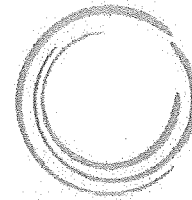


3225 MAIN STREET • P.O. BOX 226
BARNSTABLE, MASSACHUSETTS 02630



CAPE COD
COMMISSION

(508) 362-3828 • Fax (508) 362-3136 • www.capecodcommission.org

Minutes

Meeting

Cape Cod Commission

East Wing Conference Room • 3195 Main Street, Barnstable, MA 02630

May 2, 2019

The meeting was convened at 3:00 p.m., and the Roll Call was recorded as follows:

Town	Member	Present
Barnstable	Fred Chirigotis	Present (<i>arrived at 3:10 p.m.</i>)
Bourne	Richard Conron	Present
Brewster	Elizabeth Taylor	Present
Chatham	Tom Wilson	Present
Dennis	Richard Roy	Absent
Eastham	Joy Brookshire	Absent
Falmouth	Charles McCaffrey	Present
Harwich	Jacqueline Etsten	Present
Mashpee	Ernest Virgilio	Present
Orleans	Len Short	Present
Provincetown	Cheryl Andrews	Present
Sandwich	Harold Mitchell	Present
Truro	Kevin Grunwald	Present
Wellfleet	Roger Putnam	Present
Yarmouth	John McCormack, Jr.	Present
County Commissioner	Ronald Bergstrom	Absent
Minority Representative	John Harris	Present
Native American Rep.	David Weeden	Present
Governor's Appointee	Michael Maxim	Absent

The Cape Cod Commission Meeting was called to order on Thursday, May 2, 2019 at 3:00 p.m. in the East Wing Conference Room, Barnstable County Complex, 3195 Main Street, Barnstable, MA. Roll was called, and a quorum was established.

Chair Harold Mitchell welcomed and introduced Stephen Mealy who was recently appointed as the Bourne Representative to the Cape Cod Commission.

Stephen Mealy said he has served on the Planning Board and Board of Selectmen in the Town of Bourne and his professional experience is in mechanical engineering.

SUMMARY OF ACTION TAKEN

- **Minutes:** The minutes of the April 4, 2019 Cape Cod Commission Meeting were approved with 13 votes in favor and one abstention (Stephen Mealy).
- **Public Hearing—Vineyard Wind Connector:** Following presentations, public testimony and discussion the Commission voted unanimously to close the public hearing. The Commission then voted to adopt the draft written Development of Regional Impact (DRI) decision as recommended by the Hearing Officer and grant DRI approval for the Vineyard Wind Connector project subject to the conditions set out in said decision.

■ TRANSCRIPT OF THE CAPE COD COMMISSION MEETING ATTACHED

Attached is the transcript of the May 2, 2019 Cape Cod Commission Meeting prepared by Linda L. Wesson, Professional Court Reporter/Stenographer. The transcript includes:


- Public Comment by Chris Powicki
- Approval of Minutes of the April 4, 2019 Cape Cod Commission Meeting
- Executive Director's Report
- Public Hearing: Vineyard Wind Connector Project

■ NEW BUSINESS: *Topics not reasonably anticipated by the Chair more than 48 hours before the meeting.*

No new business was taken up.

A motion was made to adjourn at 5:15 p.m. The motion was seconded and voted unanimously.

Respectfully submitted,


Elizabeth Taylor, Secretary

List of Documents Used/Presented at the May 2, 2019 Meeting

- May 2, 2019 Cape Cod Commission Meeting Agenda.
- Draft meeting minutes of the April 4, 2019 Cape Cod Commission Meeting.
- Draft Development of Regional Impact Decision on the Vineyard Wind Connector Project.
- PowerPoint presentation on the Vineyard Wind Connector Project prepared by Vineyard Wind LLC.

COMMONWEALTH OF MASSACHUSETTS

CAPE COD COMMISSION

PUBLIC HEARING:

VINEYARD WIND CONNECTOR

HELD ON THURSDAY, MAY 2, 2019

ORIGINAL

This transcript is prepared by Linda L. Wesson, Certified Verbatim Reporter and Notary Public in and for the Commonwealth of Massachusetts, held at the East Wing Conference Room, Barnstable County Complex, 3195 Main Street, Barnstable, Massachusetts, 02630, commencing at 3:00 p.m.

* * * * *

CANAL COURT REPORTING
15 Lakewood Road
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(508) 888-4676

A P P E A R A N C E SCape Cod Commission Staff:

Ms. Kristy Senatori, Executive Director

Mr. Jonathan Idman, Chief Regulatory Officer

Barnstable, Fred Chirigotis

Bourne, Stephen Mealy

Brewster, Elizabeth Taylor, Secretary

Chatham, Tom Wilson

Falmouth, Charles McCaffrey

Harwich, Jacqueline Etsten

Mashpee, Ernie Virgilio

Orleans, Leonard Short

Provincetown, Cheryl Andres

Sandwich, Harold Mitchell, Chair

Truro, Kevin Grunwald

Wellfleet, Roger Putnam

Yarmouth, Jack McCormack, Jr., Vice Chair

Minorities, John Harris

Native Americans, David Weeden

P-A-R-T-I-E-S

Mr. Nathaniel Mayo, Vineyard Wind

Ms. Kate McEneaney, Vineyard Wind

Mr. Theodore Barten, Vineyard Wind

Mr. John Arruda, Vineyard Wind

Mr. Charles McGlaughlin, Esquire, Town of Barnstable

Mr. Chris Powicki, Brewster Resident

Ms. Marjorie Thearle, W. Hyannis Port resident

1 machine to make sure everybody's registered.
2 Keep in mind, also, that if a member comes in
3 late, I will be announcing that member. I will
4 be taking a minute to announce that member as
5 present so it goes into the public record and
6 they don't have to vote into the machine. It's
7 still a learning curve; we're still learning, you
8 know, getting all this down, so please stay with
9 us and we'll get through it, I promise you.

10 Roll Call

11 CHAIR HAROLD MITCHELL: So at this
12 time, we'll start with roll call and, remember,
13 when Elizabeth calls your name at that time you
14 will hit the button, flashing button on your
15 machine and that will register you as being
16 present. Thank you.

17 MS. LIZ TAYLOR: Barnstable, Fred
18 Chirigotis.

19 MR. FRED CHIRIGOTIS: (Arrived after
20 roll call.)

21 MS. LIZ TAYLOR: Bourne, Stephen Mealy.

22 MR. STEPHEN MEALY: Present.

23 MS. LIZ TAYLOR: Welcome.

24 MR. STEPHEN MEALY: Thank you.

1 MS. LIZ TAYLOR: Brewster, Elizabeth
2 Taylor. Present. Chatham, Tom Wilson.
3 MR. TOM WILSON: Present.
4 MS. LIZ TAYLOR: Dennis, Richard Roy.
5 MR. RICHARD ROY: (Not present.)
6 MS. LIZ TAYLOR: Eastham, Joy
7 Brookshire.
8 MS. JOY BROOKSHIRE: (Not present.)
9 MS. LIZ TAYLOR: Falmouth, Charles
10 McCaffrey.
11 MR. CHARLES MCCAFFREY: Present.
12 MS. LIZ TAYLOR: Harwich, Jacqueline
13 Etsten.
14 MS. JACQUELINE ETSTEN: Present.
15 MS. LIZ TAYLOR: Mashpee, Ernest
16 Virgilio.
17 MR. ERNIE VIRGILIO: Present.
18 MS. LIZ TAYLOR: Orleans, Len Short.
19 MR. LEONARD SHORT: Present.
20 MS. LIZ TAYLOR: Provincetown, Cheryl
21 Andrews.
22 DR. CHERYL ANDREWS: Okay. I'll be
23 difficult because I don't see green; I see
24 yellow, so I hit that?

1 CHAIR HAROLD MITCHELL: Yes.

2 DR. CHERYL ANDREWS: No, it's the
3 yellow one.

4 MS. LIZ TAYLOR: Sandwich, Harold
5 Mitchell.

6 CHAIR HAROLD MITCHELL: Present.

7 MS. LIZ TAYLOR: Truro, Kevin Grunwald.

8 MR. KEVIN GRUNWALD: Here.

9 MS. LIZ TAYLOR: Wellfleet, Roger
10 Putnam.

11 MR. ROGER PUTNAM: Here.

12 MS. LIZ TAYLOR: Yarmouth, John
13 McCormack, Jr.

14 MR. JACK MCCORMACK, JR.: Here.

15 MS. LIZ TAYLOR: County Commissioner,
16 Ron Bergstrom.

17 Commissioner BERGSTROM: (Not present.)

18 MS. LIZ TAYLOR: Minority
19 Representative, John Harris.

20 MR. JOHN HARRIS: Here.

21 MS. LIZ TAYLOR: Native American
22 Representative, David Weeden.

23 MR. DAVID WEEDEN: Here.

24 MS. LIZ TAYLOR: Governor's Appointee,

1 Michael Maxim.

2 MR. MICHAEL MAXIM: (Not present.)

3 MS. LIZ TAYLOR: We have a quorum.

4 CHAIR HAROLD MITCHELL: Thank you, very
5 much. So everybody's button was steady, so that
6 means that you voted. Thank you, very much.

7 At this time, I'll open the microphone
8 for public comment. This will be for anyone that
9 would like to make a comment. And while I'm
10 opening that up, I'm going to take this
11 opportunity to also welcome our new member of the
12 Commission, Mr. Stephen Mealy from Bourne.
13 Congratulations and welcome.

14 MR. STEPHEN MEALY: Thank you, very
15 much.

16 CHAIR HAROLD MITCHELL: If you'd like
17 to take a minute to introduce yourself to the
18 Commissioners, you will hit the button down
19 below. Your mic will go red and that means
20 you're hot and ready and you can go with it.

21 MR. STEPHEN MEALY: I'd just like to
22 say thank you for having me as a representative
23 from Bourne. My background is technical; I'm an
24 engineer by trade, and I served on both the

1 planning board and member and chairman in the
2 Town of Bourne as well as the Board of Selectmen.
3 So I've got some background and experience, and I
4 hope to contribute to the decisions here, and
5 thank you, all, very much.

6 CHAIR HAROLD MITCHELL: Thank you and
7 welcome. And we already know that you've taken
8 an appointment on the upcoming DRI Committee, so
9 thank you for that.

10 Public Comment

11 CHAIR HAROLD MITCHELL: At this time,
12 we'll start with any public comment.

13 MR. CHRIS POWICKI: Hi, sir. Thank
14 you, Mr. Chair.

15 CHAIR HAROLD MITCHELL: Introduce
16 yourself to the Commissioners, please.

17 MR. CHRIS POWICKI: Chris Powicki from
18 the Town of Brewster. I'm here speaking today on
19 behalf of representatives or on behalf of 350
20 Cape Cod. And a month ago on April 1, 350 Cape
21 Cod submitted a petition to the Cape Cod
22 Commission including signatures for more than 300
23 people calling for amendments to the Cape Cod
24 Regional Policy Plan. The petition was entitled,

1 "Petition to Focus the Cape Cod Regional Policy
2 Plan on Addressing Climate Change." It was
3 submitted under a County ordinance that allows
4 citizens to petition before or on April 1 each
5 year. It was submitted with more than 300
6 signatures.

7 And the last we heard from the
8 Commission, I believe, was a week after the
9 petition was submitted was that we would get a
10 date for when the required public hearing would
11 be held. And so I'm here today asking if there's
12 an update on that; when the public hearing will
13 be held?

14 Thank you.

15 CHAIR HAROLD MITCHELL: I'm going to
16 let our Director respond to you, sir.

17 MR. CHRIS POWICKI: Thank you.

18 EXEC. DIR. KRISTY SENATORI: Thank you.
19 And we have been in touch. Certainly, we were in
20 receipt of the petition. Unfortunately, it was
21 not filed properly; however, we have been in
22 touch. We've been certainly aware of and
23 cognizant of the climate change efforts, and
24 spent a significant amount of time amending the

1 Regional Policy Plan during your last update of
2 that plan, which was just approved a few months
3 ago.

4 So as Mr. Powicki did identify, we did
5 -- we did offer to host a public session on
6 climate change, and we will be doing so and we
7 are organizing internally around that and will
8 have a date soon.

9 MR. CHRIS POWICKI: If I might respond,
10 Mr. Chair?

11 CHAIR HAROLD MITCHELL: Go ahead.

12 MR. CHRIS POWICKI: The petition was
13 filed in a legitimate way consistent with the
14 language in the ordinance. It was not
15 incomplete. There are different ways to
16 interpret the one sentence that's in the
17 applicable ordinance.

18 Our position is that the petition was
19 filed in a timely fashion. More than 300
20 citizens are asking for a public hearing on this,
21 and we would like the Cape Cod Commission members
22 to consider this petition, to respect the will of
23 the citizens, and to call a public hearing as
24 required. Thank you.

1 CHAIR HAROLD MITCHELL: Thank you.
2 Anyone else? Seeing none. I'll close off the
3 public comments at this time.

4 Approval of Minutes

5 CHAIR HAROLD MITCHELL: And now we'll
6 go back to the approval of the minutes. These
7 are potential approval of the Cape Cod Commission
8 Minutes for April 4, 2019. You all received a
9 copy. If there are no changes or amendments
10 needed to be made, I'll take a motion to accept
11 those as written.

12 MR. JACK MCCORMACK, JR.: Move they be
13 approved as written.

14 MR. TOM WILSON: Second.

15 CHAIR HAROLD MITCHELL: I have a motion
16 and a second as written. All in favor, say,
17 "Aye."

18 COMMISSION MEMBERS: Aye.

19 CHAIR HAROLD MITCHELL: Any opposed?
20 Any abstentions?

21 MR. STEPHEN MEALY: One.

22 CHAIR HAROLD MITCHELL: One abstention.
23 Thank you. So the minutes carry.

24 (Minutes passed.)

1 Executive Director's Report

2 CHAIR HAROLD MITCHELL: Now we'll go to
3 our Executive Director's report with Kristy.

4 EXEC. DIR. KRISTY SENATORI: Thank you,
5 Mr. Chair. I, too, would like to welcome Stephen
6 Mealy who is our new representative from the Town
7 of Bourne, so we welcome you to the Commission.

