 106:2 111:10,10,25 112:11 114:15 115:7,11 121:5 124:15,20 125:4,8 128:14,17 136:24 158:14,23 building's 125:7 building's 76:7 80:18 83:18 buildings 53:15,18,20 54:3 57:17 85:3,7,9,11 86:11,24 90:9,11 100:22 111:13 112:3,9 129:16 built 11:22 33:2 37:16 43:15,17 43:17 46:19 141:4 bulk 113:15 bullet 12:5 bunch 135:20 bureaucratic 163:6 buried 52:15 119:25 Burroni 59:22,23 burying 98:12 business 156:16 buy 69:23 buying 55:5,8</p>	<p>C.V 68:20 calculated 82:7 calculations 156:17 call 5:11,16 23:14 29:7 31:15 34:3 35:18 36:5,13,20,21 44:9 44:17 54:24 81:5 91:3 131:21 149:15 called 37:25 44:13 45:11 48:24 54:12 72:5 73:13 82:24 84:15 121:18 137:3 142:8 149:13 calls 166:3 camera 144:13 canal 125:18 126:8,18,23 canister 69:25 cans 64:16 cap 156:20 capability 90:3 capable 76:11 caption 171:5 capture 76:15 captured 8:4 care 144:7 158:2 163:22 career 70:10 155:21 careful 133:8 carefully 131:16 Carey 2:22 7:9,10 Carolina 82:19 114:23 carried 160:14 carrying 26:16 cars 115:11 case 46:23 76:20 96:6 cash 73:3 case 19:2 20:8 22:25 23:6 24:9 25:6 cases 15:5,11 19:7 130:2 140:20 143:18,19,19 144:13,15,17,19 157:13 159:8 catastrophe 159:6 catch 69:25 84:8 categories 111:23 112:22 category 43:12 112:17 133:4 137:16 caught 89:10 167:8 cause 96:2 102:16 171:4 causing 58:2 caveat 109:19 119:10 caveated 133:17 cavity 14:18 32:23 33:8 34:6,8 35:6 37:10 cell 83:14 121:8,9 146:15,15</p>
C	
<p>C 35:21,23,25 36:6,14 47:23 64:9,16</p>	

<p> cells 95:25 cement 40:9 cement-like 52:13 centered 43:3 central 2:13,21 137:2 century 67:24 certain 15:10 22:25 52:12 certainly 24:23 27:3 52:12 76:2 78:11 86:21 119:18 CertainTeed 32:9 44:18 62:23 63:2 certify 171:3 cesium 103:14 cessation 27:24 28:14 29:5,11 30:14 156:7 cetera 141:6 151:18,19 CFR 47:13 Chair 5:4,6,19 7:12,14 8:8 10:14,18 15:18 17:15 19:17 20:22 21:5,9,11,15,19 25:24 26:3,11 27:15 28:9 29:7 31:13 35:14 37:5 44:6 51:8,12 55:12 61:6,18,22 62:2,18 63:18 64:22 65:8,15 66:5 67:8 95:5 98:19,23 102:3,10 104:20 107:13 108:6 120:9 121:7 122:15 124:2,8,11 125:9 126:16 127:19 128:2 132:3,13 132:17 134:20 136:3 137:18 141:15 153:15,20 154:11 155:8 166:11,15 169:4,7,13,16 170:2 chaired 141:2 challenge 96:21 challenging 165:11 change 21:24 23:2 24:12 58:8 67:23 151:18 154:2 changed 23:6 49:11 96:19 141:9 162:20 changes 11:16 19:7,8 58:14,15 89:8 96:2 changing 22:24 80:3 channeled 71:10 Chapin 12:25 109:11 Chapter 49:24 chapters 69:7 characterization 26:16 27:7 58:5 charge 31:7 charitable 50:14 chart 12:18 </p>	<p> chat 8:3 check 34:13 checked 59:20,21 chemical 67:21 152:4 Chernobyl 148:8,15 Chicago 71:25 chief 13:2 71:19 108:25 139:10 children 139:20,22 chip 68:10 choose 65:25 choosing 131:16 chose 57:12 86:5 92:9,21 93:23 103:18 118:13 chosen 93:23 Christian 18:4 171:3,12 circ 42:15,16 circle 15:23 circuit 33:11 149:25 circuits 93:10 circulate 132:18 circulated 66:12 circulating 142:21,24 143:3,8 143:10 circumstances 165:11 citizens 72:16 74:15,18,22 93:10,12 140:17 city 3:18 4:4 44:23 70:23 claim 143:6 144:4 clarification 54:8,14 132:23 134:22 136:4 153:24 clarified 61:11 clarify 125:11 135:10 clarifying 105:3 class 35:10,15,21,23,25 36:6,14 64:9,16 116:18 122:8,11,21,22 clean 55:7,10,12 56:2 103:19,20 104:6 125:6 157:23 cleaned 58:21 clear 20:20 45:6 46:6 47:9 66:21 131:15 165:9,16 cleared 129:17 clearly 7:20 158:12 Cliff 12:25 109:11 close 48:6,8 92:17 102:19 136:11 147:14 close-up 37:11 closed 160:24 closer 67:7 closure 8:14 9:11 17:12 30:19 165:4 </p>
--	---

<p> co-founder 70:20 Coalition 157:23 coat 34:11 coating 34:13 coauthor 69:8 cobalt 103:14 cobbled 133:19 cold 38:24 39:19,20 86:25 Colin 7:4 collaboratively 166:6 collapsed 85:14 colleagues 30:5 156:24 collect 79:17 collected 75:20 112:10,15 collection 16:20 college 69:14 column 111:4 combination 83:3 114:24 combined 135:5 combining 158:6 come 21:11 23:19 56:14 59:23 65:6 70:8 97:4 98:17 107:21 109:15 132:6 138:3 140:14 147:5,8 155:21 159:2 160:15 161:5,6 comes 47:4 88:22 98:6 coming 8:18 15:19 21:8 25:20 40:18 62:25 66:13 74:24 78:10 81:19 105:4,5 113:10 133:22 139:3 147:3 164:14,20 commence 32:21 commenced 5:2 34:22 commencing 154:3,8 comment 9:16,19 10:3 14:7 17:8 17:9,21,22 19:20 22:7 24:15 61:3 124:17 comments 7:20 10:4 61:10 95:8 169:17,18,22 commercial 48:16 80:11 113:13 123:14 127:14 commercially 91:18 Commission 1:3 11:22 12:11 14:6 29:9 30:17 69:4 72:12 73:7 93:8,13 115:20 131:2 Commissioner 18:3,4 common 168:25 communicate 45:22 communicating 62:13 communications 153:22 communities 28:17,18 30:14 </p>	<p> 97:13 107:17 140:9 157:25 159:5 165:18,24 community 11:16 28:18 29:23,24 65:18,23 66:9 84:4 94:18 97:19 130:23,23 138:23 140:23 142:3 154:14,19,20 155:17 156:15 157:7,10 160:8 companies 120:23 company 47:14 65:6,24 68:4 69:15,16 71:11,20 72:3,5,25 74:14 121:18 company's 71:21 comparable 150:4 compare 103:19 compared 89:21 103:20 104:2 comparison 71:22 Compensate 159:12 complaints 11:8 complete 33:12,15 34:19 35:13 39:6,15 40:9 42:5 completed 19:5 32:18,19 completely 72:4 completes 15:23 complex 165:18 compliance 12:6 15:3 component 38:23 45:3 components 14:3 38:4 40:2,16,20 42:13,19,21 44:25 55:2 125:22 128:13,16 comprehensive 145:7 Con 14:2 38:17 40:15,21 99:25 concern 29:24 45:14,18 57:14,15 57:21 59:5,7,8 73:10,12 119:23 127:7,10,12,20,23 128:3,6 134:24 135:4,9 154:3 concerned 17:24 72:16 81:8 160:7 concerning 15:3 concerns 45:17 46:7 154:14 concluded 25:3,7 concludes 120:7 concrete 52:14 98:12 157:13 condensate 53:24 conditioning 42:11 condos 161:11 conducted 108:20 126:2 conference 23:14 confidential 133:18 confirm 29:3 136:22 Congdon 2:5 5:4,6,18,19 7:12,14 </p>
--	--

8:8 10:14,18 15:18 17:15 19:17 20:22 21:5,9,11,15,19 25:24 26:3,11 27:15 28:9 29:7 31:13 35:14 37:5 44:6 51:8,12 55:12 61:6,18,22 62:2,18 63:18 64:22 65:8,15 66:5 67:8 95:5 98:19,23 102:3,10 104:20 107:13 108:6 120:9 121:7 122:15 124:2,8,11 125:9 126:16 127:19 128:2 132:3,13 132:17 134:20 136:3 137:18 141:15 153:15,20 154:11 155:8 164:7 166:11,15 169:4,7,13,16 170:2 congested 129:16 Congress 73:23 97:10,14 98:15 98:16 99:14 131:25 150:16,18 150:19,19 Congressman 96:14 Connecticut 101:19 111:9 112:24 168:4 connection 117:24 consensus 126:4 consent 16:5,14 consequence 23:21 consequences 135:5,7 139:19 Conservation 2:7 15:25 consider 153:7 165:13 consideration 102:20,23 110:9 155:22 158:22 considerations 118:4,8,19 119:5 120:3 152:20 considered 35:24 117:18 122:8 considering 79:11 92:16 consistent 11:14,14 30:11 99:5 consistently 99:6,15 consisting 171:7 consolidated 13:16 149:20 conspiracy 152:12 constructed 71:16 73:2 131:8 construction 15:4,10 16:11 20:8 125:3 constructive 61:7 consumed 95:17,18 consumers 31:7 consumption 49:8 contact 11:19 contacted 44:22 67:12 contain 126:6 container 36:3	containers 36:2,6 containment 14:17 86:11,19 90:11 containments 54:12 contains 80:20 contaminant 129:9 contaminants 135:4 158:19 contaminated 58:4 76:4 78:25 103:10,17 112:4,5 113:2,5,20 113:24 116:2 165:21 contaminating 143:6 contamination 76:16 78:4 107:19 contending 125:14 contentious 156:21 context 22:22 85:12 continue 17:5 22:6,8 28:11,12 28:24 39:6 57:13 63:8 76:10 continued 49:3 continues 17:11 continuing 14:23 38:21 41:21 85:4 166:5 contract 153:23 154:8,15,18 contracted 112:2 154:7 contraction 88:25 contractor 51:15 control 13:17 14:2 26:22 32:19 101:3 114:9 120:25 131:18 controlled 75:23 106:9 107:7 conventional 32:2,4 40:4 53:17 conversation 18:6,8 49:3 conversations 17:23 18:10 converting 98:10 cook 147:18,23 cool 112:19 cooled 111:25 142:22 cooling 111:12 142:23,24 coordination 150:13 core 33:14,16,25 34:4 35:2,5 37:12 38:25 corners 78:4 corporate 159:23 166:23,23 corporations 159:15 correct 51:19 61:21 99:12 105:13,16 107:12 108:4 130:3 137:14 166:13,14 correctly 158:18 corresponds 116:8 corrupted 162:17 Cortland 1:12 Cortlandt 1:10 2:11 4:8
--	---

Cortlandt's 95:18
cosmic 80:21
cost 49:9 115:24 119:6,9 134:8
 134:14
costs 115:17 116:11 119:11
 133:24 134:2
Cottage 3:16 138:19
council 2:21 60:20
counsel 56:20 60:2,7,12 125:10
count 25:21 29:20
countries 52:13
country 23:15 36:19 49:21 63:10
 94:23 131:12,21 132:16 159:2
county 2:17 3:4 7:2 10:14 152:2
couple 59:21 66:11 74:4 77:18
 78:15 82:15 85:3 104:24,25
 105:2 124:13 125:4
course 19:21 39:8 62:21 70:15
 89:13 124:8 127:25
court 96:23 149:25 150:6,13
Courtney 3:21 106:6 146:23
 149:7 151:2 154:25
courts 96:22
cover 8:13
covered 39:9
covering 39:3
covers 38:23
Covid's 156:23
cracked 85:22
crane 39:14 42:9,12,22,23
create 140:20 157:2 159:8
created 31:2 69:24 80:21 140:17
creates 139:18
creating 94:17
credit 74:18
Creek 87:19
critical 83:7 87:23
crow 149:11
cum 68:25
cured 168:20
curious 19:23 20:6 127:15
 167:10
current 53:12 58:10,11,12
 150:13
currently 19:24 52:5 115:3
 117:10 119:8 125:15 144:15
 155:24 156:6,25 165:22
cursor 44:7
cursory 144:9
custodian 131:5

custodians 155:20
custody 131:18
cut 11:12 25:17 34:7,23 38:7,10
 38:21 42:2 138:6 147:24 148:2
 148:2,4 156:13
cut-and-paste 47:10 50:15
cuts 147:19 151:23
cutting 14:18 33:24 35:22 37:11
 159:10
cycle 49:9

D

D 46:9,10 57:10
D.B.E 84:15
D.C 82:18 150:5
D.E.C 16:2,8,13,15,16,20,22
 17:4,11 21:22 40:13 47:5
 155:5 165:25
D.E.R 128:22
D.O.B 5:15 9:25 10:22 12:20
 17:16 26:5,7 28:11 37:15
 39:17 48:21 50:18 66:12 67:16
 132:18 137:20 138:20 165:5
 166:6 169:23
D.O.E 36:8 48:2 116:22 130:9,13
 145:12 148:24
D.O.E.'s 130:5
D.O.P 73:13
D.O.T.-approved 36:11
D.P.O 73:14
D.P.S 12:23 15:23 23:23
dad 67:20
damage 13:7 83:15 139:18
damaged 85:14
Damiani 6:5,6
dams 70:5,5
Dana 3:4 27:18 125:9
dang 167:24
dangers 140:8 149:17
DANIELLE 171:3,12
Darra 44:11
Darra's 44:10,13 45:7
data 84:10 104:12 154:11,14
date 48:6 68:21 123:6
dated 70:22
Dave 6:17
David 82:2
day 79:12 87:13 88:2 89:16
 124:22 171:10
days 50:9 59:21 78:15 85:3

<p> deadline 10:5 19:4 deadly 161:14 deal 78:14 112:7 150:23 dealing 51:22 134:18 147:5,25 148:3 death 147:25 debrief 50:7,8,16 debt 68:10 decade 37:4 decades 137:9 151:24 160:18 165:4,24 decay 91:14,14 December 47:17 48:21 decide 56:12 decided 143:22 147:12 decision 35:4 48:18 66:23 84:7 93:10 97:3 decommission 104:10 decommissioned 71:18 125:19,23 decommissioning 1:4 5:5,7 9:14 11:24 12:9 14:10,23 21:25 23:20,25 27:20 63:11 65:2 66:22 69:8 97:14 109:8 110:4 110:21 111:5,17,21 113:14,18 114:14 115:19 116:12,16 117:5 117:14,19,24 118:6,23 119:17 119:19 123:7 124:16 131:19 140:5 141:20 154:2,9 155:11 163:3,9 164:19 165:9,18 166:4 166:7 decompose 52:15 decon 38:18 decontamination 112:16 dedicated 140:21 164:24 deep 52:15 deeply 68:11 94:20 defending 138:25 defense 159:11 defer 60:12 defined 13:21 definitely 102:7 144:9 degree 69:5 degrees 142:11 delay 52:6 143:24 144:5 159:21 165:8,11 delivered 82:9 demineralization 76:15 demineralized 76:9 demineralizer 76:11 demineralizers 76:5 </p>	<p> demo 32:3,5 37:14 40:8 demolished 105:16 demolition 31:24 32:2 56:16 114:14 154:3,4 demonstrate 47:19 Demonstration 116:22 densely 19:2 departed 25:14 department 2:3,7,9 3:12 5:8 8:25 15:25 69:2,7 72:23 108:17 109:2,12,13,24 131:3,4 131:7,17,23 132:4 dependent 30:23 Deputy 5:8 described 106:7,11 121:22 describing 110:19 descriptions 11:4 design 37:17,22 43:25 64:20 84:15 85:5 86:2 design-based 85:12 designed 32:24 43:6 71:15 72:25 77:13 84:19,23 88:20 144:14 despite 149:21 161:12 destinations 114:23 detail 25:2 detect 78:20 89:15 determination 15:8 determine 45:12 104:12 determined 15:14,17 130:10 Detritiation 48:14 developed 112:3 development 103:4 161:5 device 69:12 diaphragm 77:16 88:24 89:23 diatribe 56:18 didn't 75:22 diesel 46:25 different 34:11 36:3 37:17,22 55:13 77:11 78:11,12 101:16 110:24 114:21,22,23 127:12 133:20 136:7 151:5 differential 134:8 Differing 73:13 difficult 86:17 127:14 156:21 160:22 dilution 53:23 55:20 126:19 direct 97:15 direction 50:24 directly 47:11 Director 5:15 </p>
--	---

