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BARNSTABLE, MASSACHUSETTS 02630



CAPE COD  
COMMISSION

(508) 362-3828 • Fax (508) 362-3136 • [www.capecodcommission.org](http://www.capecodcommission.org)

## Minutes

### Meeting

### Cape Cod Commission

First District Courthouse • Assembly of Delegates Chambers  
3195 Main Street, Barnstable, MA 02630

December 1, 2016

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

Town	Member	Present
Barnstable	Royden Richardson	✓
Bourne	Richard Conron	✓
Brewster	Elizabeth Taylor	✓
Chatham	Michael Skelley	Absent
Dennis	Richard Roy	✓
Eastham	Joy Brookshire	Absent
Falmouth	Charles McCaffrey	✓
Harwich	Jacqueline Etsten	✓
Mashpee	Ernest Virgilio	Absent
Orleans	Len Short	✓
Provincetown	John Krajovic	✓
Sandwich	Harold Mitchell	✓
Truro	Kevin Grunwald	✓
Wellfleet	Roger Putnam	✓
Yarmouth	John McCormack, Jr.	✓
County Commissioner	Mary Pat Flynn	✓
Minority Representative	John Harris	✓
Native American Rep.	David Weeden	Absent
Governor's Appointee	Vacant	Vacant

The meeting of the Cape Cod Commission was called to order on Thursday, December 1, 2016 at 3:00 p.m. in the First District Courthouse, Assembly of Delegates Chambers, 3195 Main Street, Barnstable, MA. Roll was called and a quorum established.

■ **SUMMARY OF ACTIONS TAKEN/VOTES:**

**Approval of Minutes:** The minutes of the November 10, 2016 Commission Meeting were approved with a unanimous vote of the Commission.

**Public Hearing: Canal Unit 3 (CCC Project #15016)**

The Canal Unit 3 project proposes the construction of a new, high-efficiency, fast-starting approximately 350-megawatt peak electric generating unit and related site improvements on an approximate 12-acre site at the existing 52-acre Canal Generating Station site located at 9 Freezer Road in Sandwich, MA. Following presentations, testimony and discussion the Commission voted unanimously to close the Development of Regional Impact (DRI) public hearing period on the project. Following the close of the public hearing period, the Commission voted unanimously to adopt the draft DRI decision and approve the project, subject to the findings and conditions in the DRI decision.

**Executive Director's Report**

The Cape Cod Commission Executive Director had no new business to report.

Attached is the transcript of the December 1, 2016 Cape Cod Commission Meeting and Canal Unit 3 public hearing prepared by Linda L. Wesson, Professional Court Reporter.

A motion was made to adjourn at 4:39 p.m. The motion was seconded and voted unanimously.

Respectfully submitted,

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Roger Putnam, Secretary

**List of Documents Used/Presented at the December 1, 2016 Commission Meeting**

- Minutes of the November 10, 2016 Commission Meeting.
- Handout material: December 1, 2016 Commission meeting agenda.
- Handout material: Canal Unit 3 draft Development of Regional Impact Decision.
- Material presented: Canal 3 Development PowerPoint presentation prepared by NRG.
- Material presented: Canal Unit 3 DRI Review PowerPoint presentation prepared by Commission Staff.

**COMMONWEALTH OF MASSACHUSETTS**

**CAPE COD COMMISSION**

**PUBLIC HEARING:  
CANAL UNIT 3  
(CCC PROJECT #15016)**

**HELD ON THURSDAY, DECEMBER 1, 2016**

**TRANSCRIPT** prepared by Linda L. Wesson,  
Professional Court Reporter and Notary Public in and  
for the Commonwealth of Massachusetts, at the First  
District Courthouse, Assembly of Delegates Chambers,  
3195 Main Street, Barnstable, Massachusetts, 02630,  
commencing at 3:00 p.m.

\* \* \* \* \*

**CANAL COURT REPORTING  
15 Lakewood Road  
Sagamore Beach, MA 02562  
(508) 888-4676**

**A P P E A R A N C E S**Cape Cod Commission Staff

Barnstable, Royden Richardson  
Bourne, Richard Conron  
Brewster, Elizabeth Taylor  
Dennis, Richard Roy  
Falmouth, Charles McCaffrey  
Harwich, Jacqueline Etsten  
Orleans, Leonard Short  
Provincetown, John Krajovic  
Sandwich, Harold Mitchell, Chair  
Truro, Kevin Grunwald  
Wellfleet, Roger Putnam  
Yarmouth, John McCormack, Jr.  
County Commissioner Mary Pat Flynn  
Minority Rep., John Harris  
Native American Rep., David Weeden

Mr. Paul Niedzwiecki, Executive Director  
Ms. Kristy Senatori, Deputy Director  
Mr. Jonathon Idman, Chief Regulatory Officer  
Ms. Cally Harper, Coastal Resiliency Specialist  
Mr. Jeffrey Ribeiro, Regulatory Officer

Mr. Michael Ford, Counsel  
Mr. Tom Atkinson, NRG Energy  
Mr. Fred Sellers, Tetra Tech, Inc.  
Mr. Rich Tabaczynski, Atlantic Design Engineers  
Mr. Shawn Konary, NRG Energy

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1 MR. ROGER PUTNAM: Dennis, Richard Roy.

2 MR. RICHARD ROY: Present.

3 MR. ROGER PUTNAM: Eastham, Joyce  
4 Brookshire.

5 MS. JOYCE BROOKSHIRE: (Not present.)

6 MR. ROGER PUTNAM: Falmouth, Charles  
7 McCaffrey.

8 MR. CHARLES MCCAFFREY: Present.

9 MR. ROGER PUTNAM: Town of Harwich,  
10 Jacqueline Etsten.

11 MS. JACQUELINE ETSTEN: Present.

12 MR. ROGER PUTNAM: Mashpee, Ernest  
13 Virgilio.

14 MR. ERNEST VIRGILIO: (Not present.)

15 MR. ROGER PUTNAM: Orleans, Leonard  
16 Short.

17 MR. LEONARD SHORT: Here.

18 MR. ROGER PUTNAM: Provincetown, John  
19 Krajovic.

20 MR. JOHN KRAJOVIC: Here.

21 MR. ROGER PUTNAM: Sandwich, Harold  
22 Mitchell.

23 CHAIRMAN HAROLD MITCHELL: Here.

24 MR. ROGER PUTNAM: Truro, Kevin

1 Grunwald.

2 MR. KEVIN GRUNWALD: Here.

3 MR. ROGER PUTNAM: Wellfleet, Roger  
4 Putnam, here. Yarmouth, John McCormack.

5 MR. JOHN MCCORMACK: Here.

6 MR. ROGER PUTNAM: County Commissioner,  
7 Mary Pat Flynn.

8 COMMISSIONER MARY PAT FLYNN: Here.

9 MR. ROGER PUTNAM: Minority Rep., John  
10 Harris.

11 MR. JOHN HARRIS: Here.

12 MR. ROGER PUTNAM: Native American  
13 Rep., David Weeden.

14 MR. DAVID WEEDEN: (Not present.)

15 MR. ROGER PUTNAM: Thank you, Mr.  
16 Chairman; we have a quorum.

17 PUBLIC COMMENT

18 CHAIR HAROLD MITCHELL: Thank you, very  
19 much. At this time, if anyone would like to make  
20 a public comment for the Commission, we invite  
21 you to step up to the podium. Anyone like to  
22 make a public comment?

23 EXECUTIVE DIRECTOR'S REPORT

24 CHAIR HAROLD MITCHELL: At this time we



1 were going to have an Executive Director's report  
2 from Paul.

3 Mr. PAUL NIEDZWIECKI: I have no report  
4 today.

5 CHAIR HAROLD MITCHELL: No report.

6 APPROVAL OF MINUTES

7 MR. JOHN MCCORMACK: Just the minutes.

8 CHAIR HAROLD MITCHELL: And we'll look  
9 at the potential of the minutes for November 10.  
10 Everyone received a copy of those. Everyone have  
11 a chance to read those? Any amendments or  
12 changes to those minutes?

13 MR. JOHN MCCORMACK: I'll move minutes  
14 as presented.

15 MALE VOICE: Second.

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

18 COMMISSION MEMBERS: Aye.

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

21 (Minutes approved.)

22 PUBLIC HEARING: CANAL UNIT 3

23 (CCC PROJECT #15016)

24 CHAIR HAROLD MITCHELL: So we're now

1 going to move to the -- so at this time we'll  
2 move to the Canal Unit 3 Public Hearing, Cape Cod  
3 Commission AOD motion. This is a hearing  
4 continued from November 2, 2016, on the following  
5 project.

6 At this hearing, the Cape Cod  
7 Commission will review the project and consider  
8 whether to approve the project and adopt the  
9 draft written DRI decision for the project.

10 The project has been referred to the  
11 Cape Cod Commission as a mandatory Development of  
12 Regional Impact, a DRI, pursuant to Sections  
13 12(i) and 13(b) of the Cape Cod Commission Act,  
14 and Sections 2(d) and (i) of the Commission's  
15 Enabling Regulations governing review of  
16 Developments of Regional Impact.

17 Secretary of the Massachusetts  
18 Executive Office of Energy and Environmental  
19 Affairs has issued a certificate on the project's  
20 final environmental impact report determining  
21 that the project adequately and properly complies  
22 with the Massachusetts Environmental Policy Act.

23 The project is also subject to review  
24 by the Commonwealth's Energy Facilities Siting

1 Board. The project name is Canal Unit 3,  
2 Commission File No. 15016. The applicant is the  
3 NRG Canal 3 Development, LLC. The project  
4 location is 9 Freezer Road in Sandwich.

5 A description of the project is  
6 proposed construction of a new high-efficient,  
7 fast-starting approximately 350-megawatt peak  
8 electric generating unit and related site  
9 improvements on an approximate 12-acre site at  
10 the existing 52-acre Canal Generating Station  
11 site.

12 The unit includes one simple-cycle  
13 combustible turbine that will be equipped with  
14 state-of-the-art emissions control technologies,  
15 including selective catalytic reduction and  
16 oxidation catalyst systems, a near-zero liquid  
17 discharge designed to reduce water demand, and a  
18 comprehensive set of noise measures.

19 Anyone wishing to testify orally will  
20 be welcomed to do so. Written comments may also  
21 be submitted at the hearing. Public application  
22 plan and relevant documents may be reviewed at  
23 the Cape Cod Commission office located at 3225  
24 Main Street, Route 6A, Barnstable, 02630, between

1 the hours of 8:30 and 4:30.

2 For further information or to schedule  
3 an appointment, please contact the Commission  
4 Office at 362-3828.

5 That all being said, at this time we'll  
6 open up and have a presentation by the applicant.

7 PRESENTATION BY THE APPLICANT

8 ATTY. MICHAEL FORD: Good afternoon,  
9 Mr. Chairman/members of the Commission, staff,  
10 ladies and gentlemen; my name is Mike Ford. I'm  
11 local permitting counsel for NRG.

12 What we'd like to do this afternoon is  
13 to give you a presentation of the project. We  
14 would like to start by saying that we have had a  
15 good working relationship with the Commission and  
16 staff. And I think that's assisted the applicant  
17 in getting to this point and we appreciate that.

18 The first speaker for NRG will be Mr.  
19 Tom Atkins, who's a Vice President of Development  
20 in charge of this project at NRG.

21 You'll also hear from Fred Sellers of  
22 TRC, who's in charge of environmental permitting  
23 for the project.

24 Rich Tabaczynski, who's with Atlantic

1 Design, many of you know here locally in Bourne,  
2 and Rich's office was the site engineer for  
3 portions of the project. And we also have other  
4 members of NRG staff here available for  
5 questions.

6 So, with that, I'll turn it over to Mr.  
7 Atkins.

8 MR. TOM ATKINS: Thank you, Mike. It's  
9 a pleasure to be here before you today.  
10 Commissioners, thank you for taking the time to  
11 look at our project. We're here to explain it to  
12 you, answer any questions you may have, such as  
13 why we propose this now and what exactly it is  
14 that we're intending to do here. So, again,  
15 thank you for your attention.