8 MR. STEPHEN MEALY: Thank you.

9 EXEC. DIR. KRISTY SENATORI: It's not
10 working. Is it on now? There we go. Thanks.
11 And also while we're providing some updates, I
12 just wanted to recognize and congratulate several
13 of our staff members that will be retiring. As
14 you recall, there's an Early Retirement Incentive
15 Program being implemented at the County level and
16 five of our staff members are going to be leaving
17 us on May 15. And so I just wanted to recognize
18 them, so if you don't mind standing. So Patty
19 Daley, who is our Deputy Director; Sharon Rooney,
20 our Chief Planner; Gail Hanley, our Commission
21 Clerk; Lev Malakhoff, our Senior Transportation
22 Engineer, and Scott Michaud our Hydrologist. So
23 combined they have 127 years of experience with
24 the Cape Cod Commission, and so we wanted to

1 thank them for their service.

2 (Applause.)

3 EXEC. DIR. KRISTY SENATORI: So I want
4 to thank them for their service and commitment
5 and dedication in all their years at the
6 Commission.

7 The County did host a retirement party
8 for all of the retirees across the County last
9 week. We'll also be having a retirement lunch --
10 (microphone issues) -- we will also be having a
11 retirement lunch at the Cape Cod Commission
12 office for our staff on May 15 at noon, and I
13 wanted to make sure that that invitation was
14 extended to the members as well so that you're
15 welcome to join us.

16 We are currently advertising for
17 several positions; the Cape Cod Commission Clerk
18 and the Chief Planner positions are open
19 positions at the Commission at the moment.

20 This year's OneCape Summit will be held
21 on July 29 and 30. For the second year, we'll be
22 down at the Wequassett Resort in Harwich. We
23 have issued a "Save the Date" for that and more
24 information will be shared as an agenda is set.

1 We anticipate opening registration for that event
2 towards the end of May.

3 We are anticipating our new website to
4 be up and running by the end of this month as
5 well, so stay tuned for some more information
6 about that, but it should be a more user-friendly
7 website and should have all the information
8 available that you need to access for the
9 Commission.

10 I also wanted to identify for you that
11 the 2019 update to the Comprehensive Economic
12 Development Strategy was issued for public
13 comment on Friday. That is a 30-day public
14 comment period that will close on May 26, and
15 that is available on our website and open for
16 comments from the general public and anyone
17 interested in providing feedback on that draft
18 document.

19 The Regional Transportation Plan is
20 also in the process of being updated, and we
21 anticipate that going out for public comment for
22 a 21-day period around the May 20 timeframe.

23 And then, lastly, we have an update on
24 the 208 Progress Report that was submitted to

1 both DEP and EPA at the last -- at the end of
2 April. This report also included compliance
3 reports for all 15 communities for the first
4 time. We'll be issuing those compliance reports
5 to the 15 communities for their review and
6 feedback. They're in draft form. We anticipate
7 doing that sometime within the next few weeks.

8 And, so, that's all I have today.

9 CHAIR HAROLD MITCHELL: Thank you. Let
10 the record also show that we've been joined by
11 Fred from -- the Barnstable representative.

12 MR. FRED CHIRIGOTIS: Thank you.

13 Public Hearing Vineyard Wind Connector

14 CHAIR HAROLD MITCHELL: Thank you. At
15 this time, we're going to move forward with the
16 Public Hearing on the Vineyard Wind Connector.
17 This is a hearing continued by the hearing
18 officer from an April 9, 2019, hearing on the
19 following project for which the Cape Cod
20 Commission is conducting Development of Regional
21 Impact review.

22 The project is the Vineyard Wind
23 Connector. The project applicant is Vineyard
24 Wind LLC. The project location is the Town of

1 Barnstable with offshore export cable landing at
2 Covell's Beach, Centerville, and onshore export
3 cable terminus at substation in Independence Park
4 in Hyannis. The project description is
5 construction and operation of the portion of the
6 Windyard, excuse me, Vineyard Wind Connector
7 project located within Barnstable County, which
8 project is intended to connect to and serve the
9 proposed approximately 800 megawatt Vineyard Wind
10 offshore wind project. The project includes
11 without limitation offshore export cables located
12 within Barnstable County waters, the onshore duct
13 bank, and associated onshore export cables
14 located within and under the existing rights-of-
15 way and the proposed onshore substation.

16 Anyone wishing to testify orally will
17 be welcome to do so and written comments may also
18 be submitted at the hearing. At this time, I
19 will start with the applicant's presentation to
20 the Commission. Please.

21 (Getting PowerPoint to work.)

22 MR. NATHANIEL MAYO: Okay. Well, if
23 this will suffice, I think we can work off the
24 slightly suboptimal visual there. My name is

1 Nathaniel Mayo. I'm with Vineyard Wind, Manager
2 of Development and Policy, also Provincetown
3 resident, so the project hits close to home as
4 one that Barnstable County's involved in.
5 Joining me are a number of members of the staff
6 here as well as Counsel from Foley Hoag and Kate
7 McEneaney with Epsilon Associates will be giving
8 the second half of the presentation. There are a
9 number of other experts of various elements of
10 the project that we brought in the event that
11 you've got questions.

12 So, just to start, we're very -- this
13 is a really exciting venue for us to be. We're
14 permitting in a really broad range of agencies
15 and venues at the state, federal, and local
16 level, but this really feels to many of us like a
17 very Cape and Islands centric project. So this
18 is really one of the more appropriate venues for
19 us to be discussing the project, its merits, the
20 technical aspects of it and, of course, making
21 landfall on the Mid-Cape is something, I think,
22 we all as Cape Codders involved with the project
23 are really -- we feel really happy about.

24 But the dialogue that's gone on with

1 regulators has been really well encompassed with
2 the Commission staff over the past several
3 months. We've gotten a strong image that the
4 Commission's charge as well as the Cape Cod's
5 charge really fits with the fundamentals of this
6 project and the elements of the project.

7 The connecting of local interests with
8 regional, with national, with global is always a
9 struggle when we look at climate change and clean
10 energy projects. This has project local impacts
11 and local benefits, but we're also taking about a
12 much broader global concern. And the Commission
13 really does a great job in their charge of
14 bridging that gap at least at the local to
15 regional level. So that's our shared task.
16 That's where Vineyard Wind is. That's where the
17 stakeholders that we work with are, and that's
18 where I think the regulators, including the Cape
19 Cod Commission are.

20 You know, the hard work begins after
21 the policies are written and Vineyard Wind comes
22 here through a matrix of federal and state and
23 local policies and regional policies that have
24 allowed us to pursue more efficiently and with

1 more proper review clean energy projects and
2 offshore wind, especially which we know has had a
3 complicated history in the region.

4 So to the specifics, our proposal is an
5 offshore wind facility that's going to reduce
6 Massachusetts carbon load by 1.6 million tons per
7 year. It's the equivalent of taking about a
8 third of a million automobiles off the road with
9 just this one project. It's important to the
10 Cape, of course. We're at the nice edge of
11 climate change issues, and this is our
12 opportunity to do our part, and we recognize that
13 we have to do it right, just as much as you
14 recognize we have to do it right.

15 Environment is our economy here. We
16 say that to everyone from off-Cape, and it's
17 important that those interests are held in the
18 greatest stead as we pursue these projects. And
19 we think our work with the Commission and the
20 permitting work that we've done exemplifies that.

21 And, most importantly, our contribution
22 to clean energy, our contribution to new energy,
23 offshore wind is our resource. The resource in
24 our region, Southeastern Massachusetts, Southern

1 New England, its offshore wind, that's what we
2 have as our unique contribution to this puzzle of
3 solving climate change. So that all fits with
4 the charge that we all share.

5 This DRI comes, as I'll show a little
6 bit later, through two years of permitting and
7 project refinements that have led us to a clear
8 picture of what we're proposing and what we're
9 going to be building. And we're excited to
10 discuss the project as in follow-up with your
11 questions after we give our presentation and we
12 look forward to it. So I'll go through a brief
13 overview of the project and we can certainly
14 follow up with questions after the presentation.

15 So we're here because of a number of
16 aspects of state and federal policy. The
17 Commonwealth passed the Global Warming Solutions
18 Act about 11 years ago mandating carbon
19 emissions. In the context of that, the federal
20 government was engaged in a multiyear stakeholder
21 process bringing everyone to the table to
22 determine where we can responsibly site offshore
23 wind. And our lease area chosen by BOEM on the
24 Outer Continental Shelf is one of the products of

1 that long process.

2 Lease areas were given up for auction
3 by the federal government, and Vineyard Wind was
4 one of two original authorities of a lease that
5 they bid on through a competitive auction in 2015
6 when the project really began in earnest.

7 The Energy Diversity Act was passed
8 about a year later mandating expansion of
9 renewable resources into the grid including
10 offshore wind. We submitted our project plans in
11 2017. We filed for state and federal permits.
12 And in 2018, just under a year ago, Vineyard Wind
13 was selected in order to bid to sell electricity
14 from offshore wind to the Commonwealth. In 2019,
15 what brings us here, is we received final
16 certification from the state on our environmental
17 review allowing us to seek regional and local
18 permits.

19 So a brief overview of the company;
20 we're New Bedford based, a lot of local and also
21 global talent and there's a nice mix of that. We
22 draw on the resources of some international
23 partners who have experienced the bulk of
24 offshore wind development in Europe. There's

1 4,000 turbines spinning off European shores. And
2 from that technical side and also the financial
3 side, there's a great deal of expertise and
4 capacity there. And then we are really over the
5 past several years cultivated by meaningful
6 partnerships that I'll go into a little bit
7 later.

8 The essence of the project at 30,000
9 feet where this is perhaps, you know, 30 miles is
10 an 800-megawatt wind farm. That's roughly about
11 enough power for 400,000 homes located 35 miles
12 south of Cape Cod, about 15 miles south of the
13 islands.

14 The export cable will run through
15 Muskeget Channel and across Nantucket Sound and
16 make landfall at Covell's Beach in Barnstable.
17 The run from Covell's Beach to the substation in
18 Independence Park where we will connect to the
19 grid is about 5.3 miles, all underground from the
20 turbines, essentially, to the substation. Again,
21 it's located in Independence Park next to the
22 existing Eversource substation.

23 So, talking about partnerships, this
24 has been the result of a lot of collaborative

1 planning. We have a lot of meaningful
2 endorsements and relationships that have crafted
3 the project in a meaningful way. Local,
4 regional, and national groups and some of them
5 would highlight, in addition to our outreach that
6 we've been undergoing for the past few years,
7 numerous appearances before nonprofit boards in
8 addition to community forums, widely publicized,
9 office hours, open houses in Barnstable and other
10 parts of the Cape. We also expanded into new
11 media to try and reach beyond just traditional
12 print media and word-of-mouth and postings to
13 really try and capture the community and make
14 sure that we were getting all the input we could.

15 And crucial to this was a Host
16 Community Agreement that we were able to arrive
17 at with Barnstable. Barnstable is sort of the
18 main host of the infrastructure for Vineyard Wind
19 onshore. We had extensive and broad ranging
20 discussions with town staff over many months.
21 Some of the highlights of that Agreement:
22 protecting the town's interest, providing the
23 town with benefits and also establishing a
24 partnership with the company, seasonal

1 construction restrictions avoiding, obviously,
2 the summer months working in Covell's Beach,
3 especially. We call it the human migration is
4 one of the many time of year restrictions we deal
5 with, so limiting our work to outside the peak
6 season to minimize disruption. Extensive
7 discussion about design standards for
8 containment. You know, we're on the sole-source
9 aquifer. It's not lost on anyone. This is the
10 most prized resource on land. So we've worked
11 out standards within the HCA that we think will
12 set a standard for other electrical
13 infrastructure development beyond Vineyard Wind.
14 Not a small measure, \$16 million in supplemental
15 payments and that's in addition to substantial
16 property tax revenues that the town will receive
17 over the life of the project. And that 16
18 million is a fully unrestricted amount of support
19 that's going to be given to the town throughout
20 the course of the project's operation and the
21 town has -- in a while thereafter made the
22 dedication towards the Water Stabilization Fund
23 for that funding, but it's the town's prerogative
24 as to where those funds go.

1 Repaving and rehabbing the Covell's
2 area after construction. We're also going to be
3 installing a bathhouse or funding the town to
4 build a bathhouse which is on their capital plan
5 to provide some community enhancements in the
6 area where we'll be working.

7 I'll go quickly through project
8 benefits. I know it's been in the filings that
9 we've submitted to you, but local revenue as
10 mentioned before. Infrastructure investments to
11 try and anchor this industry in southeastern
12 Mass., which will result in jobs not only on the
13 South coast and South shore but also the Cape and
14 Islands.

15 A commitment to marine animal
16 protection both through our agreement with
17 national eNGOs on construction to protect the
18 North Atlantic Right Whale, and in addition to
19 that as part of our bid, \$3 million to support
20 innovations in Right Whale and Marine Mammal
21 Protection. The idea being to get some things
22 integrated into the system so that monitoring and
23 protections can be advanced.

24 Climate change benefits we've

1 discussed. Significant ratepayer benefits. The
2 DOER came out with a study establishing that
3 against a baseline. This will result in actually
4 some savings for Massachusetts ratepayers.

5 Improved grid reliability.
6 Massachusetts or, excuse me, Cape Cod, it's been
7 a one-way street for electricity. It comes from
8 the mainland and comes out to us. This utilizes
9 that infrastructure and injects a significant
10 amount of power at the edge of the grid. We've
11 got a Resiliency and Affordability Fund that
12 Barnstable, as a partner community, will be a
13 beneficiary. Its \$15 million, a million dollars
14 a year for resiliency projects including battery
15 and storage, the idea being some measure --
16 battery storage for emergency shelters and those
17 kind of emergency events. And then, of course,
18 in following with the many years of work that's
19 been done at the state level to enhance our
20 climate change and clean energy efforts.

21 So, quickly, about the project's
22 development, excuse me, the project's sort of
23 progress. It's really into three parts: an
24 offshore component, an onshore component, and the

1 substation component, the transmission component.

2 So if we follow here, the installation
3 will be done by a hydro-plow or jet plow, which
4 is the upper left. That's a prescribed minimally
5 invasive technique for fluidizing the sea bottom
6 in a narrow trench and allowing the cable to
7 settle there. Our routing has been the result of
8 extensive, you know, years of survey of the sea
9 bottom with an array of technology that I
10 wouldn't bore you with but it's been pretty
11 extensive.

12 You see in the center there the image
13 of the cable-laying vessel, the vessel that
14 trails and distributes the cable. Important to
15 our efforts here, horizontal directional drilling
16 will be used to transition from the ocean to the
17 shore. That ultimately is going to the parking
18 lot, setting ourselves back from the beach a bit,
19 drilling down below an arc, and ultimately
20 reaching about 30 feet of depth at the tide line.
21 So Covell's Beach is an accreting shoreline
22 generally, so fewer concerns about erosion. But
23 that notwithstanding, putting the cable to
24 sufficient depth virtually eliminates any

1 possibility of human impact in that shore side
2 area. It arrives on the offshore, you know,
3 after a thousand foot of HDD, so also outside the
4 swimming environment.