<p> disassociation 49:19 discernible 148:13 discharge 9:2,3 48:7 52:5 66:17 97:16 101:12,18 117:20,22 120:17 125:18 126:7,18,23 127:2 165:16 discharged 101:9 112:24 discharges 20:19,20 22:3,8,11 discharging 79:7 disconnect 40:16 disconnected 40:19 discuss 29:14 50:2,18 56:20 89:5 125:11 discussed 9:24 14:24 48:13 50:14 93:7 105:9 115:7 134:9 155:2 discussing 28:24 60:2 109:7,20 110:3 111:22 118:5 discussion 15:20 17:17 32:11 95:10 98:24 109:21 110:18 146:13 discussions 72:13 125:14 disingenuous 165:7 dismantle 69:16 dismantled 72:4,4 103:7 dismantlement 104:10 disposal 25:18 56:21 61:5 109:5 109:22 113:3,15 116:24 117:9 118:4,11 119:21 120:2 131:9 152:23 disposed 61:2 66:24 disposition 60:3,13,15,21 distill 91:5 distillate 54:25 distorted 72:13 distributed 26:7 district 2:13,25 3:3 28:6,23 29:16 49:24 154:17 155:18,24 156:5,13 157:15 district's 155:23 156:2,9,16 distrust 97:8 147:11 149:4 dive 110:20 diversion 112:8,12,24 diverted 142:19 divided 100:19 dock 42:12,13 docks 53:21,22,23 doctor 82:12 doctors 68:5 document 50:10,11 </p>	<p> documented 57:21 documents 50:5 doing 20:2 24:17 31:23 33:3 34:10 38:6,15,20 40:4,11 48:2 51:24 53:17 54:17 108:12 144:21 147:18 164:20 dollars 71:22 73:25 99:22 domes 54:11,12 donations 50:14 door 24:9 80:8 Dose 51:4,6 doses 148:14 152:17 doughnut 131:22 144:22 dozen 69:21 75:6 dozens 96:13 Dr 82:16,16,17,18 83:10 95:14 135:19 draft 9:19 16:9 17:7,9 drag 18:7 drain 33:9 34:25 drained 33:2 78:9 draining 112:16 draw 115:5 drawn 116:11 Drechsler 3:17 138:4,16,19 140:23 141:13 Dresden 87:12 drilling 129:20 drinking 95:23 158:8 165:2 drive 32:19 drone 45:5,6 drop 87:6 dropped 70:2 drum 38:2,4 99:16 drums 38:4 75:19 dry 15:5,11 19:2 20:8 22:25 23:4 24:9 36:3 88:8,11 130:2 156:11 due 10:4 29:5 32:8 50:2 88:25 dump 74:12 96:19 140:19 143:4 145:18,19 dumping 75:4 107:9,12 158:4 duration 81:8 124:25 dust 152:3 Dwaine 139:10 </p> <hr/> <p style="text-align: center;">E</p> <hr/> <p> E.P.A 81:25 82:5,7 E.S.D 28:16 earlier 12:4,4,4 72:13 85:6 </p>
--	---

early 19:5 99:24 103:22
earned 69:3
earth 140:11 148:18
earthquake 32:8 42:25 43:2,3,4
 43:7,12,19 64:7 84:15,16,18
 84:23 102:15 144:10
earthquakes 137:11
easiest 112:18
easily 12:21 82:14 135:21
 158:13
east 45:8
eastern 137:2,6,13,16
easy 51:2 159:18
Eberline 71:10
economics 94:12
economy 158:11
Ed 14:2 38:17 40:15,21
Edison 13:16 99:25
Education 155:15
Edwards 82:16
effect 83:4 135:22 156:23
effective 77:25
effects 148:14,20 151:20 152:17
efficiency 62:17
eight 52:6,7,21,22,24 53:2
 70:10 87:20 134:12 143:24
either 14:16 25:22 64:7 85:15
 85:15 89:11 107:2 118:9 122:2
 135:6 152:25
elected 99:11 164:3
Electric 70:19
electrical 49:18
electricity 85:5
element 142:8
Elie 4:9 157:21 160:3,4 161:25
 162:13,16,19,20,24 163:2,12
 163:13 164:5
eliminate 79:9 91:13
else's 31:5
emergency 13:6 18:13,16,16,21
 18:22 19:8 109:2
EMILIANA 3:6
emissions 134:3
Empire 70:25
employee 21:5 50:20 51:14
employees 19:25 25:21 51:17
empty 76:19,21 86:16 114:13
Enbridge 45:16,16 144:11
enclose 158:24
endanger 159:4
endangered 167:6
endangers 157:25
endeavor 115:18 169:20
endless 109:18
energy 3:10 8:21 30:6,7,8,11,12
 30:16,21,25 66:9 69:4,7 72:24
 116:22 121:18 131:2,4,7,17,23
 132:4 149:14 157:23 166:19
enforcement 22:17 23:17,18,19
engineer 43:25 69:14 81:12,21
 147:2
engineering 69:2,20
engineers 43:10,14 69:21 70:7
 98:5
English 155:13
enhance 49:19
ensure 7:19 11:23 23:3,24 166:6
Entergy 13:18 46:20 114:19,21
 137:8
entering 112:9,11
entire 59:6,7 167:14
entirely 11:14 76:11 78:9
 135:23,24
entities 13:11 166:6
environment 58:20 97:6 140:24
 146:6 159:5,15,23
environmental 2:7 15:25 25:9
 44:11 107:18 130:25 139:17
 140:18 141:5,8 165:3
environmentalists 97:11
epoxy 34:12
equipment 13:23 41:5,21 42:2
 43:23 47:2 49:8 57:12 63:20
 126:17 155:3
equivalent 43:18
essentially 15:15 86:14 143:3
established 51:23 96:4
establishing 149:20
Esteemed 156:23
estimate 27:6,12 59:19,23,24
 60:24 62:5,6,10 119:10
estimated 119:6
estimates 47:16,18 119:13
estimation 124:19
et 141:6 151:18,18
evaluate 74:22
evaluated 92:5 142:16
evaluating 104:11
evaluation 45:17 107:23
evaporate 142:12

evaporated 119:24 122:3
evaporating 142:7
evaporation 77:17 88:16,17 89:3
 89:5,19,21,22 121:24 142:6,16
evening 8:13 9:6 10:12,16 16:4
 31:17 108:24 146:25 155:6
 157:22 163:19 164:10,12
event 85:5,12 86:2
eventually 46:2 53:7 66:23
everybody 17:19 31:18 43:9
 48:23 166:19 167:4,5
everyone's 5:9
evidence 137:10
evolve 19:14
exact 25:20 35:10 115:17
exactly 20:10,18 21:21 22:2
 150:20
examination 66:19
example 57:15 75:11 87:12
 103:21,24
examples 78:24 88:7
exceeded 18:24
excellent 65:9
exchange 66:25
exchanger 39:23
exchangers 42:3
exciting 111:16
Excuse 28:13
Executive 5:7,15
exemplify 115:12
exempt 35:18 38:16
exist 33:5
existed 64:7
existence 73:18
existing 14:15 53:12 90:15
 92:21
exists 29:15
exit 50:13,15
expansion 88:25
expect 34:19 42:5 46:5,14 76:12
 92:25
expecting 130:15
expedite 151:10
expensive 74:12 91:6,16
experience 73:15 74:21 75:2,3
 86:7 90:9 92:16 110:4 111:21
 116:16 124:3
experienced 84:17 160:21
experiencing 87:25
expert 52:12 88:15 141:22,25

164:21
experts 140:17
explain 31:10 35:15 127:20
explained 48:15 158:5
explaining 29:19 63:2
explains 158:12
explanation 75:15
exploring 28:11
exposure 82:9 152:17
expressed 147:10
expressing 91:20
extend 19:20
extended 18:6
extension 27:19
extent 82:9
extra 76:25 77:2 89:12 119:14
 158:19
extraneous 34:23
extremely 15:15
eye 138:12,17 167:8

F

fabrication 15:3,4
face 97:13
faces 155:24
facetious 134:11
facilitate 66:25 109:21
facilitating 114:13
facilities 69:17,18 118:10,10
 120:14 121:19
facility 19:3 20:19 21:24,25
 22:2,3,10,13 72:15 80:12
 86:16 93:2 104:10 106:13
 107:4 118:24 120:2 121:2,10
 121:15,16 122:2 125:6 150:3,5
fact 11:14 19:4 52:4 53:2 74:23
 150:24 161:12 162:22
factors 134:4,5,18
factory 15:9,10
facts 24:19
factual 60:5
fail 85:16 102:16
failed 10:20 34:9
failure 25:5
failures 87:11
FAIRE 3:10
Fairewind 67:14
Fairewinds 8:21 66:9 67:12
 74:13 75:16 94:17
Fairle 82:17

<p> Fairwinds' s 70:20 fairy 73:19 faith 74:8 fall 136:7 familiar 66:13 117:4 family 70:24 74:7 fantasy 149:13,16 far 41:24 44:24 45:2 46:7 79:18 81:8 83:14 107:10 113:25 151:7 fast 27:21 father's 68:3 favorable 92:25,25 fear 147:7 149:4 feasible 28:21 110:13 133:23 135:24 feature 8:3 138:10 February 30:24 50:12 fed 121:4 federal 12:11,14 15:14 72:13 97:2 120:5 128:23 130:10,21 131:6 144:24 151:18 161:21 164:3 Feds 128:24 feed 41:23 feedback 10:2 feedwater 14:19 42:6,7 53:17 feel 99:12,17 107:17 118:15 fees 64:25 feet 70:2 Fellowship 69:4 felt 20:12 96:10 field 8:5 16:15 45:24 fields 38:18 Fifth 149:24 figure 55:25 69:22 98:5 figured 144:25 file 49:23 filed 13:16 47:11 64:24 filing 65:7 fill 79:5 filled 77:4,8,8,19 88:18 filling 57:19 79:6,12 filter 76:10 filtered 76:9 filters 76:5 filtration 76:14 final 46:13 50:17 97:20 140:10 140:16 163:18 164:9 finalize 10:3 </p>	<p> finalized 9:17 finally 17:11 160:24 finance 32:10 159:10 finances 133:16 financial 13:5 17:24 23:21 71:19 119:16,20 155:25 157:2 157:7 financially 29:25 find 64:3 78:3 98:4,5 112:17 115:22 123:24,25 129:21 148:13,15 findings 151:14 fine 21:18 60:19 finger 50:24 74:7 finish 27:7 fires 85:17 first 8:20 10:23 11:5,5 25:20 29:13 50:16 51:5 63:4 68:2 69:2,7,24 70:4 78:10 80:19,19 87:3 90:20 105:3 110:12,12 111:22 112:12 119:14 138:2 142:6 143:16 147:17 fiscal 119:5 140:2 152:22 fishing 158:10 five 75:14 76:3 93:14 152:8 156:12,12 five-year 165:8 fix 51:3 flabbergasted 152:20 flex 36:21 flies 149:11 floating 71:4 flood 32:22 33:7 34:13,20 flooded 45:25 89:15 flooding 77:6 floor 67:5 80:8 95:8 125:8 flow 46:3 55:20 73:3 flows 45:23,24 139:14 142:18 fluctuate 88:20 fluid 89:12 flying 24:9 focus 19:10 42:22 folks 9:12,20 14:24 51:9 67:9 151:6 169:16 follow 65:9 99:3 163:7 follow- 52:10 follow-up 24:5 153:17 follow-ups 136:5 followed 30:25 141:18 146:22 149:7 153:13 157:20 161:5,5 </p>
---	---

following 48:6
Food 96:12
footprint 103:2
footprints 54:11
force 8:14 9:12,13,14 10:2
 98:17
forced 71:20
forcing 93:12
forecast 161:19
foregoing 171:4,6
foreground 111:9,12 115:8
foreseeable 78:9
foretaste 161:19
forever 51:25 99:16
forgive 10:16 147:16
form 9:19 18:6 96:4 169:22
format 75:8,9
formation 34:2
Former 16:10
fortified 162:8
forward 63:13 75:16 100:7
 143:11 154:9 166:4,5
found 73:22 168:25
foundation 128:18,19,20
founded 74:14
four 11:11 34:10 38:3 39:21
 75:15 145:8
four- 37:17
fourth 50:13
fracked 152:5
fraction 156:3
Fraczek 153:14 157:21 160:2
framework 23:4 26:14
Frank 3:8 31:16,18 35:14 51:8
 51:20 54:8 56:23 66:6 126:9
 127:6
free 68:11 70:3
freestanding 88:4
freezing 86:23
friend 73:11 167:11
Frymire 3:13 8:25 13:3 95:9
 108:23,25 120:15,19 121:8,14
 122:6,10,14,23 123:11,18,20
 132:11,14
fuel 18:25 19:2,6,13 22:9 23:5
 33:25 35:24,25 36:3,8,9 40:8
 46:25 48:2 53:5 59:2 64:9,18
 69:25 70:2 72:14 76:4,16,19
 78:4 106:20,21 107:4,5,25
 112:18 114:3,6,12 130:2,24

131:5,9,13 142:7,12 143:5,18
 143:19 144:17 145:15 146:14
 146:18 151:16 157:14 158:7,16
 159:4,7,9 161:20
fueling 46:25
Fukushima 69:11 78:24 85:8
 148:9
full 21:22 30:3 38:17 47:25
 88:2 137:21 152:4
fuller 154:23
fully 29:4 31:9 39:15
fulsome 12:14
functional 39:15 63:20
fund 11:19 12:7,9 23:20 27:24
 28:14 29:5 47:21,23 48:3 65:3
 65:17,19,21 115:19 116:12
 156:7,10
fundamental 147:6,7
funded 29:4 31:9 65:2
funding 19:21 30:18 31:8 47:20
funds 11:24 65:22 145:12 156:6
 156:11
funny 167:23
further 15:20 47:19 48:20 63:14
 66:19 77:16 90:18 92:5 95:10
 97:19 99:18 110:7 114:13
 116:4 119:13 126:2 154:19
furthermore 44:12
future 100:7 139:16,20,21 140:3
 155:23 157:6,17 158:21

G

G.S.B 41:2 42:11
gallon 116:2,9,20 119:7
gallons 57:20 61:9 89:21,22
 113:23 114:4,6,9 116:6,18
 117:8,15 119:8 124:23,24
 142:19 143:3,4
gamma 96:5
gap 147:14
gas 41:13 70:19 85:16 102:16,23
 151:24 152:5
gather 119:6
general 25:15 65:22 73:6 103:9
 139:25
generate 85:4
generated 117:13 158:3
generation 41:13
generational 139:18
generations 139:16,20 140:14

generator 38:2 70:5
generators 37:21,22 38:8 39:3
Generic 137:3
generously 159:13
genesis 31:11
genetic 96:2 139:18
Geologic 64:2
Geological 137:4
getting 28:18 38:7 49:4 52:9
60:9 73:17 78:7,19 90:17
138:8 149:16 154:14
give 26:13 28:3 29:10 32:5
45:20 56:17 57:15 59:14 67:19
107:19,19 122:23 132:6 145:12
154:17
given 12:14 13:20 66:11 72:23
72:24 92:23 93:9 94:2 100:3
gives 31:8
giving 13:3 109:4 145:13
glad 10:19 84:5 110:18
Glenn 73:24 74:5
Glidden 3:25 153:14 157:20,22
159:20
go 5:11 20:5,5 34:14,17 37:9
38:2,16,24 40:24 41:4 42:12
42:16 56:6 87:14 88:3 92:19
93:21 96:22 99:18 109:25
114:18 116:10 117:3 120:22
121:24 124:6 126:5 129:19
132:6,23 140:9 145:20 161:16
170:5
goal 42:22 80:4,10 87:7 90:20
94:11 104:15,16 136:21
God 84:5
goes 13:18 15:9 32:24 36:2,3
59:2 77:14 88:21,22 93:5
115:9 131:5 137:4 142:24
154:9
going 5:10 8:13,14,16,19 10:8,9
11:9 15:9,24 17:16 18:22
20:16,25 21:11 22:14 24:14,22
27:20,21 31:20,21,21,25 33:6
33:9 34:11 36:19 38:19 39:16
40:12 45:13,20 50:2 52:6 53:3
53:10 56:17,20 61:2 63:13
65:13,14 66:15 68:21,22,22
75:14 78:3,17 79:20 80:4
84:13 87:7 88:19 89:2 91:11
92:18 95:9 96:21,23,24,25
97:4,13 100:6 102:3 103:3,25
104:22 110:9 117:3 128:22
131:16 133:2 137:20,23 138:8
138:10,11 143:11,23,24,24
144:4 145:20 146:2 147:16
148:3 149:4 150:8,9,22 151:17
153:5 154:3 161:19 163:16
164:8
good 10:12,16 16:4 31:17 38:22
39:9 74:23 78:20 82:25 83:2
108:13,24 120:15 132:17
134:21 140:13 146:25 157:22
160:25 169:11
Gordon 82:16
gotten 13:15
governing 21:23
government 97:2,9 130:10,22
131:6 144:25 150:14 161:21
governmental 13:11
governor 27:17 67:15 94:21
117:21 138:22,24 145:6
governs 20:19
grabbed 167:11
grade 99:10
graduated 68:24 75:2
grandchildren's 56:11
grant 150:6
graphic 38:22
grateful 67:2
gravity 78:8
Gray 44:11
great 8:8 29:15 73:3 75:7,15
78:22 80:13 81:24 84:25 86:22
87:18,18 123:2 166:17
greater 35:21,22,25 36:6,14
64:16
green 72:20 112:12
ground 43:7 52:16 159:8
groundwater 16:21 44:14 103:15
103:17 112:3,7,9 151:24
158:15 165:22 166:2 168:9
group 70:7 140:17,21
groups 67:12 69:24 74:22
grow 49:12
grown 49:2
Gs 43:10
GT2-3 40:6,8,10
guess 56:13 90:17 91:18 127:6
guest 7:19 8:20
guidance 30:25
Gundersen 8:21 66:8,18 67:3,6