16 Before you on the board is an overview  
17 of the project site. And some of you may recall  
18 we were in here earlier this year with the Edmund  
19 Freeman Solar Farm. We proposed this project as  
20 a modernization of the Canal facility. And,  
21 again, for the record, my name is Tom Atkins, and  
22 I'm the Program Manager for this modernization  
23 program.

24 And we lump these projects together, a

1 conventional project that we'll talk about, Canal  
2 3, and a renewable project, the Edmund Freeman  
3 Solar Farm. The Secretary of Energy was kind  
4 enough to allow us to segregate the projects  
5 because they move at a different timeline. And  
6 we were before this board in early 2016 to get  
7 the DRI approved for the solar project, which I'm  
8 pleased to say is not only under construction  
9 today but is nearing completion and should be  
10 online producing clean renewable power in January  
11 of 2017. So that first phase of the project is  
12 nearing completion.

13 And now we're before you to discuss  
14 Unit 3, which I have a pointer here, takes place  
15 right here on the site. So just to orient  
16 everybody; this is the East end of the Cape Cod  
17 Canal. So the Canal is here and we're on the  
18 southern shore of that water body.

19 And then the existing facilities are  
20 right here and here; that's Unit 1 and Unit 2's  
21 main boiler house. The large stack that people  
22 can see is located right here. These are the  
23 liquid fuel storage tanks that exist today. And  
24 the site of the new unit would be right here in

1 this area here, which is just currently  
2 undeveloped and available for expansion.

3 It was when the project was initially  
4 constructed by Commonwealth Electric back in the  
5 1960s and 1970s. There was a room left for two  
6 additional units here that were never actually  
7 constructed. So this unit will go where the  
8 expansion of the plant was always intended to go.

9 So I'll talk a little bit about what  
10 exactly it is we're proposing. And right now,  
11 again, I won't spend a lot of time on the solar  
12 project which, again, a 1.5 megawatt photovoltaic  
13 ground-mount solar, you know, facility that has  
14 been developed as a community solar project,  
15 meaning the output from the facility is sold to  
16 local businesses and residents who want to take  
17 advantage of clean solar power but don't have the  
18 ability to put panels on their roofs perhaps. So  
19 like a community garden, people are able to sign  
20 up for the output of that facility. I'm pleased  
21 to say it's fully subscribed and moving forward  
22 and we're quite pleased with that.

23 But the conventional unit is part of a  
24 grid modernization program. You may have heard

1           there's lots of things that the grid is being  
2           improved for, principally to accommodate more  
3           renewable, both wind and solar, hydropower,  
4           things of that nature, clean carbon-free emission  
5           generating units.

6                         But as part of that process, the grid  
7           also needs conventional units that are there for  
8           when the sun isn't shining, when the wind isn't  
9           blowing, or when there are contingencies on the  
10          system, whether that be a transmission line that  
11          has suddenly failed or another local power plant  
12          that for some reason is no longer functioning, we  
13          need units that can quickly come on line and pick  
14          up the slack, if you will. And that's exactly  
15          what this unit is designed to do.

16                        So what you're look at here is a  
17          picture of the new technology. It's General  
18          Electric's latest gas turbine technology. It's  
19          called a Frame 7HA.02 machine. It's essentially  
20          a very large jet engine that instead of hanging  
21          on an airplane wing is stationary and we use the  
22          exhaust from it. The air goes in here and  
23          exhausts out this end. The exhaust comes out and  
24          spins a turbine which spins a generator and



1 creates electricity. So instead of creating  
2 thrust for an airplane to fly, in this case it's  
3 spinning a generator that creates electricity.

4 And we're able to do that very  
5 efficiently and quickly with this new unit. This  
6 is a large unit, 350 megawatts out of this one  
7 particular unit. And it can go from sitting cold  
8 to full load in 10 minutes time.

9 So that's one of the new improvements  
10 that General Electric has made in its technology,  
11 and we're taking advantage of that because we  
12 need and the grid needs, as you'll see in a  
13 moment, these kinds of units that can be just  
14 standing by. But when something happens,  
15 something on the Cape, somehow the Cape needs  
16 more support, something happens on the grid, you  
17 know, we're losing units now; Brayton Point is  
18 retiring; Pilgrim is retiring. If we need more  
19 power for some reason, this unit is standing by  
20 and ready to produce power at a moment's notice.

21 Okay. So the system benefits from  
22 this, I think, are multi-fold, and I'll talk a  
23 little bit about why we're proposing it now. The  
24 way the electric grid in New England is

1           administered, there is an annual auction for  
2           capacity, meaning that the grid operator, ISO New  
3           England, who's responsible for making sure that  
4           the lights stay on at all times makes sure  
5           there's enough power plants in the region to  
6           support the load. They look at how much load we  
7           have. Is it growing? Is it shrinking? And how  
8           many power plants do we need to meet that load?  
9           And then they have an auction which actually sets  
10          a clearing price for new capacity. And when you  
11          don't need new capacity, the price is quite low.  
12          And for many years, the price has been low in  
13          this area.

14                        But back in 2015, we actually saw a  
15                        significant price signal in the area. And so  
16                        there was a price of \$17.73 a kilowatt month that  
17                        was generated from an auction in February of  
18                        2015, and we looked at that and said to ourselves  
19                        there's a shortage of electricity in southeastern  
20                        Massachusetts and now is a good time to expand  
21                        the Canal facility.

22                        So when you look into the details of  
23                        what happened at that auction, the price went to  
24                        a cap. So this was as high as it could go and

1           that's because there was a shortage of 238  
2           megawatts of electricity-producing capability in  
3           this area.

4                        So as a result of that, we started to  
5           develop the Canal 3 project and we bid it into  
6           the subsequent auction, which was in February of  
7           this year. And as a result of that auction, we  
8           cleared that auction but one of the results of  
9           our coming online is that that \$17.73 price for  
10          capacity, which is passed on to all electric  
11         ratepayers in the area, was cut by more than half  
12         to \$7.03.

13                      So this is the amount of money that the  
14          current -- that the new unit will earn if and  
15         when it comes online. And you can see that  
16         effectively by adding this new capacity, and  
17         there were a number of other developments in the  
18         grid; we weren't the only new unit to come on,  
19         but certainly Canal 3 had a significant impact in  
20         dropping this price by more than half.

21                      So the first benefit I can suggest to  
22          you from this facility is that it will lower  
23          local electric costs.

24                      The next thing is it improves system

1 reliability. Very important, you know, the grid  
2 sort of supports our whole economy. And with  
3 today's day and age, we would just need reliable  
4 power and that's what this unit is intended to  
5 provide.

6 One of the features of it that's  
7 important is that it's a dual fuel unit so it  
8 uses natural gas most of the time. But it does  
9 have the capability to burn liquid fuel as a  
10 backup. And most of you are aware that Cape Cod  
11 is a very difficult place to get natural gas to.

12 And as recently as the winter of 2014,  
13 we had significant disruptions in natural gas.  
14 And when that happens, there's not enough gas to  
15 go around, so the gas company has to decide  
16 whether to allocate that gas to homes that need  
17 heating or to electric generating plants, and  
18 that's a very difficult choice to make. Should  
19 we heat homes? Should we keep the power on?

20 So a plant like Canal 3 is designed to  
21 not operate on gas on those kinds of days. We  
22 can switch over to liquid fuel. And as I showed  
23 you previously, there are significant amounts of  
24 existing fuel storage capacity on-site that this

1 plant will take advantage of.

2 So as a dual fuel unit, it produces --  
3 it provides a great deal of reliability to the  
4 grid. So if something happens to the natural gas  
5 supply system, it gets curtailed, and we come  
6 online and we operate on our backup fuel. So  
7 that's an important element of it.

8 A couple other important elements I'll  
9 speak to. There are no off-site improvements  
10 required for the project. Being located at an  
11 existing infrastructure site is important. The  
12 substation that we tie into is right here. So  
13 the electric line runs right across the railroad  
14 tracks and ties into the substation there. So we  
15 don't need to do any new powerlines anywhere.  
16 There's no new rights-of-way or new transmission  
17 towers off-site that have to be developed.  
18 They're all right in this area.

19 And then the other thing I'll point out  
20 is the natural gas supply comes in right here.  
21 That's where we get our natural gas already. So  
22 there's no new pipeline needed for this for  
23 facility. It's already everything in place.  
24 We're taking advantage of existing

1 infrastructure.

2 Finally, we have an unloading dock  
3 right here that we'll use to unload the liquid  
4 fuel. That exists today too. It will come in by  
5 barge just like it does now. So nothing really  
6 is changing. And putting this facility at an  
7 existing site has tremendous benefits from not  
8 having to do any off-site improvements.

9 Okay. Back to -- I'll speak a little  
10 bit about how this participates in a modern grid.  
11 So our electric grid is evolving and we've all  
12 seen development of significant amounts of solar  
13 and wind resources, and we expect that there will  
14 be quite a bit more going forward. And this  
15 plant as we're proposing, Canal 3, is perfectly  
16 situated to fit into a modern grid. And this is  
17 a depiction of a daily load profile, and I'll  
18 give you a little example of how things work.

19 So you see it at midnight and then sort  
20 of midnight the next day. So this is 24 hours  
21 going across the bottom starting at midnight,  
22 noon, midnight again. And you can see this is  
23 the load, okay, it comes down during the night  
24 and then it starts to build up in the morning

1 when people get up and start to take their  
2 showers, get ready to go to work, kind of comes  
3 down in the afternoon.

4 And then when people come home,  
5 everybody's home for the evening, turn on all  
6 their appliances, we get this ramp up at the end  
7 of the day. So that's what sort of happens.  
8 This is in 2012.

9 Now what happens in a modern grid if we  
10 look forward 10-15 years, we're going to have  
11 significant amounts of solar that are  
12 contributing to the supply. And we take  
13 advantage of that electricity anytime we can  
14 because anything that the sun is making has no  
15 cost associated with it, so we want to use as  
16 much of that as we can. And when that happens,  
17 so it's 6:00 a.m. or thereabouts, the generation  
18 starts to go up. So we start to see solar power  
19 go up. And what you're seeing is all these --  
20 all these curves starting to dip down here,  
21 that's because the sun's come up and now the  
22 solar plants are providing the power, and we  
23 don't need the conventional plants anymore; okay?

24 But as the sun goes down towards 3-4

1 o'clock in the afternoon, you see this huge ramp  
2 requirement there to go back up and meet the  
3 load. Now the solar projects are coming off but  
4 you still need to satisfy the load.

5 So we need quick-starting units that  
6 can shut off in the middle of the day over  
7 generation risk, meaning there's too much power  
8 being provided, and you don't want to turn off  
9 the solar plant. You don't want the solar plant  
10 to be turned off because it's producing carbon-  
11 free emissions at no cost. So you have to turn  
12 off other plants. Many of the facilities, Canal  
13 Unit 1 and 2 are an example, they can't turn off  
14 in the middle of the day. It takes them 12 hours  
15 to start up and shut down.

16 So a plant like the new Canal 3 fits in  
17 perfectly because it operates and then it shuts  
18 down during the middle of the day as we go  
19 through the belly of the duck we call it. And  
20 then in the afternoon when we really need ramping  
21 capability to keep the lights on as people come  
22 home and the sun goes down, Unit 3 comes on, and  
23 then it shuts back off again.

24 So it actually can provide a



1 significant amount of electricity at exactly the  
2 time you need it to do so. So that's how it fits  
3 into the future grid.

4 So I'll go through a little bit of the  
5 visuals for the facility so you get a sense of  
6 how the views -- the visuals will change, the  
7 view shed will change as a result of adding the  
8 new project.

9 Here you see a view from Merchant  
10 Square which is the Stop & Shop parking lot  
11 directly south of the facility. This is the  
12 existing view. And as I click forward, we can  
13 see the plant pop-up. So what you see from here  
14 is essentially just the new stack. That's the  
15 new exhaust stack from the unit. You can see  
16 it's slightly taller than the existing boiler  
17 house but significantly shorter than the existing  
18 stack. So that's the view from the south.

