

In The Matter Of:
Energy Hearing

Energy Hearing Public Workshop
July 21, 2016



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Min-U-Script® with Word Index

1 The goal is to give you an
 2 administrative update so everybody is aware of
 3 where we are in the process and also to provide
 4 forum for the public to comment on the greenhouse
 5 gas emission related issues. That is the scope
 6 of this workshop. There are a lot of other
 7 issues and a lot of other forums in which people
 8 are commenting on other aspects of the site, but
 9 this one is about the greenhouse gas emissions
 10 issues.

11 It is going to be transcribed, as I
 12 said. It will be posted on our website and the
 13 presentation materials are also posted on the OER
 14 website. So to the extent that you want to go
 15 back and see any of those, they will be
 16 available.

17 And with that, Nick, do you want to give
 18 us a highlight of the proposal?

19 MR. UCCI: Sure. Thank you. I'm going
 20 to try to avoid the microphone. I should have a
 21 loud enough voice. That's what my wife tells me
 22 anyway.

23 We won't spend too much time on this
 24 because if you're here today you probably know
 25 most of the background on the facility. It's a

1 is in Burrillville located within the vicinity of
 2 a high pressure gas pipeline as well as
 3 high-voltage interstate transmission lines. It
 4 is also located adjacent to a Spectra Algonquin
 5 pipeline compressor station.

6 As Carol mentioned, this is one piece of
 7 a very complex and comprehensive process at the
 8 Energy Facility Siting Board. In fact, the
 9 Siting Board has designated 12 State and local
 10 agencies to provide advisory opinions into their
 11 process.

12 Here's a listing of those advisory
 13 agencies including our office as well as the
 14 Department of Environmental Management,
 15 transportation, health and so forth. There are
 16 also some local agencies including the Tax
 17 Assessor, the Zoning Board and the Building
 18 Inspector in Burrillville that have also been
 19 asked to provide advisory opinions on issues
 20 relevant to their jurisdiction. All of those
 21 advisory opinions are due to the Siting Board on
 22 September 10th.

23 Specific to OER, we've been tasked to
 24 collaborate with the Rhode Island Executive
 25 Climate Change Coordinating Counsel, that's a

1 proposed 1,000 -- approximately 1,000 megawatt
 2 combined cycled power plant primarily fired with
 3 natural gas, but it will also include two on-site
 4 tanks with backup diesel oil that the plant would
 5 be able to use in the event they did not have
 6 sufficient access to natural gas.

7 The project, located in Burrillville,
 8 has a 36-month construction timeline with an
 9 anticipated operation date of June 1st, 2019, for
 10 the first unit and, depending on the capacity
 11 auction results, the facility may have an
 12 operation date for June 1st, 2020 for the second
 13 unit.

14 This is a project rendering of the
 15 proposal that is publicly available in
 16 Invenenergy's docket materials. By the way, all of
 17 the public docket materials are available on the
 18 PUC's website. If you go there and drop down,
 19 there's a menu for the Energy Facility Siting
 20 Board, you can click that link, and the materials
 21 listed on the docket, SB2015-6, and it will have
 22 all the testimony, the application, data requests
 23 that have been filed by the various parties and
 24 all of the public material.

25 The location, as I'm sure you all know,

1 mouthful so we'll say EC4, and the Department of
 2 Environmental Management to examine two major
 3 components related to this project.

4 One is the impacts of the facility on
 5 anticipated greenhouse gas emissions and the
 6 cumulative impact over the life of the project.
 7 And the second, as to whether or not the facility
 8 will conform with the Resilient Rhode Island Act
 9 and State energy policies.

10 And as you know, the Resilient Rhode
 11 Island Act is a statute that's in place that
 12 outlines the emission reduction targets for the
 13 State. Those are listed here on this slide,
 14 80 percent reduction below 1990 levels by 2050.

15 So to support the development of our
 16 advisory opinion, we proposed to hold this public
 17 workshop to receive public input. This process
 18 was endorsed by the EC4 back in May. We intend
 19 to report back to the EC4 on the results of this
 20 workshop in August.

21 We have contracted with Levitan &
 22 Associates. As Commissioner Grant mentioned
 23 earlier, we have Ellen Cool here who's our
 24 primary consultant on these matters to help
 25 advise us and conduct some analysis on the

1 potential GHG and State energy policy impacts.
 2 To be clear, we're a nondecisional
 3 agency. We have no permitting authority on this
 4 project, but we are participating in all forums
 5 including at the Siting Board.
 6 Finally, just briefly, upcoming
 7 timelines. We're having this public workshop
 8 today. As I mentioned, we'll be reporting to the
 9 EC4 in August, and advisory opinions, including
 10 our own, are due to the Siting Board on
 11 September 10th. We anticipate that evidentiary
 12 hearings will be held by the Siting Board
 13 throughout the month of October/November,
 14 possibly early December, but they have not yet
 15 set the formal schedule. Again, that schedule
 16 will be available on the Siting Board website
 17 when it's been published. I provide the direct
 18 link there for your information.
 19 And with that, I will turn it over to
 20 Dr. Cool for technical presentation on how she's
 21 going to help assist the energy office in
 22 conducting our analysis.
 23 MS. COOL: Thank you so much, Nick. Can
 24 you hear me all right? Great.
 25 So Ellen Cool. I'm with Levitan &

1 be served by Narragansett Electric Company that
 2 might be familiar to you.
 3 You can see on this slide, if you look
 4 on the left, the left half, the left of the green
 5 line is a cartoon illustrating what I call the
 6 high-voltage power system or the bulk power
 7 system. You can see -- I can't point, but you
 8 can see in the schematic there's what looks like
 9 a conventional power plant, some wind turbines.
 10 Those are the sources of the electricity.
 11 They're brought through the high-voltage
 12 transmission line, through some step down and
 13 step up transformers and then carried over to the
 14 local distribution system that then delivers that
 15 power to homes and businesses across not just
 16 this state but all over the states across New
 17 England.
 18 Importantly, if you'll look in the upper
 19 left side of this figure, you can see a little
 20 arrow pointing to interconnections to New York,
 21 Quebec and New Brunswick. Not only is the system
 22 integrated across all of New England, but we have
 23 some very important ties that connect us to
 24 Canada and to New York State. For example,
 25 there's a very large transmission line that comes

1 Associates. I have spent about 30 years in both
 2 the energy and environmental field, so I'm hoping
 3 that by straddling those two disciplines I can
 4 bring an informed perspective to the questions
 5 that I've been tasked to help the OER with.
 6 So before I -- well, as Nick and as
 7 Commissioner Grant said, what I want to do today
 8 is not tell you any conclusions because we
 9 haven't gotten there yet, but to try to provide
 10 you with some background on how we'll frame the
 11 issue and what the process and methodology is for
 12 arriving at the advisory opinion content.
 13 So just a little background, first,
 14 about New England's energy system. New England
 15 electricity is derived from hundreds of power
 16 plants scattered across the six New England
 17 states. It's an integrated resilient power
 18 system. There are, as I said, several hundred
 19 power plants. There are over 8,000-plus,
 20 8,500 miles of high-voltage transmission lines.
 21 And these transmission lines carry bulk power
 22 from the power plants that are across the state
 23 to local distribution systems which are the local
 24 utilities that deliver the power to the homes and
 25 businesses. Many of you sitting here today may