5 You see a little picture of an example
6 cable. Two of those will be installed and that
7 is what can carry the electricity to the grid.

8 So onshore, it really begins to
9 resemble a traditional public works or
10 construction project. Roads are opened, trench
11 is dug, conduit is laid, encased in cement,
12 covered over and then cable is pulled through
13 various duct banks, which is in the upper right
14 there at various intervals. The expectation's
15 about one to 200 feet of progress per day, and
16 these parts of the project don't need to happen
17 in a single succession. Different areas can be
18 worked at different times and, again, obeying
19 seasonal restrictions knowing that our traffic
20 constraints are a lot higher in the summer.
21 There's also additional traffic management
22 procedures and plans that are worked out
23 comprehensively.

24 You can see the route from Craigville

1 Beach Road, Strawberry Hill, Wequaquet, Phinneys,
2 Attucks Lane and then into Independence Drive.
3 This is ultimately what the project will look
4 like throughout the communities. A couple of
5 manhole covers to access some of those junction
6 boxes in between runs of conduit. This is
7 actually an existing cable, one of half a dozen
8 that comes to the south side of the Cape, and
9 this one is the more recent cable that feeds
10 Nantucket with their power; there's three others
11 from Falmouth to the Vineyard.

12 So the substation in Independence Park,
13 we've talked about the containment elements
14 associated with the Host Community Agreement.
15 You can see to the north of that example
16 schematic, the Barnstable Switching Station, so
17 we are able to bring the power to shore, step it
18 down and process it appropriately and then
19 connect into the grid there. And then you can
20 see the mockup of the substation as it will be
21 viewed from the parking lot in Independence Park.

22 So, I wanted to go quickly into the
23 permitting process. I don't have to belabor this
24 too much, but we've got a major -- main federal

1 process which involves the consultations and
2 approval of numerous federal agencies and then
3 two threads of state review, both the MEPA
4 process, the Mass. Environmental Policy Act
5 process which leads down to the regional and then
6 the local level and then the Energy Facilities
7 Siting Board. We've received a tentative
8 approval from the EFSB and expect final approval
9 very shortly. We've worked through the MEPA
10 process and received final Environmental Impact
11 Report which, again, that was finalized in
12 February and that allowed us to pursue regional
13 and local permits. Host of agencies, I don't
14 need to get into too much but you can imagine the
15 typical players, those devoted to endangered
16 species, DEP, DMF, Division of Marine Fisheries,
17 and at the federal level everything from Coast
18 Guard to FAA to National Marine Fisheries.

19 I would also want to note that sort of
20 the project timeline, you know, it started a
21 couple of years ago, and our goal is to begin
22 construction this year. And it's an important
23 goal because it means that the benefits of the
24 project both locally, to the town, regionally,

1 and as well as statewide and nationally in terms
2 of our climate goals can be achieved more
3 quickly. So we've really enjoyed working with
4 the staff to make sure that we were comprehensive
5 and I think we've largely arrived there. We look
6 forward to your questions.

7 I'm going to introduce Kate McEneaney
8 to discuss some of the specifics as it relates to
9 our DRI application.

10 MS. KATE MCENEANEY: Good afternoon.
11 It's a pleasure to be here. My piece of the
12 puzzle is to discuss the standards of approval
13 for a Development of Regional Impact, a DRI, and
14 to address how the project meets those standards,
15 and you, all, are familiar with those standards,
16 but it's consistency with Regional Policy Plan,
17 that's the 2019 Regional Policy Plan, relatively
18 new; consistency with municipal bylaws and
19 planning documents, and a weighing of the
20 benefits and the detriments.

21 We have a very substantial record on
22 this case, and the Regional Policy Plan and the
23 Local Comprehensive Plans and the Bylaws are
24 quite extensive. I'm going to synthesize all of

1 this information for you in about five or six
2 slides. So, here we go.

3 I want to just start by taking a step
4 back and looking at the Barnstable County Growth
5 Policy as stated in the Regional Policy Plan.
6 The Growth Policy is sort of a mission statement
7 for the plan and the entire planning effort
8 undertaken in the Regional Policy Plan. And the
9 Regional Policy Plan says of that Growth Policy
10 that it aims to "Support the vision for the
11 future of Cape Cod as a place of vibrant,
12 sustainable, and healthy communities and a
13 protected natural environment."

14 And we say, "Yes," yes to that idea.
15 The project will fit perfectly with this vision
16 for Cape Cod. It will bring -- it will be the
17 first project to bring renewable wind energy
18 online at a commercial scale, as Nate mentioned,
19 that powers over 400,000 homes. It will do that
20 and replace power and offset 1.6 million tons of
21 carbon dioxide. And we propose to do that in a
22 way that not only protects but enhances the
23 resources of the Cape. How? That's next.

24 So the Regional Policy Plan addresses a

1 complex and interrelated and dynamic human and
2 natural environment by breaking that down into
3 three categories, and that's Natural Systems,
4 Built Systems, and Community Systems.

5 So I'd like to start with Natural
6 Systems and this covers water resources, ocean
7 resources, wetland resources, wildlife and plant
8 habitat, and open space. So how does the project
9 address these resources? How does it protect
10 these resources?

11 First of all, through the Host
12 Community Agreement with Barnstable, as Nate
13 mentioned, the Vineyard Wind project will provide
14 a new funding source for this Water Stabilization
15 Fund to the tune of \$16 million. The site also
16 will be constructed with a secondary containment
17 system that's above industry standards. So that
18 containment system is primarily for the
19 dielectric fluid that is -- that will be used on
20 the site that is necessary for the operation of
21 the site. This dielectric fluid is a coolant and
22 an insulator and it's much like mineral oil in
23 terms of its characteristics. So there will be a
24 secondary containment system that provides a

1 redundancy to make sure that there's no chance
2 that this dielectric fluid will make its way into
3 the environment.

4 There's no permanent impacts to wetland
5 or our species habitat with this project. And
6 the project is proposing a comprehensive suite of
7 protective measures or Best Management Practices
8 during construction to make sure that all impacts
9 are avoided and minimized, and this includes a
10 Benthic Habitat Monitoring Plan that's pertinent
11 to the offshore piece, the marine piece, and
12 erosion control plans, as may spill control
13 plans, as well as many other protective measures,
14 and those are detailed in our application.

15 Moving on to Built Systems, these
16 relate to community design, coastal resiliency,
17 capital facilities, transportation, energy, waste
18 management. Again, this is a really significant
19 source of renewable energy, 800 megawatts, and
20 that will make the regional grid more reliable.
21 It also addresses, importantly, the
22 considerations of coastal resiliency.

23 So here we have a project that not only
24 presents a design that is perfectly consistent

1 with the coastal resiliency design standards but
2 also actually addresses the inherent problem
3 behind global warming and climate change that, I
4 think this is well stated in the Regional Policy
5 Plan, touches every aspect of life on the Cape or
6 will touch or has already touched.

7 The siting of the project is contact
8 sensitive from a planning perspective and, again,
9 we have a very robust suite of Best Management
10 Practices to ensure that there will be no impacts
11 to any of the other infrastructure systems, such
12 as the transportation systems, and that includes
13 Traffic Management Plans that will be developed
14 with Barnstable, DPW, and the police.

15 Finally, Community Systems addresses
16 cultural heritage, economy, and housing and this
17 project will provide new substantial funding for
18 education and training. It will be a new source
19 of jobs, a new industry in the region. There's
20 no impact to cultural resources. The Department
21 of Energy Resources has assessed that there will
22 be a significant savings to ratepayers from the
23 project, and also the Host Community Agreement
24 establishes a significant source of revenue for

1 Barnstable -- for the Town of Barnstable.

2 To address the substation specifically
3 for a moment, it is proposed on a 6.3 acre parcel
4 of land. This was -- the parcel is part of the
5 former Cape Cod Times property off of
6 Independence Drive; I'm not sure if you're
7 familiar with that. It is within the Industrial
8 Park. It is, from a siting perspective, we feel
9 it's well sited. It's adjacent to the existing
10 Eversource substation that's just south of the
11 highway there and also adjacent to the existing
12 overhead utility right-of-way. It is within a
13 designated Industrial Activity Center, that's a
14 Cape Cod Commission designation. And I'll just
15 elaborate on that; the Industrial Activity Center
16 is defined as lands containing industrial uses
17 that are suitable for future industrial activity,
18 as well as emerging industries. So that's a good
19 fit.

20 And there is containment to protect
21 groundwater -- let me back up. The site is also
22 located within a Wellhead Protection Area and to
23 acknowledge that and make sure that the
24 groundwater resources are absolutely protected.

1 I mentioned that there's an above-industry
2 standard containment system planned. And
3 Vineyard Wind has been working closely as well
4 with the Town of Barnstable on that.

5 Just to address quickly the Regional
6 Performance Measures; there are nine performance
7 measures listed in the Regional Policy Plan. I
8 won't go through them all. I will note that the
9 project has either no impact or a positive impact
10 to all of these measures. And the reasons that I
11 think it's important to mention that is in most
12 cases with development, we assume there's a
13 trade-off between -- with development and some of
14 these critical resources, these yardsticks to
15 measure these critical resources. In our case,
16 that trade-off is not there in some cases so we
17 have a positive impact. So stuff like BioMap
18 habitat and nitrogen loading, we have no impact
19 there. Sorry, hold on. It's not done yet.

20 Finally, the final piece is consistency
21 with local planning and, importantly, benefits
22 versus detriments. The project is consistent
23 with the Local Comprehensive Plan, DCPC, and
24 Municipal Bylaws. The Zoning, in terms of the

1 Bylaws, zoning is addressed in part through the
2 state siting process, which is the Energy
3 Facilities Siting Board and Department of Public
4 Utilities, and that is also addressed in the Host
5 Community Agreement as well.

6 Finally, benefits versus detriments.
7 Nate had an entire slide on benefits. We could
8 talk for 45 minutes, I think, just on that slide.
9 The benefits are significant and they are long
10 lasting. There are environmental benefits. We
11 mentioned 1.6 million tons of carbon dioxide
12 annually, that's about 325,000 cars off the road
13 -- the equivalent of. So environment, we can't
14 say that enough.

15 Economic benefits in terms of bringing
16 this new and emerging industry to this area,
17 jobs, funding for job training, and scientific
18 research as well with the Marine Mammals
19 Innovation Fund and, also, some of these go
20 towards Community and building community here on
21 the Cape and in the region. And, specifically,
22 some of these funding streams are going towards
23 scientific organizations and higher education --
24 institutions of higher education.

1 In terms of the detriments and thinking
2 about that weighing that happens at the
3 Commission level, the detriments are temporary
4 and minor. Some of the things that we think
5 about are temporary potential for traffic
6 congestion, for example, while the cables are
7 being installed within the roadway, and those are
8 things that we think can be managed and putting a
9 lot of effort into making sure that we're
10 coordinating with the town and abutters on that.
11 So we feel that the benefits far outweigh the
12 detriments on this project.

13 Finally, we are also really cognizant
14 of, given the importance at all these different
15 levels of this project, the project's schedule,
16 and we're hoping to be under construction this
17 fall and, hopefully, through the Barnstable
18 Conservation Commission, maybe even this spring.
19 So we're lining up all of our ducks and we've got
20 the Siting Board coming in and MEPA, so we're on
21 full throttle. So we appreciate the Commission's
22 piece of that and also want to just say how much
23 we appreciate working with the staff on this
24 project which was, I think, maybe unique for them.

1 and a lot -- this huge record, so we just really
2 appreciate all the work that they've put into it.

3 And with that, I appreciate your time
4 and I look forward to the discussion, and our
5 project team is here if we have any questions
6 that you would care to refer to us, we'd be more
7 than happy to address those. So that is all.
8 Thank you.

9 CHAIR HAROLD MITCHELL: Thank you,
10 Kate. At this time, we'll have Commission staff
11 hearing offering their presentation. Jon Idman.

12 MR. JONATHAN IDMAN: Thank you, Mr.
13 Chair, members of the Commission. For the
14 record, Jon Idman, your Chief Regulatory Officer.
15 I just want to state that the applicant has
16 prepared -- there are some unique regulatory
17 provisions for projects like this, and the
18 applicant has prepared a statement that those on
19 the development team, the Vineyard Wind
20 Development Team, have given their testimony
21 today under oath.

22 A DRI hearing was held on the project
23 on April 9. I served as a hearing officer for
24 that hearing. This project is subject to the

1 State's Energy Facilities Siting Board
2 jurisdiction and also DRI jurisdiction and, thus,
3 is subject to certain special procedural
4 provisions such as the one I mentioned under the
5 Commission's regulations.

6 Of note, these regulations expressly
7 allow for the use of hearing officers to hold
8 hearings for these substantive hearings for these
9 energy-related projects which are also subject to
10 Energy Facilities Siting Board review.

11 Staff has prepared a draft decision.
12 Those regulations call for a report and
13 recommendation being made by the hearing officer
14 to the Commission. And what I'm providing to you
15 today is the report which is contemplated under
16 the regulations, and my recommendations are
17 contained in the draft DRI decision, which has
18 been distributed to the board and also made
19 available to the public online.

20 This was a complicated project. There
21 was a lot of review with it, so I just want to
22 recognize some of my colleagues who had a greater
23 level of participation in it: Jessica Wielgus,
24 Heather McElroy, Scott Michaud, Tim Pasakarnis,

1 Steve Tupper, and I want to give kind of an extra
2 special call out to Kristen Clothier, who's my
3 regulatory colleague in the Regulatory Department
4 who put in a significant amount of work on this
5 project.

6 When we had this hearing on April 9, it
7 was pretty well attended. There were 20 or 30
8 public attendees at the hearing, approximately
9 nine people provided testimony. Some of those
10 provided written comment. All who spoke and gave
11 direct testimony, oral testimony at that hearing
12 spoke in favor of the project.

13 All these written comments, which we
14 have received to date, are in your member
15 materials as well as contained online. There
16 have been a few letters we received over the past
17 few days. They are contrary to those comments we
18 received early in the process. There were in
19 opposition to the project. I'll let you make
20 your determination after you review those but,
21 frankly, they were a little off-base with the
22 project that's directly before the Commission.
23 They're a little broader than that, and they
24 actually came from letter-writers who are outside

1 of our jurisdiction. But without me giving any
2 further color, I'll let you review those and you
3 determine how much weight or credibility you want
4 to give them relative to your review.