19 So if we look from the west -- here,  
20 we're on the middle of the Sagamore Bridge. This  
21 is a zoomed-in view so it should be something  
22 that many of us have seen many times driving  
23 across the bridge but it's blown up here. So  
24 that's what it looks like now, and that's what it

1 looks like afterwards.

2 And, again, the thing I'll mention you  
3 can see is a stack pop up a little bit up here.  
4 So I'll go back and forth again. That's without  
5 and there it is that the new stack pops up. So  
6 the view doesn't change dramatically with the new  
7 unit from the Sagamore Bridge.

8 So we'll take a look at the facility.  
9 This is from the new restaurant if any of you  
10 actually had an opportunity to go near the marina  
11 in Sandwich. There's a new restaurant called  
12 "Fishermen's View." We took some photos of the  
13 facility from that parking lot.

14 Now in this case, the new unit is  
15 already here. So there's the stack of the new  
16 unit, and this is part of the unit right here.  
17 It's behind these trees. And what you'll see as  
18 we go forward is that there's a new landscaping  
19 that we've added. So if you look carefully, you  
20 can see that our landscape plan fills in some of  
21 the holes where you can see the plant more  
22 clearly, before, after we filled it in.

23 And then our final view is along the  
24 bike path and the walkway along the Canal. This

1 is the Army Corps' path. Again, now you get a  
2 good view of the new facility. So here's the  
3 stack of the new facility. Here's the pollution  
4 control equipment for it. This is the gas  
5 turbine right here. That unit I showed you  
6 before fits inside that little box. Air comes in  
7 through there, gets burned in the gas turbine,  
8 and then exhausts through the pollution control  
9 equipment up out the stack.

10 That's before the landscaping and  
11 here's a view of it after the landscaping.  
12 Again, this is mature and this is 5 to 10 years  
13 afterwards. We replant this and we get some  
14 growth from it, but that's essentially the new  
15 landscape view that we're proposing to install  
16 with the facility.

17 With that, I'm going to turn this over  
18 to Fred Sellers with Tetra Tech who's going to  
19 walk you through some of the performance  
20 standards and other measures we've done to meet  
21 the Commission's requirements.

22 Thank you.

23 MR. FRED SELLERS: Thank you, Tom. Mr.  
24 Chairman/Commissioners, my name is Fred Sellers.

1 I'm with Tetra Tech. We're the lead  
2 environmental consultant for the Canal 3 Project,  
3 and I thank you for the opportunity to be here.

4 I'd like to talk just a little bit  
5 about the environmental impact analyses that we  
6 completed for the project, and I'll sort of go  
7 through it discipline by discipline.

8 As Tom mentioned, there are a number of  
9 significant benefits for using an existing  
10 developed site. We start with land alteration;  
11 one of the most important benefits right off the  
12 bat is the site's already been prior disturbed in  
13 the construction of the first two units and the  
14 clearing of that area associated with that  
15 construction in anticipation of the future.

16 So even with construction of all of  
17 this new equipment, we actually result in a  
18 reduction in the amount of impervious area on the  
19 site. So we're already benefiting as far as  
20 things like stormwater.

21 Because the hundred year flood  
22 elevation was recently changed by the Federal  
23 Emergency Management Agency in 2014 plus in  
24 consideration of future sea-level rise, we are

1 going to elevate the base elevation in the area  
2 of the new units by 6 feet above the existing  
3 grade. That will put us 2.3 feet above the  
4 current hundred year floodplain. And I'll come  
5 back to that when we talk about climate change  
6 resiliency in a bit.

7 From an air quality standpoint, the  
8 facility will be among the cleanest of its type  
9 anywhere in the world. It's going to be equipped  
10 with the most advanced admission controls ever  
11 put on a facility like this, and it will meet the  
12 state's requirements for application of the Best  
13 Available Control Technology and Most Achievable  
14 Admission Rate.

15 In that big box that Tom showed you  
16 outside of the turbine, that houses something  
17 called, "Selective Catalytic Reduction," device  
18 that greatly reduces the nitrogen oxide emissions  
19 plus an oxidation catalyst that reduces any  
20 organics or carbon monoxide admissions. So it  
21 will be extremely clean from that standpoint.

22 As part of the licensing of the  
23 project, we completed a comprehensive Air Quality  
24 Impact analyses subject to the Department of

1 Environmental Protection's review, and those  
2 analyses demonstrate that we fully comply with  
3 all of the health-based National Ambient Air  
4 Quality Standards.

5 And then beyond that, since the air  
6 quality for a number of elements in this area is  
7 better than the Air Quality Standards, we also  
8 meet compliance of something called, "Prevention  
9 of Significant and Deterioration Increments."  
10 Basically, what that means is we will not  
11 significantly change the air quality in the  
12 region.

13 In addition, the facility, as part of  
14 its air permitting process, has to demonstrate  
15 that we fully comply with all of the Greenhouse  
16 Gas regulations and we're consistent with the  
17 state's new Global Warming Solutions Act. We've  
18 made those demonstrations. We expect our draft  
19 Air Permit fairly soon.

20 The facility will continue to  
21 participate on the Regional Greenhouse Gas  
22 Initiative as well as other new requirements  
23 associated with the Global Warming Solutions Act.

24 We also did a Comprehensive Noise

1           Analyses, and the facility will fully comply with  
2           Mass. DEP Noise Policy and the town of Sandwich's  
3           Noise Bylaws. Our analyses conservatively  
4           assumed the simultaneous operation of both the  
5           existing two units as well as the new unit.  
6           Together even though that's a scenario that would  
7           practically never, if ever, occur.

8                         And we do that by meeting an extensive  
9           noise mitigation on not only the new unit but  
10          also some additional noise mitigation on existing  
11          units that fully meet the Department of  
12          Environmental Protection's Best Available Noise  
13          Control Technology.

14                        From a water standpoint, the simple  
15          cycle turbine that Tom described to you  
16          inherently uses very, very little water. There's  
17          no steam cycle so there's no steam electricity  
18          that's being made so no cooling tower for  
19          condensing steam-packed water. The maximum  
20          average daily demand for this facility would be  
21          78,000 gallons per day. The expected operation  
22          would be closer to about 20-22,000 gallons a day.

23                        The facility will get its processed  
24          water from the existing wells that are on the

1 site within the registered volumes because the  
2 operation of the existing two units has declined  
3 so much over time. There's ample capacity in  
4 those wells to stay within the current registered  
5 volumes. And these are rates that have occurred  
6 for about 30 years without any observable impact.  
7 It's a very, very lush aquifer under the site.

8 Further, it has a near-zero liquid  
9 discharge design so there will be no new  
10 wastewater discharged into the Canal.

11 The project site itself has no  
12 Bordering Vegetative Wetlands on the site.  
13 Because it is in the hundred year floodplain,  
14 most of the site is regulated as a wetland as  
15 Land Subject to Coastal Storm Flowage.

16 The transmission interconnect, that  
17 short line that Tom showed you, will traverse  
18 over about 170 linear feet of an off-site  
19 wetland, but we won't be required to do any new  
20 poles in that wetland or any fill in that  
21 wetland.

22 We've routed the line very, very  
23 carefully to avoid any very, very large mature  
24 trees. We will have to continue to monitor to



1           make sure that none of the vegetation there grows  
2           tall enough to get in the way of the wires.

3                        If we have to cut any of the trees to  
4           maintain the heights of the tops of those trees,  
5           we will do so purely by hand, hand-clearing.  
6           There won't be any equipment that goes into doing  
7           any mechanical cutting at all.

8                        Over by the Eversource switchyard where  
9           the facility will interconnect into the grid, two  
10          new transmission poles will need to be  
11          constructed. They are technically within the  
12          buffer zone of that wetland that we have  
13          traversed. However, both of those poles will be  
14          within the existing disturbed areas within the  
15          existing switchyard property. A Notice of Intent  
16          will, of course, be filed with the Sandwich  
17          Conservation Commission.

18                       And finally, we'll be adding a new  
19          discharge pipe to the existing fuel unloading  
20          dock parallel to the existing pipe. All of that  
21          work will be completely on the dock. There won't  
22          be any new in-water work there at all. It will  
23          constitute a minor modification to the facility's  
24          existing Chapter 91 license, and we'll be filing

1           that application with the state very, very  
2           shortly.

3                       From a historic standpoint, the project  
4           site where we're building of course was  
5           previously disturbed in association with  
6           constructing the existing station. So the Mass.  
7           Historical Commission has concluded that any work  
8           on the site is very unlikely to affect any intact  
9           archaeological resources. And we received  
10          basically a sign-off from MHC for that.

11                      The facility has been designed to be as  
12          aesthetically compatible with the existing  
13          station elements as possible. And as such, it's  
14          consistent with the objectives of the Sandwich  
15          Local Comprehensive Plan and the Old Kings  
16          Highway Act in that it preserves economic  
17          contributions of historic sites. The existing  
18          facility itself is considered a historic site for  
19          its economic contributions. A certificate of  
20          appropriateness will be sought from the Old  
21          King's Highway Historic District Committee. The  
22          project has had some initial meetings with them  
23          and we'll be making formal applications.

24                      The facility does have some chemicals

1 that are stored on the site but nothing that is  
2 not currently stored on the site from the  
3 existing units. All of the chemical storage will  
4 be, of course, within a secondary containment  
5 using Best Management Practices. And the  
6 existing facility Spill Prevention Control and  
7 Countermeasure Plan will be modified to reflect  
8 the new storage.

9 The backup fuel, liquid fuel for the  
10 project, Ultra-Low Sulfur Distillate, will be  
11 transported to the facility by barge to that  
12 existing unloading dock following the same  
13 delivery practices that have been practiced at  
14 the station for decades.

15 Two of the existing fuel tanks, one of  
16 the main storage tanks and the day tank will be  
17 repurposed from their current storage of the fuel  
18 oil for the number -- for the Units 1 and 2 to  
19 this new Ultra-Low Sulfur Distillate. So there  
20 won't be any new storage tanks that need to be  
21 constructed.

22 Similarly, ammonia which is the reagent  
23 in our admissions control system is already  
24 currently stored on the site. It is the reagent

1 for the admissions control of one of the existing  
2 two units. No new ammonia storage. We  
3 necessarily use the same tanks, but we will take  
4 the opportunity to enclose those tanks. They're  
5 currently surrounded by secondary containment.  
6 We'll put a structure on top of them to provide  
7 some additional containment.

8 And then from a Transportation  
9 standpoint, there are a couple of inactive and  
10 one active rail spur on the site. We'll be  
11 removing the inactive rail spurs, but one of the  
12 rail spurs will continue in active operation and  
13 that's how the ammonia is currently delivered to  
14 the facility and will continue to be delivered in  
15 that fashion.

16 There's not going to be a significant  
17 change in operational staff. So once  
18 constructed, there won't be any operational  
19 changes in traffic volumes. So we don't expect  
20 this development to have any change on traffic  
21 conditions in the area.

22 In our DRI application, we went through  
23 the town of Sandwich Local Comprehensive Plan as  
24 well as the Cape Cod Commission's Regional Policy

1 Plans, Minimum Performance Standards, and Best  
2 Development Practices.

3 The facility is located in the  
4 designated Industrial District within Sandwich,  
5 and Sandwich's Local Comprehensive Plan  
6 identifies this area as providing good  
7 opportunities for mixed-use and in-fill  
8 development. So we think it's very consistent  
9 with what the town has in mind for this property.

10 The project is considered a  
11 redevelopment project, and our application  
12 addressed and assessed the project's  
13 applicability to each Minimum Performance  
14 Standard and Best Development Practice. We think  
15 we've fully complied with all of those.