1 down from Quebec and brings massive amounts of
 2 hydropower into the region.
 3 One other thing I want to mention on
 4 that slide, if you don't mind going back for a
 5 second, Nick, the left-hand side, the
 6 high-voltage power system is a very massive
 7 complex system but it's managed minute by minute
 8 by an entity called ISO New England, which you
 9 probably have heard of. It's an independent
 10 system operator New England, or for short ISO New
 11 England.
 12 And they're headquartered in Holyoke,
 13 Massachusetts. As you imagine, there's just a
 14 giant control room with high security. You might
 15 have, you know, seen something like this in,
 16 like, a submarine or nuclear power plant
 17 headquarters, and that's where they manage the
 18 power from minute to minute. It's federally
 19 regulated. It has a federal charter from the
 20 Federal Energy Regulatory Commission. And that
 21 entity is responsible for dispatching the power
 22 plants on a minute-by-minute basis making sure
 23 the transmission system is running safely,
 24 security and reliably and they're delivering the
 25 power to the local distribution systems.

1 On the right-hand side, under the local
 2 distribution system, what's important is that
 3 those companies, like Narragansett Electric, are
 4 governed and regulated by the State.
 5 So ISO New England -- should we stop for
 6 questions?
 7 MR. UCCI: No.
 8 MS. COOL: Okay. We'll take questions
 9 later.
 10 UNIDENTIFIED SPEAKER: No, it's not
 11 a question. I'm sorry. I apologize for being
 12 late, but is the microphone turned on? I can't
 13 hear you.
 14 UNIDENTIFIED SPEAKER: It's tough to
 15 hear you.
 16 MS. COOL: I'm sorry. How is this? Is
 17 this better?
 18 UNIDENTIFIED SPEAKER: A little better.
 19 MS. COOL: Okay. So ISO New England,
 20 although, it dispatches the power plants on a
 21 minute-by-minute, hour-by-hour basis, its goal is
 22 to deliver power safely, reliably and cost
 23 effectively, but it does not -- it is not
 24 responsible for managing greenhouse gas
 25 emissions. Although, it can track them because

1 states in the Northeast that regulate, through
 2 state-implemented rules, this greenhouse gas cap.
 3 There's an annual carbon dioxide cap,
 4 CO2 cap or greenhouse gas cap that all the states
 5 have agreed upon. That cap is shown by the green
 6 line on the top. It ratchets down annually and
 7 the states have an obligation to ensure that
 8 power plants within the state combine
 9 collectively across the whole RGHGI footprint
 10 meet the cap. And it's through a market cap and
 11 trade system. By putting a price on carbon, it
 12 incentivizes the power plants to reduce their
 13 emissions, become more efficient and it, over
 14 time in principle, will cause the fleet of power
 15 plants to become cleaner and more sustainable
 16 over time.
 17 And just before you switch, you can see
 18 the states that are part of RGHGI, New England
 19 states, New York, Maryland, Delaware, District of
 20 Columbia. New Jersey was a member of RGHGI at
 21 one point, but at the end of 2011 they exited the
 22 program and the cap was adjusted accordingly.
 23 This chart illustrates typical emissions
 24 from power plants with respect to their CO2
 25 footprint. So the chart is number of pounds of

1 it has all the data which plants are operating.
 2 So this chart is derived from some data
 3 that is available from ISO New England on what
 4 the regional emissions of greenhouse gasses are.
 5 This chart is in terms of millions of tons of
 6 carbon dioxide, the primary greenhouse gas
 7 emission. The colors are the different states.
 8 Rhode Island is the little orange piece at the
 9 top of the stack. There's a sliver of Vermont in
 10 red on the top that you might not be able to see,
 11 but you can see Rhode Island's contribution to
 12 the regional greenhouse gas emissions, which
 13 peaked around 2010, and has generally been
 14 declining ever since.
 15 So while I said that ISO New England is
 16 not responsible for controlling greenhouse gas
 17 emissions, it does try to dispatch the plants
 18 that are most efficient and most cost effective
 19 first, which indirectly controls or indirectly
 20 effects greenhouse gas emissions.
 21 But the entity now that really has the
 22 authority to manage and control greenhouse gas
 23 emissions is the organization called RGHGI or the
 24 Regional Greenhouse Gas Initiative, which many of
 25 you may have heard of. It's a consortium of nine

1 CO2 per megawatt hour generated.
 2 A megawatt hour, just to give you a
 3 ballpark, in a typical home probably generates --
 4 or probably consumes about a megawatt hour of
 5 electricity in six or seven weeks. So if you
 6 have a typical home, you'd use about a megawatt
 7 hour in six or seven weeks.
 8 So you can see that coal plants are the
 9 highest emitters. The rate of emission depends
 10 on two things, the fuel itself and the carbon
 11 content per unit of intrinsic energy of the fuel,
 12 and it also depends on the efficiency of the
 13 plant.
 14 So an old 40-year-old coal plant is the
 15 highest emitter, not terribly efficient by modern
 16 standards, and coal itself is a very high carbon
 17 intensive fuel.
 18 There's some old oil-fired steam plants
 19 that are a little bit better, a little under
 20 one ton, 2,000 pounds per megawatt hour.
 21 Among the fossil plants, the most
 22 efficient ones are the new combined cycle plant
 23 such as the Clear River Energy Facility is
 24 proposed to be. And you can see that on a per
 25 megawatt hour basis, it produces maybe about a

1 third of the carbon emissions on a per megawatt
 2 hour basis as a traditional coal plant.
 3 Obviously, a nuclear, wind, solar
 4 produce no carbon footprint. One thing I should
 5 just note that this chart just shows the stack
 6 emissions. Does not take into account anything
 7 related to the full life cycle carbon footprint
 8 of the plant, which is a different analysis that
 9 I'm not going to address here.
 10 So how do we account for greenhouse
 11 gasses from the electric sector? There are two
 12 ways to do that.
 13 Can you hear me now in the back, too?
 14 There are two options for doing it per county for
 15 greenhouse gasses in the electric sector. The
 16 first we're calling generation-based accounting
 17 and that counts the carbon dioxide or the
 18 greenhouse gas emissions from all of the in-state
 19 power plants. So put a bubble around Rhode
 20 Island and count up the greenhouse gasses that
 21 come from each of the fossil-fired power plants
 22 within the State.
 23 The other way to look at it is called
 24 consumption-based accounting which tallies up the
 25 greenhouse gas emissions that are associated with