5 The applicant's PowerPoint presentation
6 from the April 9 hearing is also contained in
7 your materials. You'll notice a guest here
8 today, a transcriptionist who's taking a verbatim
9 transcript, that's another special provision
10 within these regulations. We also have a
11 transcript that was available to you and to the
12 public in your materials from April 9 as well.

13 The draft decision which has been
14 prepared is based on the application materials
15 that have been submitted by the applicant, public
16 testimony, and written comment letters that have
17 been provided and staff's analysis as well as my
18 own observation as a hearing officer of that
19 April 9 hearing.

20 This decision also takes in large part
21 from certain proposed findings and conditions
22 that were referenced in a staff memorandum that
23 was prepared for that April 9 hearing which,
24 again, is in your materials and also contained on

1 the website.

2 Essentially, the recommendation that's
3 contained in that draft DRI decision to the
4 Commission is to grant DRI approval for the
5 project subject to the conditions in that draft.
6 The draft contains all the findings and
7 conditions necessary to approve the project given
8 the standards of DRI approval set out in the act
9 and regulations without limitation findings
10 concerning the consistency with the Regional
11 Policy Plan, consistency with municipal
12 development bylaws, and findings about the
13 relative probable project benefits and
14 detriments.

15 I want to make a point of emphasis here
16 too because of the complexity of the project. As
17 you've heard some reference to, the project
18 overall actually represents some features outside
19 of Barnstable County jurisdiction. There's an
20 overall wind project with a connector that
21 ultimately will terminate in Independence Park in
22 Hyannis. However, the Commission does not have
23 direct jurisdiction over those elements located
24 outside Barnstable County.

1 So, essentially, what the Commission is
2 looking at in terms of the project is the
3 offshore export cable located in Barnstable
4 County waters, and that cable as it arrives on
5 land at Covell's Beach traverses north, northerly
6 in Barnstable, and ends up in Independence Park
7 and then connects to the grid. That entire land-
8 base cable is in the Town of Barnstable. It kind
9 of brings me to another thought the Commission
10 staff has had in reviewing the project.

11 Commission staff's review really began
12 with that Massachusetts Environmental Policy Act
13 process for which Commission staff provided a
14 number of comments. Commission staff was pleased
15 to see that some of our recommendations
16 especially concerning the land-based cable route
17 were taken into account and, in fact, at first
18 there was a proposal to have alternative routes,
19 one which would go through Yarmouth, one which
20 would go through Barnstable. Commission staff's
21 position is that the one through Barnstable had
22 fewer impacts on various resources and, in fact,
23 that is the project or part of the project you
24 see before you, and Commission staff was happy to

1 see that change based on some of its comments
2 through the MEPA process.

3 All those MEPA filings, by the way,
4 including the Commission's comment letters are
5 contained in your materials -- you'll hear this
6 as a refrain today, as well as located on the
7 website.

8 Getting to some of the other standards
9 for DRI review in terms of municipal development
10 regulations, there's kind of another unique
11 feature of this project. In terms of local
12 zoning matters as allowed under Massachusetts
13 General Laws, the zoning matters have actually
14 been deferred to the DPU and then to the EFSB to
15 issue certain zoning exemptions and the town
16 consented that.

17 So, essentially, there will be no
18 zoning reviews over the project in the town. The
19 zoning reviews have been consolidated in the EFSB
20 docket consolidated with other matters, like the
21 actual request to construct the project which the
22 EFSB has a direct jurisdiction over.

23 In terms of the RPP itself, as you
24 know, there were 14 goals in the 2019 RPP and

1 corresponding objectives with those goals as well
2 as corresponding methods and the Technical
3 Bulletins which clarify certain of those goals
4 and objectives. Essentially, all but two of
5 those goals apply to this project. The two that
6 didn't apply were housing and waste management,
7 but some of the things that you would think would
8 apply wetlands, coastal resiliency, ocean
9 resources, open space all applied in this given
10 case. And you'll find finding relative to those
11 in the decision in, I think, relative detail.

12 There's also an appendix to the
13 decision which, basically, gives a checklist
14 about which of the goals and objectives in the
15 Policy Plan actually applied to the RPP
16 Consistency Analysis in this given case.

17 I guess I also want to make a general
18 point too that if we look at some of the reasons
19 why there was a significant change in the way the
20 Commission did the 2019 RPP versus predecessor
21 versions of the RPP, I think this was a really
22 good test case for that because in any given
23 project there will be positive and negative
24 effects or impacts with that project, and it's

1 incumbent on a review board like the Cape Cod
2 Commission to have abilities to reconcile those
3 potential positive and negative impacts, and
4 that's exactly what this RPP allows the
5 Commission to do, and I hope you see that
6 reflected in the findings and conditions in the
7 draft decision.

8 In order for -- I think it's been
9 helpful for me to think about this project to
10 separate it into kind of three parts, at least
11 the project that the Commission is looking at.
12 The offshore export cable and the landing at
13 Covell's Beach in Barnstable, kind of the long
14 stretch of cable which is located under paved
15 roadways in Barnstable, and then that substation
16 component which is located in Independence Park.
17 And really throughout staff's emphasis, I don't
18 know if this surprises you or not, has actually
19 been on the substation up in Independence Park.
20 I think you saw the matrix of how many federal
21 and state project partners there are when you saw
22 the earlier presentation, that actually, I think,
23 assists Commission staff and assists the
24 Commission because there's a great deal of

1 emphasis on reviewing the project out in the near
2 shore and offshore areas. And some of these
3 state, of course, state and federal agencies have
4 a technical expertise that really helps the
5 Commission in its review as the applicant worked
6 with these state agencies to come up with ways to
7 minimize, avoid, or mitigate impacts within those
8 ocean resources: fisheries, marine mammals,
9 etcetera.

10 Within the middle portion of the
11 project, if you will, which is the cable
12 underneath the road -- public rights-of-way in
13 the Town of Barnstable, to be honest, there were
14 a few concerns. It was very well sited. It's
15 under paved right-of-way. As you see with some
16 of the figures in the application, there were
17 very few resources located in that area. There
18 weren't historic resources, wetlands resources,
19 etcetera, so that kind of long stretch of cable
20 under roadways was well sited and, essentially,
21 as being -- if there are any impacts, they are
22 temporary transportation impacts and they'll
23 largely be handled through individual
24 Transportation Management Plans for certain

1 intersections or stretches of roadway that have
2 been already worked on extensively with the town
3 and that our staff has reviewed relatively
4 extensively as well.

5 So in terms of a point of emphasis of
6 what Commission staff spent I think most of its
7 efforts on especially in terms of review of the
8 RPP and consistency with the RPP is the
9 substation. And this is a perfect example of
10 having to reconcile certain positive and negative
11 impacts or effects of a project. This area up in
12 Independence Park is an Industrial Service and
13 Trade Area with the Commission. It is also an
14 industrial area with the Town of Barnstable, that
15 said, it's also Wellhead Protection Area. So by
16 me telling you that, you can already see some of
17 the maybe inherent conflicts that need to be
18 reconciled.

19 Along with substations also come up --
20 come with the need to use something called
21 "dielectric fluid," which is essentially a
22 coolant, and in the parlance of the Cape Cod
23 Commission's Regional Policy Plan, it's a
24 hazardous material. So, obviously, to reconcile

1 these ideas, there had to be some strong
2 mitigation response. And the strong mitigation
3 response that's been provided here is to provide
4 a very risk-conservative approach towards
5 containment. And the applicant is also providing
6 \$16 million through a Host Community Agreement
7 they've entered into with the Town, and the Town
8 has agreed to direct all those funds to a Water
9 Stabilization Fund the town has provided, which
10 will be used to study and, ultimately, develop a
11 new water supply areas in the Town of Barnstable.

12 Some other kind of issues to reconcile
13 in terms of the substation is an issue associated
14 with Open Space. So, again, it's an Industrial
15 Service and Trade Area. There is a switching
16 station directly north of this new substation, so
17 in that sense it's relatively well sited but,
18 again, there's a Wellhead Protection Area, and
19 the area proposed to be cleared is several acres.
20 Naturally forested area helps to protect Wellhead
21 Protection Areas. So, again, a conflict point in
22 how do we reconcile that. It's being essentially
23 reconciled through not only the payment through
24 the Host Community Agreement but also through a

1 commitment that the applicant has made since that
2 April 9 hearing to provide 5.9 acres of open
3 space through a potential combination of methods,
4 and that's the last condition you'll see in your
5 decision. That Open Space commitment can be done
6 through payments in lieu, an actual restriction
7 of land, working with the Town to direct some of
8 those Host Community Agreement payments to the
9 restriction of open space. But, none the less,
10 the applicant has committed to provide open space
11 protection to mitigate for that loss of tree
12 cover in the Industrial Service and Trade Area,
13 which is also a Wellhead Protection Area.

14 The last kind of conflict point that
15 staff spent some significant time with relative
16 to the substation is community design. So the
17 same refrain I've made here, this is a
18 substation. It's in an Industrial Service and
19 Trade Area, but also directly abutting to the
20 east of the proposed substation site is a utility
21 easement and abutting that is a residential
22 community. So you see a conflict point there.
23 You have a relatively industrial-type use within
24 several hundred feet of a multi-family

1 residential use. The mitigation response to that
2 is to keep a relatively substantial buffer, a
3 commitment to keep a relatively substantial
4 buffer along Independence Park, a 30 foot buffer
5 along the easterly side of the new substation
6 where it's available and doesn't interfere with
7 the utility easements, and then provide
8 landscaping in concert with the town to
9 appropriately mitigate visual impacts associated
10 with, especially the northeasterly side of that
11 substation.

12 That northeasterly side of the
13 substation also proposes to have a noise and
14 visual barrier as well, primarily for noise but
15 will also provide a direct visual barrier to
16 looking into and see some of the substation
17 equipment at that proposed substation.

18 Kind of moving on to the next
19 significant sort of undertaking that staff had in
20 terms of the DRI standards of approval is this
21 concept which is probably the Commission's
22 greatest level of jurisdiction is over the
23 relative probable benefits of a project versus
24 the probable detriments associated with a

1 project. The recommendation in this decision,
2 again, it recognizes some particular probable
3 benefits and some particular probable detriments,
4 but the recommendation of the decision is
5 ultimately that the probable benefit of the
6 project is greater than its probable detriment.

7 I think you've already heard some of
8 the suggested benefits and detriments and I'll
9 kind of direct you to the section of the draft
10 decision which speaks to those things but,
11 roughly, the benefits are associated with
12 furthering the Global Warming Solutions Act in
13 the Commonwealth of Massachusetts, the
14 facilitating the reduction in greenhouse gas
15 emissions, the sort of economic impacts with not
16 only this project but the economic prospects
17 associated with the renewable energy sector. And
18 then the payments to various funds and programs
19 that you'll see referenced in the decision are
20 running the gamut from this Host Community
21 Agreement, we spoke about, all the way to
22 providing infrastructure programs which would
23 provide seed money for battery storage projects
24 on Cape Cod, which is an emphasis of the states

1 and also definitely is an important component to
2 the generation of renewable energy in order to
3 store that energy and improve resiliency in the
4 particular area to use that energy when other
5 energy is -- energy sources are in greater
6 demand, and then I think another great benefit is
7 in this Host Community Agreement with this
8 approach to containment and other matters.

9 In terms of -- there are some
10 recognized detriments, and I think the applicant
11 was pretty straightforward and honest suggesting
12 some of these detriments themselves, and many of
13 them I've gone over with you today already. They
14 are detriments, potential detriments associated
15 with the substation. I will note interestingly
16 that they're also occasioned, all these
17 identified detriments are also occasioned by
18 strong mitigation actions, for instance, the
19 clearing of land in the Wellhead Protection Area
20 for the substation is occasioned by the
21 commitment to provide 5.9 acres of open space
22 protection through a combination of different
23 available methods.

24 I want to go through a number of

1 conditions in the decision. Those are always
2 sometimes kind of the most telling feature of a
3 particular decision. You can imagine given the
4 nature of this project, I can as I've seen it
5 evolve through working through the MEPA phase and
6 then to now, it's a constantly moving project and
7 there's this incredible matrix of different
8 permitting that's required at the local,
9 regional, state, and federal level. So you can
10 imagine that the plans we got in some cases were
11 relatively conceptual because the project could
12 only be planned to a certain level given some of
13 the changes that will be made with a project of
14 this scope. So it's important to recognize in
15 this decision that there are approved project
16 plans but there are instances with some of these
17 approved project plans that they're recognized as
18 conceptual in nature, and there are specific
19 plans referenced and the conditions of the
20 decision that we expect to receive in final or
21 updated form with greater information. And many
22 of those plans are related again to the
23 substation. They are things like final design of
24 containment, final landscaping plans for the

1 substation, final, if you will, architectural
2 renderings or elevations for the substation
3 itself.

4 Another very important condition deals
5 with requiring the applicant to continue to
6 pursue all its obligations under the Host
7 Community Agreement with the Town of Barnstable.
8 I'll take kind of a side note to say that Host
9 Community Agreement is kind of an unusual feature
10 in my experience in permitting, and it's a great
11 feature to have because many of those things that
12 you normally try to address and preserve and
13 protect through your permitting had been
14 accounted for and addressed with a contractual
15 relationship with the town, the town of which
16 probably is at a greater susceptibility to suffer
17 some of these impacts most directly which the
18 Commission is in charge of mitigating,
19 minimizing, or avoiding.

20 There are a number of other conditions
21 related to the applicant continuing to work with
22 both the town and state agencies on those Traffic
23 Management Plans or other transportation issues
24 referenced in those conditions. Potential impact

1 on fisheries was an important consideration in
2 the decision, and the applicant has worked with
3 state agencies and made strong commitments
4 towards a fisheries monitoring and monitoring of
5 other ocean resources. I'll direct you to the
6 last condition again which deals with the Open
7 Space commitment.

8 And, finally, we've spoken about
9 dielectric fluid as a hazardous material at the
10 substation; the applicant is ultimately required
11 to give an inventory of any other materials which
12 constitute hazardous materials under the Cape Cod
13 Commission's Policy Plan and Technical Bulletin,
14 and to the extent that there are additional
15 materials revealed have to develop a management
16 plan including potentially some additional
17 required containment to address the other
18 hazardous materials that may be identified in
19 that final inventory.

20 So I will -- I'll say in closing to you
21 that I know after having conversations with the
22 applicant that they believe that there are
23 certain exigencies, I think, that they would like
24 to obtain permits as soon as they can. This

1 decision would allow you to essentially approve
2 the project subject to the conditions in the
3 decision accounting for all the required findings
4 that are required under the Commission's enabling
5 regulations given the DRI Standards Review.