16 From a climate change adaptation and  
17 resiliency standpoint, something we take very,  
18 very seriously, the minimum floor elevation of  
19 all of the critical components of the new  
20 facility will be raised to 16 feet above mean sea  
21 level. That's an increase of 6 feet above the  
22 current grade and a little over 2 feet above the  
23 current 100-year floodplain. This accounts for  
24 future sea-level rise through 2060 based on an

1 average of the United States Army Corps of  
2 Engineers and the National Oceanic and  
3 Atmospheric Administration's high projections.  
4 We took the average of those two projections and  
5 we actually rounded it up to 16 feet to ensure  
6 we've adequately protected the facility against  
7 future sea-level rise.

8 And from the Stormwater standpoint,  
9 I'll turn it over to Rich to talk about the  
10 stormwater plan.

11 MR. RICH TABACZYNSKI: Good afternoon.  
12 Rich Tabaczynski with Atlantic Design Engineers.  
13 I just wanted to briefly touch on the stormwater  
14 design for the project. As you can see on the  
15 first bullet point, there was a lot of guidelines  
16 that this project needed to comply with in terms  
17 of the stormwater standards due to its location  
18 and adjacent to wetlands and being in the  
19 floodplain areas.

20 We have to comply with basically  
21 federal standards for U.S. EPA, some state  
22 standards, Stormwater Management Standards from  
23 the Mass. DEP. Also, your Cape Cod Commission  
24 Regional Policy Plan standards are also applied,

1 as well as the town of Sandwich Local Design  
2 Standards. So those were all taken into account  
3 in the design of the system.

4 And, basically, it's a Low-Impact  
5 Development system, or LID system, which  
6 incorporates a number of Best Management  
7 Practices as well as a series of stormwater  
8 basins that would act as infiltration and  
9 detention basins on the site. All of these  
10 measures would be combined with BMPs such as  
11 vegetative swales, filter strips, sediment  
12 forebays. These are all pretreatment devices  
13 that would enhance the water quality of the  
14 stormwater on the site.

15 The system's design basically with the  
16 three basins on the site, that would reduce the  
17 flows off-site also. Presently, there's the  
18 stormwater from the facility going in a northerly  
19 direction towards the Canal and then a portion of  
20 the site is discharging in a southerly direction  
21 towards wetlands south of the site. We'd be  
22 improving the water quality of all those  
23 discharges by the use of these LID measures and  
24 BMP measures.

1                   So we feel that, again, our goal was to  
2                   comply with these standards which we feel we've  
3                   met and also to improve the water quality that's  
4                   leaving the site.

5                   Just one more item I wanted to mention.  
6                   I know it was brought up at the first Public  
7                   Hearing regarding potential use of turf in lawn  
8                   areas on the property as part of the design. But  
9                   I just wanted to clarify, I guess, the point that  
10                  there really will be no turf lawn areas,  
11                  manicured lawn areas on the site. Essentially,  
12                  it's not a residential or retail development  
13                  where we need to keep manicured lawns on the  
14                  property.

15                  So, basically, any disturbed area  
16                  that's not going to be covered by pavement or  
17                  buildings or anything are going to be basically  
18                  just seeded for stabilization measures and for  
19                  erosion control. They'll be seeded with a native  
20                  seed mix, watered initially to get the growth,  
21                  and then, essentially, left natural at that  
22                  point. So the areas that are in between  
23                  buildings adjacent to roadways will just be a  
24                  natural field as opposed to a lawn. It will



1           require minimum maintenance, minimal mowing, and,  
2           again, it will provide stabilization only. So I  
3           just wanted to clarify that point while I had the  
4           chance.

5                           And I guess I'm turning it over to Tom.

6                           MR. TOM ATKINS: Thank you, Rich.  
7           We're going to conclude with some of the local  
8           benefits. I talked earlier about some of the  
9           system benefits from an electrical standpoint and  
10          carbon emission future benefits that we'll get  
11          from this facility.

12                          But there's also significant local  
13          economic impacts. The first of which I'll talk  
14          about, the maintenance of a critical  
15          infrastructure site for Cape Cod. It's a site  
16          that, in my opinion, can't be replicated on the  
17          Cape. And the Cape in order to support its  
18          future economic development needs these kinds of  
19          services and where a better place to do it than  
20          at the existing Canal station.

21                          And then in addition to that, the  
22          project offers a significant amount of local tax  
23          revenue. So we recently signed a PILOT Agreement  
24          with the town of Sandwich, which I'm pleased to

1 say was approved at the special town meeting that  
2 was held last week with the unanimous vote of the  
3 town. And that particular agreement provides for  
4 over \$57 million of revenues to the town of  
5 Sandwich over the next 21 years. And a  
6 significant amount of that goes to the tax  
7 coffers.

8 But there are also two other funds that  
9 I'll mention quickly in our Host Community  
10 Agreement which is, in fact, a separate  
11 agreement, but we're providing \$150,000 a year  
12 during the operation of the facility to support  
13 the school system. So there's an Innovative  
14 Curriculum Fund that's targeted to the STEM  
15 Program; Science, Technology, Engineering, and  
16 Math. So we're providing funding for the  
17 schools.

18 And then there's \$100,000 a year which  
19 goes into an Emergency Preparedness Fund, which  
20 is just a continuation of an existing program  
21 that the station has with the town of Sandwich to  
22 make sure that first responders to any kind of  
23 emergency would be well-trained and well-prepared  
24 to respond.

1                   So we're happy to do that and we will  
2                   continue the practice of having regular training  
3                   exercises on the site to help make sure that fire  
4                   and police are prepared to address anything that  
5                   may happen.

6                   There's significant construction jobs  
7                   and we've submitted to the Commission a full  
8                   economic analysis of both the direct and indirect  
9                   benefits of the project but, clearly, this will  
10                  not necessarily create new jobs but it will  
11                  certainly provide job security for people who are  
12                  existing employees of the site. These are high-  
13                  wage jobs and require people with significant  
14                  technical backgrounds. So this facility will  
15                  continue the need for those employees and, of  
16                  course, all of the indirect benefits that flow  
17                  from that.

18                  The one that I'll point out is the last  
19                  one that we estimate over \$400,000 a year in  
20                  local purchases just by having the facility  
21                  there.

22                  So that's my concluding remarks. I'm  
23                  going to turn it over to Attorney Ford to just  
24                  wrap up the proponents presentation.

1                   MR. MICHAEL FORD: Thank you, Tom. So,  
2                   where we go from here assuming that you see fit  
3                   to grant the Development of Regional Impact as  
4                   Fred indicated. We've got two local permits that  
5                   we still need to apply for. First, an Order of  
6                   Conditions with the Conservation Commission  
7                   because of the location of the property with  
8                   respect to wetlands.

9                   And then secondly, an application for  
10                  Certificate of Appropriateness to the Old King's  
11                  Highway Regional Historic District. And as Fred  
12                  mentioned, we've met with that committee already  
13                  informally so that they've started to have some  
14                  input into the project at this point from a  
15                  Community Character situation.

16                  We do have other staff here to answer  
17                  questions beyond those that have made the  
18                  presentation. And I think at this point, Mr.  
19                  Chairman, what we'd like to do is rest; that's  
20                  our presentation but be available for comments  
21                  with respect to this presentation or any  
22                  questions that may arise in the course of your  
23                  review of the draft decision.

24                  CHAIR HAROLD MITCHELL: Thank you,

1 Attorney Ford. At this time, we'll open up for  
2 comments by the Hearing Officer Jon Idman.

3 MR. JONATHON IDMAN: Thank you, Mr.  
4 Chair, Members of the Commission. Jon Idman,  
5 Chief Regulatory Officer with the Commission.  
6 The project is a mandatory Development of  
7 Regional Impact. It's an energy infrastructure  
8 project that's subject to review in the  
9 jurisdiction of the Commonwealth's Energy  
10 Facilities Siting Board. Because of that, it's  
11 subject to some special procedures under the  
12 Commission's Enabling Regulations governing  
13 Developments of Regional Impact.

14 Under those special regulations and  
15 procedures, it provides the opportunity for a  
16 hearing officer to hold substantive hearings on  
17 the project. It also allows for the initial  
18 hearings on the project to be held at Commission  
19 offices. There was a hearing held on the  
20 project. I think it was November 2. I served as  
21 hearing officer.

22 The procedures also -- and let me just  
23 point out too that the choice of a hearing  
24 officer was done after consultation with the

1 Commission Chair.

2 Because no person sought to intervene  
3 pursuant to some of those special procedures  
4 under the Enabling Regulations, this hearing  
5 process operates, for all intents and purposes,  
6 as a typical Development of Regional Impact  
7 process would.

8 Under those special adjudicatory  
9 procedures, persons who are not applicants are  
10 otherwise entitled to seek status as parties.  
11 That is not -- that's not the case here. So,  
12 it's basically a typical DRI process.

13 At the hearing, the applicant gave  
14 substantially the same presentation that the  
15 Commission heard today detailing the project, the  
16 project site, operations, environmental controls,  
17 and the relationship of the project to overall  
18 energy goals in the region including to the  
19 broader Northeast region.

20 At that point at the hearing,  
21 Commission staff presented comments on the  
22 project in terms of the project's consistency  
23 with the Commission's regulations and concluded  
24 in its comments that the project, subject to

1 receipt and review of some details about the  
2 proposed stormwater management system, would  
3 comply with the Commission's regulations and meet  
4 the standards for a project DRI approval.

5 No public written comments have been  
6 received to date, though some oral comments were  
7 submitted at the November 2 hearing.

8 State Representative Randy Hunt  
9 attended. He provided comments in support of the  
10 project including the project's consistency with  
11 local and state energy policy. He serves -- he  
12 submitted that he serves on state and local  
13 committees that deal with energy policy.

14 Sandwich Town Manager Bud Dunham spoke  
15 in support of the project discussing primarily  
16 the importance of the Canal plant to the town and  
17 a region in general in terms of a fiscal and  
18 economic development, and the importance of the  
19 future viability and evolution of the plant  
20 operations.

21 He discussed the agreements you heard  
22 discussed today that were reached with NRG  
23 regarding PILOT payments, Host Community  
24 Agreements, and other benefits associated with

1 the project.

2 At that point, general public comments  
3 were received. One neighbor of the property  
4 raised a number of questions about the project to  
5 which the applicant responded after taking a  
6 recess of that hearing.

7 Don Keeran, Assistant Director with the  
8 Association to Preserve Cape Cod attended and  
9 spoke to a number of issues including some  
10 hazardous materials and stormwater management  
11 issues that he asked the Commission to take a  
12 careful look at as part of the project.

13 Having heard all that comment and  
14 presentation, I directed staff to prepare a draft  
15 DRI decision for the full Commission's  
16 consideration subject to the receipt of  
17 additional stormwater materials requested and  
18 recommended by staff.

19 I continued the hearing to today's  
20 meeting agenda for a presentation of the project  
21 to the full Commission, and for the Commission's  
22 review of that draft decision that was ultimately  
23 prepared by staff after staff had received and  
24 analyzed additional stormwater materials.



1                   The draft decision prepared and  
2                   recommended by staff concludes that the project  
3                   meets the Commission standards for project  
4                   approval and would, if adopted and approved by  
5                   the Commission, approve the project subject to  
6                   the conditions in the decision.

7                   Jeffrey Ribeiro, who is managing the  
8                   project here for Commission staff, will speak in  
9                   more detail about the decision following my  
10                  report.

11                  Thank you.

12                  CHAIR HAROLD MITCHELL: Thank you, Jon.  
13                  At this time, Jeffrey, if you would like to come  
14                  up and give us some comments by the Commission  
15                  staff. At this time, Jeffrey, if you'd like to  
16                  come up and give us some comments about the  
17                  Commission staff.

18                  MR. JEFFREY RIBEIRO: Hello, everyone.  
19                  For the record, Jeffrey Ribeiro, Regulatory  
20                  Officer here at the Commission. I'm just going  
21                  to provide you an overview of the way that the  
22                  Commission staff reviewed the project for  
23                  consistency with the Regional Policy Plan amongst  
24                  the other concerns necessary to be addressed to

1 approve the project as a Development of Regional  
2 Impact. And also just a couple provisions of the  
3 draft decision that's before you today.