1 specific permits. So by managing consumption
 2 rather than accounting for generation, the State
 3 really has more of a -- more levers to apply.
 4 I should also add that the State -- the
 5 utilities in the State have contracts long-term,
 6 contracts with renewable resources like wind that
 7 are outside of the State. So we want to be able
 8 to account for that.
 9 It's also consistent with how our
 10 neighbors, Connecticut and Massachusetts, are
 11 approaching their equivalent of the Resilient
 12 Rhode Island Act, which in those states is called
 13 the Global Warming Solutions Act. And it's also
 14 consistent with how RGHGI approaches greenhouse
 15 gas management as a regional system.
 16 So the first assignment Nick mentioned,
 17 that the -- the advisory opinion has two prongs.
 18 The first assignment is to opine on the impact
 19 that the Clear River Energy Center will have on
 20 greenhouse gas emissions, so I want to talk a
 21 little bit about how we're going to approach
 22 that.
 23 First of all, what did the project
 24 developer claim with respect to greenhouse gas
 25 emissions? This is a quote from the application.

1 the electricity as used within the State. So
 2 because I describe New England as having a
 3 regional electric grid with electricity
 4 transmitted all over the region as well as in and
 5 out of the region, but two values are not always
 6 the same. And I'll come back to that with some
 7 illustrations in a minute or two.
 8 In our advisory opinion, we have a
 9 choice of looking at it either generation based
 10 or consumption based, and our approach is to take
 11 the consumption based accounting system. Why?
 12 There are many reasons. Just to name a few,
 13 first of all, the EC4 decided several months ago
 14 that that was going to be the approach that would
 15 be used in the plan to achieve the resilient
 16 Rhode Island targets.
 17 Secondly, as I said before, it's a
 18 really a more realistic representation of the
 19 regional grid which include these cross state and
 20 cross border transfers.
 21 Third, it aligns with all the State
 22 policies that are intended to incentivize things
 23 like energy efficiency and renewable energy and
 24 the State does not control the dispatch of the
 25 generating resources other than enforcing

1 The application says "the project will enable the
 2 transition away from older, less efficient and
 3 polluting coal and oil plants which will lower
 4 emissions of CO2 by removing over a million tons
 5 of carbon dioxide from the air annually."
 6 There's a chart that you may not be able
 7 to read from the bottom that's straight from the
 8 application that shows every year a forecast
 9 period of about a 1 percent reduction in carbon
 10 dioxide emissions. And that's across the
 11 footprint of New England plus our neighbor New
 12 York State.
 13 So that analysis was performed by a
 14 consultant to Invenergy, the developer, PA
 15 Consulting and our first job would be to examine
 16 that conclusion.
 17 Key questions: How did this consultant
 18 for Invenergy arrive at these conclusions? They
 19 forecasted the operation and emissions of the
 20 plant over some years into the future. Well, how
 21 did they do that? What kind of models did they
 22 use to analyze the electric grid? What
 23 assumptions did they make about how the plant
 24 would operate? And what assumptions did they
 25 make about the emissions from this plant?

1 So to dive into that, we will examine
2 all of those questions and then say, well, were
3 the assumptions that they used and the tools that
4 they used reasonable. Are they aligned with
5 generally good, professional judgment? Was there
6 a bias or were they objectively analyzing the
7 system?

8 Nick mentioned that a lot of the
9 information is available on the docket website.
10 We will examine the content of your application,
11 in particular the PA Consultants' reports,
12 written testimony provided by the consultants at
13 PA Consultants.

14 There are questions that were posed to
15 Invenegy by other intervenors as well as by the
16 OER. We have responses from the first round and
17 we will be seeing responses to data requests that
18 have been filed by other intervenors.

19 ISO New England has a wealth of
20 information on historic emissions and how the
21 system operates. We will dive into that. And
22 the sister, if you will, sister organization, the
23 New York ISO, which has a role similar to ISO New
24 England within New York State also provides a lot
25 of information. And because PA Consultants

1 accounting method and the consumption-based
2 accounting method for greenhouse gasses are not
3 the same, that this is illustrated on this slide.
4 The blue line which doesn't seem to
5 follow any pattern and zigs and zags around the
6 generation-based emissions in terms of millions
7 of tons of CO2 from the electric power sector
8 within Rhode Island going back to 1990.

9 The red line is computed on a
10 consumption basis and you can see it's a smoother
11 line. It grew very slowly, peaked around 2005
12 and has slowly been decreasing since then.
13 That's the line that we're going to focus on, the
14 consumption-based approach.

15 How do you compute those numbers? EC4
16 will use a more detailed method than what I'm
17 describing here, but in general because the
18 electricity is from a pooled system, you really
19 have to view the consumption-based approach as
20 reflecting an overall average of the emission
21 rate of the whole fleet across New England as
22 well as electricity that's derived from our
23 neighbors.

24 I don't know if you can see it on this
25 slide, but ISO New England does publish every

1 conclusion covered the whole footprint of New
2 England and New York, we will have to look into
3 New York as well.

4 MR. UCCI: Can I just make a
5 clarification, the slide says "DPU docket," but I
6 think, you know, if you want to examine this
7 material you're best off to go to the Siting
8 Board, the docket that I mentioned earlier, which
9 is Siting Board 2015-6. And that's where you'll
10 see a copy of the full application and all
11 supporting materials. So I just want to make
12 that clarification. I apologize for the error in
13 the slide.

14 MS. COOL: Thank you. Thank you.

15 So the second assignment is to examine
16 the consistency with State energy laws and
17 policies, including the Resilient Rhode Island
18 Act. Nick already described this piece of
19 important legislation which sets goals for carbon
20 reductions relative to the 1990 baseline up to an
21 80 percent reduction by 2050.

22 The plan is being developed by EC4 with
23 the help of their consultant and it's not -- it's
24 due at the end of 2016.

25 I said before that the generation-based

1 year the average greenhouse gas emission rate
2 across the whole fleet for all the power that it
3 delivers throughout New England. The number for
4 2014 was 726 pounds per megawatt hour. It's been
5 going down since ISO New England started tracking
6 this. In general, it's been declining as the
7 fleet is becoming more efficient and more
8 sustainable.

9 In addition to the Resilient Rhode
10 Island Act, it's the OER's charge to gauge
11 whether this project would be consistent with a
12 host of other laws and policies that have been
13 issued and promulgated by the State of Rhode
14 Island as a natural leader in promoting
15 sustainable and cost effective energy.

16 There are many more than this, but for
17 convenience I've grouped them into three -- three
18 parts. There are regulations and policies
19 related to promoting energy efficiency in this
20 state. There are of rules and policies that
21 promote renewable energy resources, the use as
22 well as the development of renewable energy. And
23 lastly there are some policies that are related
24 specifically to reducing greenhouse gasses.