67:10 95:6 100:15,19,23 101:11,14,17,23 102:22 103:6 104:6,8,18 105:3,14,17,19,23 106:3,16,23 107:8,16 108:3,15 124:21 134:23 135:16 136:6,13 136:17,20 137:7,15 139:2 141:21 142:4,5 143:13 151:21 158:12 164:20 Gundersen's 125:24 126:12 Gunderson 3:11 141:2 gut 53:19 gutted 86:14 125:5,7 guy 48:23 82:2,12 guys 51:21 94:23 gypsum 44:17 45:18 152:2,3	headline 152:15 Heady 1:11 healed 147:21 health 82:3,5 135:4,5,6 139:19 148:13,20 152:17 153:4,8 159:16 166:25 health-based 82:13 healthy 97:8 139:21,22 140:14 hear 8:14,16,24 52:2 66:15 70:6 72:7 99:15 133:5 150:18 163:5 163:5 heard 7:20 85:6 88:14 99:21 142:2 149:14 hearing 18:2 108:9 117:3 137:22 153:18 162:3,4 169:20 171:8 heat 39:23 42:3 57:17 87:10 heater 14:19 42:6 53:18 heaters 41:23 42:7 heating 55:11 heavier 91:2,2,4 heavy 91:3 154:2,4,8 heels 156:22 height 87:22 held 35:24 145:3,4 156:6 Hello 17:19 166:18 help 28:25 30:14 45:12 97:22 157:2,5 helpful 37:6 127:21 helping 157:9 hemp 48:23,25 49:4,13 91:8,9,10 91:11 Hen-Hud 156:24 Hen-Hud's 157:6 Hendrick 2:13 155:14,15,17 157:15 hereof 171:6 hereto 171:5 hereunto 171:9 herring 143:17 Herschel 4:5 141:18 146:22,22 147:2 hey 84:4 Hi 10:14 31:17 143:15 149:9 high 36:14 45:10 68:6,14 70:2 155:14 163:13,13 high-level 38:19 163:14 higher 36:13 148:19 159:8 highest 35:19,20 90:13 hired 161:9 Hiroshima 148:7
H	
H.H.A 157:4 H3 98:8 habitat 158:9 half 68:9 69:21 73:24 91:25 108:8 124:24 half-life 95:24 hall 1:10 53:19 86:14 HAMLET 3:22 hand 50:21 144:7 166:16 handbook 69:8 happen 18:10 25:6 77:12 83:17 84:22 120:22 161:19 168:6 happened 46:22 71:23 75:17 76:22 81:17 92:10 141:9 144:17 150:4 151:19 160:17,17 happening 22:3 145:2,24 156:22 161:18 happens 120:13 happy 62:15 120:8 Harckham 3:2 5:22,23 17:18 18:18,21 19:11,16,20 96:17 132:21,25 133:7,11,13 153:6 hard 89:13 harm 140:5 harmful 168:18 harming 158:5 hazard 137:5 hazards 40:2 41:13 128:15 head 14:18 20:5 25:12,21 27:3 32:20 34:18,21,23 35:2,5 37:9 46:16 74:5 103:25,25 151:22 152:8 heading 103:15	

historically 123:14 168:13
history 68:2 81:25 84:17 92:24
 117:5 129:8
hit 84:24 85:5
Hochul 67:15 117:22 138:22,24
Hochul's 94:21
hold 69:11 76:10 84:6 125:17
holding 145:15
holds 36:4
hole 131:22 144:22,23
Holtec 3:7 8:17 11:19 12:3,5,10
 13:10,12,15,19 14:2 16:11,14
 16:16,19,23 17:3 18:24 19:3
 21:2 22:4,6 23:6 24:18 25:25
 26:19 27:10 31:16 51:9 52:4
 61:10 65:20 71:14,15 72:5,14
 72:18,23 74:11 86:12 88:8,11
 90:10 92:3,17 93:9 96:21
 100:15,16 110:15 117:12 118:8
 118:11,13 119:22 120:4,4
 124:13 125:14 130:7 131:19
 139:13,22 140:2 143:2,22
 144:6 145:10 149:19,22 156:2
 157:23 165:9,25 166:3
Holtec's 71:19 92:23 117:18
 140:2 144:13 149:25 151:15
 159:17 165:6
Holtec's 22:23 79:20 87:9
home 71:5
homogeneous 78:2,3
homogenous 78:19
honest 73:17 92:18
Honestly 65:5
honors 68:25
hooks 142:10
hop 130:18
hopefully 166:20
hoping 27:25 63:4 164:15
horizontal 37:21 42:3 43:8,11
host 130:23 159:12
hot 35:25 38:24 146:14,15
hotline 11:6
hour 108:8
house 64:4 169:11
housekeeping 8:13
Hudson 2:13 3:14 9:4 45:22 59:2
 67:17 70:17 74:13 75:5 80:5
 80:22 82:23,25 83:7,25 85:18
 89:25 90:21 94:10 95:3 96:12
 104:15 106:10 117:20,23

138:23,25 139:15 142:18,20,25
 143:4,6,25 152:4 155:14,15,18
 157:15 158:5 164:23,25 165:7
 165:17,23 168:7,7,8,13
Hudson's 94:11
huge 29:24 86:16 96:20 158:6
human 140:13 146:5
humor 167:15
humorous 167:11,17
hundred 94:19
hurt 79:13 97:23
hydraulic 46:24
hydrogen 41:13 98:9
hydrogens 135:20
hydrologist 45:12
hyperlink 22:20

I

I'd 83:12
I'll 32:3 57:2
I'm 5:6,6 25:3,20 62:15 76:3
 163:16
Ian 82:17
ice 70:13
Idaho 114:24 118:14 121:25
idea 143:16 166:22
ideas 48:11 167:12
identical 72:2
identified 34:24 44:11 127:24
 131:7
identifying 137:5
idle 103:5
immediate 81:10
impact 25:9 53:20 57:14 130:25
 151:16
impacted 57:12
impacting 58:19
impacts 53:14 58:3 153:8 165:3
imperfections 33:4
implication 134:14,15
important 27:23 69:19 71:22
 77:18 80:16 82:11 117:12
 140:3 142:3 143:11 147:25
 158:18 166:24 167:3 168:12,12
impossible 111:20
in-depth 123:23
in-leakage 112:2
in-person 7:18 166:12
incentive 159:24
inches 45:10

include 51:17	169:1 170:1 171:1
included 16:20	indicate 5:16 7:21 30:16
includes 167:3,4	indicated 13:5 28:10
including 14:17 28:23 55:3 69:17 88:15 137:14	indigenous 107:17 159:4
increase 148:20 156:19	individuals 82:15 138:2 164:15
increased 137:5	indoor 86:15
increases 156:20	industrial 151:25
increasing 61:16,19	industry 36:15 74:16 94:12 98:17 123:15 162:18
independent 38:3 141:22,25 158:17	inexpensive 75:4
independently 145:10	inflation 119:12
Indian 1:1,4 2:1 3:1 4:1 5:1 6:1 7:1 8:1 9:1,11 10:1 11:1 12:1 13:1 14:1,21 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 28:17 29:1 30:1 31:1,19 32:1 33:1 34:1 35:1 36:1 37:1,3,22 38:1 39:1 40:1 41:1 42:1 43:1 44:1 45:1 46:1 47:1,14 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 72:2 73:1 74:1,10 75:1 76:1 77:1,12 78:1 79:1,4,4 80:1 81:1 82:1 83:1 84:1,22 85:1 86:1 87:1 88:1,10 89:1 90:1,5 90:6 91:1 92:1 93:1,3,22,22 94:1 95:1 96:1 97:1 98:1 99:1 100:1 101:1 102:1 103:1 104:1 104:2 105:1 106:1,8,21 107:1 108:1 109:1,6,22 110:1,24 111:1,5 112:1 113:1 114:1 115:1 116:1,19,25 117:1,4,8 118:1,3,19,21 119:1,7,14,19 120:1,4 121:1 122:1,8,22 123:1,12,20 124:1 125:1 126:1 127:1 128:1 129:1 130:1,22 131:1,11 132:1 133:1 134:1 135:1 136:1 137:1,14 138:1 139:1 140:1 141:1,4 142:1 143:1 144:1 145:1,17 146:1 147:1 148:1 149:1,11 150:1 151:1,22 152:1,9 153:1 154:1 155:1,11,25 156:1,8 157:1,8 158:1 159:1,7 160:1,6,7,12 161:1,10 162:1 163:1 164:1 165:1,3 166:1 167:1 168:1	information 9:24 13:13 17:4,6 22:4,18 49:7 59:12,14 63:3 66:24,25 67:13 81:18 84:10 109:20 110:4,22 115:21 116:14 122:25 132:10 133:19
	informative 109:16
	infrastructure 53:13 54:5 85:15
	initial 109:19 117:19
	initially 29:19
	injury 50:20
	insect 140:12
	insecurity 157:8
	insert 36:4
	inside 14:15,15 22:25 83:14 86:25 92:22 100:21 125:5 128:14 144:17 158:13
	insidious 156:23
	insight 115:24
	insignificant 20:13
	insist 140:16
	inspected 144:14,16
	inspection 26:4 50:4,5 65:16 144:10,11
	inspections 32:12
	inspector 12:25,25 15:2 24:25 73:5
	installation 16:21
	installed 112:8
	institution 162:8
	instrumentation 79:8 87:4
	instruments 86:24
	insulated 37:24
	insulation 39:2,10
	insurance 13:7
	intact 85:9 126:8
	integrity 73:4 74:9 85:10 136:24 144:16
	Intensity 43:13
	intent 91:20

intention 65:18	it'll 36:24 96:22
interacting 135:9	it's 14:5 15:9 68:20 78:18 104:7
interest 62:16 75:11 79:11	items 48:8 58:16
interested 13:11 58:2 100:11 134:25 139:21,22	
interesting 64:5 133:2 134:7,16	J
interestingly 132:3	Jackie 141:15
interim 36:20 56:14 145:18 149:20,22	Jacquelyn 3:17 138:3,4
interior 93:25	Jacqui 138:18
interject 61:7	James 3:23 149:8 153:13 155:12
internal 23:3 32:22 33:19 40:20	Jane 2:10 4:7 6:7 169:9
internals 25:16 34:4 36:7	January 44:18 113:22
International 67:22	Japan 69:10
intervening 141:9	Jennifer 6:12
interview 68:23	Jersey 43:3
introduce 10:20 31:25 32:3,5 40:3 49:17	Jimmy 68:7
introduced 32:3 37:15	job 42:6 139:13 144:21
introduction 108:21	jobs 160:19
intrusion 112:5,8 113:2,20,24	Joe 6:15
inventory 9:25 114:8,11	John 2:6 5:20 10:9,9 15:18 16:3 18:12 40:4,17 47:17,20 48:4 73:24 74:5 104:22,24 108:6 133:3
investigation 16:6,7,9,17,19,24 46:11 47:3	John's 50:21 108:14
investigative 26:20	Johnson 70:23
invite 155:4	join 13:12 67:3 125:11
invited 66:10 68:16	joined 7:24 12:24 70:18 132:7
invites 92:14,14	Joint 11:22
inviting 67:11,18 95:3	joke 167:25
involved 13:22 92:15	jotted 136:9
involves 22:24	July 16:24 46:13
IPEC 43:6	June 15:21 153:21 154:23 170:6
Iran 148:18	jurisdiction 143:10
ISFSI 43:15,17 64:12,14,20 129:24 131:10	jurisdictions 28:13,23
Island 148:9	justice 107:18
isn't 109:10	K
isolated 133:24	Kaczmarek 2:4 5:10,12,13,14,20 5:22,24 6:3,5,7,9,12,14,17,20 6:22,24 7:2,7,9,11,13 137:25 140:22 141:11,17 143:14 145:21 146:8,19,21 148:21 149:6 150:17,25 153:9,12 155:9 157:11,19 159:19 160:2 161:24 162:11,15,19,24 163:12 163:18 164:9 166:9,14 168:22
isotopes 81:4	keep 7:25 51:24 54:5 87:10 90:21 93:4 106:20,20 128:12 138:12,17 145:25 146:4 164:7 164:8 166:4,20 169:6
issuance 10:6	
issue 9:16 15:3,7,8,16 17:8 29:23 33:5 44:12 50:7,9 60:5 60:5 61:7 83:6 89:22,24 95:18 96:3,24,25 99:12,17 107:18 119:23 137:3 142:6 147:6,7 163:25 165:16	
issued 9:19 32:11 58:13	
issues 8:4 43:24 44:2 48:19 58:20 84:14 94:8 98:16 102:17 123:24 148:5 165:19	

keeping 28:25 97:25 107:4,5,25
Kelly 2:8 6:3 15:24 17:15 20:23
 26:10,12 46:8,12,17 57:5
kept 84:6
key 90:20
kid 68:2,3,8
Kim 153:14 157:20 160:2
kind 20:11 40:16 49:11 63:12
 115:7,12 116:8 129:2,9 133:17
 152:12
kinds 88:6 151:23
knew 62:24 100:2 113:10
Knickerbocker 2:16 6:20,21
 27:16 56:23 62:20 98:21 99:2
 100:17,21,24 101:13,15,20,25
 102:5 163:16,21
knocking 86:13
know 9:12 12:24 14:24 18:10
 19:3 20:10,15 23:7,16,17,20
 23:22,23 24:6,7,10,11,16
 25:13 26:15,24 31:3,4 33:7,9
 34:16 44:9 45:25 46:6,22
 47:14 49:7 50:25 52:3,12,25
 55:18 56:6 57:18 59:3,10 63:9
 63:16 64:6 65:5 70:7 72:25
 73:16 74:25 80:4,11,13 81:15
 82:19,25 83:2,20,21 87:6,9,13
 87:21 91:8 92:6 94:19 95:19
 96:7,13,22 97:18 98:5,6 99:5
 99:6,9 100:5,7,19 101:2,15
 103:18,21 105:19 106:16,18
 107:23 108:10 117:4 122:20,20
 123:4,8 124:6,17,23 125:4,10
 127:16,16,16 128:6 133:7,18
 133:22 134:2,3,10,10,13,15
 135:3,13,14 136:20 137:7
 144:16 145:24,24 146:12
 147:20,22 148:11,12,17 152:24
 154:21 163:4,4 166:23 167:18
 168:4,19,24
knowledge 67:4,14 81:15 147:15
 168:25
known 116:11
knows 43:2 49:22 147:19 148:24
Kocher 82:3,12

L

lab 48:16 71:10 135:25 158:17
 158:20
labeled 112:4,11

LABOR 2:9,21
Lafarge 16:10 32:9
lagged 17:25
laid 29:17
Lake 4:6 46:2 169:10
landfill 121:6,7
landing 157:3
largest 151:25
Lastly 112:14 119:16 120:3
 121:25
late 44:10 137:20
lattice 23:4
laude 68:25
laughing 167:13,20
law 29:15 30:8 61:20 72:14 92:8
 96:18,22 117:22 120:6 151:18
 165:11 167:12
laws 49:25
lawsuit 49:23 52:24 64:24 65:3
 144:4 145:14
lawsuits 150:11,12
lawyer 133:7 150:11
lawyers 62:14
laydown 46:20
layer 77:2,3
layers 35:17
leader 165:2
leak 14:18 32:23,24 34:24 59:2
 89:16 136:11
leakage 33:10 76:21 87:8 89:6,9
 90:16
leaked 112:3
leaking 146:17 151:23
leaks 34:8,14 44:23,24 46:24,24
 88:2,16,17 119:3 123:5,22
learn 65:10 74:3
Leary 6:15,16
leave 77:15 162:22
led 81:20
left 33:21 34:5 38:25 39:23
 50:25 111:12 128:18 156:24
leg 39:20
legacy 58:20
legal 60:5 64:25 72:20
legislation 97:15 149:19
legislative 92:23
Legislator 10:14 64:22
LEGISLATORS 3:5
legs 38:24 39:19,24
Lenape 139:10