4 Here we go. So as many of you are  
5 aware, the project site is located on the Cape  
6 Cod Canal as was mentioned. This western portion  
7 of the site was reviewed as a Development of  
8 Regional Impact for the solar farm that was  
9 approved by this board about a year ago. And now  
10 the project is moving forward on the 350-megawatt  
11 power plant today.

12 One of the most important  
13 considerations from looking at all Developments  
14 of Regional Impact is whether they constitute new  
15 development or redevelopment in the parlance of a  
16 Regional Policy Plan. This clearly is  
17 redevelopment. The area is heavily disturbed.

18 And, also, one aspect of this project  
19 is that it utilizes a significant amount of  
20 existing site infrastructure, which means that  
21 the overall footprint of the project can be  
22 significantly reduced. So those include the oil  
23 storage tanks, the natural gas connection that's  
24 on-site, some other materials handling systems.

1                   One very important consideration is the  
2                   water supply wells. You know, previous plans to  
3                   expand the plant would have required additional  
4                   water withdrawals. This stays within the  
5                   approved water withdrawal limits and doesn't  
6                   require any additional withdrawals, and all of  
7                   the administrations and operations buildings as  
8                   well will stay.

9                   Just again, zooming in. We already saw  
10                  this but it is in this portion of the site where  
11                  we're talking about and as you can see from this  
12                  aerial it is pretty much entirely disturbed.  
13                  This is just another overview of the new project  
14                  components. You can see they are relatively  
15                  compact here compared to the existing Canal plant  
16                  buildings.

17                  With regard to the Land-Use and  
18                  Economic Development issue areas of the Regional  
19                  Policy Plan, the site is mapped as an economic  
20                  center. This orange area is the economic center  
21                  according to the Land-Use Vision Map. That Land-  
22                  Use Vision Map was drafted by the town and then  
23                  approved by this body and incorporated into the  
24                  Regional Policy Plan. It encompasses the

1 majority of the marina area.

2 And as was also mentioned by the  
3 applicant, the area has been extensively planned  
4 for continued use by the town for industrial as  
5 well as other purposes.

6 Under the issue area of Water  
7 Resources, there are no mapped protection areas  
8 here. This isn't any kind of water recharge  
9 area. It is not a well-head protection area.  
10 It's not a potential public water supply or  
11 etcetera. Thus, the applicable Nitrogen Loading  
12 standard here would be the 5 parts per million  
13 nitrogen loading standard.

14 As would be expected for a project that  
15 is decreasing the impervious on-site and also  
16 doesn't constitute any significant wastewater  
17 flows, this project has a very low nitrogen  
18 loading of only 1.3 PPM.

19 Also, the stormwater system is  
20 something that Commission staff looked very  
21 closely at. Given that this area is fill, it's  
22 adjacent to the Canal, which is, again, a natural  
23 water body in the traditional sense. You know,  
24 there really were some different conditions to

1           what we usually see on Cape Cod. And Commission  
2           staff, Monica Mejia, one of our staff  
3           hydrologists is here if you have any further  
4           questions on that, but she worked very closely  
5           with the applicants to make sure that we meet the  
6           2 foot separation of groundwater for their  
7           infiltration and achieve appropriate levels of  
8           pretreatment and TSS removal.

9                           And just one other note from Commission  
10           water staff is that, you know, this significantly  
11           improves the wastewater treatment on-site over  
12           current conditions. Again, just being a, you  
13           know --

14                           AUDIENCE MEMBER: Stormwater.

15                           MR. JEFFREY RIBEIRO: -- stormwater,  
16           sorry. I always do that. So it significantly  
17           improves the conditions over existing which  
18           encompass some sheet flow and we know other less  
19           advanced stormwater management techniques.

20                           Under the issue of Coastal Resources,  
21           again as was mentioned, this is land subject to  
22           Coastal Storm Flowage. Under the RPP, this is  
23           considered a redevelopment of private  
24           infrastructure. It's not, you know, a public

1 project; energy is a private entity. But it is  
2 located in the FEMA A zone that is allowed but we  
3 do require that all structural members of a  
4 project be located outside of that floodplain.

5 Dr. Cally Harper is here as well.  
6 She's our Coastal Resiliency Specialist. She  
7 looked very closely at this project. And they,  
8 again, are locating -- they're exceeding  
9 Commission requirements by elevating more than 2  
10 feet above BFE. You can see here this is the  
11 extent of the A zone. It's actually quite a ways  
12 from this velocity zone here. The velocity zone  
13 doesn't extend that far in to the Canal.

14 And then this map shows the grading.  
15 And as you can see, there's significant, the red  
16 is fill. So there will be significant fill to  
17 elevate this site up out of the floodplain. And  
18 Commission staff also looked closely at the  
19 impacts that that fill would have and is  
20 comfortable that it will not have negative  
21 impacts on surrounding properties.

22 As far as other issues related to  
23 Coastal Resources, we do have concerns about  
24 public access, maritime aesthetics, maritime

1 industries. And this project really doesn't  
2 affect any of those. There's no effect to the  
3 public amenities along the marina and along the  
4 Canal. And as we'll discuss more under the  
5 Community Character section, the project is  
6 really subordinate to what's already there. So  
7 aesthetically it doesn't compromise the area.

8 And as far as industries goes, again  
9 utilizes existing marine infrastructure that's  
10 already there and doesn't have any negative  
11 effects.

12 One other concern was with stormwater.  
13 This is the stormwater basin closest to the  
14 Canal. It is more than 200 feet from here. So  
15 our additional stormwater standards under Coastal  
16 Resources section don't apply to the project.

17 With regard to Natural Resources,  
18 again, the project is redevelopment. It is a  
19 previously disturbed site. There is very little  
20 impact to naturalized areas by the project. So  
21 there's no open space required.

22 Under Wildlife and Plant Habitat,  
23 Natural Heritage determined that there are  
24 unlikely to be any impacts to rare species. The

1 site -- this portion of the site is not mapped  
2 for rare species, which is logical considering  
3 its disturbed nature and surrounding uses.

4 There are some invasive species on-  
5 site, and the draft decision does require that an  
6 Invasive Species Management Plan be provided by  
7 the applicant prior to the commencement of work  
8 of the project.

9 There are no direct impacts to  
10 wetlands. There is some tree topping required in  
11 a wetland buffer, and that is, as you can see  
12 here, to connect the site to the existing other  
13 electrical grid connections nearby.

14 As Mr. Sellers' noted, the project did  
15 avoid specimen trees which you can see are dotted  
16 -- there's one here, one here, one here, one here  
17 -- dotted throughout that area. So they worked  
18 hard to make sure that no tree topping would be  
19 required there. And Wetland Standard 1.3 does  
20 allow for utility line installation within  
21 wetland buffers when there's no other viable  
22 alternative. And given the site, Commission  
23 staff feels that that is the case and that the  
24 effects were minimized in avoiding those specimen



1 trees.

2 Under the issue area of Heritage  
3 Preservation and Community Character; first off  
4 Heritage Preservation. Again, there's a long  
5 history at this site. It's significantly  
6 disturbed, thus, we can safely rely on the 1998  
7 review by the Mass. Historical Commission of the  
8 project site and found no likely impacts,  
9 historical or ecological resources. Again, given  
10 that it's primarily fill and anything likely has  
11 been disturbed already. It's near the Canal,  
12 etcetera.

13 The existing plant structures have been  
14 inventoried by the Mass. Historic Commission of  
15 the town but no changes are planned to any of  
16 those structures. So it would not impact them.  
17 And then the Mass. Historical Commission has also  
18 issued correspondence that they feel that there  
19 are no historic structures approximate to the  
20 site. So, again, kind of the historical  
21 importance of those would be discussed more  
22 broadly if they were to be impacted. But  
23 Commission staff also agrees that there are no  
24 likely impacts.

1                   Community Character is a big concern.  
2                   You already saw some of the renderings provided  
3                   by the applicant that Commission staff feels  
4                   adequately represented the impacts that the  
5                   project would create. The last things will  
6                   really only be increased at lower levels. The  
7                   existing plan is really the stack and the  
8                   buildings of the existing plant really kind of  
9                   define the skyline of this area and the new plant  
10                  will not make it visible from any new areas.

11                  The colors proposed are also consistent  
12                  with Commission guidelines and general Best  
13                  Practices. The gray best blends with the sky for  
14                  taller elements. We also, obviously, do this for  
15                  cell towers and things; you've heard this before,  
16                  and then the green will blend with vegetation at  
17                  the lower levels.

18                  I think you already saw some of these  
19                  but these are some of the vantage points that  
20                  Commission staff felt most important. This is  
21                  the visitor center without the new plant; this is  
22                  with.

23                  This is from the supermarket plaza  
24                  which also is along Route 6A. In this area, Old

1 King's Highway before and after; you can see the  
2 new stack popping up but, again, it's  
3 significantly dominated by those existing  
4 structures. This is from Sandy Neck Beach and  
5 you can see, again, the existing structures  
6 really dominate. The Scusset Beach parking lot.  
7 The Sagamore Bridge. It just really pops up  
8 barely there. And there are some other issue  
9 areas that we looked at as well -- the -- sorry,  
10 I skipped over something here.

11 Yes, the landscaping provided by the  
12 applicant significantly improves the site for  
13 redevelopment projects, that is the standard to  
14 improve the site, and it definitely will do that  
15 and buffer both the existing plant in the new  
16 structures from the surrounding areas.

17 And the applicant has been working  
18 closely with Commission staff to make sure that  
19 their site lighting will meet our standards.  
20 They've expressed that they feel strongly that  
21 they can do that and that they should do that to  
22 make sure that, again, the visual impacts at  
23 night are minimized. We're very close. They've  
24 submitted things as recently as today, but it was

1 a little too late to be incorporated into the  
2 decision or reviewed even though there are  
3 activities going on today. So, that will be  
4 required prior to issuance of a Preliminary  
5 Certificate.

6 Under the issue area of Transportation  
7 as was referenced, there does not anticipate to  
8 be any new jobs created by the project. They'll  
9 just maintain the existing jobs. Thus, there are  
10 no new trips. There's also no changes to access  
11 points in the site drives, etcetera. The  
12 construction period plan was reviewed by  
13 Commission staff and found to be adequate.

14 Under Waste Management, we are not  
15 located in any water protection areas as  
16 previously referenced. Thus, you know, there are  
17 no prohibitions on materials here. And again, as  
18 referenced in the decision, the hazardous  
19 materials on-site while marginally increased will  
20 not be substantially different or more  
21 detrimental than what's already there. The  
22 applicant, also as part of the project, is  
23 improving their Spill Prevention Plan, and that  
24 involves some of their refueling facilities,

1           etcetera, so that could be even viewed as a  
2           project benefit potentially.

3                       The plant is already registered with  
4           Mass. DEP. We have a standard that requires that  
5           so there's no change need there, and their  
6           classification will stay the same under this  
7           project.

8                       The Energy issue area as we've seen  
9           before with power generation facilities really  
10          only applies to an energy conversion facilities  
11          and habitable buildings. So there's limited  
12          applicability here. We do have a requirement  
13          that existing structures have an energy audit  
14          performed. The applicant did perform that on a  
15          small training building that they're going to  
16          continue to use. But, again, the project largely  
17          is not subject to the performance standards under  
18          Energy because they're not applicable.

19                      And then under Affordable Housing,  
20          again, there are no new jobs proposed but even  
21          more importantly Commission staff did look at the  
22          wages expressed in the Economic Development  
23          report and found it to be true that according to  
24          the Bureau of Labor Statistics this is an

1 extremely high wage industry, and fewer than half  
2 of 1 percent of workers in this industry on  
3 average make below average wages. Thus, if we  
4 were to even apply, if there were going to be  
5 jobs created, there wouldn't be any payment under  
6 the Community Contribution standard because of  
7 the high wages.