25 So what are the key questions that we'll

1 be asking --
 2 MS. GRANT: Excuse me. Just because
 3 people have been joining us I want to assure
 4 everyone who has not yet signed up to speak, we
 5 will take a break before the public comment so
 6 you'll have an opportunity to sign up. So I
 7 don't want anyone worrying about whether they'll
 8 have an opportunity to sign up. Sorry to
 9 interrupt.
 10 MS. COOL: Thank you.
 11 MS. GRANT: Sure.
 12 MS. COOL: So with the backdrop of those
 13 policies, state policies, we have to ask some key
 14 questions. The greenhouse gas savings or
 15 avoiding greenhouse gas emissions that the Clear
 16 Energy Project purports to produce, will they
 17 actually help Rhode Island meet its greenhouse
 18 gas reduction targets?
 19 Second question is: How will operation
 20 of this plan affect the operation of other
 21 fossil-fired plants in the State and the region?
 22 The claim is that it will help displace
 23 some of those dirtier, less efficient plants
 24 that, in fact, do we think and expect that this
 25 will occur.

1 real treasure trove of information. And RGHGI
 2 also documents the greenhouse gas emissions as
 3 well as the price of those emissions.
 4 EPA has a lot of detailed information
 5 that all of the fossil-fired plants above
 6 25 megawatts have to report to the EPA on their
 7 emissions on a very regular basis.
 8 And, of course, public comment that
 9 we're taking today will be part of our integrated
 10 analysis. Thank you.
 11 MR. UCCI: Thank you, Ellen.
 12 MR. McVAY: My name is Doug McVay. I'm
 13 Chief of the Office of Air Resources at DEM. And
 14 what I want to do today is briefly give you an
 15 introduction to the air pollution control permit
 16 process, what the permit is, what the current
 17 status is, what some of the major elements are of
 18 that process and where we expect that process to
 19 go.
 20 So first and foremost, you should know
 21 that the air pollution control permit process is
 22 separate and distinct from anything the energy
 23 facility Siting Board is doing. The permit is a
 24 federally delegated permit under the Clean Air
 25 Act and, as a result it, is exempt under the

1 Third, will the development of this plan
 2 affect the viability of less efficient
 3 fossil-fired plants and help transform the
 4 region's power grid?
 5 Will the development of this plan in any
 6 way affect or deter the expansion of renewable
 7 resources in this state? Will it promote
 8 renewable resources, will it hinder or will it be
 9 neutral? Will the development of the plant
 10 affect the ability in any way to implement and
 11 expand the aggressive energy efficiency programs
 12 across the state?
 13 And lastly, how will -- or will the
 14 project contribute to achieving the goals of
 15 RGHGI as well as other reduction policies?
 16 Data sources in addition to the
 17 information available that Nick clarified on the
 18 website, there's a lot of data available from the
 19 local utilities, Narragansett Electric Company,
 20 ISO New England again, Rhode Island DEM. You'll
 21 hear from Doug McVay in a little bit talking
 22 about the permitting program.
 23 Federal government provides a lot of
 24 information, very detailed, on energy sales by
 25 sector, greenhouse gas emissions by sector, a

1 Energy Facility Siting Board Act and DEM is the
 2 permitting authority.
 3 The air pollution control permit
 4 required for the Clear River Energy Center is
 5 called a Major Source Permit and it is required
 6 before construction begins on the project.
 7 The requirements that must be satisfied
 8 to obtain a Major Source Permit are contained in
 9 DEM's air pollution control regulation Number 9
 10 and, in particular, in Sections 9.4 and 9.5.
 11 That regulation is available on DEM's website if
 12 anybody's interested.
 13 So what are some of the major elements
 14 of that permit application? One is a control
 15 technology review. And the purpose of this
 16 review is to determine that the source is
 17 incorporating the best available control
 18 technology into the plant plan.
 19 In the application, it is the
 20 applicant's responsibility to show what they are
 21 using to minimize emissions and to defend that as
 22 being the best available. It is then our job to
 23 review that and determine if that is accurate and
 24 correct.
 25 Second piece of our second major element

1 is the air quality impact analysis. And what
 2 this does is it combines a look at existing air
 3 quality in the area as well as predictions of
 4 what future air quality will be with the addition
 5 of this source in combination with other sources
 6 in the area. The purpose is to show that the
 7 emissions from this source will not cause or
 8 contribute to air pollution in violation of any
 9 standards.

10 A third important piece of this review
 11 is a health risk assessment. And the purpose of
 12 this assessment is to calculate risks associated
 13 with exposures to pollutants via multiple
 14 pathways.

15 A lot of times in air pollution reviews
 16 you're just looking at inhalation of -- as a
 17 pathway. This looks at multiple exposure
 18 pathways and it also looks at the cumulative
 19 impact of exposures to multiple pollutants rather
 20 than looking at the air pollutants individually.

21 The application was determined to be
 22 administratively complete as of March 29th, 2016.
 23 And what "administratively complete" means is we,
 24 DEM, have all the elements we need to begin the
 25 review of the process.

1 I think that what we'll do now in order to give
 2 everybody an opportunity to be sure that they've
 3 signed up if they want to speak. We'll take a
 4 five-minute break and then we will reconvene for
 5 the public comment portion of the public
 6 workshop. Okay?

7 UNIDENTIFIED SPEAKER: Is the sign-up in
 8 the back the same as the one here or --

9 MR. UCCI: You can sign up in either
 10 place. And there are also restrooms, if you need
 11 them, straight through these doors against the
 12 back wall.

13 MS. GRANT: If you've signed up once, we
 14 have your name. But if you haven't, they're
 15 right here.

16 All right. We'll begin again. Thank
 17 you everyone. We'll now have a portion for the
 18 public to comment and listen. Yes, sir.

19 UNIDENTIFIED SPEAKER: Before we start
 20 the public comment, can I ask a couple of
 21 questions about the presentation information?

22 MS. GRANT: We can do that. Our thought
 23 was to respect the people who have come to make
 24 public comment, if that's okay, and let people
 25 make their comments. And then we will all be

1 The expected timeline for the review of
 2 the application, we are in the very early stages
 3 of the application and we expect to complete the
 4 review by the end of the year, sometime in
 5 December of 2016.

6 This permit process does include the
 7 opportunity for public comment and a public
 8 hearing. It is expected that the public hearing
 9 will occur somewhere in the February to
 10 March 2017 time frame and then ultimately DEM
 11 will make a final determination of the permit in
 12 the May time frame, May 2017.

13 That was just a brief introduction to
 14 what the air pollution permit process is. I will
 15 stay here. After we take public comment, if
 16 anybody has any additional questions about the
 17 permit process, feel free to come down and ask
 18 them of me.

19 Additionally, this is my contact
 20 information. If after the workshop you think of
 21 some questions you want to ask, feel free to
 22 either email me or give me a call. Thanks.