6 But I also want to let you know that
7 there is no absolute requirement that the
8 Commission has to do this day. You have plenty
9 of time in your public hearing period if you see
10 fit to have additional hearings or meetings on
11 this project recognizing that this is a big
12 complicated project and you may need time to
13 digest that.

14 So with that, I would be happy to take
15 any questions as they might arise today, and I'm
16 sure my colleagues in attendance would as well.
17 Thank you.

18 CHAIR HAROLD MITCHELL: Thank you, Jon.
19 At this time, we'll start with -- if the
20 Commissioners have any initial questions? Yes,
21 Charles.

22 MR. CHARLES MCCAFFREY: Two areas in
23 the decision that I would like a little more
24 information on. One is the sea-level rise and

1 the fact that the applicant analyzed historic
2 accretion. My concern is that future sea-level
3 rise could substantially mitigate if we have
4 under a rapid sea-level rise scenario, four feet
5 of sea-level rise by 2050 say that can very much
6 change what the situation is at Covell Beach.

7 MR. JONATHAN IDMAN: That's true. I
8 mean I can answer your question. I think what I
9 would like to do now is kind of defer that
10 substantive question to the applicant and then
11 maybe after discuss with you why we think the
12 information that was provided is at least
13 consistent with the Commission's Technical
14 Bulletin and RPP objective relative to this.

15 MR. CHARLES MCCAFFREY: Okay. My
16 second question is probably the same kind. The
17 trenching offshore will disturb benthic habitat.
18 What evidence is there that even though it's
19 quite limited, what evidence is there that
20 benthic habitat would restore itself in the area
21 of the trenching?

22 MR. JONATHAN IDMAN: Yeah, I would like
23 to defer that to the applicant first to get the
24 substantive answer, and then maybe after that's

1 answered discuss why Commission staff thought
2 that the mitigation actions referenced in the
3 application were appropriate.

4 MR. THEODORE BARTON: Good afternoon.
5 My name is Ted Barton. I'm an environmental
6 engineer by training and principal at Epsilon
7 Associates, and I've been working with the
8 Vineyard Wind team for the last two and a half
9 years on this project.

10 Let me start with the benthic question
11 first. So, this is a subject that has come up at
12 pretty much all levels of the project review,
13 federal, state, as well as the regional. The
14 first place we kind of look for an answer on this
15 is to look at cables that have already been
16 installed in Nantucket Sound and similar waters
17 using similar installation techniques. So those
18 include both of the Nantucket cables, which are
19 each roughly 25 miles long and more recently a
20 cable over to the Vineyard which is about five
21 miles long. All of those were installed using a
22 jet plow technology which leaves a very narrow
23 trench in the seabed to do the installation.
24 More recently, we looked at pretty extensive

1 monitoring that was done for the Block Island
2 cable and this was done by both the proponent and
3 by BOEM, the federal agency responsible for that.

4 In all of these cases, the post
5 installation monitoring that was done and it was
6 done extensively for both the Vineyard cable and
7 the Block Island cable show that first the
8 disturbance was, in fact, very minimal, a few
9 feet of width. And, secondly, that the seabed
10 restored to its natural topography very quickly
11 with a matter of a few weeks. There will, as you
12 pointed out, be some short-term disturbance to
13 the benthic organisms themselves, so one of the
14 things that we've committed to primarily via the
15 state and federal permitting is a Benthic Habitat
16 Monitoring Plan, and that is being finalized as
17 part of our state permitting, the 401 Water
18 Quality Certification and, basically, we're going
19 to have to go, after installation, go back and do
20 some pretty specific testing, grab samples and
21 benthic analysis to basically show the state and
22 the federal agencies that, indeed, the habitat
23 has restored as we believe it will. And if for
24 some reason that does not happen, there are some

1. measures in that to restore some of at least
2 larger benthic organisms, shellfish and the like.

3 So we think there's a good track record
4 out there that shows us in these waters that the
5 cable can, in fact, be installed with very
6 minimal habitat damage and that that situation
7 restores itself quite quickly.

8 So let me go to your first question
9 which was sea-level rise, certainly something
10 that I think is top of mind for pretty much
11 everybody that's been involved in the project.
12 So we did look -- we looked carefully at Covell's
13 Beach to get an idea of historically is the beach
14 -- is it stable; is it eroding; is it accreting?
15 And, in fact, it is accreting. I don't have the
16 figure memorized but it was something to the tune
17 of about 150 feet of accretion over the last
18 century or thereabouts. So, that's certainly a
19 positive thing.

20 The physical installation that we'd be
21 conducting at Covell's, as Nate went through in
22 his presentation, uses HDD. So the cable is
23 placed at a depth of roughly 25 to 30 feet below
24 the water at its maximum depth. It's in

1 conduits. It terminates in a concrete vault that
2 will be buried under the Covell's Beach parking
3 lot and then that continues into a duct bank that
4 will go through the streets. All of that is
5 designed to operate in a wet environment if need
6 be. So it could be something much less dramatic
7 than sea-level rise. It can be just ordinary
8 storm flooding; it can be unusual participation
9 events and the like. So the equipment is
10 designed to maintain that, and we believe the
11 design of the installation is sufficiently robust
12 that it will certainly endure even in a
13 significant sea-level rise environment for the 30
14 to 40 year life of the project.

15 MR. CHARLES MCCAFFREY: Thank you.

16 MR. THEODORE BARTON: You're welcome.

17 CHAIR HAROLD MITCHELL: Yes, Ernie.

18 MR. ERNIE VIRGILIO: You recognized the
19 plow method; however, you haven't mentioned there
20 also could possibly be mechanical trenching,
21 there may be a dredge used, or identifying other
22 possible ways of digging this trench, shallow
23 water cable installation tractor, pre-trenching
24 boulder removal and replacement and jetting. I'm

1 a little bit concerned on, one, you only
2 mentioned that you've got to plow it in, but yet
3 you've indicated in all these other methods that
4 you're going to use if you have to that, to me,
5 is certainly a concern for disturbing the ocean
6 floor.

7 Next, you haven't brought up anything
8 about, I'm sorry, correct myself. I haven't
9 found any answers for the NOAA questions. I
10 can't find any data that you updated or you
11 answered any of their concerns.

12 My next question is what is the depth
13 of the cable on land and the width, and what's
14 the termination points of these junctions? Are
15 they 500 feet, 600 feet? I know I should be
16 reading your plan but I have reasons for those
17 questions. And how are these properly protected
18 in the road areas? And I'm assuming you're going
19 to, of course, replace the road and not just the
20 trench. It's quite a few miles of disturbed
21 roadway. So I've got a few questions if you'd
22 like to answer them.

23 MR. THEODORE BARTON: Okay. Well, that
24 was a pretty long list, so I think we'll start

1 with the roadways and we'll work back. So the
2 cable, as Nate explained in his presentation,
3 goes in a duct bank. The duct bank basically
4 will consist of eight roughly 10-inch plastic
5 ducts. They're typically arranged in a two-wide,
6 four-deep form, although depending on where we
7 are in interferences with other utilities that
8 can vary. There's an option to do a four-wide,
9 two-deep variation. But, typically, for most of
10 the road sections it will be either two ducts
11 wide or two conduits wide, four deep. There's a
12 minimum cover requirement of about three feet and
13 the trench itself is going to be two-and-a-half
14 feet wide or so and it will go down allowing for
15 the 3 feet of cover. It will be down at a depth
16 of 7 or 8 feet to the bottom of the trench.

17 So the plastic sleeves are encased in
18 concrete and then there's soil or compacted
19 material placed over that. The roads will be
20 restored by -- there will be a temporary patch
21 but then there is provision for full-width
22 repaving of the road. The town of Barnstable was
23 pretty insistent on that and that's the right way
24 to do it. So we've made that commitment.

1 There are splice vaults at a spacing of
2 roughly 1,500 feet, it can vary somewhat
3 depending on the number of bends and such in the
4 cable, but typically every 1,500 feet there's a
5 concrete vault that goes under the street. The
6 cable is pulled in at one end, and then the next
7 stretch of cable is pulled in from the other end.
8 They're spliced in the vault. There's six cables
9 in total. So the eight sleeves that I described
10 in the duct bank allows for two spares if they're
11 ever needed. This is pretty typical underground
12 electric utility construction. This question
13 came up in some of our other reviews. There are,
14 if memory serves me correctly, something like 30
15 other cities and towns in Massachusetts where
16 this technology or something very similar is in
17 use for voltages ranging from 46 kV for the
18 Nantucket cables of which there are some buried
19 in Barnstable streets all the way up to 345 kV in
20 places like Stoughton and Milton and the city of
21 Boston. There's quite a bit of 115 kV cable as
22 well. So we're certainly confident that this can
23 be installed properly and operate reliably for
24 the life of the facility.

1 Questions on that before I go onto the
2 other questions?

3 MR. ERNIE VIRGILIO: Well, I'm familiar
4 with duct lines. Just one more on your junction
5 boxes, those are concrete?

6 MR. THEODORE BARTON: Concrete, yes.

7 MR. ERNIE VIRGILIO: It's a cast iron
8 frame, right?

9 MR. THEODORE BARTON: For the manhole
10 covers above, yes.

11 MR. ERNIE VIRGILIO: Thank you. I
12 would like to get back to your process, which --
13 I'd like to get back to your process where you
14 mention all these other methods that you're
15 probably going to need bringing this cable
16 across. This is a great concern to me. I wish I
17 could comment about the windmills but I won't
18 because I don't think I'm supposed to. But,
19 anyway, a great concern to me is what you're
20 going to encounter, and this is a long path, and
21 all these other methods are not simply plowing a
22 couple of cables in the ground. So, how are --

23 MR. THEODORE BARTON: So --

24 MR. ERNIE VIRGILIO: Let's try and

1 answer that, but on top of that I'm going to ask
2 you one more. Go ahead.

3 MR. THEODORE BARTON: Okay. So we're
4 transitioning now from -- my first answer was on
5 the land cables, the under street cables; now
6 we're out in the ocean. So, you're right. It is
7 a long cable route. It's roughly 40 miles from
8 the offshore wind farm itself up through Muskeget
9 Channel, across Nantucket Sound to Covell's
10 Beach. So we started surveying that route about
11 three years ago. We did some preliminary
12 surveys, some sort of single line geophysical and
13 bathymetric surveys to get an idea of the basic
14 characteristics of the sediment. Obviously, we
15 had lots of map charts and other information to
16 start with. That survey, in turn, was used to
17 refine the routes. Then there was an area
18 roughly 800 meters wide surveyed very carefully
19 for the entire length of that route. So that
20 mapping is a level of detail; it does not appear
21 in this record but it has been submitted as part
22 of the BOEM, the federal record, and it's also
23 been submitted as part of the MEPA and state
24 review efforts. So people have had a chance to

1 look at this very carefully.

2 So we've characterized not only the
3 obvious like water depth and bottom contours but
4 we've taken vibracore samples along the entire
5 route so we have an idea down to a depth of 10 or
6 12 feet what the sediment actually looks like.
7 We've used geophysical techniques to take a,
8 basically, take a scan of what the bottom
9 conditions are, and we've done a host of
10 biological surveys as well.

11 So all that material was used by the
12 engineering team that's going to be responsible
13 for actually installing the cable to figure out
14 where within that 800 meter-wide swath is the
15 best location to route the cable.

16 So, the long list of potential methods
17 that you see listed there, some of those are
18 preparatory. So if we get in an area where the
19 conditions look pretty favorable but there may be
20 a boulder or more than one boulder in the way,
21 we've described a technique basically to pick up
22 the boulder, relocate it within the corridor but
23 to get it out of the way of the path that we'd
24 like to follow. We're confident that the vast

1 majority of the installation can be done using
2 jet plow, the sediments are conducive to that.
3 They're uniform; they're relatively soft. The
4 jet plow technique we think will work fine.

5 Now that said, there are areas where
6 there are stiffer sediments that we have to go
7 through, and there are areas where there are
8 active sand waves primarily in the Muskeget
9 Channel area. So you'll notice that we describe
10 the installation as a burial depth of 5 to 8 feet
11 below the stable sea floor, so that means we have
12 to get through the mobile sand wave and into the
13 stable sediment in order to do the jet plowing.
14 So the dredging was described as one method to,
15 basically, make a temporary notch in a sand wave
16 so that we can then run the jet plow through the
17 stable sediment and install the cable that way
18 and then the sea will restore those dunes.

19 We've been looking at a variant of a
20 jet plow which is a basically more capable
21 version of the normal jet plow that will allow us
22 to go through the sand waves without the need to
23 dredge in advance. And that looks like the
24 installation technique that we will use well

1 offshore.

2 The area that is in front of the
3 Commission, the Barnstable County piece of this,
4 which is about seven miles, that we are confident
5 we can use the jet plow technique as we've
6 described.

7 Lastly, the jetting is something that
8 -- it's a hand jetting operation and that's used
9 in very specific circumstances, for instance,
10 where you bring the end of the cable into the end
11 of the HDD. You can't run the equipment right up
12 to the end of the HDD pipes so you use hand
13 jetting to put the cable to the right depth
14 there. So we've left some flexibility but the
15 vast majority of the installation we expect to be
16 as described with a jet plow.

17 MR. ERNIE VIRGILIO: I just wanted my
18 colleagues to understand a little bit better, I
19 hope. Is there some reason why the NOAA
20 questions were not answered or were they
21 answered? Was there any information passed along
22 regarding their concerns? Can you answer that or
23 would someone else?

24 MR. THEODORE BARTON: No, I can speak

1 to that. So you're talking about the NOAA
2 letter, the comments --

3 MR. ERNIE VIRGILIO: Right.

4 MR. THEODORE BARTON: -- letter on the
5 DEIS?

6 MR. ERNIE VIRGILIO: Yes.

7 MR. THEODORE BARTON: Yeah. So, NOAA
8 is a federal agency and within that is the
9 National Marine Fisheries Service, so they're one
10 of several cooperating agencies in the federal
11 review process, which has been going on for the
12 last year and a half.

13 MR. ERNIE VIRGILIO: Yes.

14 MR. THEODORE BARTON: So in the course
15 of that, NOAA and NMFS have made their concerns
16 and questions known. They have been addressed by
17 the BOEM team that is working on the federal MEPA
18 review, so it's sort of like a parallel to MEPA
19 but this is on the federal level. They did, I
20 think, a decent job of addressing the NOAA
21 concerns in the DEIS; however, NOAA had
22 additional questions and those are being resolved
23 as the FEIS is being put together. That document
24 is out for federal agency review as we speak, and

1 it's scheduled to be made available for public
2 review in early June.