8 There is some other standards of review  
9 that have to be determined by the Commission to  
10 approve a Development of Regional Impact. Those  
11 include consistency with the town of Sandwich's  
12 Local Comprehensive Plan. The area has been  
13 planned for continued industrial use within the  
14 marina. And also, there has been expression  
15 about concerns over ozone, in particular  
16 emissions. As was referenced, this plant is  
17 significantly cleaner than Units 1 or 2 on-site.  
18 Thus, assuming that this, to some degree,  
19 replaces those and that it comes online before  
20 those others, it would potentially address some  
21 of those issues.

22 The Local Development Bylaw's  
23 applicable to the project in accordance with the  
24 Zoning Act. This kind of project can be granted

1           what's called a "Zoning Exemption" by the  
2           Department of Public Utilities. The town has --  
3           the Board of Selectmen voted to support having  
4           the DPU handle this. They really look at the  
5           zoning consistency and the appropriateness of the  
6           project. It's not a true exemption in that  
7           respect but that's what it's called.

8                         The project will still require review  
9           by the Old King's Highway Historic District  
10          Commission and the Conservation Commission, and  
11          that will occur after Commission permitting.

12                        There are no DCPC, District of Critical  
13          Planning Concern, implementing regulations that  
14          apply to the project. And, you know, last,  
15          obviously, the board must determine the project  
16          benefits outweigh the project detriments.

17                        Commission staff based on the materials  
18          provided and comment heard at the Public Hearing  
19          held on November 2 proposed the project benefits  
20          you can find in the draft decision. Those  
21          include that it will provide additional capacity  
22          for the Southeastern Mass. and Rhode Island area.

23                        It facilitates integration of renewable  
24          energy into our energy grid, and that it

1 modernizes a piece of regional infrastructure  
2 which is important in that it continues to  
3 provide well-paying jobs as well as local  
4 revenues to the town.

5 So, with that, I will turn it back over  
6 to the Chair for further discussion by the board,  
7 public comment, and potential vote on the  
8 project.

9 CHAIR HAROLD MITCHELL: Thank you,  
10 Jeffrey. At this time, we'll take some initial  
11 questions from the Commissioners if anyone has  
12 any. Let me see. We'll start right over here  
13 with Richard.

14 MR. RICHARD CONRON: Dick Conron from  
15 the town of Bourne. I know you mentioned that  
16 there were no more storage tanks, but what about  
17 the frequency of fuel deliveries? Will the  
18 frequency of the fuel deliveries increase because  
19 of this project?

20 MR. TOM ATKINS: Thank you for your  
21 question. Now there will be two different kinds  
22 of fuel delivered to the site. There will be the  
23 fuel that's been delivered there historically,  
24 which is Number 6 Fuel Oil, and now there will be



1 the new Ultra-Low Sulfur Distillate fuel, which  
2 will be used in Unit Number 3.

3 I would suggest that if you look at the  
4 historic deliveries at the site going back to the  
5 days when the plant was a baseload plant, there  
6 will be far, far less deliveries going forward  
7 then there have been historically.

8 The unit is a backup unit. It's a  
9 peaking unit so it is not expected to operate for  
10 more than 20 or 30 percent of the year. So we do  
11 not expect that there will be significant  
12 increases in storage at all, excuse me, in  
13 deliveries. In fact, it will go down from what  
14 it historically has been from when the plant was  
15 originally constructed.

16 MR. RICHARD CONRON: So compared to  
17 last -- this year, you're going to have lower  
18 deliveries?

19 MR. TOM ATKINS: If you looked at this  
20 year, I would say that the deliveries may go up  
21 slightly from that because the existing  
22 facilities have not operated a significant amount  
23 over the last couple of years. So, I think you  
24 may see additional barge deliveries, but we're

1           only talking about a couple barges a year. We're  
2           not talking about significant amounts.

3                     MR. RICHARD CONRON: Do you know what  
4           the percent increase of power generation is?

5                     MR. TOM ATKINS: Roughly I can tell you  
6           the existing plants are roughly 1100 megawatts  
7           and we're adding 350. So if I had my calculator  
8           on me, I could do that for you but 30 percent.

9                     MR. RICHARD CONRON: Okay. And the  
10          last question I have is I was a little confused  
11          about the floodplain or the flood considerations.

12                    MR. TOM ATKINS: Sure.

13                    MR. RICHARD CONRON: Are the equipment  
14          going to be raised up or how -- is the plant in a  
15          floodplain?

16                    MR. TOM ATKINS: Fred, do you want to  
17          answer? I can speak to the elevation being  
18          raised. All the elevation for the turbine itself  
19          will be raised to 16 feet above --

20                    MR. RICHARD CONRON: Okay. So it's  
21          going to be at least 16 feet?

22                    MR. TOM ATKINS: Correct. It will be  
23          at least 16 feet and that puts it above -- that  
24          puts it over two feet above the hundred year

1 flood storm level.

2 MR. RICHARD CONRON: Okay. That's the  
3 number I was looking for. Thank you.

4 MR. TOM ATKINS: Okay.

5 CHAIR HAROLD MITCHELL: Thank you.  
6 Charles.

7 MR. CHARLES MCCAFFREY: For Commission  
8 staff, the applicant talked about consideration  
9 of accommodating sea-level rise by the high  
10 estimates for 2060. But your review didn't  
11 comment on their approach to sea-level rise  
12 consideration. What is -- I didn't --

13 MR. JEFFREY RIBEIRO: This is Jeffrey  
14 Ribeiro. I'm just going to call up Cally Harper.  
15 She is our Coastal Resiliency Specialist and she  
16 is here. So she can much more adequately address  
17 your question than me.

18 MS. CALLY HARPER: Hi, Cally Harper.  
19 I'm not quite sure I understand the question.

20 MR. CHARLES MCCAFFREY: The applicant  
21 talked about accommodating for substantial  
22 increase in sea-level rise, and you referenced  
23 high estimates for 2060 are considered. But the  
24 staff review did not mention sea-level rise and

1           whether it did not assess the adequacy or the  
2           reasonableness of what the applicant mentioned.

3                       In other words, the presentation talked  
4           about a lot of things. I didn't see sea-level  
5           rise as one evaluation of the project.

6                       MR. JEFFREY RIBEIRO: Sorry. I think I  
7           see now. The standard itself that deals with  
8           this, only Land Subject to Coastal Storm Flowage  
9           requires this added elevation above base flood  
10          elevation. So through the fill, they are going  
11          to elevate all structural components of this  
12          facility more than two feet, which I think Cally  
13          can speak more about maybe.

14                      MR. CHARLES MCCAFFREY: But flood  
15          elevation has little to do with sea-level rise.

16                      MS. CALLY HARPER: So, you're right.  
17          They're different but you can have sea-level rise  
18          on top of flooding from a storm event.

19                      MR. CHARLES MCCAFFREY: Uh-huh.

20                      MS. CALLY HARPER: So this particular  
21          project is elevating the infrastructure above the  
22          projected flooding scenario that's mandated by  
23          FEMA. And so by doing so, by elevating above,  
24          you're also --

1                   MR. CHARLES MCCAFFREY: Yeah, but how  
2                   does that relate to the sea-level rise projection  
3                   for 2060? They seem to be saying that they were  
4                   addressing that. I'm looking for the  
5                   Commission's staff's evaluation of how well they  
6                   addressed that sea-level rise by 2060 will be a  
7                   few feet higher than it is today? And that is  
8                   not accounted for in flooding elevation. It  
9                   could be even more than two feet above.

10                  MR. PAUL NIEDZWIECKI: If I could just  
11                  weigh in on that. The applicant can look at sea  
12                  level projections and incorporate them into their  
13                  presentation. The Commission has no Minimum  
14                  Performance Standards that would have us look at  
15                  sea-level rise, and we don't have any one model  
16                  that we endorse in order to predict a certain  
17                  level of sea-level rise at any time.

18                  MR. CHARLES MCCAFFREY: But since -- I  
19                  assume they said they were addressing it. I was  
20                  just curious if you had an opinion on what they  
21                  proposed, if you know, (Inaudible) for 2060  
22                  standards?

23                  MR. JEFFREY RIBEIRO: Sorry. The  
24                  relevant standard is CR 2.2 Accommodating

1 Relative Sea-Level Rise. So it says, "All new  
2 buildings including replacements or substantial  
3 improvements to existing structures shall be  
4 designed to accommodate documented relative sea-  
5 level rise rates in Massachusetts and for within  
6 A zones that requires the lowest horizontal  
7 structural member shall be a minimum of 1 foot  
8 above base flood elevation." So, again, that is  
9 our requirement within the RPP and that may be  
10 adjusted during the RPP update.

11 But that is our requirement to address  
12 sea-level rise is to locate 1 foot above and  
13 they've elevated 2 feet above, so they've  
14 actually exceeded our requirement for  
15 accommodating for sea-level rise; is that clear?

16 MR. CHARLES MCCAFFREY: Okay. And that  
17 was the applicant? The 16 feet was your  
18 recognizing sea-level rise above minimum flood  
19 elevation?

20 MR. FRED SELLERS: We spent a lot of  
21 time on this issue. As part of the design of  
22 where we arrived at 16 feet above mean sea level,  
23 we exceeded the requirement by taking into  
24 account both the Army Corps of Engineers and the

1 National Oceanic and Atmospheric Administration's  
2 projections of sea-level rise through 2060. So  
3 we added that basically to what the hundred year  
4 flood elevation is right now and that's why we're  
5 raising the elevation of the site to 16 above its  
6 current grade.

7 CHAIR HAROLD MITCHELL: Okay. Thank  
8 you. Liz.

9 MS. ELIZABETH TAYLOR: I see other  
10 things to change in our RPP as we update it.  
11 You've elevated the building but I read somewhere  
12 that there were issues with access during storms.  
13 And if you have to evacuate the building because  
14 you don't have access during the storms, it's  
15 sort of counterproductive since this appears to  
16 be a critical energy source when other sources  
17 aren't working. So are you going to improve  
18 access so it isn't negatively impacted during  
19 storms?

20 MR. TOM ATKINS: Thank you for that  
21 question. And I'll just, as a general comment,  
22 I'll say that our hearings at the Energy  
23 Facilities Siting Board, and there were eight  
24 days of hearings there, there was an enormous

1 amount of time spent on what was the proper  
2 elevation to raise the site to, and what would  
3 sea level look like in the year 2060?

4 So we went through a lot of different  
5 things, and I would suggest that we've been quite  
6 conservative in our estimations, which is why  
7 we've taken the average of the high models.  
8 There's models that are low, medium, and high; we  
9 took the highs.

10 But you are correct in the sense that  
11 we did not raise the elevation of everything on  
12 the site to 16 feet because it would have been  
13 dramatically expensive to raise everything.

14 So what we did raise was all the  
15 critical infrastructure that would allow this  
16 plant to operate even if we had flooding  
17 conditions in 2060 at a significantly higher sea  
18 level going in.

19 And so there may be circumstances where  
20 certain portions of the site may flood, but it  
21 would not preclude the facility from running at  
22 any time. And we'll have provisions to have  
23 people there and be able to run this plant if the  
24 sea-level rises to those levels and we have that



1 situation.

2 So the 16 feet is specifically designed  
3 to allow this plant to operate in those  
4 conditions.

5 MS. ELIZABETH TAYLOR: Oh, okay. So  
6 you wouldn't be closing during storms?

7 MR. TOM ATKINS: We would not be.

8 MS. ELIZABETH TAYLOR: Oh, okay. I  
9 just had one other question. You mentioned that  
10 you would be not using turf or anything. You'd  
11 just let whatever was there grow and you'd mow  
12 it. I would just request, as I always do, that  
13 you only mow in the fall because it will become  
14 habitat since you're not mowing it normally and  
15 you're not putting in turfgrass.

16 And I always request you not use  
17 pesticides during removal of the invasives; you  
18 do it by hand, because most of these, I think,  
19 are in wetland areas and there are no pesticides  
20 out there that are really safe.

21 MR. TOM ATKINS: Understood. I  
22 understand that's a concern of the Commission's  
23 and we're happy to work with that and make sure  
24 we do that in accordance with your requirements.