23 MR. UCCI: Thanks, Doug.

24 MS. GRANT: Thanks, Ellen and Doug and
 25 Nick. And as we said, I think we're on schedule.

1 available for conversations afterwards.

2 UNIDENTIFIED SPEAKER: It's just that
 3 the comments that are made might depend upon the
 4 answers from the clarifying questions that we
 5 want to ask.

6 MS. GRANT: I'm okay with that, but what
 7 we aren't going to be able to do is have an
 8 extended conversation. But if there are a couple
 9 of clarifying questions that you think would help
 10 the conversation, if you would come to the
 11 microphone I think that would be helpful.

12 UNIDENTIFIED SPEAKER: You want me to
 13 come up there?

14 MS. GRANT: If you want to come to the
 15 microphone over here, that would be helpful.

16 UNIDENTIFIED SPEAKER: It might be
 17 helpful to -- how long is this workshop?

18 MS. GRANT: It was posted to be -- we're
 19 available until 1 o'clock.

20 UNIDENTIFIED SPEAKER: 1 o'clock. Okay.
 21 So we have lots of time.

22 MS. GRANT: We have time.

23 JOHN HAMILTON: John Hamilton from
 24 Charlestown. So the first question is:
 25 Massachusetts issued a report that the State

1 doesn't need increased gas capacity to meet its
2 energy needs. What is Rhode Island's opinion on
3 that? Does Rhode Island need additional gas
4 capacity to meet its energy needs? This is
5 the --

6 MS. GRANT: That is a question about
7 needs, which actually is not the conversation
8 today, but I'll take the question. I appreciate
9 the question, and I think that --

10 MR. HAMILTON: But this is the Office of
11 Energy Resources.

12 MS. GRANT: I'm also the Office of
13 Energy Resources and we have filed a portion of
14 the testimony about needs, which has been filed
15 publicly with PUC. I refer you to that. I think
16 that's the right to place to go with that and
17 that opinion has a lot of expert --

18 MR. HAMILTON: Wouldn't you know that
19 already?

20 MS. GRANT: It's a complicated answer,
21 so I would refer you to the expert testimony.

22 MR. HAMILTON: Okay. So the second
23 question is: Does the State produce more power
24 in the State than it actually uses or needs in
25 the State?

1 MR. HAMILTON: All right. Thank you.

2 MS. GRANT: Thank you for your question.

3 PAUL ROSELLI: Paul Roselli,
4 R-O-S-E-L-L-I, from Burrillville. Would it be
5 appropriate to ask some questions of the material
6 that was presented?

7 MS. GRANT: I appreciate the question.
8 I'm going to go back to the original plan which
9 we laid out which is to allow the members of the
10 public who have comment to go first and to
11 respect that. We can come back to questions, but
12 I would really like to get to the public first.

13 So the process will be, at this point,
14 all the people who have signed up are invited
15 to -- I will call people's names and you're
16 invited to come to either end of the aisle.

17 We had originally set a time limit on
18 this of three minutes. Given the number of
19 people that we have and the time that we have
20 available, I've made an executive decision that
21 you can have up to five minutes. Don't feel that
22 you have to fill the time so that people will
23 have enough time that we can use the time to hear
24 your input.

25 And we'd request that when you're called

1 MS. GRANT: I don't know off the top of
2 my head, so --

3 MR. HAMILTON: I understand that they
4 power produce in Burrillville and in Providence
5 and the other smaller generating stations, right?
6 Produces more power than is needed. And the
7 excess, according to some engineer friends that
8 have been up to ISO and looked at the ISO map,
9 indicate that the excess is exported
10 out-of-state; is that true?

11 MS. GRANT: Again, we're not going to
12 get into this, back and forth questions and
13 answers.

14 MR. HAMILTON: These are clarifying
15 questions to the --

16 MS. GRANT: That's actually a different
17 question from the greenhouse gas emissions, so we
18 can -- we can take note of that question. Thank
19 you.

20 MR. UCCI: And it's relevant to the
21 needs assessment that the Commissioner pointed to
22 earlier that the PUC is -- that's what their
23 process is, to examine the needs of the facility.
24 And so those sorts of questions, that would be
25 the proper venue for that.

1 upon you'll state your name and your residence
2 and we will expect that those comments will be
3 actually your comments, not a series of
4 questions. So we're going to be listening.

5 We appreciate all the input that you
6 will have. And then at the end of that, we can
7 assess, again, whether there are other comments
8 that people want to make. You can sign up during
9 the process if you decide you want to add your
10 name to the comments and then we'll have -- we'll
11 see where we stand on time at that stage.

12 Any questions other than the ones that
13 you were going to go with? All right. All set,
14 Nick?

15 MR. UCCI: Yes.

16 MS. GRANT: Do you want to sit or stand?
17 Let's go sit --

18 MR. UCCI: Let's sit.

19 MS. GRANT: -- so we can listen better.
20 First speaker is Oleg Nikolyszyn. And I asked
21 you your last name and I'm going to let you
22 actually say it so that I don't butcher it.

23 MR. NIKOLYSZYN: O-L-E-G, last name
24 N-I-K-O-L-Y-S-Z-Y-N. And mine was really a
25 question, not a comment, so I will reserve my

1 question until after the comments.
 2 MS. GRANT: Great. Thank you. The
 3 second person who wants to speak is Peter
 4 Nightingale.
 5 MR. NIGHTINGALE: Peter Nightingale,
 6 N-I-G-H-T-I-N-G-A-L-E. I have written comments
 7 here. Can I give those to you?
 8 MS. GRANT: Yes, please.
 9 MR. NIGHTINGALE: How many copies would
 10 you like?
 11 MS. GRANT: One is fine and we
 12 appreciate it.
 13 MR. NIGHTINGALE: I will start with a
 14 quote, and this comes from Mary Christina Wood's
 15 book Nature's Trust. It says, "While the public
 16 may assume agencies implement regulations in a
 17 formulaic, objective fashion requiring very
 18 little judgment, in fact, agency behavior can be
 19 highly politicized and even corrupt. A host of
 20 scientific and technical presumptions flow into
 21 permit and other approval decisions, and the
 22 agencies commonly invoke their vast discretion to
 23 choose assumptions that ease the burden on
 24 politically powerful permit applicants."
 25 Well, what I'm talking about is that, as

1 20-year-old number, and the link to the table
 2 that contains this information is in the
 3 information I gave you.
 4 In the long run, say, 200 or 300 years,
 5 methane is irrelevant. And the problem is that
 6 likely within the next couple of decades we might
 7 reach tipping points in the climate. The West
 8 Antarctic ice sheet is caving in as we speak.
 9 The AMOC, that is the Atlantic Meridional
 10 Overturning Circulation -- I'll say that again --
 11 Atlantic Meridional Overturning Circulation --
 12 one of my faults, sorry -- AMOC, most people call
 13 it, is collapsing as we speak.
 14 In other words, the hundred year time
 15 horizon is irrelevant. We are talking about a
 16 phenomenon that is happening on the time scale of
 17 a decade.
 18 So when one considers a decade, the
 19 conclusion is very simple. And I'm quoting from
 20 a scientific paper that says, "The conclusion
 21 stands that both shale gas and conventional
 22 natural gas have a larger greenhouse gas
 23 footprint than do coal and oil, for any possible
 24 use of natural gas and particularly for the
 25 primary uses of residential and commercial