3 So, I think the NOAA comments have been
4 taken seriously by their counterparts in the
5 federal agency that's doing the MEPA review.
6 They're certainly taken seriously by the project.
7 That said, I think it probably is good to bear in
8 mind that they are an advisory agency; they're
9 not a permitting agency, so they can offer
10 comments and those comments are seriously
11 considered but there's a balancing that goes on
12 in the federal review process. And what you may
13 see in that letter is some of that balancing
14 process so.

15 MR. ERNIE VIRGILIO: To be fair, I live
16 here; I fish here. I love Cape Cod. I love the
17 waters; I love the area, that's the reason for my
18 questions. Thank you for doing your best.

19 MR. THEODORE BARTON: You're welcome.

20 CHAIR HAROLD MITCHELL: Any other
21 questions? Yes, Liz.

22 MS. LIZ TAYLOR: Thank you. I just had
23 a few questions about the cable and the more
24 benthic questions, so you might as well come back

1 up again.

2 MR. THEODORE BARTON: Okay.

3 MS. LIZ TAYLOR: There have been some
4 discussions about cable depth and cables coming
5 back to the surface or not being deep enough.
6 But in part of the run from the turbine to land,
7 you're not even going to have it buried? It's
8 going to be on the sea floor because you ran into
9 obstructions of some sort? It's going to be
10 buried with I think it was concrete blankets or
11 something? I'm just curious why you have to bury
12 it at all? Is that for storm damage protection?

13 MR. THEODORE BARTON: So, I'll start
14 with that piece. This is a project that has a
15 physical and economic life expectancy measured in
16 many decades, so we want to make sure that the
17 cable, which there are two cables, which are the
18 essential link between the offshore generation
19 and the onshore grid are installed such that they
20 are protected not only from storms but also from
21 fishing activity, from potential anchor drops,
22 etcetera, etcetera.

23 So it is accepted and expected normal
24 practice that the cables will be buried, and we

1 have set a burial, a target burial depth of 5 to
2 8 feet below the stable sea bed, which is
3 sufficient to protect the cable from that list of
4 hazards that I just went over. There could be,
5 although we expect this to be very limited, there
6 could be instances where the sediments are stiff
7 or rocky and we can't get that proper burial
8 depth. So we will make repeated efforts to get
9 to the burial depth, but if it just proves
10 impossible in short stretches, then we'll use
11 cable armoring to protect the cable. And,
12 typically, that is placing rocks over the cable.
13 So these could be stones of this size and a swath
14 about 10-feet wide and a couple feet thick is
15 placed over the cable and that provides a similar
16 level of protection to if you're able to bury it.

17 What we have told the federal and state
18 agencies is that our objective is to bury every
19 last foot of the cable so that we do not have to
20 use any armoring. But we have, given that it's a
21 40-mile cable, albeit carefully surveyed, we want
22 to have the flexibility if we do find a spot
23 where we can't bury it to the target depth, we
24 can protect it using other means. So that's

1 basically the armoring that was described.

2 Another technique to do that is to use
3 something called a concrete mattress, but our
4 feedback from the fishing community is that they
5 would rather see us use rock, not the concrete
6 mattresses because there has been some incidences
7 of gear being snagged on the mattresses which
8 have sort of sharper edges if you will. So our
9 preference would be to use the rock armoring.

10 MS. LIZ TAYLOR: Okay. Thank you.

11 There was a lot of discussion about noise issues;
12 are there any issues with vibration, underwater
13 vibration issues because I would think the
14 turbines would produce vibrations which would be
15 transferred?

16 MR. THEODORE BARTON: In a word, no,
17 and Jack Arruda may want to speak to this as,
18 well, but vibrations in this kind of equipment,
19 very bad thing. So the turbine operations are
20 monitored carefully and if there is any sign of
21 vibration which can lead to more severe problems,
22 the equipment is shut down until it can be
23 checked. So this is normally very smoothly
24 operating rotating equipment.

1 MS. LIZ TAYLOR: Okay. Thank you. I
2 just have one last question about economics using
3 local people to install or do the lifetime
4 management/maintenance of the turbines. I assume
5 the company that installs them provides their own
6 maintenance so how are we getting locals involved
7 even if you train them?

8 MR. THEODORE BARTON: So I may ask Nate
9 to expand on this, but as you probably know, the
10 company has committed to establishing its
11 operations and maintenance base out on the
12 Vineyard. The initial maintenance will, in fact,
13 likely be done largely by the people who have
14 provided the equipment, but that is intended to
15 be kind of a bridge to being able to train and
16 then use people from the local region to do that
17 work over the 30-plus year life of the project.

18 Nate.

19 MR. NATHANIEL MAYO: Yeah, I would add
20 to that, you know, there has been a substantial
21 priority put on local employment both -- both for
22 the community benefit associated with it and for
23 the fact that local knowledge when you work in a
24 marine environment or in a municipal, you know,

1 local environment that those are, you know, you
2 benefit from that significantly.

3 To add to that -- so O&M facility is,
4 for the long-term maintenance of the project, is
5 planned for Martha's Vineyard. There will be
6 some additional support services that will be
7 needed to be brought in periodically off-Island.
8 But we have also had a good dialogue with some of
9 the local individuals who come out of Mass.
10 Maritime, for example, or individuals who are
11 doing -- we have a guy from Bourne that we've
12 been in touch with specifically who's done cable-
13 laying operations for some of the Vineyard work.

14 Adding to that, there's sort of a
15 twofold set of priorities in terms of getting
16 local talent to be building not just this first
17 project but, perhaps, subsequent projects. The
18 Mass. CEC has done a lot of work to try and
19 provide anchoring for the industry in
20 southeastern Mass.

21 Additionally to that, Vineyard Wind has
22 made a \$10 million infrastructure commitment.
23 The idea is we can front load and build some of
24 the resources in New Bedford to support these,

1 that's going to be an economic draw for the
2 region -- region at large.

3 And I would add to it, you know, folks
4 that I know from Mass. Maritime that I went to
5 high school with are often finding themselves
6 having to go out to the Gulf or the West Coast.
7 This is a burgeoning industry that's going to be
8 available to them.

9 To add to the technical skill set that
10 our maritime industries have, fisheries on the
11 Cape, Islands, South coast, there is a need for
12 some specialized training associated with
13 transferring your basic and important marine
14 skills to an offshore wind environment,
15 construction or maintenance. We've devoted \$2
16 million to a wind -- we call the Windward
17 Workforce for workforce investment to actually
18 build that local talent. So we're already
19 working with Cape Cod Community College, Bristol
20 Community College, Mass. Maritime as well, some
21 of the universities that certainly Cape Codders
22 and people in Southeastern Mass. access. It's a
23 benefit to the industry to have local talent and
24 it's also, of course, a benefit to the

1 communities.

2 MS. LIZ TAYLOR: Thank you.

3 CHAIR HAROLD MITCHELL: Anyone else?

4 Kevin.

5 MR. KEVIN GRUNWALD: Just a follow-up
6 to Elizabeth's question; do you have an estimate
7 as to how many jobs would be generated by this
8 project both during construction as well as
9 operations?

10 MR. NATHANIEL MAYO: Sure. So the
11 operational, you know, the long-term operational
12 is, I think, roughly about 80 full-time jobs to
13 management the operations and maintenance of this
14 first project. That number and the number of
15 about 1,600, I believe, jobs associated with
16 construction, both came from work that we did
17 with UMass Dartmouth. They did an economic
18 evaluation of the projects, labor and workforce
19 benefits. That study was released last spring, I
20 believe.

21 MR. KEVIN GRUNWALD: Another benefit
22 that you cited was improved regional grid. My
23 understanding, and I could be wrong, is that the
24 reliability of the regional grid has more to do

1 with transmission and distribution of power than
2 it does with generation of power.

3 MR. NATHANIEL MAYO: Uh-huh.

4 MR. KEVIN GRUNWALD: So could you
5 explain how this project is going to improve the
6 grid?

7 MR. NATHANIEL MAYO: I could lean on
8 more technical experts but I could also provide
9 an anecdote. There was about, what was it,
10 January of last year we had the bomb cyclone that
11 hit. Part of that storm took Pilgrim off-line
12 due to a power line going down. Immediately
13 thereafter, there was a massive cold snap that we
14 all might, unfortunately, remember. That caused
15 the managers to divert natural gas resources to
16 home heating. So natural gas is sort of the fuel
17 that a lot of our electrical infrastructure
18 demands. In doing that, that brought diesel
19 online at Canal. So Canal needed to provide
20 basically emergency power due to that loss. It
21 cost ratepayers a huge amount of money, in the
22 tens of millions over just a short period of
23 time.

24 And in addition to that, for

1 environmental concerns, the amount of emissions
2 associated with flipping Canal over to diesel and
3 cranking that into the environment for a few days
4 was, you know, jaw-dropping. It was tens of
5 thousands of tons of CO2 in a short time. An
6 analysis was done about Vineyard Wind potentially
7 being involved in the grid when that occurred.
8 The wind resources, as we can all imagine, more
9 robust in the winter. The analysis asserted that
10 Canal would not have had to operate during that
11 time due to the consistent wind resource that was
12 going to be pumping wind and energy into the grid
13 on Cape Cod. As you know, our option for
14 generation and bringing power are unlimited.

15 I could, if that doesn't suffice, tap
16 some of the other talents behind me to address
17 that.

18 MR. KEVIN GRUNWALD: Well, again, I'm
19 curious because my understanding is that the
20 regional grid draws power from lots of sources.
21 It's not just our local sources.

22 MR. NATHANIEL MAYO: Correct. This guy
23 will have a better answer for you.

24 MR. KEVIN GRUNWALD: All right. Thank

1 you.

2 MR. THEODORE BARTON: Yeah, and that's
3 true. I mean it is a regional grid for a reason.
4 But both transmission and generation are
5 important to reliability, and I think it's worth
6 thinking about the fact that in southeastern
7 Mass. in general, the Cape in particular, two of
8 the major baseload plants that served that part
9 of the state, Pilgrim and Brayton Point, are no
10 more. So having a significant source of
11 generation that feeds directly onto the Cape
12 certainly helps the reliability. It's not a
13 panacea and it's not the only factor. There
14 still needs to be reliable transmission and the
15 like, but it certainly helps the reliability of
16 power to the Cape.

17 MR. KEVIN GRUNWALD: Okay. Great.
18 Thank you.

19 MR. THEODORE BARTON: Sure.

20 CHAIR HAROLD MITCHELL: Thank you,
21 Kevin.

22 CHAIR HAROLD MITCHELL: Yes, Cheryl.

23 DR. CHERYL ANDREWS: I'm happy to say
24 all of my questions have been answered except one.

1 that I think maybe would go to Mr. Idman. They
2 consider the very last condition with Open Space,
3 so there are two questions. One, there's a
4 dollar value listed in that condition, and I was
5 curious how that is developed? How does that
6 number per acre, the dollar value per acre get
7 generated?

8 MR. JONATHAN IDMAN: That formula is
9 within the Technical Bulletin for Open Space. So
10 really how it's arrived at, and Heather McElroy,
11 help me if I get this wrong, it's the average
12 assessed value of developable but undeveloped
13 open space in excess of two acres in the town.

14 DR. CHERYL ANDREWS: In that town?

15 MR. JONATHAN IDMAN: Correct.

16 DR. CHERYL ANDREWS: Okay. So it's
17 town specific.

18 MR. JONATHAN IDMAN: Yes.

19 DR. CHERYL ANDREWS: And that leads to
20 a second question which that I was curious where
21 the land that is to be donated or restricted
22 comes from? And you keep saying a municipality
23 as opposed to the municipality. So will this be
24 in Barnstable or are other municipalities

1 options?

2 MR. JONATHAN IDMAN: It's not; it's not
3 specific to the town of Barnstable. They could
4 work with -- to the extent that Open Space is a
5 regional issue, they could work with a land trust
6 in a neighboring town, for instance. But I think
7 it's more likely if the commitment is made
8 through an actual restriction on land, it's
9 likely that that will occur in the town of
10 Barnstable, but this is not prescriptive as to
11 that issue.

12 This could also be met by a commitment
13 to use some of those funds under the Host
14 Community Agreement to actually acquire and
15 restrict Open Space. Right now, those funds
16 could be used for that but they're not
17 necessarily earmarked for that. They're
18 earmarked towards a water investigation and
19 development of supplies.

20 DR. CHERYL ANDREWS: Right, right.
21 Okay. And so just for clarity, certainly that
22 this kind of issue is not going to be enough for
23 me to withhold a yes vote on this. But based on
24 what I'm reading and hearing, it would be my

1 preference particularly since the dollar value is
2 related specifically to the municipality that the
3 land restriction and the open space if you're
4 taking it from one, should happen in the same
5 municipality. That would be my bias for obvious
6 reasons. Every town is different in terms of
7 their Open Space, you know.

8 MR. JONATHAN IDMAN: If others share
9 your view, that's an easy fix here. We could
10 make that unique to the town of Barnstable. It's
11 just as you see, there are different
12 considerations but it's something the Commission
13 has done for a long time. If there's an open
14 space commitment, it's often done and required to
15 be done in a particular town where the project is
16 located. So if that was the desire of the body,
17 that could easily be modified.

18 CHAIR HAROLD MITCHELL: Okay. Thank
19 you. Any other questions? David.

20 MR. DAVID WEEDEN: Yeah, my question
21 just as a matter of transparency, I just want to
22 say that, you know, my office, we do work with
23 Vineyard Wind and have been for a long time on
24 reviewing it, the project, under Section 106, so

1 my office has been involved throughout the
2 process.

3 But my question today is more of a
4 statement that I think it was a statement that I
5 disagree with when it was mentioned that the
6 project will not affect any cultural resources.
7 I say this only because there's a significant
8 amount of the project that will be going in the
9 roadway and such and archaeological assets aren't
10 always unbeknown to us. Sometimes, you know, you
11 have to do archaeological studies and because a
12 lot of this project is in the roadway, there's
13 areas that haven't been tested.

14 So, you know, I would be hesitant to
15 make a blanket statement that the project will in
16 no way affect cultural resources. You know when
17 you do a preliminary desktop review of the
18 project area with a one-mile buffer, there's
19 known archaeological assets that pop up within
20 the Mass. Historical Commission's Listed
21 Inventories. So, you know, some of which are
22 burials habitation sites year round. When you
23 look at predictive modeling and such, you're
24 coming right down along the Wequasset Lake, to

1 me, would be a flag, that kind of area -- that
2 whole area of Phinneys Lane and such. There
3 could be cultural assets unbeknown to all
4 involved. So I just disagree with that
5 statement, and I wanted to go on record stating
6 such.