1 MS. ELIZABETH TAYLOR: Thank you, very  
2 much.

3 CHAIR HAROLD MITCHELL: Thank you.  
4 John.

5 MR. JOHN KRAJOVIC: I have some  
6 questions about design. I wonder if you can pull  
7 up slide 13.

8 MR. TOM ATKINS: I'd be happy to.

9 MR. JOHN KRAJOVIC: So what's the  
10 approximate square footage of the new development  
11 in terms of structures?

12 MR. TOM ATKINS: Well, if you're  
13 talking about acres of sort of new development --

14 MR. JOHN KRAJOVIC: I'm not talking  
15 about the drainage pools but of the structures  
16 themselves; do you know?

17 MR. MICHAEL FORD: We can have it  
18 looked up.

19 MR. TOM ATKINS: I don't know the exact  
20 square footage but we can look it up. I know  
21 that, you know, roughly 5 acres is what is being  
22 developed. So it's --

23 MR. JOHN KRAJOVIC: I'm just looking  
24 for the square footage of the actual structures?

1 MR. TOM ATKINS: Square footage.

2 MR. JOHN KRAJOVIC: Slide 13.

3 MR. JEFFREY RIBEIRO: Of the Atkins  
4 presentation?

5 MR. JOHN KRAJOVIC: Of their --  
6 exactly.

7 MR. TOM ATKINS: If I may, my colleague  
8 Shawn Konary handed me a figure from the  
9 application. "Impervious building and structures  
10 include 54,664 square feet"; 54,664.

11 MR. JOHN KRAJOVIC: So that's the  
12 total.

13 MR. TOM ATKINS: A little over an acre.

14 MR. JOHN KRAJOVIC: Okay, structural  
15 development. And I'd like to learn a little bit  
16 more about the skin of these boxes which is why  
17 I'd like to see the image from the --

18 MR. JEFFREY RIBEIRO: Sorry.

19 MR. JOHN KRAJOVIC: Sure.

20 MR. JEFFREY RIBEIRO: We're having a  
21 little technical glitch here.

22 MR. JOHN KRAJOVIC: The materials, if  
23 you know.

24 CHAIR HAROLD MITCHELL: You know, while

1           Jeffery's pulling that up, anyone else have a  
2           question and we'll come back? Any other  
3           questions?

4                     MR. JEFFREY RIBEIRO: My apologies.  
5           I'm attempting to reboot the computer there. The  
6           building materials are in the application  
7           materials. So in Section 4 of the Application  
8           materials, there are details on the various --  
9           they are metal structures primarily. And there's  
10          the plans actually for each of the individual  
11          structures in those plans.

12                    MR. JOHN KRAJOVIC: Are they metal  
13          panels or -- just from the image, it looks like  
14          its one great big slab of metal.

15                    MR. JEFFREY RIBEIRO: So I mean every  
16          -- there's buildings of various sizes. They're  
17          all individual structures.

18                    MR. JOHN KRAJOVIC: Well, if everybody  
19          looks at Slide 13 on their computer, to me it  
20          looks like -- they're quite large structures.  
21          And what's the approximate height of these boxes?

22                    MR. TOM ATKINS: That's a good  
23          question. Let me grab some more information and  
24          I'll be able to answer those questions for you.

1 MR. JOHN KRAJOVIC: Does anyone know  
2 the approximate height of the trees in the  
3 images?

4 MALE VOICE: The height of the trees?

5 MR. JOHN KRAJOVIC: Well, I'm just  
6 trying to gauge the height. I just want  
7 substantial height.

8 MR. JEFFREY RIBEIRO: Oh, sorry. We  
9 can go analog here, and I can bring this over to  
10 you.

11 MR. JOHN KRAJOVIC: I don't -- you  
12 don't need to. Let me get to my point here. The  
13 Cape Cod station is --

14 MR. JEFFREY RIBEIRO: (Handing over  
15 binder.)

16 MR. JOHN KRAJOVIC: That's all right.

17 MR. JEFFREY RIBEIRO: Sorry. This has  
18 all the elevations on it.

19 MR. JOHN KRAJOVIC: Tell us so everyone  
20 understands what the height is and --

21 CHAIR HAROLD MITCHELL: Go ahead, John.

22 MR. JOHN KRAJOVIC: So my question is  
23 what are the various heights of the boxes that we  
24 see in the image on slide 13?

1                   MR. JEFFREY RIBEIRO: So the proposed  
2 steel stack is at 236 feet. The next tallest  
3 member -- there is an air inlet structure over --  
4 I believe is the turbine enclosure that's  
5 approximately 100 feet tall. There's another  
6 structure kind of directly next to the stack  
7 that's 94 feet tall. And then the other  
8 structures are probably about 50 to 60 feet tall.

9                   MR. JOHN KRAJOVIC: So the point is  
10 these are significant structures. And the Cape  
11 Cod station is an iconic -- is industrial  
12 architecture. And the stack itself is one of the  
13 Cape's most iconic structures. I mean in  
14 Provincetown, we judge the day by whether or not  
15 we can see the stack from our houses and our  
16 beaches.

17                   And just from what I see here, I think  
18 you really missed this great opportunity to --  
19 because when you look at these images, and all I  
20 know is from what I'm seeing here, it's very  
21 visible from the Canal walkway from the marina,  
22 from the restaurant, and industrial architecture  
23 does not have to be pedestrian. And this, to me,  
24 is exceedingly pedestrian.

1                   I mean that's why I'm interested. It  
2 looks like they're just metal panels, singular  
3 metal panels without any type of animation or  
4 lining in them.

5                   I also beg to disagree with the  
6 excellent Cape Cod staff that the color is the  
7 preferred color. Because when you have  
8 structures this large, you want them this  
9 beautiful color; a light gray, a taupe, or  
10 something like that.

11                  And my sense is, and I'll pose this as  
12 a question, did you engage an architect or an  
13 urban designer in this project?

14                  MR. TOM ATKINS: No, we did not engage  
15 an urban designer in this project. We don't  
16 consider this an urban setting so.

17                  MR. JOHN KRAJOVIC: Well urban -- what  
18 about an architect?

19                  MR. TOM ATKINS: Well, we have  
20 architect engineers that work on the projects so.

21                  MR. JOHN KRAJOVIC: No. What I'm  
22 getting at is this is a huge impact on the public  
23 view corridor. And, you know, that's why one  
24 wants an architect or an urban designer. An

1 urban designer doesn't mean it's just related to  
2 the city.

3 CHAIR HAROLD MITCHELL: Turn your mic  
4 on or talk into the mic, please.

5 MR. JOHN KRAJOVIC: Sorry. I'm very  
6 disappointed. This is a very profitable business  
7 venture. And I'm very disappointed that the  
8 services of an architect or an urban designer was  
9 not engaged in this because it has a huge impact  
10 on the public view corridor from one of the most  
11 iconic sites on the entire Cape.

12 So I'm hoping that the materials  
13 haven't been ordered. And I really would  
14 encourage you to engage a good creative architect  
15 to really help improve what the public is going  
16 to see here because it's an iconic station.

17 On a positive note, I really like what  
18 you're doing with the landscape. I agree with  
19 everything that's Elizabeth said in terms of the  
20 treatment and management of it. But you're  
21 choosing indigenous species, that's great. I  
22 like the fact you're not having a lawn.

23 But I really wish I could see kind of  
24 some exciting industrial architecture. And I



1 hope some of the Historic Commissions which still  
2 have review kind of weigh in on this. And I'm  
3 hoping you haven't ordered the materials yet. So  
4 that's really kind of my main point.

5 CHAIR HAROLD MITCHELL: At this time,  
6 we're going to close for the initial questions.

7 COMMENTS FROM FEDERAL OFFICIALS

8 CHAIR HAROLD MITCHELL: And I'm going  
9 to ask for public comments from any federal  
10 officials that might be in the audience. Seeing  
11 none.

12 COMMENTS FROM STATE OFFICIALS

13 CHAIR HAROLD MITCHELL: I'll go to  
14 state officials; any state officials? Going,  
15 going, gone.

16 COMMENTS FROM LOCAL OFFICIALS

17 CHAIR HAROLD MITCHELL: So then I will  
18 go to the local officials. If any local  
19 officials would like to speak, if you would step  
20 up to the podium. I see several so I'm sure that  
21 we'll be hearing from some.

22 MS. SUSAN JAMES: Good afternoon. My  
23 name is Susan James, and I am the Chair of the  
24 Sandwich Board of Selectmen. And I'm really

1           delighted to be here to talk to you all about  
2           this project.

3                       We're very excited in Sandwich and have  
4           been since we first heard about this project and  
5           have been very involved right along with the  
6           process of development of the project.

7                       Our Town Manager, Bud Dunham, has  
8           worked very, very closely with Tom Atkins and the  
9           others representing NRG, and it's been quite an  
10          interesting series of negotiations that really  
11          brings a lot of benefit to both the town and to  
12          NRG.

13                      The project appears to be an  
14          environmentally friendly project that will not  
15          only accommodate increasing energy needs here on  
16          the Cape and in the area but also be an economic  
17          driver for Sandwich, and this is really important  
18          to us.

19                      Both the PILOT and the Host Community  
20          Agreement are favorable to the town in multiple  
21          ways, and, of course, especially in the local  
22          revenue aspect of the plan, which is a very  
23          welcome addition to Sandwich.

24                      In 1978 when I moved here to town, the

1 Canal Electric subsidized the whole tax rate and  
2 that has, obviously, changed over the many years  
3 we've been here. So the infusion to local  
4 revenue is it's just so positive for our town.

5 As Mr. Atkins pointed out, the PILOT  
6 Agreement was approved unanimously without --  
7 essentially without any discussion on Monday  
8 evening's town meeting. The townspeople are very  
9 much in favor of this project.

10 The Board of Selectmen encourages you  
11 to vote positively to approve the DRI so that we  
12 can move ahead with the project.

13 Thank you, very much.

14 CHAIR HAROLD MITCHELL: Thank you.  
15 Anyone else?

16 MR. BUD DUNHAM: Hi. Good afternoon,  
17 everyone. My name is Bud Dunham; I'm the Town  
18 Manager in Sandwich. And in addition to Chairman  
19 James, Selectman Frank Pannorfi is here, and  
20 Blair Haney, Director of Planning and  
21 Development.

22 As I was sitting here, I thought this  
23 was comical, but there was a time not too long  
24 ago there was a hearing in Sandwich on a

1           subcommittee. I think the last time a large  
2           project was in our town and Woody at the time was  
3           on the ZBA, Frank was the Chair of the Selectman.  
4           So the three of us went and it was like Frank,  
5           Woody, and Bud sounded like the three replacement  
6           bears for the Country Bear Jamboree at Walt  
7           Disney World. But what can we do about our  
8           names? (Laughter.)

9                   MR. BUD DUNHAM: So there's a couple  
10           things I wanted to say about our support for the  
11           project. It's really important to note that the  
12           town also in addition to participating in the  
13           Commission's review process filed as a formal  
14           intervener in the state's Energy Facilities  
15           Siting Board process. And as anyone who's  
16           familiar with that, it's extremely technical and  
17           a lot of high-level things on environmental  
18           issues. So during that process, we submitted  
19           appropriate briefs and comments whenever the EFSB  
20           had questions on what the town's beliefs were.

21                   And then, also, after that, as has been  
22           talked a couple times, we negotiated two separate  
23           agreements with NRG as part of the Canal Unit 3  
24           project. A Host Community Agreement, or HCA, and

1 a Payment In Lieu Of Tax Agreement, or PILOT  
2 Agreement, both of which were 21 years in  
3 duration.

4 So it's important to remember that  
5 these types of agreements are common for  
6 municipalities across the Commonwealth that have  
7 large-scale power generation facilities within  
8 their borders.

9 And while a lot of public attention has  
10 been given to all the economic benefits that are  
11 spelled out in the PILOT Agreement, it's really  
12 the Host Community Agreement, or HCA, that holds  
13 NRG's feet to the fire in terms of environmental  
14 and performance standards for Sandwich and for  
15 our region.