1 one of your slides explicitly said, you do not
 2 consider full life cycle emissions. So if we
 3 ignore all the other problems of fracking and we
 4 focus on the global warming only, the trouble
 5 with fracked-gas is that methane is a much more
 6 powerful greenhouse gas than carbon dioxide.
 7 Methane decays in the atmosphere in
 8 about a decade. In the impact of the gas policy
 9 on global warming, one converts the combination
 10 of carbon dioxide and methane to a carbon dioxide
 11 equivalent with the same effect on global
 12 warming. The conversion factor is called the
 13 global warming potential.
 14 For making small scale, real-life
 15 decisions, one smears out the effect over a time
 16 horizon of 20 years or 100 years. For the
 17 20-year horizon, the rounded global warming
 18 potential has a conversion factor of about 90.
 19 And for 100 years, it's about 30. These numbers
 20 are from the latest IPCC report, and the link is
 21 on the paper that I gave you.
 22 EPA, on the other hand, uses a 100-year
 23 horizon for not a small bracket but for a
 24 national policy, a global policy I would say, and
 25 they use a conversion factor of 20. That's a

1 heating."
 2 If -- I have some plats for you and I
 3 want to show them to you, but what we can do is
 4 we can figure out what happens if we take into
 5 account methane in realtime. And it turns out
 6 that if you lose more -- you're looking at those
 7 graphs? Wonderful. I have one for others, too.
 8 If we lose about two-and-a-half percent,
 9 then methane -- that's the tipping point where
 10 methane becomes less -- or more harmful for the
 11 globe -- for global warming than coal and oil.
 12 In other words, anything above two-and-a-half
 13 percent loss is awful.
 14 If you go to 5 percent, you will see the
 15 curve where methane becomes more advantageous
 16 than coal and oil, pushes out to about 20 years
 17 or so, if I remember correctly.
 18 If, however, we lose about 10 percent,
 19 and the latest estimates are that we might lose
 20 about 12 percent, that limit is about 80 years.
 21 In other words, the conclusion is that
 22 by the time the benefits of the clean power plant
 23 show up, 50 or 80 years from now, we'll all be
 24 dead and the climate will be ruined. That's my
 25 comment.

1 MS. GRANT: I really appreciate it. And
 2 we do have the full comment which we will keep
 3 and make part of the record.
 4 (Off the record discussion.)
 5 MS. GRANT: The next speaker is Craig
 6 Maynard.
 7 CRAIG MAYNARD: Hi. Can everybody hear
 8 me? My name is Craig Maynard, C-R-A-I-G,
 9 M-A-Y-N-A-R-D, and I'm from Kingston. Excuse me
 10 a moment. Yeah, I just have a few comments about
 11 the big picture, not so much about the details.
 12 First I want to say a few words about
 13 myself. I'm new to Rhode Island. I moved from
 14 California to Rhode Island in January of 2016
 15 after a 27-year career as a software developer in
 16 Silicone Valley and Colorado. I'm very glad to
 17 be back in the Eastern U.S. where I grew up. I'm
 18 currently living in Kingston while I design and
 19 build what will be the second energy efficient
 20 passive house in Wakefield which is nearby.
 21 I'm not here merely to challenge the
 22 proposed location of the power plant, in this
 23 case the greenhouse gas emissions. Building a
 24 new natural gas power generation plant in Rhode
 25 Island probably makes short-term economic sense,

1 I'm speaking primarily as -- I'm a
 2 former DEM employee, I retired in 2007, where I
 3 coordinated the Rhode Island Natural Heritage
 4 Program which, essentially, is -- I'm going to be
 5 talking about biodiversity issues.
 6 According to the Resilientri.org
 7 website, the website created to help explain the
 8 purpose of the Act of the general public, the
 9 effects of climate change in Rhode Island will
 10 include rising sea level, increased inland and
 11 coastal flooding for more intense storms,
 12 extended droughts and longer and more intense
 13 heat waves. What is not included on this list,
 14 nor identified elsewhere on the website, is the
 15 degradation of the State's biodiversity of the
 16 species, ecosystem and landscape levels.
 17 According to the Center for Health and
 18 the Global Environment at Harvard, climate change
 19 alone is expected to threaten with extinction
 20 approximately one quarter or more of all species
 21 on land by the year 2050 surpassing even habitat
 22 loss as the greatest threat to life on land. The
 23 Center points out it is not possible to predict
 24 how most species, including our own, and how most
 25 ecosystems will respond to climate change, but

1 and I don't know if you have about the realities
 2 of power generation and transmission to make any
 3 other informed comments about that.
 4 The big picture here, though, is that
 5 humanity is facing the biggest crisis in its
 6 history. We must begin to think about how our
 7 decisions effect not just ourselves but our
 8 descendants who will inherit the earth that we
 9 leave them long after we're gone.
 10 Building a fossil fuel power generation
 11 plant anywhere in Rhode Island at this time would
 12 be irresponsible and foolish.
 13 Governor Raimondo has shown a
 14 willingness to change her mind before when the
 15 facts and public opinion dictate a new course of
 16 action. I hope she will do the right thing for
 17 Rhode Island citizens and the rest of humanity
 18 and refuse to approve this project. Thanks.
 19 MS. GRANT: Thank you, Mr. Maynard.
 20 Welcome to Rhode Island and thank you for
 21 participating. And good luck on the house.
 22 Next person who wants to speak is
 23 Richard Enser.
 24 RICHARD ENSER: Richard Enser,
 25 E-N-S-E-R, from South Kingstown.