7 MR. JONATHAN IDMAN: May I respond, Mr.
8 Chair?

9 CHAIR HAROLD MITCHELL: Yes.

10 MR. JONATHAN IDMAN: I agree with you
11 and, actually, I misspoke. There is a finding.
12 It uses the term "known cultural assets." So
13 you're absolutely right. Basically, the
14 information we had is to work off mapping. So to
15 the extent that we're dealing with that road
16 layout, that disturbed road layout, it's true to
17 say there are known assets within the layout.
18 But you're absolutely right, these things could
19 get discovered and that's what populates the
20 state's database, if you will.

21 MR. DAVID WEEDEN: Uh-huh.

22 MR. JONATHAN IDMAN: So I agree with
23 you and misspoke but that language is actually in
24 the decision itself as known assets or resources.

1 MR. DAVID WEEDEN: Okay. Thank you.

2 CHAIR HAROLD MITCHELL: Thank you.

3 Tom.

4 MR. TOM WILSON: The dielectric fluid
5 that's used for cooling, is that unique to a wind
6 turbine project or is it a fluid that's normally
7 used in electrical generation? And is there any
8 history of leaks of dielectric fluid in
9 Massachusetts?

10 MR. THEODORE BARTON: So there's
11 nothing unique about this project in terms of
12 dielectric fluid. Dielectric fluid, which is
13 essentially refined mineral oil, is used in,
14 essentially, every substation, big and small,
15 throughout Massachusetts of which there are
16 several hundred. So it's used in any
17 transformer, any reactive compensation device,
18 capacitor banks, etcetera. So it's a necessary
19 component and it serves both an insulating and a
20 cooling purpose within a transformer.

21 There have -- and it's used not only in
22 substations but smaller transformers that are
23 mounted on poles. As you go up and down a
24 street, you'll see every, you know, 500 or 1,000

1 feet. So there is, in fact, some spill history
2 not infrequently. If there's an auto accident
3 and somebody knocks down a pole, the pole
4 transformer comes with it, and when it hits the
5 ground, there are sometimes ruptures of those.
6 So the utilities be it Eversource or National
7 Grid have procedures in place to clean that up
8 and it's a relatively small volume.

9 Within substations proper, the
10 equipment is a very robust design so leaks are
11 certainly infrequent but that's why you have
12 containment below them. In the event that there
13 is a problem with the equipment, the dielectric
14 fluid, be it a slow drip or something more than
15 that, it ends up in a concrete sump and it can be
16 cleaned up properly from there.

17 The whole subject is something that the
18 electrical power industry monitors and studies
19 and pays careful attention to. So there are some
20 pretty lengthy reports from IEEE and others that
21 talk about the causes of potential failures of
22 transformers and means to prevent them. So
23 there's nothing -- there's nothing unique about
24 this facility in that regard.

1 MR. TOM WILSON: There was mention of a
2 secondary containment to supplement the primary;
3 could you describe how that works?

4 MR. THEODORE BARTON: Yeah, so the
5 basic containment design that has been developed
6 and this has been kind of a joint effort between
7 the project with input from the town of
8 Barnstable, the town of Barnstable has hired
9 outside engineers to assist them in their review.
10 So the transformer itself is basically a heavy
11 steel vessel with windings inside it and the
12 dielectric fluid is within that vessel. So
13 beneath it, there's a concrete sump which
14 basically is sized to accommodate 110 percent of
15 the volume of the dielectric fluid in the
16 transformer. So if you lost the entire
17 transformer, it contains all of the fluid with a
18 10 percent margin. Then on top of that the
19 assumption's made that all that happens in the
20 midst of a torrential rainstorm so you have not
21 only the dielectric fluid but you have rain water
22 accumulating in the sump. And, typically, the
23 industry design standard for that has been
24 basically a 24-hour storm, basically a heavy

1 thunderstorm, so maybe 5 inches/6 inches of
2 rainfall. For the Cape, that was updated
3 recently to a 9-inch storm event which was our
4 original design assumption.

5 In discussions with the town of
6 Barnstable, they wanted to see something beyond
7 that, so their engineers basically recommended as
8 kind of a belt and suspenders approach to this
9 that we use the probable maximum precipitation
10 event which is 30 inches of rainfall. So the
11 containment is going to be sized for 110 percent
12 of the dielectric fluid plus 30 inches of
13 rainwater on top of that at the same time.

14 So the balance of the system, there's
15 an outlet pipe at the base of the containment,
16 and that has, basically, something called an oil
17 inhibition device in it, which is a series of
18 plastic, special plastic beads, so they allow
19 rainwater to pass through it. But if there is
20 any dielectric fluid or oil mixed with that
21 water, they swell up and seal off the containment,
22 so that the dielectric fluid stays put. Those
23 then drain to an oil-water separator that, in
24 turn, drains to a large containment -- I

1 shouldn't say containment, basically a basin at
2 the south end of the site which its primary
3 purpose is for stormwater retention, but it also
4 serves as a second line of defense, if you will,
5 for the dielectric fluid.

6 So we think this is a -- it's a very
7 robust design that goes, as was mentioned earlier
8 in our presentation, it goes well beyond the
9 normal industry standards. A lot of thought has
10 gone into it, and both the project and the town
11 of Barnstable are taking this very seriously. So
12 I think we have a good solid design there.

13 MR. TOM WILSON: If there were a leak
14 of that dielectric fluid, would it necessitate
15 those nearby wells being immediately shut down or
16 not?

17 MR. THEODORE BARTON: No, because the
18 whole intention of the system is to make sure
19 that the dielectric fluid stays in the
20 containment sump.

21 MR. TOM WILSON: Okay. Thank you.

22 MR. THEODORE BARTON: Sure.

23 CHAIR HAROLD MITCHELL: Okay. Len, I'm
24 going to go to you for one last question, and

1 then we're going to close off the questions. So
2 you've got the final question.

3 MR. LEONARD SHORT: Wow. My question -
4 - I'm a little confused when you showed one of
5 the graphics, you showed the boring and it was
6 down through the beach in the sand and out into
7 an open body of water. And then you talk about
8 the fact that everything is going to be
9 underground; will this cable at any point be
10 exposed?

11 MR. THEODORE BARTON: Okay. The short
12 answer, no, and let me explain a little bit about
13 the graphic that you saw. So that was a very
14 simple depiction of the horizontal directional
15 drill, which starts in the parking lot and,
16 basically, follows kind of a shallow arc for
17 roughly a thousand feet. At its deepest point,
18 it's down maybe 30 feet or so, but as it gets out
19 a thousand feet or so from the shore, it comes up
20 to the sea bottom and you, basically, are leaving
21 -- you're placing a conduit. So then you bring
22 the submarine cable as close as you can get to
23 that. And then the cable is put into the open
24 end of that conduit, pulled through to the beach

1 where there's a splice vault. And then that --
2 it's a little hard to do it without a chalkboard,
3 but the point at which the HDD sleeve and the
4 cable come together at the seafloor, that is then
5 hand jetted so that you have five or six feet of
6 sediment below it. So once it's in place, you
7 then, basically, remove -- temporarily remove the
8 sediment from below it so that that sinks into
9 the sediment and is covered at that point.

10 MR. LEONARD SHORT: Thank you.

11 CHAIR HAROLD MITCHELL: All right. So
12 we'll close questions for now, but we do have
13 another round of questions and comments after
14 public comment.

15 Public Comments

16 CHAIR HAROLD MITCHELL: So, at this
17 time, I'm going to open up the microphone for
18 public comments.

19 We'll start with any state or federal
20 officials? Seeing none.

21 Any local officials who would like to
22 speak?

23 MR. CHARLES MCLAUGHLIN: Good
24 afternoon, Mr. Chairman. Charles McLaughlin,

1 Attorney for the Town of Barnstable. I
2 appreciate the opportunity to comment and in --
3 since the subject of the very last condition has
4 been raised, we had an exchange with counsel on
5 that matter today, and we just wanted to clarify
6 from the town's perspective that, obviously, as
7 we look to utilize this dedicated fund that will
8 be coming to us in the way of mitigation the
9 opportunity to search out new sites and the like
10 is very arduous for new wellhead sites, etcetera,
11 and it can take as long as five years. So we
12 don't know at this point where we're fairly -- a
13 fair amount of publicity on the subject lately
14 and we're looking very actively for sites. We
15 don't know -- we have not identified any
16 particular properties for acquisition. We just
17 wanted to make it clear that there is no
18 obligation of the town to dedicate these funds in
19 any particular direction and we need that
20 flexibility to find the best opportunity.

21 So unless I get hit by a bus or counsel
22 moves on for Vineyard Wind that we just want the
23 record to be very clear that this is a wide open
24 discussion. And when presented with the

1 opportunity at the time that it arises, the town
2 will certainly weigh it.

3 I would respectfully suggest in terms,
4 and Mr. Chirigotis may want to comment from his
5 experience on the Town Council, there's always a
6 concern at the council level in our town about
7 taking properties off the tax rolls, which would
8 be accompanied by at least a diminished income
9 for the town when we devote properties to
10 conservation restrictions. And depending on what
11 property it might be that's identified, the
12 council always wants to weigh in on it. I would
13 think that in terms of giving Vineyard Wind the
14 most expeditious and wide-ranging opportunity for
15 a dedication to find land that's appropriate. I
16 think we're quite content with leaving that open
17 not only to the Town of Barnstable but to other
18 towns that might have pressing needs. This is a
19 regional project.

20 So I don't want to speak for the town
21 on that. The subject has not come up because,
22 again, it's quite premature in terms of our
23 analysis, but I do think it gives everyone the
24 best chance to consider that. So I might make

1 that simply as an observation and leave it to you
2 to vote accordingly.

3 The question -- let me step back for a
4 moment, and as I said last month, the town's
5 extremely grateful to the interaction that we've
6 had from day one with the Vineyard Wind folks.
7 We learned a lot of lessons from the prior failed
8 project, and I think all of those lessons were
9 employed in the negotiations that resulted in
10 this Host Community Agreement. And I think the
11 Host Community Agreement will act as a standard
12 bearer going forward as more projects are
13 proposed and as these projects inevitably come
14 ashore both in the Commonwealth and outside.

15 And in terms of setting standards, I'll
16 also make the observation that in conjunction
17 with the last failed project, we spent a lot of
18 time looking at the IEEE Standards for
19 containment and, quite bluntly, it's woefully out
20 of date. And so we're out on the cutting edge
21 here, and my sense without knowing that industry
22 as well as I know other matters, my sense is that
23 what our consulting engineers and even today with
24 Mr. Jack Arruda who's here are about to

1 accomplish is something that will be certainly a
2 state standard if not a national standard for
3 these types of projects.

4 These dielectric fluids are -- the
5 selling point is with due respect to my friends
6 at Vineyard Wind, it's like mineral oil. Well,
7 not unless you're in love with cancer. The
8 Massachusetts contingency plan that addresses
9 allowable levels of various chemicals in our
10 drinking wells, drinking water rather in the
11 Commonwealth says that you can only allow, and
12 it's a generic description, I think you may see
13 as a result of, again, something that's getting a
14 lot of publicity and is going to get more, a real
15 thorough review by DEP of trying to create more
16 definitive standards for different types of
17 products. Right now, the generic version of this
18 because it relates to, basically, all oil
19 products it's 1 to 5 million standard. So if you
20 have a 10-gallon spill of dielectric fluids, that
21 translates into a pollution level if evenly
22 distributed of 50-million gallons of water. And
23 so because this site is directly upstream of not
24 only the Barnstable wells but also the Yarmouth

1 wells and so forth, it's been a real concern to
2 all of us, and Vineyard Wind has been very
3 appreciative and respectful of that concern.

4 Fire Chief Burke at the Hyannis
5 District said to us, "You know, the chance of
6 something going wrong is very minimal, but God
7 help us if it does, we lose Hyannis." So we've
8 got to get this right, and I think the work that
9 we have all done and about to complete with a
10 subsequent written agreement on the question of
11 containment will set certainly state maybe even
12 national standards to be used for this type of
13 work done.

14 Even today, there was a handshake on
15 the subject of, well, what happens, as we had in
16 Wellfleet just last year, an explosive situation
17 on the ground with a transformer failure and
18 you've got, of course, those product spraying all
19 over the place. Today, at the suggestion of our
20 engineers, we've reached at least a tentative
21 oral understanding with Vineyard Wind that three
22 sides are going to be contained by blast walls.
23 The fourth side will have the cooling radiator
24 which is part of the transformer to help in which

1 usually is the last thing to be destroyed in an
2 explosion there to prevent material getting out.
3 There's an extensive site control design and
4 directive leading to containment on the site so
5 if this gets out beyond the walls.

6 So we've given it a lot of thought and
7 very happy to say, I think, with dealing with a
8 difficult push/pull situation, benefit/detriment
9 analysis that we're happy as we can be with
10 what's coming forth.

11 You did ask a question and one lesson I
12 asked this Commission to consider going forward
13 and it's not directly related, actually one piece
14 of good news added to this mix, is Eversource has
15 their station a couple hundred feet away and it's
16 going to be, obviously, the connecting point to
17 the grid. Eversource has been aware of the
18 town's concerns in all of our hearings and has
19 done their risk analysis and recognizes what a
20 tremendous risk it is to their bottom line if
21 things go wrong at their substation. And so they
22 have voluntarily agreed and we expect to sign the
23 agreement probably tomorrow that Eversource is
24 going to retroactively retrofit its substation

1 next door which is not currently to these
2 standards -- to the standard that Vineyard Wind
3 is adopting. So, again, it's a national model
4 going forward.

5 I say that Cape-wide because I think
6 the next place to have this discussion including
7 in July and among the managers and among the
8 Selectmen's Associations and like is an
9 opportunity to discuss what this hazard is, what
10 it can do to your water source if it, God help
11 us, something goes wrong and an opportunity to
12 work I think with Eversource as they consider
13 what this risk is and how best to protect us all.
14 So it's a great byproduct coming out of this
15 project.

16 I think that's probably -- the town has
17 been very supportive of this project
18 understanding that we needed first to protect
19 ourselves and we've had great response from them.
20 I know the manager spent, as we all did, hours
21 and hours and hours last fall working out this
22 very detailed Host Community Agreement, and I
23 think we can all be proud of and complementary to
24 the Vineyard Wind for having the candor to

1 recognize these risks and address them up front.

2 So, we thank you, and we do recommend
3 your support for the approval of this project.
4 Thank you.

5 CHAIR HAROLD MITCHELL: Thank you. At
6 this time, we've had three people sign the sign-
7 in sheet, only one asked to speak, Marjorie
8 Thearle.