<p>lengthy 119:17 Leschinskie 109:13 let's 71:12 84:6,8 104:3 143:21 148:23 158:25 164:7 Let's 164:6 letter 27:17 28:10 59:20,20 level 31:8 35:19,19,20,20,20 36:13 86:25 87:4 88:19 97:2,3 128:12 164:3 leveling 125:7 levels 35:17 82:8 127:12 148:10 148:19 Levenberg 3:4 5:25 6:2 19:18 21:4,7,10,13,17 24:4,20 26:2 32:15 51:10,13,16 96:18 122:16,17 123:2,16,19 124:4,9 124:12 127:4,22 128:4,10 129:12,23 130:6,12,20 levy 156:14,20 license 36:17 47:13,25 69:3 72:14 73:22 93:16 149:22,25 150:3 licensed 69:16 72:18 106:13 118:10 119:25 121:12,13,14 130:22 licensee 117:19 120:3 152:23 licenses 150:6 licensing 93:24 lie 161:23 lied 161:21 life 140:12,12,12,13 168:7,11 lift 74:7 light 72:20 140:17 limit 150:14 limits 96:4 Linda 6:10 line 12:18 47:22 62:24 67:25 77:13 115:9 138:3 159:24 liner 32:23,24 34:6,20 35:6 lines 40:19,20 85:17 liquid 32:11 48:7 49:15 50:3 53:3 77:25 79:20 101:12 113:15 116:21 119:2 liquids 88:13 list 12:2 20:3 152:22,24 153:3 listed 129:6 listen 98:15 listening 35:15 157:18 lists 43:22 literally 53:19</p>	<p>lithium 98:7,7 litigation 50:3 65:11 74:2 134:12 144:2 little 22:18 34:18 36:3 37:17 38:23 44:8 80:15 89:6 90:18 110:19 127:17 129:7 151:23 live 138:19 149:10 152:25 153:2 153:7 168:2,16 169:10 lived 160:16 lives 140:14 159:16,21 living 158:9 169:6 load 158:6 local 2:19 91:24 97:3,19 156:9 157:10 located 110:25 121:2 location 130:11 locations 117:10 148:18 Lochbaum 6:17 locks 54:4 logical 97:7 logistics 5:11 long 68:21 75:8 80:17 84:12 92:23 95:25,25 124:18 133:2 161:14 long-winded 31:10 longer 19:12,21 41:5 49:12 80:16 84:6 119:23 142:25 longer-term 157:2 longstanding 33:5 136:25 look 9:20 14:8 30:21 33:24 63:8 63:15 81:17 82:20 83:24 87:15 88:2 96:23,24 97:2 111:16 123:23 142:3,16 161:7,13,14 looked 24:25 25:5 44:23,23 52:20 84:24 85:2 88:10 93:22 106:5 135:14,16 150:12 161:4 looking 13:4 15:2 22:23 33:23 37:19 44:16 47:2 51:22 63:5,7 63:17 87:8 102:23 120:21 129:15 136:6 152:15 160:25 167:15 looks 166:5 loop 37:18 48:8 loops 38:21 39:4,17,21 lost 51:2 71:5,6,6 151:15 lot 13:15 20:16 40:20 42:9 43:5 49:12,25 52:3,11 63:2 74:3,8 80:8 81:18,22 83:15 111:19 120:21 160:21 163:6 Lou 7:11</p>
---	---

love 115:4	124:22 125:7 129:15
loved 80:14	matters 159:21
low 15:15 25:4 80:20 92:4 117:15 148:10,14 152:17	mayor 2:16 17:23 27:15,16 62:18 98:20 102:10 162:3
low-level 148:10 152:14 168:19	mayor's 28:10
lower 33:19 34:3 38:9,10,18 96:4	Meahagh 46:2,2
lowest 35:19	mean 15:4 24:4,6,8 61:23 78:14 86:10 127:13 134:11 158:4 168:11
Luckily 72:15	meaningful 94:20
M	means 43:9 114:12 118:17,18
ma'am 162:12	measure 88:3
Ma'am 162:15	measuring 63:20
magazine 68:17	mechanic 67:21
magically 142:18	mechanism 29:10 30:18
magnitude 43:2,4,19	mechanisms 25:6 28:22
main 20:19 166:21	meet 55:20,21 157:5
mainstay 158:10	meeting 1:6 5:2,5,11 7:17,23 8:16,18 10:13,23 11:3,5 15:13 15:19 33:13 39:7 42:6 48:9 59:14,18 60:6 108:9 138:21 151:4,7 153:21 154:23 155:2,7 160:5 170:6,8
maintained 23:25 163:11	meetings 8:10 9:23 11:20 12:2 13:10,13 14:25 32:6 61:8 99:4 147:4,8 153:17 161:6
maintaining 48:5	meltdown 69:11
major 97:23 128:16	member 67:20 68:14 73:12 75:24 139:11 155:16
majority 76:6	members 7:18 10:22 17:17 26:7 66:10 93:14 138:20 155:10,22 165:5
maker 66:23	mention 130:17 138:13 152:10
Makhijani 82:17 83:10 135:19	mentioned 7:14 16:6 17:6 18:13 51:17 101:6 102:14 124:14 127:7,8,12 130:13 134:23 135:8 136:23 151:7
making 15:4 98:16	mentioning 118:16
Malave 6:10,11	Mercalli 43:13
management 120:23	messed 147:23
manager's 156:17	met 19:3,4,4 48:12,22 49:6 70:19
managers 68:4	method 36:11 88:10
Manhattan 96:14	methodology 134:8,9
manipulating 92:24	Mexico 149:19,21
manner 140:4	mic 7:19 67:9 125:12 167:11 169:19
MANOR 2:11 4:8	MICHAEL 2:14
manufacture 159:11	Michigan 72:22
manufactured 165:10	microphone 133:10
manufacturing 22:24	
March 16:17,18 47:11 58:14 149:18,24	
margin 140:3	
Marilyn 4:9 157:21 160:3 163:22	
Mark 6:9	
married 70:21,22	
master 67:20	
master's 69:5	
material 58:15 78:2,7 97:16 107:18 121:6 122:21 125:5	
materials 52:13 98:11 123:9	
math 68:14 116:8	
matrix 134:17 153:5	
matter 53:8 54:6 87:25 122:22	

mics 7:25
mid 99:24
middle 78:11
migrating 165:23
Mile 148:9
miles 85:23 149:10 152:9 169:12
milestones 117:5
military 159:11
millhouse 42:17
million 48:5 61:9 72:6,10,23
 73:24 89:22 92:2 94:19 102:2
 113:23 116:5 117:8,15 119:8,9
 124:23,24 152:16 156:7,15,18
 168:24
millionth 89:24
mind 28:25 108:10
mindset 83:7
mine 156:24
minimal 89:10
minimizes 79:9
minimum 11:19 12:6
minority 160:11
minute 111:20
minutes 77:18 104:24 106:7
 137:19,20,21 138:7 151:6
 170:3
misconceptions 81:21
misnomer 81:6
missile 70:4
missing 96:13 148:23 152:21
 167:15
mixing 52:13 78:20 98:11
mod 39:14
mode 36:18
model 36:4
modification 33:15
modified 43:13 79:23
Modular 48:14
Mohegan 4:6 169:10
molecular 49:18
molecule 135:20,21
moment 25:22 61:11
Monday 11:7
money 29:15 72:8 100:3 118:18
 144:3 160:19
monitor 89:17
monitoring 11:10 16:22 86:24
 145:7,9 151:8 153:21 154:4,5
 154:7,13,16,19
monitors 11:11 87:22,23 145:8

month 12:4
monthly 13:10
months 8:18 42:20 74:4 125:4
Montreal 82:16
MONTROSE 3:22
monument 85:22
mother 70:11
motor 46:24
motors 42:16
Mountain 131:13
Mousseau 82:18
move 18:25 20:23 34:16 42:15
 48:19 53:8 56:15 58:16 62:15
 62:17 124:16 129:25 132:19
 140:20 159:9 165:19
moved 33:18 91:10 114:18 130:7
 130:17 144:6
movement 119:2
moving 14:9 52:3 130:14 146:13
 166:4
multiple 76:19 96:15 122:11
 156:19
multiple-year 126:3
multiply 83:5
Munsee 139:10
murder 139:18
muted 7:25

N

N.E.A 68:15,16
N.R.C 12:21 14:25 15:7,13,16,17
 15:18,21 20:8,12 22:17,19,23
 23:8,10,11,15,17 24:17,18,24
 25:2,8 26:4 32:12 50:4,5,9
 55:21 58:14 69:16 72:13,19
 73:4,12,15,22 74:6,6 75:22
 76:24 86:9 91:24 92:14,17,19
 92:24 94:15 97:8,9,15 98:15
 99:5,6,7,13 101:2 104:11
 113:13 118:12,14,15 136:25
 137:11 143:9 144:18,20 148:24
 149:22 150:2,6 162:4,6,16
 163:23
Nagasaki 148:7
name 5:14,16 7:21 108:24 138:18
 155:12 163:9 167:18 169:8,9
 171:10
named 82:2
Nancy 3:20 146:23 149:7,9
 151:14

narrow 48:25
Nate 163:19,19
Nathan 48:21 164:10,11
Nation 139:11
National 64:2 152:11
nationwide 97:17 98:16
natural 147:10
naturally 52:15
nature 21:6 22:2 57:24 89:9
 94:5
Nautilus 70:12
Navy 70:11
near 29:4 102:2
nearby 165:24
nearly 109:16
necessarily 22:8 24:18 109:23
necessary 41:5 110:7
need 18:11 34:25 36:17 40:12,24
 42:15,21,23 44:3 49:7 53:11
 53:12,14 54:3,5 55:16,19,20
 55:21 56:9,10 57:22 60:25
 67:7,8 71:14 72:11 73:5,18
 80:19 82:20 84:9 87:4 99:18
 118:12,23 125:22 128:12,13,15
 128:16,19,20 129:17 142:23
 145:9 146:14 148:22 150:23
 157:7 160:18,19 161:15,15
 163:24 164:2
needed 34:25 75:18 124:15
 142:23
needs 99:13 128:14 129:19,20
 140:24 142:16 145:7 152:16
 163:10
negative 25:9
Nevada 131:14
never 34:21 50:25 51:2 71:15,16
 71:16,17 72:25,25 73:2 78:17
 92:12 93:7 101:18 128:25
 144:15 159:2 168:5
new 1:2,12 2:25 3:3 5:8 13:24
 23:14,16 42:11 49:24 55:13
 68:25 70:9,10,18 79:8,8 80:5
 89:7 90:3,5 92:13,20 93:2,2
 93:25 100:7 105:5 110:6
 116:15 117:22 126:24 138:19
 138:24 141:8 146:10 147:3
 149:12,19,21 152:16,18 156:7
 156:20 158:19 159:16 160:10
 165:16 168:8 171:2
new-guy 65:14
newer 10:22
news 115:23
newspaper 115:22
nexus 30:20
nice 9:25 10:12 70:25
nightly 152:3
no- 84:4
non-profit 115:23
non-reactor 69:18
normal 22:10,12 35:12
north 3:24 71:24 84:20 85:22
NorthStar 111:3 112:10 113:10
 113:23 114:7,20,22 115:3,12
 115:18
note 14:15 22:21 23:12 24:24
 71:14 117:12 131:20
noted 12:5
notice 10:5 15:7 16:15
noticeable 31:5
noticed 13:24
notification 16:16 23:10
November 17:4 48:12
nozzle 70:4,5
nuclear 12:11 19:6 23:5 53:7
 69:2,12,15,17,18 70:9 71:15
 71:16,17,18,24 72:12 73:7
 81:23 84:17,17 88:15 93:8,13
 96:24 97:16 98:8 99:8 100:2,4
 100:6,6 108:25 109:8 110:23
 113:14 115:20 117:24 123:15
 130:24 131:5,9 140:19 144:23
 145:2,18 148:6 149:14,16,17
 150:7 157:24 159:22
nuclear-powered 70:12
nuke 59:6,7 73:2 128:9
number 9:7 14:5,12 19:24 20:3
 25:21 35:10 46:16 57:8 61:9
 61:13,15,18 63:24 87:10 96:9
 108:10 156:17
numbers 21:6 47:17
numerous 112:2
NYSERDA 109:10

O

O'Brien 62:12
O'BRIEN 3:9 56:19 59:25 60:8,11
 60:16,19,22,25 65:4,24 167:21
Oak 82:3,12,12
obligations 12:7,15
obtained 46:13

obviously 24:6
occur 38:12 77:6,7 89:9,10
occurred 11:4 12:3,3 14:10,13
 23:9 66:19 127:25 154:6
occurs 89:16 126:19
October 16:8,13
offer 169:17
offers 140:8
offhand 65:5
officer's 71:19
official 99:11
officials 164:3
offloaded 121:3
offshore 85:8
offsite 66:20 113:8 116:20
oh 18:16 69:23 137:15 146:24
 161:9 162:4 167:22 169:9,10
oil 40:9 46:24 57:16 67:21
 129:8
okay 10:8 19:16 21:4,10,14,19
 22:14 27:11,14 34:17 44:3,5
 47:10 48:7 50:3,25 58:24
 60:22 61:25 62:11 65:15 66:3
 66:6 67:10 68:21 77:20 83:16
 92:12 100:21 101:13,20 102:5
 106:4,19 110:2 112:21 113:5
 120:15,19 121:17 123:18,19
 124:5,9,21 127:4 130:6,12,20
 136:3,16,19 137:18 143:12
 151:3 160:3 164:7,18 167:23
old 36:21 70:11 90:4 135:24
 136:14
on-site 91:21 119:22 136:10
 139:3
once 19:6 33:7 34:24 35:4,6
 41:3 50:5 54:23 77:4,8,15,19
 86:13 87:13,13 88:2,2,3,18
 89:16 121:3 125:6 127:8
 129:16 157:9 168:20
ones 20:24 90:12 136:14 152:25
online 52:11 99:25 164:15
onsite 159:18 165:13
open 17:16 18:5 24:9 28:25
 63:17 67:5 95:7
operated 71:17 73:2
operating 21:25 43:22 50:22
 65:22 111:8 112:20
operation 165:4
operations 21:24 22:10
operator 50:23
operators 43:23 69:3
opine 67:9 96:23
opining 108:18
opinion 73:14 164:21
opportunities 28:12 164:16
 169:17
opportunity 14:7 140:2 151:4
 157:4,10
opposed 74:15 86:18
opposite 150:21
optimism 133:3
option 28:22 106:20,22 109:5,20
 109:21 110:8,13 118:4 120:5
 139:4,8 140:6
options 90:9 106:24 108:2,13
 124:14 134:18
order 9:8 11:23 16:5,14 22:16
 31:2 33:10 34:24 53:13 57:22
 138:5 157:3
organic 94:5
organically 84:2
organically-bound 90:22
organization 74:9 97:10
organizations 96:11
oriented 25:2
original 82:6 101:6,7,9 126:5
 153:25
originally 94:7 100:16,16
 154:13
Oswego 70:22
outcomes 92:25
outdoors 93:2
outlet 115:23
outrageously 167:17
outreach 65:18,21,23
outside 19:3 53:18 65:21,25
 92:13,13,20 117:18
outstanding 165:20
overall 26:14 94:6
overfilled 78:23,24
overflowing 77:6
overflow 79:14,17
overflowed 57:18,19 77:10
overflowing 45:8,9 79:10
overhead 40:19
overinflate 71:21
overlooked 166:22
oversee 17:12
oversight 1:4 5:6,7 8:15 9:14
 11:4,15,18 12:12,14,23 24:13