1 the effects are likely to be catastrophic.
 2 In the minds of most, the term
 3 "biodiversity" is associated with tropical rain
 4 forests, coral reefs, and other exotic locales,
 5 but all places in the world are dependent on
 6 their own unique biological diversity that
 7 provides vital ecological services and sustains
 8 the lives of all species, including humans.
 9 Rhode Island is no exception to this fact of
 10 life. The quality of life for Rhode Islanders is
 11 dependent on the quality of the natural
 12 ecosystems that make up this place. And the
 13 index that can be used to assess the quality of
 14 those systems is the number of native species
 15 they maintain.
 16 If we apply that index to Rhode Island,
 17 I can report to you that the current condition of
 18 most of Rhode Island's natural ecosystems is
 19 deplorable. Beginning in 1979, as the program
 20 botanist for the RI Natural Heritage Program, I
 21 was responsible for conducting the research and
 22 inventory effort to compile the State's list of
 23 rare plants, i.e., plants threatened with
 24 extirpation from Rhode Island. The latest
 25 revision of this list, published in 2015 in the

1 State's Wildlife Action Plan, includes 388
 2 plants, 88 more than was originally -- in the
 3 original 1979 list and is roughly 30 percent of
 4 the State's flora.
 5 The list has grown because the
 6 degradation of two primary ecosystem types,
 7 coastal marshes and northern hardwood forests.
 8 We've already done a number on these ecosystems.
 9 There is less than 50 percent of their original
 10 natural extent of both of these remaining and
 11 what remains has been fragmented into smaller,
 12 species-depauperate pieces that suffer from the
 13 added impacts of advancing impacts of advancing
 14 exotic, invasive species.
 15 Unfortunately, as identified by the
 16 Manomet Center for Conservation Studies, these
 17 two ecosystems are highly vulnerable to the
 18 effects of climate change. Brackish marshes will
 19 be forced to migrate inland in advance of rising
 20 sea level, and their persistence will be highly
 21 dependent on the decisions made regarding
 22 coastline stabilization efforts. Unfortunately,
 23 our society will value more the protection of
 24 homes and infrastructure along the coast, and in
 25 many places there will be no undeveloped land

1 written, you're welcome to submit it.
 2 MR. ENSER: Three paragraphs.
 3 MS. GRANT: Okay.
 4 MR. ENSER: The largest tract of
 5 northern hardwood forests in Rhode Island is in
 6 the northwest corner of the State where it abuts
 7 additional forest land in Massachusetts and
 8 Connecticut. However, even this forest is
 9 already undergoing species reductions due to past
 10 land use decisions and now is beginning to feel
 11 the impacts of climate change.
 12 As such, it is imperative that the
 13 existing forest acreage be retained. In 2012,
 14 the U.S. Forest Service reported several central
 15 principles for mitigating and adapting to climate
 16 change in Northeastern forests. Among these are
 17 "Prevent Forest Loss" and "Reduce Other Stressors
 18 on Forests."
 19 Construction of the Clear River Energy
 20 Center within one of the most important forested
 21 tracts in the region violates both of these
 22 maxims. Construction of the Clear River Energy
 23 Center will result in the further degradation of
 24 Rhode Island's last tract of northern hardwood
 25 forest and further contribute to the decline of

1 onto which these threatened marshes can retreat,
 2 and we can expect to see the demise of these
 3 natural communities.
 4 But more pertinent to the subject at
 5 hand here today is the predicted impact to
 6 northern hardwood forest, which in Rhode Island
 7 is limited to the northwest part of the State,
 8 where the Clear River Energy Center is proposed.
 9 The Resilient Rhode Island Act, quote,
 10 "provides the framework for state government to
 11 adaptively manage the problem in the face of
 12 changing conditions," including adaptations that
 13 again, quote, "protect natural areas and
 14 landscape features that buffer changing climatic
 15 conditions." The resiliency of forest ecosystems
 16 is highly dependent on the amount of forest
 17 retained and the ability of that forest to mature
 18 and support greater biodiversity.
 19 In short, more species allow forest
 20 ecosystems to negotiate the effects of climate
 21 change without also having to cope with the added
 22 stress of invasive species and other impacts
 23 associated with fragmentation.
 24 MS. GRANT: Mr. Enser, five minutes is
 25 up. Are you near the end? Or if you have

1 biodiversity in Rhode Island.
 2 Lastly, let me reiterate that the
 3 effects of climate change are already being felt.
 4 Many species are already altering this
 5 physiology, already shifting ranges, already
 6 declining, already becoming extinct. As we are
 7 all aware, even if we stopped extracting fossil
 8 fuels from the ground tomorrow many of the
 9 predicted impacts of climate change would still
 10 take place. But we exacerbate these impacts and
 11 extend their effects farther into the future with
 12 each decision we make to use more fossil fuel.
 13 During her recent appearance before the
 14 citizens of Burrillville, Governor Raimondo
 15 expressed the following, "I need in my job to
 16 look out for all the people of Rhode Island, all
 17 the businesses of Rhode Island, and make sure
 18 that energy is kept as relatively low as we can
 19 have it be." But we humans have always made
 20 sacrifices in the face of catastrophe. If paying
 21 for more energy is what we -- must be done to
 22 stop the runaway claim of climate change, then so
 23 be it.
 24 MS. GRANT: All right. The next person
 25 who asked to speak is Nick Katkevich.

1 (Off the record.)
 2 MR. KATKEVICH: Should I spell my name?
 3 THE REPORTER: Yes.
 4 MR. KATKEVICH: So it's Nick and then
 5 last name Katkevich, K-A-T-K-E-V-I-C-H, and I
 6 don't have any written prepared comments, just a
 7 couple ones.
 8 So I just really encourage the agency
 9 to, you know, as Peter said, to look into the
 10 methane emissions from this power plant and
 11 calculate in the leaks from the pipelines that
 12 will bring the gas to the power plant, and also
 13 leaks at the compressor stations along the route.
 14 And I think a lot of those studies are just
 15 coming out looking at methane leakage, but
 16 there's a lot of new data out about that.
 17 Another thing I would encourage the
 18 agency to look into is, you know, when this power
 19 plant would be running on diesel fuel, I can't
 20 remember the exact number, I know it's in the
 21 application the number of, you know, tractor
 22 trailer trucks that would be delivering that
 23 diesel fuel every single day.
 24 So if we're looking at, like, the full
 25 impacts of this project in terms of emissions, I

1 analysis from all the State agencies. So I
 2 really encourage you all -- I know you were
 3 there, Nick, on the stage and heard everything
 4 the Governor said. But I really encourage you
 5 all to do a really in-depth analysis, you know,
 6 of the climate impacts on this project because
 7 that's really what's needed.
 8 And lastly, you know, I know the
 9 advisory opinions are due, kind of, in September.
 10 I think this is a great venue. I love URI. I
 11 went to URI. But, also encourage you all, like,
 12 maybe just to consider doing like a similar
 13 hearing near Burrillville. Because once I came
 14 down here to URI to play basketball and then I
 15 had to drive to Burrillville -- I don't know if
 16 there's anyone from Burrillville here -- I mean,
 17 it's like an hour-and-a-half ride. It's really
 18 far. So I'll just encourage you all if you're
 19 thinking about scheduling a hearing, maybe do
 20 another one closer to Burrillville. So that's
 21 all. Thank you.
 22 MS. GRANT: Thank you, very much.
 23 Next person who wanted to comment is
 24 Paul Roselli.
 25 MR. ROSELLI: Madame Chair, I have some