16 So if you ever took a look at that  
17 agreement, it addresses topics like air quality,  
18 noise and visual impacts, water usage, traffic  
19 impacts, and the general health and safety  
20 concerns of the town to protect not only our  
21 residents but also those of Cape Cod.

22 As was mentioned earlier, the proposed  
23 quick-start natural gas-fired unit will  
24 drastically improve air quality admissions for

1 the entire region, particularly as Units 1 and 2  
2 become obsolete and are eventually taken off-line  
3 by NRG in the future. And so the state-of-the-  
4 art generation unit will also provide our region  
5 with much-needed power reliability.

6 The Unit 3 project is a huge plus  
7 environmentally. It has minimal visual impacts  
8 compared to what exists on site today. I think  
9 we actually hoped down the road if Units 1 and 2  
10 become obsolete, maybe there will be talk about  
11 what happens to some of those existing structures  
12 and maybe what gets built will be the new large  
13 visible structure instead of what's there today.

14 It has no traffic impact once the  
15 construction phase of the project is complete.  
16 No water discharge impacts whatsoever. And it  
17 gives Sandwich hope for potential future  
18 development and redevelopment of the generation  
19 site with additional environmentally friendly  
20 power generation capabilities.

21 The HCA also recognizes the impact of  
22 the NRG Canal project on our emergency management  
23 departments by supporting annual payments of  
24 \$100,000 for specialized training and equipment,

1 and also advances NRG's corporate education push  
2 by providing \$50,000 a year for Innovative  
3 Curriculum Fund for the school department to  
4 oversee.

5 So all told between those two funding  
6 mechanisms about 3.25 million in payments are  
7 expected to be made to the town over that 21  
8 period -- 21-year-period through the HCA.

9 I think it's also important to  
10 understand, for those who aren't familiar, that  
11 the town and whoever has owned the power plant, I  
12 think NRG's the seventh or eighth owner in my  
13 tenure in Sandwich; we've always had very  
14 positive working relationships with whomever's  
15 owned the facility.

16 So the HCA also spells out some future  
17 cooperative issues and efforts. We're going to  
18 jointly explore the potential for a new  
19 wastewater treatment plant and related grant  
20 opportunities which support both our Local  
21 Comprehensive Water Resources Management Plan and  
22 the Commission's Section 208 Plan. Our three  
23 neighboring towns on the upper-Cape are familiar  
24 with those efforts and are actually working with

1 us on what might be able to be explored there in  
2 the future.

3 We have agreement to explore any future  
4 land compatibility issues surrounding the  
5 Sandwich Marina, and also the placement of  
6 compatible dredge spoils on Sandwich beaches  
7 anytime NRG needs to dredge the Canal for some of  
8 the fuel delivery that was mentioned earlier.

9 The PILOT Agreement which is separate  
10 from the Host Community Agreement was unanimously  
11 approved by Sandwich voters at last Monday  
12 night's special town meeting on November 21.  
13 Town meeting approval is required under the State  
14 Department of Revenue, or DOR, regulations for  
15 any type of PILOT Agreement that's agreed to by  
16 any taxpayer and a municipality.

17 So the 21-year agreement is also  
18 conditioned upon NRG successfully permitting and  
19 constructing the Unit 3 project, which is  
20 expected to become operational in mid-2019.

21 The total tax payments to the town over  
22 the 21-period will exceed \$50 million with an  
23 initial payment of \$3.55 million in year one,  
24 which will maximize the capture of new growth for



1 our tax levy purposes which is extremely  
2 important.

3 It's also important to note that these  
4 payments are only for Unit 3 and do not include  
5 the existing payments for Units 1 and 2 or the  
6 land on which Units 1, 2, and 3 will be built.  
7 All those are done.

8 And then, in addition, payments will be  
9 made to the Community Preservation Act, which is  
10 not required by law because under Mass. law power  
11 utility companies are classified as personal  
12 property so you're not allowed or required to  
13 make Community Preservation Act payments. We  
14 negotiated with them payments in excess of \$1.5  
15 million, and also to the water district which is  
16 a separate municipal entity for 2.6 million.

17 So in total, more than 57 million in  
18 payments will be made through both the HCA and  
19 PILOT Agreements in addition to the improved  
20 environmental conditions -- and I'm almost done.

21 We feel we're unique compared to some  
22 of the other Cape Cod towns. If you look at our  
23 demographics and our financial constraints that  
24 we've had to operate under, they're vastly

1 different from the challenges that most  
2 communities have had to face and manage for  
3 decades.

4 Demographically, we're much more  
5 similar to a South Shore community than a Cape  
6 Cod one. We have the lowest percentage of second  
7 homes. We have the lowest average age. We have  
8 the highest percentage of year-round residents  
9 and the second highest taxes. We have the  
10 smallest number of year-round municipal staff per  
11 capita by far, and I can get you numbers on that.  
12 We've not had an override approved in a dozen  
13 years, and we have the largest sending tuition  
14 assessments for Sandwich students to go to public  
15 educational opportunities of any town on Cape.  
16 Right now its \$3.4 million even though we still  
17 have the third highest school population that we  
18 have to educate.

19 So these agreements that we negotiated  
20 will literally help our community for decades.  
21 So in summary we hope that the Commission looks  
22 favorably upon the project. It will improve our  
23 reliability as a region. It will improve the  
24 long-term environmental impacts of the generation

1 site and assist us financially for many years.

2 And in our opinion, the comprehensive  
3 benefits of the project far outweigh any limited  
4 detriments to the Cape or to Sandwich.

5 So thank you, again, for your  
6 consideration of our comments and input.

7 CHAIR HAROLD MITCHELL: Thank you, very  
8 much. Any other local officials? Go Jeff.

9 MR. JEFFREY RIBEIRO: Jeffrey Ribeiro  
10 again. I'm just sorry we had technical  
11 difficulties. So this is the exhibit that was  
12 being discussed earlier. Let me turn this on.

13 So these are all the existing plant  
14 buildings, and then these are the new buildings,  
15 the new structures. Is that --

16 MR. JOHN KRAJOVIC: Yep.

17 MR. JEFFREY RIBEIRO: Okay.

18 CHAIR HAROLD MITCHELL: Okay. Let's go  
19 back to comments. Any local officials?

20 GENERAL PUBLIC

21 CHAIR HAROLD MITCHELL: Then I'll open  
22 it up for general public. Anyone from the  
23 general public that would like to speak on this?  
24 Would you please step up to the microphone and

1 identify yourself.

2 MR. TOM CAHIR: Thank you, Mr. Chairman  
3 and members of the Commission. Tom Cahir; I'm a  
4 resident of Bourne. I just very briefly want to  
5 indicate my strong support for NRG as they pursue  
6 the DRI.

7 Many years ago I had the privilege of  
8 representing Sandwich in the Massachusetts  
9 Legislature, and for over 14 years paid close  
10 attention to the activities surrounding the  
11 plant. There were issues in those days and we  
12 paid particular attention to those. We created a  
13 committee to monitor what was going on there.

14 So I've had a subsequent interest in  
15 what goes on with new ownership. And I've  
16 watched NRG over the last couple of years, and  
17 I've been really impressed with their  
18 accessibility, their responsiveness, and their  
19 interaction with municipalities.

20 And as Bud just indicated, the  
21 wonderful agreements that will help the education  
22 community in that town are all very positive.

23 So I'm very impressed at the hearing  
24 here today listening to the appropriate questions

1 being raised, but I'm yet to hear anything  
2 negative associated with the project. So I just  
3 wanted to go on record as being a strong  
4 supporter.

5 Thank you for allowing me to testify.

6 CHAIR HAROLD MITCHELL: Thank you.  
7 Anyone else? Seeing none. Any member of the  
8 Commission that has not had an opportunity to ask  
9 a question or speak?

10 MR. LEONARD SHORT: I would like to ask  
11 a question regarding the wastewater that will be  
12 used for the, I presume, the cooling of the  
13 turbines -- the turbine, and how is that -- is  
14 that going to be recycled?

15 MR. TOM ATKINS: Yes. Thank you for  
16 that question. I think it's important to note  
17 that because it's a simple-cycle facility,  
18 there's actually no cooling water. The turbine  
19 is cooled by air. Its air cooled so it has  
20 radiator fans that are air cooled. So there's no  
21 wastewater associated with the operation of the  
22 turbine for cooling purposes.

23 MR. LEONARD SHORT: What are the wells  
24 for then?

1                   MR. TOM ATKINS: Yeah, the wells -- we  
2                   need the well water for several things.  
3                   Principally, when the facility operates on liquid  
4                   fuel, it needs water injection which is a process  
5                   that reduces the flame temperature and lowers the  
6                   amount of nitrous oxides that come out of the  
7                   facility. So that water is injected into the  
8                   process but it goes up as water vapor up through  
9                   the stack.

10                  MR. LEONARD SHORT: Thank you.

11                  MR. TOM ATKINS: You're welcome.

12                  CHAIR HAROLD MITCHELL: Anyone else?  
13                  Last opportunity to ask a question.

14                  MR. JOHN MCCORMACK: Mr. Chairman, if I  
15                  may?

16                  CHAIR HAROLD MITCHELL: Yes.

17                  MR. JOHN MCCORMACK: I just want to  
18                  remind my fellow Commissioners that criteria for  
19                  approval or disapproval of a DRI is based on  
20                  benefits versus detriments. Without enumerating,  
21                  I think that the benefits far outweigh the  
22                  detriments.

23                  And having said that, at this time I  
24                  would move that the Commission close the DRI

1 Public Hearing period on the project.

2 MALE VOICE: Second the motion.

3 CHAIR HAROLD MITCHELL: So I have a  
4 motion and a second to close the DRI Public  
5 Hearing. May I have a vote; all in favor?

6 COMMISSION MEMBERS: Aye.

7 CHAIR HAROLD MITCHELL: Any opposed?

8 (Motion passed.)

9 CHAIR HAROLD MITCHELL: That being  
10 said, we will -- any abstentions? That being  
11 said, we'll close the Public Hearing.

12 (Public Hearing closed.)

13 CHAIR HAROLD MITCHELL: And I'll take a  
14 motion now to adopt the decision.

15 MR. JOHN MCCORMACK: Mr. Chairman, I  
16 move that the Commission adopt the draft DRI  
17 decision and approve the project subject to the  
18 findings and conditions in the DRI decision.

19 MALE VOICE: Second.

20 CHAIR HAROLD MITCHELL: Thank you,  
21 Jack. I have a motion in a second. All in  
22 favor?

23 COMMISSION MEMBERS: Aye.

24 CHAIR HAROLD MITCHELL: Any opposed?

1 Any abstentions? So the DRI motion carries.

2 Thank you, very much.

3 (Motion carries.)

4 MR. TOM ATKINS: Thank you.

5 NEW BUSINESS

6 CHAIR HAROLD MITCHELL: At this time,  
7 I'm going to ask everyone to please stay seated  
8 briefly. We've just got one more item and then  
9 we'll all be able to depart together.

10 At this time, is there any new business  
11 or anything that any of the Commissioners would  
12 like to bring up? Seeing none.

13 I will take a motion to adjourn.

14 MS. ELIZABETH TAYLOR: So moved.

15 MR. RICHARD CONRON: So moved.

16 CHAIR HAROLD MITCHELL: I never have a  
17 negative on that one; never. So I've got a  
18 motion, got a second, all in favor?

19 COMMISSION MEMBERS: Aye.

20 (Motion carried.)

21 CHAIR HAROLD MITCHELL: We'll see you  
22 next time. Thank you.

23 MR. TOM ATKINS: Thank you.

24 (Whereupon, it was moved,



1  
2  
3

seconded, and voted to adjourn the Cape  
Cod Commission Public Hearing at  
4:39 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 Court 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 Public Hearing on Canal Unit 3, which was held on Thursday, December 1, 2016, at the First District Courthouse, Assembly of Delegates Chambers, 3195 Main Street, Barnstable, MA 02630.

\_\_\_\_\_  
Date\_\_\_\_\_  
Linda L. Wesson, Notary Public  
My Commission Expires: June 3, 2022

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