66:22 75:25 93:15 94:25 141:20 155:11 160:5,6 163:3,9 overtime 170:3 overview 10:10 overwhelming 165:12 Owego 70:21,22 owned 114:19 owner 120:4 131:20 owners 114:21,22,24 145:14 oxide 142:11 oxygen 88:21,22 142:10 Oyster 37:3 87:18	passes 158:2 passing 92:7 Pat 3:9 31:16 66:7 patent 69:11 paths 112:2 patience 109:17 Pattison 6:9 pay 9:23 99:10 154:15 payments 156:4 peak 43:7 Peekskill 3:18 149:10 peeled 34:9 peer-reviewed 69:9 pending 50:2 penetrate 95:22 pennies 31:6 pension 71:6 pentagon 159:11 people 19:25 68:17 77:10 92:2 93:11 94:18,22 98:9 99:12,17 100:5 139:23 144:8,11,21 145:4 146:5 147:9,9 148:14 155:21 159:4,23 160:7,18 162:3,21 163:25 percent 73:8 perfect 147:16 performed 113:14 peril 155:25 period 19:22 83:19,21 85:24 138:9 permanent 29:12 33:6 97:22 98:2 131:8 145:19 159:3 permanently 111:2,25 permit 17:2,7,8,9 20:15,18 21:21,23 55:20 91:21 112:25 131:8 158:14 permits 118:25 permitted 120:5 150:16 peroxide 98:10 Perry 84:21 139:10 person 73:14 87:14 147:18 personally 139:6 perspective 15:23 18:5 23:18,19 Pete 17:17 27:18 133:9 PETER 3:2 Peterson 109:10 120:20 petition 13:16 92:2 160:14 petitioning 145:12 petroleum 17:13 128:3,6 phases 32:5
P	
P.C.B 135:20 P.C.B.s 55:3 82:25 83:25 135:9 135:23 152:5 158:7 p.m 1:9,9 5:3 170:9 P.S.C 30:25 P.S.D.A.R 58:7,11 pack 70:14 packed 19:2,13 pad 43:17 64:12,14,20 pads 40:9 43:15 129:24 159:8 page 11:9,17 171:5 pages 68:20 171:7 paid 31:3 65:11 Palisades 41:6 72:19,21 panel 75:6,12,25 93:15,15 140:21,25 panelists 7:16,24 papers 69:9 Parcel 46:9,10 57:10 parcels 27:25 parents 68:9 151:8 parking 10:17 42:9 80:8 part 10:13 11:23 14:23 48:2 65:2 79:18 97:23 101:7 104:14 104:16 113:10 125:18 128:21 129:5 131:22 partial 57:10 111:6 129:5 participants 7:16 8:2 participated 23:14 participation 74:2 particle 81:14 83:13 particular 104:17 150:10 partnership 154:20 parts 25:14 34:23 pass 97:14 passed 91:19 149:19	

phenomenal 83:10
phonetic 44:10
physically 64:14
physician 95:19
physicist 82:3
phytoremediation 48:24
Picani 7:11
picks 36:9
picture 26:13 33:22 34:5 37:20
 37:20 38:22 39:18 41:8,22
 111:15,15 115:5 118:21
pictured 111:11
pictures 32:18 37:8 39:22 42:21
piece 38:25 42:2 47:8 57:11
 79:16
pieces 82:22
Pilgrim 37:2
PILOT 156:4
pipe 87:6
pipeline 32:9 45:15,15,18 46:19
 102:18,23 144:11
pipelines 102:16 151:24
pipes 37:24 86:23
place 21:23 39:14 56:2 61:20
 79:23 96:9 131:24 132:5
 144:24 150:22 154:5 171:5
placed 26:4 76:7
places 168:14
PLAINS 4:4
plan 13:6 16:9,12 18:16,22,23
 19:8,9,10,14 29:16,25 30:11
 30:12,16,21,25 34:15 38:13,14
 46:12 47:4,5 49:12,17 113:10
 117:19 126:5 129:4,5,25
 131:19 132:5 154:5 157:2
 162:2
planned 8:18 9:2,3 41:18,20
 64:19 80:2 117:20
planning 18:16 30:6
plans 16:7 26:20 30:8 32:21
 46:11 49:20
plant 18:13,17 22:12 32:2,16
 40:4,7,24 41:4 43:20,23 44:17
 44:24,25,25 45:19 71:15,16,17
 71:18,24 72:2,19 85:24 100:4
 101:14,16 103:19 110:5,20,22
 110:23 111:3,24 112:16,19
 113:11,14 114:3 117:25 121:24
 128:9 137:16 140:11 142:18,23
 142:25 145:8 152:2,4,5 160:15
 160:24
plants 30:20 43:16 49:12 84:17
 85:4 99:8 103:20 137:2,6,13
 137:16 159:22
plastic 39:2
player 49:18
pleasant 85:18
please 5:16 7:19,25 8:2 10:7,19
 10:19 16:25 108:22 109:25
 110:11,16 113:4 116:13 125:11
 137:24 138:12 146:10 167:16
 168:17,17 169:5,7,7,8
pleased 51:21 52:2 63:5
plenty 123:9
ploy 144:5
Plummer 48:21 164:10,11
plus 68:8,9 83:4
plywood 38:23
point 1:1,4 2:1 3:1 4:1 5:1 6:1
 7:1 8:1 9:1,11 10:1 11:1 12:1
 13:1 14:1,21 15:1 16:1 17:1
 18:1,9 19:1 20:1 21:1 22:1
 23:1 24:1,7,12 25:1 26:1 27:1
 28:1,15,17 29:1 30:1 31:1,19
 32:1 33:1,7 34:1 35:1 36:1
 37:1,3,23 38:1 39:1 40:1 41:1
 42:1 43:1 44:1 45:1 46:1 47:1
 47:15 48:1 49:1 50:1 51:1
 52:1 53:1 54:1,15 55:1 56:1
 57:1 58:1 59:1 60:1 61:1 62:1
 62:12,13 63:1 64:1 65:1 66:1
 67:1 68:1 69:1 70:1 71:1 72:1
 72:2 73:1,5 74:1,10 75:1 76:1
 77:1,12 78:1 79:1,4 80:1 81:1
 82:1 83:1 84:1,3,22 85:1 86:1
 87:1 88:1,10 89:1 90:1,5,6
 91:1 92:1 93:1,3,22,23 94:1
 95:1 96:1 97:1 98:1 99:1
 100:1 101:1,2 102:1 103:1
 104:1,2 105:1 106:1,8,21
 107:1 108:1 109:1,6,22 110:1
 110:24 111:1 112:1 113:1
 114:1 115:1 116:1,19,25 117:1
 117:4,8 118:1,3,20,21 119:1
 119:14,19 120:1,4 121:1 122:1
 122:8,22 123:1,12,20 124:1
 125:1 126:1 127:1 128:1 129:1
 130:1,2,16,22 131:1,11 132:1
 133:1 134:1 135:1 136:1,23
 137:1,14 138:1 139:1 140:1

141:1,4 142:1 143:1 144:1	pre- 126:13 132:20
145:1,17 146:1 147:1 148:1	pre-existing 93:25
149:1,11 150:1 151:1,22 152:1	pre-registered 9:7
152:9 153:1,24 154:1 155:1,11	pre-treat 126:12
155:25 156:1,8 157:1 158:1	precautionary 135:13
159:1,7 160:1,6,7,12 161:1,10	precedence 72:20 91:24
161:17,17 162:1 163:1 164:1	precedent 92:6 94:2 159:22
165:1,3 166:1 167:1,5,6 168:1	precise 84:9
169:1 170:1 171:1	preclude 65:20,25 93:24
Point's 111:5 119:8	predecessor 59:22
Point's 157:8	preliminary 50:16
pointer 44:4	premature 18:8
points 64:3 96:8 98:14 133:22	prep 38:15 106:4 136:13
poisoned 168:20,21	preparations 14:19
polar 39:14	prepared 17:7 33:17 46:17 106:6
policies 79:19	138:3
polisher 53:24	Preparedness 109:2
pollute 143:25	presence 5:17 46:21 141:25
polluter 151:25	present 5:19,21 6:4,8 7:6 13:9
pond 44:9,10,12,13 45:7,24	139:3 157:16
pool 19:7 33:11 59:2 64:18	presentation 13:3 21:2,12 66:10
76:16 78:4 107:5,25 112:18	95:11,16 98:24 102:13 104:23
114:3,6,12 142:7,12 143:5	105:7 109:5,15,23 110:3 120:7
146:14,17 158:7,16	122:19 132:6,9 133:3 139:6
pooling 44:20	154:23
pools 19:2,13 22:10 53:5 76:4	presentations 17:19 66:11,16
97:25 106:21 161:20	presented 66:18 77:5
popped 70:14	presenters 7:19 8:20
population 94:13,14	presenting 108:19 164:21
port 69:17	presently 90:4
portion 11:3 16:10 43:25	president 2:20,22 31:19 73:20
pose 25:24	99:14 155:15
posed 153:16	pressure 144:12
position 33:23 91:23 109:24	pressurized 37:18 103:10
possibility 79:9 80:7 109:7	pretty 15:22 40:14 72:2 103:19
possible 91:5,14 103:16 109:21	103:20
118:2 119:3 124:14 155:24	prevail 159:17,23
156:21 162:6	prevent 77:16 90:16 112:9
possibly 147:24	159:14
pot 122:3	previous 11:14 14:25 83:20
potable 85:16	125:13
potential 48:13 135:5,8,12	previously 9:3 126:9
139:4	priced 91:8
power 30:20 49:8 53:14 69:12	principle 135:13
70:7 71:15,16,17,18 81:23	printouts 11:10
100:2,4,6,6 110:23 113:14	prior 16:15 23:10,10 76:6
117:24 152:5	112:10 118:12 153:25
powers 29:9 30:21	prioritize 165:25
praised 74:5,6	priority 58:18
prayer 140:10	probably 18:17 22:15 24:16 41:9

41:11 43:8 74:3 78:15 80:16
 95:25 102:19 117:15
problem 15:16 37:7 56:12 93:5
 103:22 142:15 161:23 163:25
problems 69:20 73:9 87:18
procedure 43:21,22
procedures 79:19,23
proceed 40:22 108:22
proceeding 14:5,6
proceedings 171:8
process 10:3 17:3,25 18:7 22:17
 35:12 39:25 48:17 52:6 53:9
 54:6,15,20,23,24 55:5,24
 63:11 78:15 79:12 92:15 98:8
 104:9 111:6,17 112:14 113:2,6
 114:2,8,10 121:5 122:2 123:7
 124:16 129:18 165:18 166:4
processed 53:11 76:5
processes 22:24 62:3 63:7
processing 54:14
procured 154:16
producing 61:12
product 49:2
professional 73:14 147:2
Professionally 69:13
profit 140:3 159:24 166:23
profits 139:23
profusely 141:23
program 28:15,19 29:11,11 30:14
 30:15 81:23 82:10 152:16
programs 156:13
progress 33:20
prohibiting 117:22
project 52:24 116:22 125:2
 166:20
projections 52:4
promote 7:16
promoted 157:24
prompt 27:20
property 13:7,19,22 47:8 57:11
 62:24 99:25 103:5 104:5,16
 145:15,16 161:10
proposal 11:22 13:23 49:11
 77:21 126:12
propose 76:21 78:13 90:5
proposed 76:14 79:2 88:18 90:4
 94:7 106:20 139:17 165:8
proposing 76:18 77:12 79:7,16
 86:4 87:13 90:3 100:14
prosperity 157:9
protect 67:17 74:7 80:4,11
 94:11 95:3 104:15 107:15
 139:15
protected 86:25 149:2
protecting 164:24
protection 13:5 77:2,3
protectors 139:12,12
proud 165:5
provide 7:15 9:15 10:10 12:2,8
 13:16 14:4 15:5 16:15 22:17
 24:22 47:18 59:23 62:5,6,10
 154:22 157:10 164:16
provided 11:15 13:10,12 16:16
 47:16 49:11 59:22 61:9,14
 116:15 155:25
provides 28:19 115:24 158:8
providing 11:3 65:20 109:20
 156:3
public 1:3 2:3 3:12 5:8 8:25
 9:6,16,17,19 10:3,5 14:6 17:8
 17:9 18:4 29:9 30:17 50:5,10
 50:11 59:16 74:2 75:25 79:11
 97:7 104:13 108:9,17 109:2,12
 109:13,24 115:17 117:2 123:25
 132:20 135:3 137:21 153:4,17
 165:12 166:24,25 169:19
publicly 13:24
published 83:11 132:12
pump 79:24 124:23 125:17
pumped 88:21
pumping 77:10 87:21 126:7,16,19
pumps 39:4 42:18
purchased 99:25 113:11
purposes 24:2
pursuant 61:20
pursue 142:4
pursuing 76:3
pushing 71:10
put 22:22 25:17 34:25 35:5,7
 37:16 45:5 54:6,21,24 55:4
 56:2 64:2 71:13 73:9,11,12
 75:16,19,19 77:15 85:12 86:16
 87:5 88:23 89:14 126:13
 127:14 133:4 134:16 137:15
 144:13 145:13 146:17 152:13
PUTNAM 2:21
putting 37:10 42:11 90:5 125:8
 139:23 145:25 165:23

Q

Q2 77:20
quake 85:21
qualitative 134:4,17
quantify 134:7
quantitative 134:5,17
quantities 80:20
quarter 50:7,8,13,17 51:5
quarterly 51:6
question 17:22 18:12 20:4,14
 22:16 23:23 25:20,25 26:5,10
 26:19 27:10 32:15 52:10,17,19
 56:14 57:3 59:17 61:8 62:19
 62:24 64:8 65:9,14 75:10 76:3
 77:9,20 78:22 79:18 80:15
 83:16,16,20 84:12,21 86:22
 87:17,20,20 88:8,14 90:2
 95:24 103:2 105:8 120:15
 122:5,10 123:13 124:5,6,7
 127:6 132:22 133:16 134:23
 141:24 146:12 153:16
question-and-answer 75:9
questions 8:4 20:3,25 22:15
 31:13 43:5 49:25 51:9 57:4,5
 65:12 66:5 67:18 75:7,7,13
 77:5 95:8 98:22 99:20 102:6,7
 102:13 105:3 108:5,14 109:18
 120:8,13 169:18,18,22
quick 17:21,21 51:11 68:22
 95:12 102:13 104:25 115:6
 133:16 134:22,22 136:5 142:17
quickly 5:17 11:17 29:10 56:15
 98:14
quite 75:8 111:4 141:4 147:4
quote 82:2 136:10,11 139:12
 140:15
quoted 88:7

R

R.P.I 68:24
racks 70:3,3
rad 36:22
radiation 69:10 78:10 82:8
 95:20,22 96:5 147:8,15 148:6
 148:8,10,13,19,25 151:23
 152:14,18 163:14 168:19,21
radioactive 22:11 45:3 74:13
 80:25 95:20 113:15 116:18
 117:23 139:24,25 157:14
 165:22
radioactively 78:25

radioactivity 76:6,10,12 86:4
 90:13
radiological 118:11,25 121:10
 121:15
radiologically 148:2
radionuclides 82:10
radius 141:5
rail 114:25 115:3,8 118:20,24
 119:15 140:7
rails 27:21
rain 45:10 46:7
raise 156:13
raised 29:24 169:19
raising 166:16
rally 96:11
Ramapough 139:10
ramification 133:25
ramifications 93:24
ran 68:7 149:13
rank 107:9
ratemaking 29:8 30:20
ratepayers 31:4
rates 49:9
rays 80:21
RCRA 121:8,9
re- 33:10
reach 162:6
reaching 159:7
reactions 95:12 149:16
reactor 14:18 20:5,5 25:12,16
 37:18 59:8 69:3 70:17 72:21
 103:8 110:25 111:10,24 112:19
 114:3,14 115:6,10 131:11,20
 145:13
reactors 103:9,10 130:22 157:9
read 47:22 75:9 95:21
reading 83:12 136:14
ready 38:7 72:20 93:21
real 68:22 115:5 142:17
real-time 145:7,9
realignment 13:25
realistic 143:21 158:25
really 8:11 15:8 19:9,10,14,14
 34:21 37:4,5 39:9 45:6,18
 51:7,11 53:18,22 55:5 67:2
 70:25 72:8 73:18 75:7,13 78:2
 78:7 80:10 81:5 82:16,20
 83:24 87:4,24 88:12 96:3 98:8
 115:4 120:12 133:18 134:16
 141:19 142:3 144:6,7 146:6

147:23,25 148:22 162:2 167:8 167:10,14 168:23 reap 157:13 reason 46:14,18 55:25 74:11 77:24 reasonable 92:8 97:21 reasonably 91:8 recall 106:15,22 107:7 136:12 137:6 154:12 received 50:20 99:22 131:8 149:22 receptacle 44:15 recipient 69:4 131:4 recirced 55:2 recirculation 77:25 reclaim 104:16 recollection 125:9,13 recommends 158:17 record 18:3 115:17 169:8 171:7 recorded 7:21 rectified 157:18 recycle 42:24 recycling 41:15 42:4 red 143:17 redeveloped 104:7 reduced 41:2 reevaluate 73:18 reference 18:15 referenced 115:25 references 116:5 refers 16:11 reflect 109:23 refusing 165:13 regard 114:2 regarding 11:19 14:2 15:8,11 22:23 49:24 64:24 65:17 region 144:8 Register 13:25 registered 43:4 132:21 166:12 registration 9:8 regular 9:22 30:8 regulate 101:2 regulations 12:15 163:6 regulator 15:14 regulators 13:9 regulatory 12:11 72:12 73:7 93:8,13 115:20 118:7,17 relabeled 142:20 related 56:21 60:2,12 relating 60:13,14	relationship 92:17 relative 107:23 release 22:19 27:25 53:3 54:22 55:16 57:10 61:20 81:10 84:5 94:9 103:12 104:12 107:7 111:6 126:6 129:5 released 55:3 56:10 89:20 103:13 113:21 releasing 61:19 83:8,21 86:2 89:24 106:9 relevance 127:20 reliable 84:9 relief 18:6 rely 82:5 138:18 relying 145:10 remain 41:11 156:14 remainder 9:5 remained 85:9 remaining 11:11 138:13 145:8 remains 12:6 23:5 161:2 remarks 138:14 Remedial 16:7,9 46:11 47:3 remediate 57:22 remediated 129:17 remediation 32:10 46:14 47:6 57:4 129:21 remedy 163:24,24 remember 35:9 37:14 77:18 remembers 48:23 remind 108:16 162:14 163:8 reminded 129:24 reminder 138:6 reminders 7:15 removal 14:19 33:14 41:20 48:9 48:13 49:19 remove 38:8,9,10,11,16 39:25 40:2,2,12 41:7,7,12,14,21 42:17,23 48:11 53:24 54:3 76:6 90:25 128:12,13,16,19 removed 32:20 39:5,24 40:21 41:18,24,25 42:20 127:8 128:15,15,16 removing 38:13,14 39:20 41:6,12 42:13 76:11 Rensselaer 68:24 70:16 repair 14:18 33:6 34:6 35:7 repairs 33:3 34:10,20 147:21 replaced 135:21 replenish 159:13 report 9:18 16:24 20:9 22:19
---	---