9 MS. MARJORIE THEARLE: Yes. Can I just
10 ask a question, two questions?

11 CHAIR HAROLD MITCHELL: If you want to
12 come up to the podium, ma'am.

13 MS. MARJORIE THEARLE: Okay. Oh, I
14 just wanted --

15 CHAIR HAROLD MITCHELL: Ma'am, I need
16 you to come to the podium, please, and state your
17 name.

18 MS. MARJORIE THEARLE: Marjorie
19 Thearle, West Hyannis Port. I'm within about a
20 tenth of a mile of this project, and I was
21 wondering about communication if the landowners
22 that are being affected by this have been
23 notified because I know a lot of the people --
24 I'm a full-time resident, but a lot of the people

1 are -- this is their second homes on Craigville
2 Beach Road, Strawberry Hill Road, and I was
3 wondering if -- I don't know if it's Barnstable
4 that does it or --

5 CHAIR HAROLD MITCHELL: I'm going to
6 let Jon Idman answer your question for you.

7 MS. MARJORIE THEARLE: No, I just have
8 one quick -- ask the engineer a question.

9 MR. JONATHAN IDMAN: In terms of legal
10 notice for the hearings, yes. We received a
11 certified abutters list from the applicant per
12 our regulations, and we sent out like almost 800
13 abutters notification forms to everybody within
14 300 feet of the project. So that means in terms
15 of land, everyone within 300 feet of that land-
16 based route.

17 MS. MARJORIE THEARLE: Oh, that's good
18 because I live in a community just a hair's
19 breath away and a lot of the people don't read
20 the Times or anything and they don't know about
21 this coming at Covell's Beach. And a couple of
22 the people I did talk to are worried about what
23 that cables emit in the water coming into
24 Covell's Beach, if there's any emissions --

1 emissions of any kind?

2 CHAIR HAROLD MITCHELL: Ma'am, can you
3 speak into the microphone, please?

4 MS. MARJORIE THEARLE: Is there any
5 kind of emissions coming out of the cables in the
6 water coming into Covell's Beach? You know, I
7 had a lady say, "Oh, I'm not going there anymore
8 because there's going to be radiation," which is,
9 to me, ignorance, but I just wanted to be able to
10 go back and tell them.

11 CHAIR HAROLD MITCHELL: Okay. Any
12 other questions, ma'am?

13 MS. MARJORIE THEARLE: No. Thanks.

14 CHAIR HAROLD MITCHELL: Thank you.

15 MR. THEODORE BARTON: Just a short
16 comment on the notice also, a similar process was
17 followed for the EFSB process where folks --
18 everybody along the route and abutters of the
19 abutters were all notified by mail and there's
20 been a host of other notification processes.

21 But to answer the question on cable
22 emissions, the subject of EMF or electrical
23 magnetic fields was something that in particular,
24 the EFSB looks at quick carefully. We did a

1 modeling study that looked in a conservative
2 fashion at ground-level fields both underwater
3 and on land. For a buried cable like this, there
4 are no electric fields. Those are easily
5 shielded by the conduits and the soil. There are
6 very low levels of magnetic fields. The modeling
7 that we did for the typical submarine
8 installation, we looked at burial depths of a
9 meter and two meters. At two meter burial depth,
10 the sea floor magnetic field level directly above
11 the cable was something in the vicinity of 30 or
12 40 milliGauss and that compares to a health
13 protective standard that's been established by an
14 international group that looks at this of 2,000,
15 so a very, very small fraction of that standard.
16 Similar levels above -- directly above the cable
17 as it's buried under the street and specific to
18 the beach, the levels are going to be lower still
19 because the HDD will place the cable down at
20 depths of 15 or 20 feet below the beach. So we
21 think you can confidently tell your neighbors not
22 to worry about that subject.

23 MS. MARJORIE THEARLE: Thank you.
24 Thank you.

1 CHAIR HAROLD MITCHELL: Thank you.

2 MR. NATHANIEL MAYO: I would like to
3 add just one quick thing about the outreach
4 effort because it's among our highest priorities.
5 We mentioned the open houses and forums that
6 we've been having in Barnstable and other towns
7 over the last year and half. In addition to the
8 formal filings we do in terms of abutters which
9 was stipulated by law, we did in some of those
10 forums we worked mailed note cards, do mailings
11 to people, households along the route. And then
12 in later stages while also in addition to ads in
13 the Cape Cod Times, the Barnstable Patriot, went
14 into media a little bit too, and I think we
15 actually did get a, from a broad demographic,
16 response to us posting ads on Facebook, Google
17 Ads, that kind of thing to go a little further to
18 try to make sure we touch as many people as
19 possible. In addition to that, several
20 appearances before the Town Council in Barnstable
21 to use that medium to get the word out.

22 CHAIR HAROLD MITCHELL: Thank you.
23 Never want to stymie, is there anyone here that
24 feels they must speak? I'll open the microphone

1 up for one last time. Going, going, gone.

2 All right. So at this time,
3 Commissioners, any last statements, questions,
4 comments you'd like to make? Yes, David.

5 MR. DAVID WEEDEN: I was wondering with
6 all the talk about the dielectric fluids and such
7 if there was going to be around the adjacent area
8 where they're going to require the fluids if
9 there's monitoring wells and if there will be
10 required monitoring intervals to track? Worst-
11 case scenario, I think it's always better to plan
12 for the worse, hope for the best, and, you know,
13 are there monitoring wells to determine if
14 anything has gotten into the water?

15 MR. JACK ARRUDA: Jack Arruda with
16 Vineyard Wind. Yes, the short answer is we have
17 put, as we speak, they're actually installing
18 those monitoring wells over the last couple of
19 days. So they'll be three monitoring wells, one
20 on the north, one on the southwest corner, and
21 one in the southeast corner at the town's request
22 and our own request. We'd like to have them so
23 that we can do post -- pre, post, and if anything
24 was to happen be able to identify the original

1 source.

2 MR. DAVID WEEDEN: Thank you.

3 CHAIR HAROLD MITCHELL: Yes, Fred.

4 MR. FRED CHIRIGOTIS: Thank you, Mr.
5 Chairman. Briefly, I heard my name and it woke
6 me right up. Just two issues; one is with regard
7 to the last condition, I see it says 5.98 acre
8 area for Open Space restriction, conservation
9 restriction. It doesn't say a single parcel
10 though and that's significant, I think, that it
11 doesn't designate just one 5.9 acre parcel.
12 That's important.

13 And the Town of Barnstable, I think,
14 all over the Cape given the significant buildout
15 that we have and the unavailability of space and
16 the need for a residential space, I think the
17 idea that we can divide that parcels up where
18 needed, and I think what we really need to be
19 protecting when we do conservation restrictions
20 is our wellheads, you know, zone ones first and
21 look from there.

22 And the other thing that we considered
23 and at least that I've heard considered, as
24 Attorney McLaughlin mentioned, is taking

1 properties off the tax rolls and putting
2 conservation restrictions puts the burden on the
3 existing householders and nobody likes to hear
4 that they're going to be footing the burden and
5 someone else -- and other properties are going to
6 come off; so that's one issue.

7 My concern or at least a thought and it
8 may not be appropriate for today, but the route
9 of the cable which goes from primarily Strawberry
10 Hill Road to Phinneys Lane is a very
11 significantly dense residential area. And while
12 the road's open, I would like to be able to hope
13 that the town has the time to be able to
14 encourage the burying of utilities, and I think
15 it's also the main route or one of the main
16 routes we're going to use for wastewater
17 treatment and sewerage, so I'd like to be able to
18 see the pipes get in the ground while the road's
19 open all at one time. Thank you.

20 CHAIR HAROLD MITCHELL: Thank you,
21 Fred. Looking around the room, any -- Jon.

22 MR. JONATHAN IDMAN: Yeah, can I just
23 make one quick comment about that? That's a
24 really important issue, Fred, that's been

1 discussed under the Host Community Agreement.
2 It's also the subject of a few different
3 conditions to make best efforts with the town to
4 coordinate infrastructure installation is in the
5 conditions as one of the requirements. So I
6 think that's responsive to the issue you raised.

7 CHAIR HAROLD MITCHELL: Thank you,
8 John. Yes, Len.

9 MR. LEONARD SHORT: Tom, to address
10 your concern about the mineral oil; in Orleans we
11 have some permeable reactive barriers, PRBs,
12 which have been installed. And my understanding
13 is that the fluid that is used as mineral oil in
14 the PRB, and we're told that there is no adverse
15 effect and that the mineral oil can be contained
16 reasonably well so.

17 MR. TOM WILSON: Thank you.

18 CHAIR HAROLD MITCHELL: Okay. At this
19 time, what I would like to do is take a motion
20 too close the public hearing on the Vineyard Wind
21 project.

22 MR. JACK MCCORMACK, JR.: So moved.

23 CHAIR HAROLD MITCHELL: I have a
24 motion.

1 MR. ROGER PUTNAM: Second.

2 CHAIR HAROLD MITCHELL: Second. All in
3 favor?

4 COMMISSION MEMBERS: Aye.

5 CHAIR HAROLD MITCHELL: Any opposed?
6 Any abstention?

7 MR. STEPHEN MEALY: Abstention, Mr.
8 Chairman.

9 CHAIR HAROLD MITCHELL: Yes, sir.
10 (Public Hearing closed.)

11 So at this time, what I'm going to do
12 is open back up the computer for us to vote.
13 Thank you. And then on your buttons in front of
14 you, you see a plus, that would be -- I'm going
15 to read the motion now for you.

16 I move that the Cape Cod Commission
17 adopt the draft written DRI decision as
18 recommended by the hearing officer and grant DRI
19 approval for the Vineyard Wind Connector project
20 subject to the conditions set out in said
21 decision. Can I have a motion?

22 MR. ROGER PUTNAM: So moved.

23 CHAIR HAROLD MITCHELL: I have a
24 motion. Do I have a second?

1 MR. LEONARD SHORT: Second.

2 CHAIR HAROLD MITCHELL: Thank you.

3 Voting on the green votes in favor; the yellow is
4 an abstention, the negative red is a vote
5 against. Please vote now.

6 MS. JESSICA WEILGUS: Mr. Chair, could
7 we take this by roll call as well so that the
8 stenographer can have the benefit of knowing what
9 each individual vote is?

10 CHAIR HAROLD MITCHELL: So I will ask
11 Gail to please take a roll call vote also.
12 You've already voted on the machine; we'll leave
13 that open. Once you voted, your light will stay
14 one color and just make sure that's the vote you
15 want to have. And, Gail, if you could do the
16 roll call vote for me, please.

17 MS. GAIL HANLEY: Barnstable, Fred
18 Chirigotis.

19 MR. FRED CHIRIGOTIS: Yes.

20 MS. GAIL HANLEY: Bourne, Stephen
21 Mealy.

22 MR. STEPHEN MEALY: Abstain. Thank
23 you.

24 MS. GAIL HANLEY: Brewster, Elizabeth.

1 Taylor.
2 MS. LIZ TAYLOR: Yes.
3 MS. GAIL HANLEY: Chatham, Tom Wilson.
4 MR. TOM WILSON: Yes.
5 MS. GAIL HANLEY: Falmouth, Charles
6 McCaffrey.
7 MR. CHARLES MCCAFFREY: Yes.
8 MS. GAIL HANLEY: Harwich, Jacqueline
9 Etsten.
10 MS. JACQUELINE ETSTEN: Yes.
11 MS. GAIL HANLEY: Mashpee, Ernest
12 Virgilio.
13 MR. ERNIE VIRGILIO: Yes.
14 MS. GAIL HANLEY: Orleans, Len Short.
15 MR. LEONARD SHORT: Yes.
16 MS. GAIL HANLEY: Provincetown, Cheryl
17 Andrews.
18 DR. CHERYL ANDREWS: Yes.
19 MS. GAIL HANLEY: Sandwich, Harold
20 Mitchell.
21 CHAIR HAROLD MITCHELL: Yes.
22 MS. GAIL HANLEY: Truro, Kevin
23 Grunwald.
24 MR. KEVIN GRUNWALD: Yes.

1 MS. GAIL HANLEY: Wellfleet, Roger
2 Putnam.

3 MR. ROGER PUTNAM: Yes.

4 MS. GAIL HANLEY: Yarmouth, John
5 McCormack, Jr.

6 MR. JACK MCCORMACK, JR.: Yes.

7 MS. GAIL HANLEY: Minority
8 Representative, John Harris.

9 MR. JOHN HARRIS: Yes.

10 MS. GAIL HANLEY: Native American
11 Representative, David Weeden.

12 MR. DAVID WEEDEN: Yes.

13 MS. GAIL HANLEY: Mr. Chairman, we have
14 14 votes in favor and one abstention.

15 CHAIR HAROLD MITCHELL: I'm happy to
16 say that's what shown on the computer, so the DRI
17 decision passes.

18 (DRI Decision passed.)

19 Other Business

20 CHAIR HAROLD MITCHELL: Thank you. At
21 this time seeing the late hour, we do have a
22 little new business I'd like to handle and then
23 we'll take a motion to adjourn.

24 Due to a recent opening, we have an

1 opening now for an alternate on the committee on
2 Regulation and Planning. They meet usually
3 before this meeting on Thursdays. If you'd like
4 to be considered for that, please meet me or have
5 a discussion with me, send me an email. I have
6 had one person express an interest, so it will be
7 an alternate position. I'm happy to say that
8 Jackie has stepped up as an alternate into a
9 voting position on that board. So I do have an
10 opening for that.

11 All right? Then any other new business
12 that anyone has? Seeing none. I'm not
13 surprised. I'll take a motion to adjourn.

14 MR. ROGER PUTNAM: So moved.

15 MR. JACK MCCORMACK, JR.: Second.

16 CHAIR HAROLD MITCHELL: I have a motion
17 and a second. All in favor?

18 THE COMMISSION MEMBERS: Aye.

19 CHAIR HAROLD MITCHELL: Any opposed?
20 Thank you and we'll see you next time.

21 (Whereupon, the Cape Cod
22 Commission meeting moved to
23 adjourn at 5:17 p.m.)

C E R T I F I C A T E

COMMONWEALTH OF MASSACHUSETTS

COUNTY OF BARNSTABLE, SS

I, Linda L. Wesson, a Certified Verbatim Reporter and Notary Public in and for the Commonwealth of Massachusetts, do hereby certify that the foregoing volume is a true and accurate transcript, prepared to the best of my ability, of the Cape Cod Commission Hearing, which was held on Thursday, May 2, 2019, at the East Wing Conference Room, Barnstable County Complex, 3195 Main Street, Barnstable, Massachusetts, 02630.

5/13/19
Date

Linda L. Wesson ORIGINAL
Linda L. Wesson, CVR
Notary Public
My Commission Expires: June 3, 2022

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