24:19 26:6 32:10 39:13 45:20 46:13 47:11,12,15,22 50:7,9 50:13,16,17 51:5,6,21 65:17 73:6 113:22,22 132:12,14 152:13,18,21 reported 11:6 12:6 16:20 126:10 171:4 Reporter 133:5,12 171:12 reporting 8:3 24:17 25:3 reports 9:15 11:15 12:10,12,13 12:20 26:4 50:4,5 115:19 represent 157:14 request 66:9 requested 17:4 49:7 require 118:12,14 128:24 156:19 required 47:19 requirement 18:25 128:22,23 requirements 16:5 55:21 requires 16:14 129:2 requiring 158:14 research 52:11 84:25 86:22 87:18 108:13,19 126:2 135:11 135:18,25 152:16 resentment 147:11 reserve 8:3 76:20 108:8 Reservoir 70:24 resident 12:25 residents 97:12 152:25 resolution 91:20 resolve 159:21 resolved 140:4 respect 60:4 82:16 respected 91:23 92:3 responded 28:10 responds 97:10 response 42:25 154:13 responsibility 99:24 130:5 responsible 140:11 145:3,4 159:18 rest 22:15 71:13 restart 72:21 restoration 11:25 166:8 result 147:10 resulting 121:6 results 11:13 31:7 32:7 47:8 retain 120:17 126:15,22 retention 83:19,20 122:3 retired 150:11 retribution 73:15 returned 33:16 143:20	reuse 103:4 reusing 90:4 Reuter 11:11 revealed 158:19 revenue 30:22 156:9 reverse 22:15 reversed 72:17 93:9 review 12:22 17:5 21:22 45:20 141:8 reviewed 8:5 reviewing 22:5 132:9 revision 13:6 18:13 Reviving 149:13 reward 157:13 rich 59:22,23 61:14 99:3 159:12 Richard 2:12,24 6:18,22 27:3 56:25 61:22 62:12 99:11 132:20 Richter 43:10 rid 52:9 57:22 63:6 90:10 149:16 ride 32:19 85:7,20 Ridge 82:3,12,12 right 8:6 11:2 24:19 25:13,22 32:14,16 33:3,24 35:22 36:18 38:6,23 39:10 40:10 41:4,8,22 44:5,15 46:4 47:25 50:12,20 52:8 54:16 55:8 56:3,4 57:25 58:8,13,17 59:9 62:3,25 64:15 67:23 103:4 108:5,24 110:2 111:9,14,16 115:8,9,13,15 117:9 122:24 126:21 128:4,10 128:11 129:12 130:3 133:13,25 135:7 143:22,25 145:19 146:10 152:15 164:13 right- 111:3 rise 156:17 158:21 159:6 risers 37:25 38:7,10 risk 119:2,16,20 157:12,16 165:24 risks 88:15 137:5 river 42:17 52:5 67:17 70:17 80:5,9,11,22 82:23 85:13,13 85:18 89:25 95:3 96:10,19 101:10,19 103:16 106:10 107:7 107:9,12 111:9 112:25 117:20 117:23 120:17 139:14,14,15,16 142:18,20,25 143:4,7,25 152:4 152:6 158:5,8 164:25 165:23 165:24 168:4,7,7,14
--	--

Riverkeeper 2:23 3:14 90:14
 96:12 139:11 164:24,24 165:6
 166:3
rivers 139:13
riverwalks 161:11
road 44:15,16,17,19,21 45:19
 46:10
robust 80:6 85:7,25 86:11,21
Rockefeller 152:12
rod 32:19
rods 64:9 159:4,7,8,9
Rogulski 3:23 149:8 153:13
 155:10,12 157:12
role 145:24
roll 5:11
rolled 67:22
roof 42:10 158:22
room 69:21 93:11 162:21
root 81:22
Rory 18:4
roughly 35:13 43:18 106:7
round 25:10
route 45:15 75:4 162:5
row 112:6,12,20
ruining 159:15,15
rules 96:18
rulings 150:14
rumor 71:3,4,9,13
run 37:24 93:16,18 137:24
 156:11
running 80:7 102:18 110:9
runs 39:20 106:6 145:9
rushing 18:17

S

s 12:21
S.S.E 84:16
Sacandaga 70:24
safe 84:16 96:4 139:3,8 140:4
 166:7
safeguard 11:21
safeguarding 164:25
safely 146:5 158:13
safer 159:8
safest 24:12
safety 14:20 15:7,15,16 25:4
 32:13 45:17 69:12 73:9 96:25
 97:6 137:3 140:21 153:4
 166:24
safety-related 143:9

sail 70:17
sailing 70:16 80:14
sake 84:13
SALEM 3:24
sample 45:2 128:20 129:19
sampled 55:2
samples 16:21 46:12 77:21,22
 78:13
sampling 47:7 158:18
saturated 46:5
Save 138:23,25 165:7
saved 8:5
savings 71:6
saw 33:22 37:11 59:20 118:21
 136:9
sawdust 49:13
saying 24:18 55:24 119:10 128:5
 133:4 145:25 152:13 160:15
 163:5 164:4
says 20:18 82:13 114:20 152:18
 163:4
scaffold 33:3
scale 43:10,13
scenario 125:25
Scenic 96:12
schedule 16:23 26:15,17,19,22
 57:9 58:4,7,11,12,16 59:10
 104:23 108:7 154:2
scheduled 57:9 170:3
Schenectady 70:18
schmucks 153:2
scholarship 68:3,9
school 2:13 28:6,23 68:6,10,14
 151:8,12,12 153:20,23 154:17
 155:14,18,23 157:15
schools 156:23 157:7
science 84:8 90:22 94:7 152:11
scientific 81:24 83:9 126:4
 137:10
scientists 83:24
scope 48:15
scrap 125:6
screen 42:17 138:11,17
screens 42:14,16,17
screwed 87:4
sea 158:21 159:6 164:25
seal 34:8 77:16 89:23
sealant 34:7,12
sealed 89:11
Seattle 70:13

<p>second 20:4 52:10 77:20 81:2 96:7 106:10 158:23 163:21</p> <p>seconds 11:12 138:13 140:22 145:21 148:21 150:17 153:9 157:11 159:19 161:24 168:22</p> <p>secretaries 155:19</p> <p>section 34:7 38:10 47:13</p> <p>sections 38:9,11,11</p> <p>secure 154:18 157:6</p> <p>secured 154:16</p> <p>security 40:25 41:5 43:24 54:3 71:8</p> <p>see 10:12 20:9,9 24:9 26:6 27:21 32:17 33:4,21 34:7 38:21 42:8 44:20 45:6,7,20 49:20 51:4,21 54:11 59:4,15 70:12 78:18 87:8,15 100:7 111:8 115:6,6,8,11 134:7 141:8 166:15</p> <p>seek 95:2</p> <p>seeking 23:24 67:13,17 94:18</p> <p>seemingly 109:18</p> <p>seen 27:18 112:5</p> <p>seg 31:24 33:8,17</p> <p>segment 13:21,22</p> <p>segmentate 34:22</p> <p>segmentation 14:12 32:22 33:20 34:21 35:6</p> <p>segmented 25:13 35:8</p> <p>segue 108:14</p> <p>seismic 43:22 84:14 136:24 137:5</p> <p>seismically 43:6</p> <p>seismological 63:20</p> <p>Senate 99:15</p> <p>Senator 3:2 5:22,23 17:18 18:18 18:21 19:11,16,20 96:17 132:21,24 134:21 153:6</p> <p>senators 96:15</p> <p>send 118:13 151:15</p> <p>sending 157:24</p> <p>senior 69:15,20 73:20,21</p> <p>sensor 89:14</p> <p>sent 27:17 35:11 59:21</p> <p>separate 30:7,22 91:15 115:20 115:22 154:18</p> <p>separated 25:12</p> <p>Separately 79:15</p> <p>separation 78:8</p> <p>September 40:22 45:9 151:9</p>	<p>serious 139:19</p> <p>serve 5:15 157:6</p> <p>serves 155:17</p> <p>service 1:3 2:3 3:12 5:9 8:25 14:6 18:4 29:9 30:17 37:16 64:2 108:18 109:3,12,14,24</p> <p>services 156:13</p> <p>set 8:9 40:10 111:6 156:11 159:22</p> <p>sets 26:16</p> <p>setting 82:6</p> <p>seven 28:19 29:16 30:3 43:12</p> <p>sewage 85:16</p> <p>shaft 50:22</p> <p>shafts 32:19</p> <p>shame 167:24</p> <p>Shapiro 4:3 138:5 141:18 143:14 143:15,16 145:22 146:9,19,20</p> <p>share 67:4 167:16</p> <p>shared 16:23</p> <p>sharing 66:24</p> <p>shielding 35:3</p> <p>shields 70:4</p> <p>shift 87:14</p> <p>shifts 89:15,17</p> <p>ship 36:10,25 37:3 114:22,25 115:13 116:6 118:2,8 119:6,22 150:8,10,23 151:18</p> <p>shipment 66:20</p> <p>shipments 36:19</p> <p>shipped 25:18 36:8 38:16 101:24 106:12 113:3,6,23 114:4,7 116:19,21 118:9 119:24 122:9 123:21 153:3 167:5,7</p> <p>shipping 35:12 36:11 69:17 109:7 111:22 113:8,16,16 114:2 115:4,16,17 116:11,15 117:17 118:5 119:17 123:13 143:17 149:15</p> <p>shock 161:3</p> <p>shocked 161:8</p> <p>shocks 148:14</p> <p>short 85:24 95:8 124:25 147:20</p> <p>short-term 125:25</p> <p>shorten 84:13 119:18</p> <p>shorter-term 125:25</p> <p>shot 45:7</p> <p>shoulders 160:13</p> <p>shout 67:19</p> <p>show 42:21 137:24</p>
--	--

<p>showed 47:17 135:11 showing 167:9 shown 144:7 shows 33:22 111:4 shrink 19:15 shrinks 19:10 shut 93:19 111:2,25 Shutdown 84:16 side 44:21 46:9 53:17 87:5 111:4 128:9 152:6 signatures 94:20 signed 92:2 93:17 117:22 132:20 significance 15:15 25:4 significant 14:9 15:16 25:9 89:2,5 103:12 signing 138:23 silicates 98:12 similar 98:9 110:24 116:18 121:22 140:25 simple 36:12 88:7 128:12 Sims 4:7 166:18 167:22 168:23 169:6,9,9,15 single 73:12,14 103:7,11 Sipos 2:6 5:20,21 10:9,11 11:2 11:13 15:22 18:15,20,24 19:12 22:14 24:14,21 54:7 62:11,16 104:22 105:2,15,18,21,25 106:4,18,25 107:11,14,21 108:4 121:12,16 130:18,21 136:5,16,19,22 137:13,17 144:22 site 8:17 11:24 12:25 13:19,20 13:22 14:11 16:10 17:13 19:25 20:2 25:14,18 27:8 31:18 32:16 36:16 42:8 43:4,20 53:7 57:4,10,17 59:7,7,19 60:17,24 61:10,12 63:21 64:10 66:17 84:6 97:21,24 101:8,24 103:13 104:8,13 107:25 108:20 109:8 109:22 111:6,23 113:3,6,17,24 114:5,11 115:2,9,13 116:7 117:9,11 118:9,20 119:9,18,22 119:24 120:18 122:21 123:6,10 123:22 129:5 130:8,24 137:14 143:17,19 159:9 163:11 166:7 sites 23:15 77:9 131:11 sitting 25:13 99:4 103:5 109:11 situation 24:8 92:5 120:24 six 36:5 41:25 64:18,19 sizes 100:12,13</p>	<p>skate 137:8 skin 81:14 95:22 skip 93:6 SLAPP 73:25 slash 135:17 slide 9:10 10:7 12:8 16:25 17:10 22:21 34:18 50:19,21 52:23 75:14,15 109:25 110:11 110:16 111:7,18 112:6 113:4 114:16 115:14 116:13 117:6 119:4 170:6 slides 108:11 110:19 sliding 70:3 small 29:5 31:6,6 32:23 148:2,3 156:3 160:11 smaller 148:9 smirking 167:13 Smith 2:20 7:4,7,8 smooth 7:16 snapshot 41:16 Social 71:7 soft 157:3 soil 16:20,21 129:19,20 141:6 sold 125:6 solidification 121:5,23 solidified 119:25 solution 56:5,7,14 69:22 97:22 98:2 102:15 116:23 146:2,2,3 146:20 solutions 70:8 72:5,6,9 98:13 98:18 116:23 121:19 solvent 156:14 somebody 79:13 87:5 107:19,20 148:23 161:9 someday 56:11 someone's 50:24 somewhat 97:24 son 70:23 soon 17:6 sorry 18:17,18 25:19 37:9 39:18 52:18,22 54:12 56:24 64:17 94:19 121:9 132:13,19,21 133:5 155:8 163:15 166:16 169:18 sort 11:8 13:25 24:2 127:6,7,11 133:23 134:7 sound 48:11 49:20 source 164:25 sources 133:20 south 44:16,16,21 45:2,8,23</p>
---	--

46:9 82:18 114:23	spoke 14:11 18:2
southern 49:23 57:11	spot 128:25
southwest 72:15	spots 34:11 129:7
soybean 49:14	spread 69:9
space 86:16	sprinkle 49:14
Spagnuolo 3:8 31:17,18 35:16	sprinkles 152:2
37:7 44:8 51:15,19 52:17,22	spur 118:20
54:10,19 55:9,11,14,19 56:4,9	squeaky 104:6
56:17,22 57:7 58:6,9,12,18,24	stability 157:7
59:3,6,11,15 61:17,21 62:7	staff 13:4 15:2 17:5 22:5 23:23
63:22,25 64:6,11,15 127:23	43:20 73:7,8,9,10,12 89:18
128:8,11 129:14 130:4,9 167:9	staged 34:2
span 156:18	stakeholders 157:5
spare 76:25	stand 33:15 43:7,12 128:25
SPDES 17:2,7,8,9 20:15 21:21,23	160:13
55:20	standard 43:16,17,18 82:13
speak 7:19 28:5 64:25 67:8,11	standards 82:2,5,6 94:6 137:8
103:7 139:9 151:4 164:15	148:25
SPEAKER 133:9 169:24	standing 70:3 79:13 117:2
speakers 95:11 138:6 163:18	145:17
164:8,9 166:12	standpoint 80:12
speaking 7:22,25 25:7 130:13	stands 138:24
167:14	start 10:9 20:22 42:7,13 55:5
Spear 2:18 6:24,25 63:19,23	75:14 104:23 113:18 118:7
64:5,8,13,21 120:11,16 121:11	136:11 151:11
121:17 122:4,7,13	started 29:14 37:16 69:14 70:10
specialist 147:15	85:4,24 98:3 105:7
Specialists 114:9 120:25	Starting 112:23 165:21
species 158:9	starts 164:5
specific 81:8 123:13	state 1:2 2:25 5:8 8:15 10:10
specifically 109:6 123:12 129:6	11:3,18,21 13:9,13,24 14:5
150:15	17:24 23:13 28:11,15 29:2,10
Specifics 74:10	30:6,7,8,11,12,16,21,23,25,25
Specter 4:5 141:18 146:22,23,25	31:4,14 66:15 70:9,10,18,25
147:2 148:22 152:10	72:22 96:15 97:3,12 105:5
Spectra 16:11 46:19	112:25 113:21 120:5 128:22
speed 68:21	129:2 138:25 145:3,4,6,9,11
spelling 44:10	145:12,23 146:6,10 147:3
spending 115:16,25 166:19	149:18,21 151:10 154:7,15
spent 19:2,6 22:9 23:5 53:5	156:7,20 158:20 159:17 168:8
59:2 64:9,18 70:2,23 72:14	169:5,7 171:2
76:4,16 112:18 114:3,6,12	State's 145:16
115:18 116:5 130:2,24 131:5,9	stated 113:22 117:7,13 121:2
142:7 143:18,18,19 144:17	131:2 171:5
145:15 146:14,18 151:15	statement 74:17 106:15 108:9
157:13 158:7 159:3 161:20	117:3 130:25 137:21 153:18
165:15	169:20
spill 127:25 128:2	statements 9:6 60:6
spilled 46:25 57:20	states 72:16 131:4,17,23 137:2
spills 119:3 123:5,23 129:8	137:4 157:25

<p> statewide 28:15 static 77:4,15,19 79:6 87:3,20 88:23 station 41:9,10 status 104:4 105:20 statute 9:15 28:16 29:12,18 stay 104:23 111:19 stead 156:2 steal 55:15 steam 37:21,21 38:2,2,8 39:3 70:5 step 96:20 97:7,11 stick 137:20 stipe 111:11 stirred 76:15 stock 71:7,11,12 Stokes 11:11 stood 96:13 161:13 stop 71:3 92:2,20 150:19 157:23 stopped 33:18 storage 19:3 24:9 36:22 40:12 41:17,19 66:17 72:15 76:7 78:23 79:2 88:8,11,12 90:3 91:21 92:11,13 97:20 100:10 100:11,13,14 102:14,15 119:21 119:23 121:4 124:19 125:25 126:13 136:10 139:3 149:20,23 150:3,5 152:23 159:3,18 165:13 store 36:23 75:18 84:9 125:16 146:18 158:22 stored 36:7,16,23 64:10,11 79:3 80:17 83:17 86:7 88:16 97:24 101:8 112:15 117:10 130:24 158:13 159:7,9 storing 76:18,19 86:18 88:12 102:20 139:24 150:7 story 158:24 straightened 94:5 strategic 73:25 stream 30:22 street 1:11 40:6 150:11 stressed 89:7 stronger 30:15 strongly 166:3 strontium 103:14 structural 85:10 structures 14:16,17 53:6,7 struggle 160:23 stuck 153:2 </p>	<p> students 155:17 studied 82:4 90:16 135:11 study 90:18 102:14,21 136:25 141:5,5,8 152:14,17 168:24 studying 132:4 stuff 83:8 126:15 168:4 sub 70:13 subcomponent 22:25 subject 29:21 30:2 submit 47:5 169:17,21 submits 47:15 submitted 17:3 22:5 115:19 submitting 26:20 subscribed 171:10 subsequent 119:12 subsistence 158:9 substance 117:23 success 8:10 successfully 110:13,14 sue 143:23,24 sued 62:10 73:24 SUFFERN 4:2 sufficient 11:24 suggest 77:3,6,22 83:23 suggested 77:21 79:19 90:7,15 92:12 107:23 137:12 suggestion 79:25 126:4 134:21 suggests 81:19 92:7 137:10 suing 71:20 suit 65:7 73:25 sulfuric 41:14 sum 12:17 summarize 75:10 summarizing 16:24 110:22 summary 12:9 summer 68:6 Summer 84:21 superintendent 7:5 10:21 17:23 28:6 65:12 102:11 104:21 154:21 supersede 97:2 Supervisor 2:12 95:13 supplemental 50:20 51:14,18 support 7:22 14:25 17:24 27:22 28:3,19,22 30:9 38:9 48:22 53:6,7,22 65:3,22 165:12 supporting 28:12 31:23 41:6 96:15 supportive 19:19 supports 53:22 </p>
--	--

supposed 34:8 130:7 151:11
Supreme 150:13
sure 27:17 28:21 30:3 45:25
 51:12 52:7 73:2 78:2 79:13,14
 100:25 101:3 107:8 122:24
 127:22 128:21 129:13
surprise 161:4
surprised 161:8
surprises 9:21
surrounded 88:19
surrounding 168:9
survey 78:20 104:12 137:5
surveyed 73:6
survive 102:15 140:13
Susan 2:18 4:3 6:24 63:18
 120:10 138:4 141:18 143:14,16
suspended 32:21
Suzannah 3:25 153:14 157:20
switchyard 13:17,23 40:18
synergistic 82:24 83:3,6,24
 90:23 94:4 134:24 135:12,17
 151:20 158:6
synergize 152:9
system 38:18 48:14 112:8 126:24
 143:8,10
systems 14:3 53:12 87:12 112:17
 125:15,18,21 126:6,20,22

T

T.R.C 45:12,19
table 21:3,12 25:25 29:4 49:4
 109:11 129:10
Tables 47:22
tactics 165:7
take 9:7 17:9 22:15 30:9 52:25
 53:4,6 54:16,16 55:3 72:18
 74:12 82:20 91:24 96:8 97:18
 97:18 99:18 102:22 107:18
 110:8 118:5 119:13 120:8
 124:18 125:21 131:17 132:2
 143:2 145:23 154:12 158:2
 161:22 162:5 164:2 166:17
 168:23
taken 142:20 158:18,22
takes 45:16 97:7 126:17
talk 9:2 31:20,21,23 32:7,10
 34:18 35:9 53:11 72:11 73:8
 74:24 80:19 98:3 100:9,9
 104:3 111:20 118:16 135:18
 161:6 162:9

talked 22:9 39:16 40:5,5 46:8
 47:20 52:23 53:16 73:4 95:21
 127:17
talking 30:19 40:17 49:20 98:9
 114:21 134:10 148:6 167:9
talks 50:19 83:12
tallest 158:23
tank 32:24 40:9,12 54:21,25,25
 55:4,8,10,11,12,13,13,17
 57:16,23 76:19,25 77:13,15,24
 78:5,6,8,9,23 79:2,4,6 81:4
 86:25 87:3,5 88:2,20,23 89:7
 89:9,11,12,19,23 90:15 91:10
 93:2 100:20 121:4 125:8,16
 126:13,17
tankage 92:20,22
tanker 106:13 114:25 115:3,11
 116:20 140:7
tanks 17:13 41:17,19 53:9 56:9
 75:19 76:7,8,13,17,18,19 77:4
 77:9,19 78:24 79:8,12,14,17
 80:5,18,23 81:3 83:18 84:22
 86:16 87:19 88:16,18 90:4,6
 92:13 93:25 100:10,11,13,14
 102:20 105:9,12 124:20 125:3
 158:13,22
Task 8:14 9:11,13,14,25
taught 81:13,16
tax 29:5,8 31:3 99:22 156:14,19
 156:20 159:12,13
taxes 92:4 156:13
taxing 28:12,23
teacher 68:14 155:13
teachers 68:15 155:16
teachers' 155:20
team 8:4 23:17 35:7 70:16
Teamster 68:7,8
Teamsters 68:12
tech 142:13,14
technetium 142:8,10
technical 8:3 21:22 67:14
technically 9:13 46:20 133:23
technologies 91:15 98:4 100:8
technology 49:5 63:13 88:9,11
 90:25 91:7 146:4
tell 54:9 148:3
telling 97:14 151:17
temperature 88:25
temporary 72:14 159:3
ten 129:2

tend 9:15
Tennessee 106:14 107:4 114:23
 116:3 118:9 121:20,23 153:3
tennis 86:15
tens 80:24
tent 39:10
term 54:8 127:21
termination 47:13,25
terms 16:4 17:2 20:7,15 21:21
 26:19 36:15 123:3 124:10
 147:14 151:20
testifying 141:22
testing 82:10 158:15,16
tests 144:12 158:20
Texas 35:11 114:10,24 118:10
 121:2,2,18,23 149:15 150:4,7
 150:9,10
thank 5:4 6:14 7:12,13 8:22
 10:11,23,25 16:3 17:14,15,18
 18:23 19:16 26:2,8 28:8 31:12
 31:14,16 37:6 51:8,20 56:23
 62:21,21 63:2,16,17,19 64:5
 64:21,23 66:3,4,6 67:5,6,11
 67:12,15 68:18 86:23 94:16,23
 95:5,14,15 98:18,19 102:5,9
 102:10,12 104:19,20 105:4
 108:5,12,15,23 109:9 116:13
 120:9,11,20 122:4,13,17
 132:25 133:14 134:19 137:17
 137:24 138:20,22 139:2,5
 141:11,13,15,16,20,23 143:12
 143:15 146:8,9,21,24 149:5,6
 150:24,25 151:3 153:12 155:10
 155:12 157:18,19 159:25 160:4
 163:14 164:17,18,18,20 166:8
 166:9,10,11,17,18 167:23
 169:2,4,4,13,13,15 170:7
thanks 5:13 8:8,9 17:19 19:18
 66:7 75:12 94:25 105:5 108:6
 122:18 134:20,20 136:3 137:25
That'll 129:4
that's 15:13 56:22 60:18
theme 99:6
theoretically 127:5,13
there's 23:20 36:11 38:3 41:9
 51:3 84:14 158:6
Theresa 2:16 6:20
they'd 18:7 90:7 103:13
They'd 126:22
they're 89:16

they've 123:21
thick 36:22 168:3
thing 13:14 24:10 55:15 69:25
 82:24 84:14 85:18 97:20
 100:10 129:3 142:17 143:11
 150:4 152:19 160:10,25 166:21
 167:8
things 21:6 28:2 29:13 80:19
 81:22 88:6 91:9 93:8 102:7
 110:8,12 134:4,14 142:6 145:5
 147:12,18 150:15 151:5,10
 161:11,11 167:6
think 15:22 20:24 22:16 24:8,11
 24:24 48:20 51:23 59:17 62:11
 62:12,14 65:8,9 70:9 71:22
 73:16,17 74:23 75:3 78:3
 82:21 83:18 86:12 87:9 89:20
 90:10 92:13,18,19 93:6 94:8
 96:7 98:14 106:21 107:6
 112:18 114:3 117:15 124:5,13
 130:17 132:7,9 133:9 134:6,15
 134:15 136:9,25 138:16 140:24
 141:3 142:2 143:11 144:5
 145:11 147:12 148:23 151:22
 152:7 155:5 161:17 168:15
thinking 128:5
thinks 152:11
third 106:19,19,22
thirty 138:13 140:22 145:21
 148:21 150:17 153:9 157:11
 159:19 161:24 168:22
THOMAS 2:22
Thompson 2:10 6:7,8
thorough 166:7
thought 74:22 75:24,25 140:10
 140:16 147:17,18
thousand 78:16
thousands 64:3 80:24
threats 140:18
three 37:23 38:3 41:11 55:2
 69:9 79:7 84:16,24 85:2 90:5
 100:11,12 106:8,24 111:23
 112:21 120:22,23,23 134:18
 138:7 146:14,18 148:9 151:6
three-and-a-half 169:11
three-foot 36:22
three-minute 166:17
three-paragraph 75:10
three-quarters 71:21
throw 20:16

<p> thrummed 157:9 Thursday 1:8 tied 53:19 57:10 tiering 107:22 ties 162:18 tightly 19:13 Tim 82:18 time 9:6 29:20,22 31:15 32:2,4 34:12 46:21 51:2 61:10,11 62:10 75:11 85:24 91:13 100:2 118:18 122:12 126:3 127:2 134:14 136:11 141:11 147:13 147:20 159:14 162:11,13,25 165:15 166:19 167:14 169:2 171:4 time's 84:13 timeframe 38:17 126:3 timeline 119:17,19 165:9 timely 166:7 timer 138:11 times 55:2 76:9 80:24 84:16 109:17 122:11 148:19 149:13 Tina 3:19 138:4 141:17 tip 11:6 tipped 25:6 tips 11:7 tired 162:3,4 title 131:18 today 9:19 25:21 31:20 42:8 71:2,18 75:5 95:4 105:16,17 105:18 106:5 155:21 told 57:5 59:18 60:11 73:21,22 130:23 Tom 2:4,5 5:6,10,12,13,14,14,18 7:9,12 8:6,9,11 10:11 13:2 17:10,14 95:14 108:23 109:19 137:23,25 163:4 166:13 170:5 tomorrow 9:20 tonight 5:9 12:24 21:9 66:16 67:11 105:4 109:4,10 110:18 117:7 138:10 139:9 140:7 142:2 144:21 147:14 149:14 162:17 169:19 tonight's 108:8 138:21 Tony 109:12 tool 50:22,23 51:3 tooth 73:18 top 27:2 37:25 38:5,10 46:16 87:6 111:11 112:23 127:15 151:21 152:8 </p>	<p> topic 32:13 110:17 total 41:19 113:23,25 143:17 totally 30:7 152:20 totals 12:17 touch 15:25 tough 69:20 toured 62:23 tourism 158:10 tourist 80:13 94:12 tours 43:24 towers 111:12 town 1:10 3:24 75:21 76:24 86:8 92:3,7,14,19 95:17 96:10 97:12,23 159:12 160:15 161:9 towns 85:15 158:9 toxicity 82:24 83:6,25 90:23 94:4 134:24 135:12,17 158:6 toxify 139:14 track 51:6 Tracy 3:15 164:10,13,23 Tracy's 164:14 trailblazers 63:12 training 57:17 transaction 48:6 transcription 7:22 171:6 transfer 13:17 48:2 79:22 80:2 118:24 159:7 transferred 13:18 76:13 77:23 79:2 89:12 transferring 79:20,21 124:21 transport 118:19,24 132:5 152:22 transportation 36:17,18 139:7 transported 52:16 123:9 transporting 122:21 140:7,8 152:21 transports 140:9 travel 83:13 traveling 42:14,15,17 treat 125:15 126:5 treated 125:17 126:14 129:6,9 treatment 116:23,23 126:18,22 tried 44:4,4 trip 67:3 tritiated 59:19 80:17 81:5 83:17 86:3 91:2,6,21 92:11 95:19 106:12 143:5 161:18 163:10 165:13 tritium 48:9,11,13,19 49:19 51:23,25 52:9 54:15,17 63:6 </p>
---	--

75:18 80:20,23,23 81:3,3,13 81:19,25 82:4,8,20 83:2,11,14 84:2 86:3,7 89:20 90:22,23,25 90:25 91:9,13,15 94:6 95:20 98:6,6 101:21 103:14 135:9,17 135:21,23 142:14 143:17 146:13 158:16	two-story 70:2 type 36:2 49:17 63:13 101:3 104:17 113:15 150:3 typewritten 171:6 typically 118:16
Tromblee 2:14 7:5,6 10:21 28:7 29:3 31:12 65:13,16 66:3 102:12,25 104:3,7,14,19 154:25	U
Troy 68:25	U.K 82:17
truck 107:24 114:25 116:2,20	U.S 113:13 152:16
trucking 107:3 119:14 123:6 134:3	U2 20:4 25:11
trucks 46:24 106:13 118:23 122:19,20 123:9	Uh-huh 121:11,17 122:6
true 58:23 106:17,19 171:7	Ukraine 88:9,11
trust 11:19 12:7,9 23:20 47:21 47:23 48:3 65:2,17,19,21 115:19 116:12	Uljaj 3:6 7:3 10:16,25 64:23
trusted 99:7	ultimate 131:4
Trusts 23:25	ultimately 25:2 37:17 80:3,4 93:18 101:23 129:14
truth 147:22	uncertain 157:17
try 19:20 40:22 75:10 123:23 138:8,10 147:14,16	uncontaminated 112:12,23
trying 24:19 55:25 128:11	undefined 81:9
tune 116:20	undergo 121:5
turbine 14:16 53:14,19 70:4 75:19 76:21,23 79:24 80:18 83:18 85:3,6,8,10,19,25 86:6 86:8,14,20 90:8 92:10 100:22 105:12,15,22 106:2 111:13,25 124:15,20 136:24 158:14,23	underground 40:11 41:19
turn 5:10 7:14 8:6,19 10:8 11:9 15:24 78:6 95:9 137:23 146:6	undermined 45:19
turned 104:9 133:10	underneath 59:8 102:19 127:9 128:19
turning 11:17 12:23 52:14 98:10 98:11	understand 22:2 24:15 49:5 55:23 61:23 90:14 134:25 160:21
Turturro 2:8 6:3,4 15:24 16:3 21:20 26:18,23 27:2,5,9,13	understanding 20:11 98:7
twisted 50:24	understood 56:8 100:5
two 8:20,20 9:13 14:25 16:15 37:23 38:4,12 42:2 48:8,10 57:3 64:16 66:15 78:15 80:18 82:22 83:3,4 96:8 102:13 107:2 108:2 115:11,22 120:13 124:22 127:9 133:23 135:4 136:5 142:5 146:17 155:6 156:8,11 163:18 164:8,9	undetected 87:19
	unexpected 75:18
	Unfortunately 115:16
	unheated 86:23,24
	UNIDENTIFIED 133:9 169:24
	unintelligible 153:19 154:10 167:21 169:25
	union 2:19 67:19,22 68:2,2,7,8 68:15 155:16
	unions 68:12
	unique 11:21 82:23
	unit 14:17,18,19,21 20:5 25:11 31:24 32:3,17,18,22 33:5,6,8 33:13,18,19 34:6,19 35:9,23 36:6,7 37:9,14,15 38:25 41:17 41:17,23,24,24 42:5,7,13,16 43:16,16 53:4,4,4,5,21,21,21 53:22,23 54:24 64:17,17,18,19 64:19 79:21,22 103:8,11,21 124:24
	United 131:3,17,22 137:2,4

157:22
units 42:11 72:3 103:20 124:22
 127:8,9 128:5
unmonitored 87:12
unnecessary 81:11 94:9
unpressurized 89:8
unreasonable 94:9
unscientific 81:11 83:22
unspecified 81:9
unsurprisingly 58:3
unwarranted 81:10 83:22
upcoming 117:14 155:4
update 9:22 11:10 19:19 32:8,9
 32:12 56:24 62:22
updated 132:14
updates 15:5 32:6 99:5
upgrades 93:21
upper 32:21 33:21 37:20 38:11
 41:8
urgency 153:25
use 43:10,10 44:6,7 47:16 48:14
 49:13 51:3 54:8 65:17,22
 76:21 79:5 90:5 100:17 104:13
 104:17 114:24 143:20 146:3
 161:10
uses 43:14 49:18 115:3
usually 109:11
Utah 121:19,21
utility 2:19 29:5
utilize 120:5

V

V.C 54:8
V.C.s 53:4
V.P 69:15,20 73:21
vacated 149:25
vacations 70:24
validating 33:14
Valley 3:16 85:19 110:5 116:16
 116:22 138:19 168:8,14
value 43:11 45:11 94:20
valves 39:5
Vann 3:20 146:23 149:7,9,9
 150:18 151:14
vapor 54:12
various 25:5
vendor 57:19 155:3
vendors 48:10
vent 77:13 88:24
vents 88:20

venture 127:14
Veolia 48:13
Vermont 66:19 75:17,25 76:23
 86:6,7 90:8 92:10 93:15,16,17
 94:3 101:5,11 103:2,3,6,23
 105:6,10 106:11,12 107:24
 108:13,20 110:5,17,20,23
 111:2,4,8,16,22,24 112:11,22
 112:25 113:7,12,13,16,21
 114:11,17,18 115:9,15,23,25
 116:5,12 117:17 118:21 119:11
 124:2,4 140:25 168:3
Vermont's 109:13
Vermontster 168:2
Vernon 110:25
versus 24:10 25:8 77:22 78:18
 103:8
vertical 33:22 37:25,25 39:20
 43:8,11
vessel 25:16 31:24 33:8,17 35:2
 35:23 36:7
veteran 155:13
viability 94:13
viable 76:2 88:9 90:19 91:17,18
 139:7
vice 2:20 31:18 73:20
video 106:5 107:2 136:6,7
videos 66:12
view 37:20
viewing 135:3
village 2:15 4:2 27:16 28:4,24
 44:22 62:22 91:19 99:21
 100:25
village's 91:22,23
violation 22:22 23:9 25:4 65:19
violations 20:8,10 32:12 73:22
visible 161:2
visit 40:23
visitor 41:3
visitors 80:12
visits 132:15
visual 144:11
voice 101:4
volatilize 142:14
volatilizes 142:11
volume 62:5 77:14 87:22 89:8
Volz-Bongar 3:19 138:4 141:17
 141:19 143:12

W

<p>Wacha 6:12,13 wages 68:8 wait 84:8 91:14 waiting 54:18 walk 41:2 walkdown 14:20 walked 67:25 Wall 150:11 walls 34:3 35:24 36:23 37:12 want 7:15 9:17 10:22 23:23 24:8 33:10 48:8 49:12,13 51:24 55:15 56:5,6 62:21 66:14,21 67:4,12,15 86:10 94:16 97:21 98:14 99:2 104:22 107:14,21 108:8,12,16 125:20 131:21 132:19 135:10 141:19 143:16 161:16 162:9,14,14,22 163:8 166:16 wanted 22:2 74:11 102:8 124:17 136:18,22 163:23 wants 90:10 154:22 warmer 46:5 Warren 160:14 Washington 82:18 85:22 wasn't 30:22 52:7 84:23 99:23 152:24 waste 32:11 35:10,17,18,18,19 35:23 36:13,22,24 37:3 38:17 38:19 48:7 49:15 50:3 53:3,8 53:11 54:6,16,20,23,24,25 55:24 64:9,16 74:13 79:21 113:15,18 114:9 118:3,11,22 118:24 120:23,25 121:15 131:12,25 139:25 140:8,19 144:23 145:2,16,18,20 146:4 150:7,9 157:24 159:16 163:14 wastes 148:10 wastewater 9:3 56:21 60:3 61:13 63:6 66:17 109:6,7,22 111:21 111:23 113:8,17 114:17,25 115:4,13,16 116:11,14,18 117:9,13,18 118:2,6 119:6,15 119:21,22 120:13 123:13,21,24 125:16,17 139:25 152:21,23 158:7 watching 23:24 79:14 136:14 water 37:18 41:23 42:15,16,18 44:19,23 48:11 51:25 59:19 60:13,15,17,21,24 61:23 62:25 66:23 76:4,8,13 77:10,11,14</p>	<p>77:22 78:25 80:2,17,20 81:5 82:8 83:17 85:16,16 86:3 87:2 87:16,21,21,22 88:5,16,21,22 89:14,17,17 90:25 91:2,3,3,5 91:6,22 92:11 94:9 95:19 96:12 98:10 101:8,21 103:8,9 103:10 105:21,25 106:12,21 107:3,5 110:25 112:4,5,10,13 112:14,15,17,18,19,23,24 113:2,3,6,6,19,20,24 114:2,3 114:4,4,8,10,22 116:3,6 117:10,20 118:8,13 119:17,24 121:3,21 122:2,3,8 124:16 126:6,12,14,19 139:12 140:11 141:6 142:7,12,19,21,22,24 143:3,5,8,10 149:15 150:10,23 158:8,16 161:18 163:10 165:2 165:14 168:9 WATERS 2:19 waterways 97:16 way 13:20 19:8 24:16 28:2,25 39:12 51:3,24 75:15 84:25 92:20 96:10 99:9,10 106:10 126:23 133:14 159:14 162:6,21 ways 51:22 139:15 we'll 10:2 15:20 25:24 31:23 32:10 34:13,13,14,14,16 35:7 37:2 38:9,9,15 39:6,6,11,12 40:13,21 41:7,14 42:13,15,20 42:24 45:20 46:17 47:6,7,7 57:13 59:15 84:3 100:17 132:17,18 138:5,6 146:15 155:7 164:16 we're 8:13,14,19 11:8 30:19 33:6,9 34:10,11,16 35:6,22 37:10 38:6,7,7,15,20,20 39:10 39:20,25 40:3,6,10,11,12,21 41:5,12,14,20 42:4 47:2 49:16 49:16 51:5,6 52:2,2 53:17 56:17,20 62:7 66:12 67:2 68:22,22 71:4,4,4 74:11 87:25 104:22 108:7 110:9 137:19,19 138:8,10 147:5 148:3,5 150:9 150:22 153:5 154:8 162:24,25 165:5 we've 9:24 26:12 32:18,18 41:24 45:9 66:10,12 71:10 73:4 83:8 117:7 129:8 147:19 149:14 165:2 we're 31:23 42:11 49:25 56:22</p>
---	---

we've 63:12
weak 81:15
weaknesses 30:13
weapon 159:11
weapons 82:10
weather 46:5 87:2
website 9:23 12:20,21 26:5,7
 63:25 64:4 169:21,23
Webster 2:24 6:18,19 26:9,12,21
 26:24 27:4,6,11,14 54:13 55:7
 55:10,18,23 56:8,13 57:2,25
 58:8,10,17,22,25 59:9,13,17
 60:4,9,14,18,20,23 61:4,25
 62:4,9,15 126:11,21
wedge 103:15
week 41:25 50:9 68:18 69:22
weeks 16:15
welcome 5:5 8:22 10:2,15,23
 31:16 105:4
weld 23:2,7 24:10 25:8 33:3
 34:10
welfare 167:24
well-thought-out 75:13
wells 16:22 129:20
went 44:18 50:23 71:6 73:23
 87:19,19 99:25 106:5 121:21
 121:23 163:15 170:4
weren't 30:2
West 110:5 116:16,21
Westchester 2:17,21 3:4 105:5
 168:3
Westinghouse 71:25
whatsoever 45:4
Wheat 49:2
Wheelabrator 151:25
WHEREOF 171:9
whistleblower 11:8 68:13 73:21
whistleblowers 71:5
white 4:4 39:2,2 111:11 136:8
wholly 71:17
wife 70:19 71:5 74:14,21 94:16
wildlife 140:12
Williams 3:21 106:6 146:23
 149:8 151:2,3 153:10,19
 154:10
willing 18:8
window 52:25 133:24
WINDS 3:10
wishes 14:7
withstand 86:2

WITNESS 171:9
won 145:14
wonderful 141:3,21
words 107:6 111:19 131:16
 138:17 139:9
work 8:11 10:2 14:10,22 16:7,9
 16:12 19:8,24 20:2 23:4 26:20
 30:12 31:21 33:11 38:15,20
 39:12 40:3,13 42:10 44:5
 46:11 47:3,4 48:16 51:2 63:14
 66:13 68:18 71:11 108:17
 119:14 120:12,21 123:3 156:25
 157:5 164:21 168:17
worked 70:17
workers 31:22 32:16 35:3,7
working 28:2 33:18 37:2 40:6,15
 40:21 74:21 132:4 135:25
 143:23 160:20 166:5
works 48:16 91:9
world 70:4
worried 85:9
worries 10:19
worse 84:18 135:6 137:11
worth 76:2 118:16 132:9
wouldn't 29:7 79:13 126:14,21
 161:22 168:16
wound 69:15
Wow 67:10
wrapping 138:14
wrist 147:24
write 68:16
writing 73:10,11,13
written 102:8 129:4 169:22,22
wrong 50:23
wrote 83:10 90:2 136:14

X

X-ray 96:5

Y

Yankee 66:20 75:17 76:23 86:6,7
 90:8 92:11 93:15,18 94:3
 101:5,11 103:2,3,6,23 105:10
 106:11,12 107:24 108:13,20
 110:5,17,20,23 111:4,8,16,22
 111:24 112:11,22 113:7,12,13
 113:16 114:11,17,19 115:9,15
 115:25 116:5,12 117:17 118:21
 124:3,5 140:25 168:4
Yankee's 119:11

Yankee's 93:16	1.8 12:19
yard 70:11	10 47:13 48:5 88:14 116:20
yeah 6:19 19:11 21:16,17 26:11	119:7 128:22 137:19,20
27:5 29:7 52:19 54:12 56:4,19	10-court 86:15
58:6 59:6 65:6 67:10 100:17	10% 91:2,2
100:18 105:20 106:3,17,24	100 57:20 70:2 152:16 168:24
121:12 126:5,11 136:17 142:5	100,000 114:9
167:19,19 170:2	104 142:11
year 14:11 19:5 23:13 29:22	10567 1:12
35:13 47:12 58:14 67:13 83:11	10th 48:12
91:20 106:6 128:25 151:12,13	11 12:8 38:13 39:5,11
156:14	118 16:12
years 27:24 28:20 29:17 30:3	12 38:13 39:5 41:23,24 90:2
35:24 38:12 48:5 52:6,7,21,23	13 38:14 39:6,17 119:9
52:24 53:2 57:18 67:20 69:13	137 103:14
70:10 74:25 75:2 79:5 82:4	138 40:19
92:4 93:15,17,18,21 100:5	13th 16:17 170:6
111:5 114:18 127:25 133:4	14 38:14 39:6,17 41:19
134:12 135:24 141:10 143:24	14.3 93:6
144:25 148:16 156:12,12,19	15 41:9 57:18
160:21	15% 73:7
years-worth 156:8	150 143:4
yellow 112:6	1500-gallon 57:16
York 1:2,12 2:25 3:3 5:8 13:24	16 68:20
23:14,16 49:24 68:25 70:9,10	160-foot-long 42:8
70:18 105:5 110:6 116:15	169 171:7
138:19,24 146:10 147:3 149:12	18th 49:23 64:24 149:12
156:7,20 158:20 159:17 165:16	1956 37:16
168:8 171:2	1962 37:16 39:8
Yucca 131:13,13	1970s 82:4
	1971 81:16
Z	1974 131:7
zero 101:12	199 137:3
Zion 71:23,24 72:3,5,6,9 103:19	
103:19,25 104:4,6,18 127:17	2
Zion's 104:4	2 14:18,18 20:5 25:11 32:17,18
Zoom 1:14 7:24 8:2	32:22 33:5,8,18 34:6,19 36:6
	37:9 41:17,23 42:7 43:16 53:4
0	53:4,21,22 54:24 64:17,19
0.10g 43:8	72:2,3 78:17 79:22 87:9 89:21
0.15g 43:8	103:20 104:2,2 127:8 128:5
	2-unit 71:25
1	2.8 149:10
1 1:11 14:21 31:24 32:3 37:14	20 11:12 69:13 93:16,21 106:7
37:15 38:25 42:16 43:22 53:21	20-mile 141:5
53:23 64:17 103:21,25 127:8	20-year 155:13
128:5 171:5,7	2010 103:13
1-2 2:19	2014 111:2
1.3 61:9 89:21 100:16,18 102:2	2017 73:5 99:4 115:24 119:11
117:8,15 119:8	2017-18 29:14

<p>2018 116:4, 7 119:11 2019 111:3 113:11 2020 116:17 2021 30:24 114:5 116:17 2022 114:5 2023 16:8,13 45:9 47:17 49:25 114:7 117:21 149:18,21 150:5 2024 1:8 16:17,18,24 41:18,20 50:13 51:4 113:22 171:10 2025 38:13 2026 111:6 2063 48:3 212 91:4 214 91:4 22nd 49:10 50:12 23,000 116:17 24th 49:6 25 1:8 128:24 250-plus 155:16 25th 105:18 26 38:14 279 49:24 27th 149:24 28th 16:18 29th 47:12 2nd 171:10</p>	<hr/> <p style="text-align: center;">4</p> <hr/> <p>4 38:17 41:19 116:2,9 119:7,10 4-loop 71:25 4.8 43:2 4/25/2024 1:1 2:1 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 93:1 94:1 95:1 96:1 97:1 98:1 99:1 100:1 101:1 102:1 103:1 104:1 105:1 106:1 107:1 108:1 109:1 110:1 111:1 112:1 113:1 114:1 115:1 116:1 117:1 118:1 119:1 120:1 121:1 122:1 123:1 124:1 125:1 126:1 127:1 128:1 129:1 130:1 131:1 132:1 133:1 134:1 135:1 136:1 137:1 138:1 139:1 140:1 141:1 142:1 143:1 144:1 145:1 146:1 147:1 148:1 149:1 150:1 151:1 152:1 153:1 154:1 155:1 156:1 157:1 158:1 159:1 160:1 161:1 162:1 163:1 164:1 165:1 166:1 167:1 168:1 169:1 170:1 171:1 40 2:25 35:24 40-hour 68:18 400 32:15 48:5 51:17 85:23 155:21 400-ton 42:8 400,000-gallon 100:20 44 67:19 45 50:9 49 41:16</p>
<hr/> <p style="text-align: center;">3</p> <hr/> <p>3 14:19 33:6,13,19 35:9,23 36:7 41:17,24,24 42:5,13 43:16 47:22 53:4,5,21,23 64:18,19 72:2 77:21,22 78:18,22 79:21 100:20 103:20 104:2 3.3 113:23 3.5 116:5 3.6 43:4 63:24 30 77:21,22 78:13,18 137:21 170:3 30-foot 50:22 30-minute 138:9 30-year 45:10 30% 156:2 300 72:23 300,000 114:5 30th 155:7 31 41:18 31st 47:17,21 345-kV 40:20 35 129:16 160:20</p>	<hr/> <p style="text-align: center;">5</p> <hr/> <p>5 38:17 83:16 119:9 5-year 156:18 50 47:13 156:15</p>

50-plus 74:25 75:2
50% 73:9 156:18
500,000 94:19 154:12,17
50s 99:24 160:9
5th 43:3

6

6 41:24 84:12
6.0 43:19 85:6
6:05 1:9 5:2
60 93:18 103:14 127:25 133:4
141:9 156:7
60-year 141:7
62 100:2
6th 96:11

7

7 86:22
7.5 45:10
70 131:11 144:25 148:19
70,000 143:2
71 75:2
75 135:24 156:18
76 143:19

8

8 41:18
80,000 142:19
800 72:6,10
800,000 116:6
82 47:13
85% 73:10

9

9 85:8 88:8
9:20 1:9 170:8
90 103:14
900,000 114:4
93 38:17
95 3:3
99 142:9,10,13,14
9th 149:21