1 think also examining, you know, if this project
 2 is going to be -- if this power plant is built
 3 and it's lifeline is 40 years, like how many
 4 trucks, you know, heavy-duty trucks are going to
 5 have to transport diesel fuel over that lifespan
 6 and what are the impacts of that.
 7 You know, another thing I just wanted to
 8 note, this power plant was first announced, I
 9 believe, the day before the Obama administration
 10 announced a clean power plan, you know, in the
 11 expectation that new gas power plants would be
 12 something that would be acceptable under the
 13 clean power plan. But actually, you know, I
 14 think it was a surprise to some and, you know, a
 15 lot of us were happy to see that new gas power
 16 plants, you know, aren't fit into that new energy
 17 policy.
 18 You know, replacing coal plants, you
 19 know, at the same site with gas plants was, which
 20 I don't agree with, but new gas power plants
 21 weren't part of that plan. And also echoing, you
 22 know, what other folks have said that, you know,
 23 when the Governor came to Burrillville the other
 24 night, you know, she expressed a real interest in
 25 learning all the details and having a really full

1 written materials I'd like to submit as well. My
 2 name is Paul Roselli, R-O-S-E-L-L-I. I actually
 3 submitted them online this morning, so you have
 4 those as well.
 5 MS. GRANT: Great. Thank you. Then we
 6 have those.
 7 MR. ROSELLI: Before I begin, I'd like
 8 to tell you a little bit about myself. At
 9 64 years old, I decided to go back to school.
 10 I'm a graduate student in a Master of Science
 11 program at Bryant University in something called
 12 Global Environmental Studies. I'm a graduate of
 13 URI, just like Nick, with a BS in Plant and Soil
 14 Science and MA in Education. My second class in
 15 my Master's program at Bryant University was in
 16 toxicology.
 17 Now, as a total disclaimer, I have to
 18 tell you that I got a 40 on my first exam in
 19 toxicology. Second, I got a 60. I got an A
 20 minus in the class. Doesn't mean I'm an expert
 21 in anything. But since September of last year,
 22 I've steeped myself in this project and have come
 23 away with a few pointers and some information
 24 that I've submitted online and you have
 25 electronically, but I would like to say some of

1 those orally today to get those into the record.
 2 I'm going to be speaking today on behalf
 3 of the Burrillville Land Trust as well as the
 4 Rhode Island Association of Conservation
 5 Commissions. And this is some of the comments
 6 that we've come up with in looking over the
 7 application from Invenegy. One is the
 8 anticipated greenhouse gas amounts must include
 9 the power plant and all the ancillary projects as
 10 outlined in the Burrillville Land Trust motion to
 11 close which was submitted to the Rhode Island
 12 Energy Facility siting Board dated January 8th,
 13 2016. Those comments and those ancillary
 14 projects were also submitted to FERC, the Federal
 15 Energy Regulatory Commission, regarding the
 16 Access Northeast project dated June 6, 2016. And
 17 also they were contained in the Rhode Island
 18 Department of Environmental Management, Rhode
 19 Island Department of Environmental Management
 20 Third Data Set Request dated July 13th, 2016.
 21 And Madam Chair, this is a long list of
 22 ancillary projects that are associated with this
 23 one project. I'd like to read some of them and,
 24 again, all of them are contained within the
 25 electronic copy that I sent earlier this morning.

1 -- of this evaporative consumptive loss is that
 2 the Land Trust owns two properties that are
 3 bisected by the Clear River. And according to
 4 the Invenegy application, the Clear River is
 5 hydraulically connected to the water supply.
 6 That means the Clear River -- that means we, the
 7 Burrillville Land Trust, is going to see a
 8 decrease in the water supply along the Clear
 9 River.
 10 Again, my time is up. I would like --
 11 we will submit additional materials along with
 12 this one to flush out each one of the ideas,
 13 specifically the segmentation one, and we'd like
 14 that included in the record as well.
 15 I've also brought some maps, small, I
 16 apologize, that show just where the power plant
 17 is. I know you've seen it. I know both of you
 18 have been there. For the rest of the folks here,
 19 I'd like to leave these behind as well. Thank
 20 you for your time and thank you for doing this
 21 in.
 22 MS. GRANT: Thank you, Mr. Roselli, and
 23 your additional written comments. As we'll say
 24 at the end, will certainly be received up to
 25 August 1st, so we look forward to receiving those

1 Some of them include the construction of two,
 2 200-foot CO2 and ash-emitting towers;
 3 construction of a two-million gallon fuel tank;
 4 construction of a gas electric generating plant,
 5 which is 67 acres in size; construction of the --
 6 of an overhead transmission line right-of-way to
 7 the Sherman Road substation in Burrillville,
 8 Rhode Island; construction of a new switchyard; a
 9 new facility access road; underground water main;
 10 expansion of an existing gas compressor station.
 11 In other words, there are a ton of other
 12 projects associated with this one project. And
 13 it is our contention that they should be
 14 associated and looked at in terms of the total
 15 gas emissions and greenhouse gas emissions for
 16 this one project.
 17 Also, you should take into account that
 18 60 to over 78 percent of the daily water use for
 19 cooling will go up the two, 200-foot stacks,
 20 which are 22 feet inside the diameter. That loss
 21 is known as consumptive evaporative loss. That
 22 is nearly 135,360 gallons per day in the summer
 23 and nearly 724,329 gallons per day in winter.
 24 That's a lot of water.
 25 There's a reason I'm stating these two

1 as well.
 2 MR. ROSELLI: Thank you.
 3 MS. GRANT: Next speaker is John
 4 Hamilton. And I'm going to spoil it since he's
 5 coming all the way from the back, he's from
 6 Charlestown.
 7 MR. HAMILTON: Okay. So, Madam
 8 Chairman, let me answer the question that I asked
 9 before. Massachusetts has indicated that the
 10 State doesn't need increased gas capacity to meet
 11 its energy needs and the same is true for Rhode
 12 Island. And so the question is why are we
 13 building this plant? All right. So we produce
 14 more power in Rhode Island than we use. It's not
 15 necessary to build this plant for our use. All
 16 right? And so it makes no sense to build a
 17 thousand-megawatt plant because all of that
 18 energy is gonna be exported out of the State of
 19 Rhode Island. All right?
 20 So Rhode Island gets to accept all of
 21 the increased emissions and environmental
 22 burdens, all right, for what? For nothing in
 23 return. And it's going to cause a possibility of
 24 not being able to meet the Resilient Rhode Island
 25 Act goals that have been set up.

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1 Now, a similar situation exists in other
 2 parts of the country. This is what the power
 3 plants do. They find states that are willing to
 4 put up these plants because of economic reasons
 5 or because of low regulations or because of tax
 6 incentives. Right? And they build the plants
 7 there and then they export the power, all right,
 8 to other states.
 9 It happened -- the latest one was in
 10 Arizona. Arizona wised up and said we're not
 11 going to be the patsies for this and we're not
 12 gonna do this anymore. Because Arizona used to
 13 supply all the power for San Diego. Well, what
 14 did the power companies do? They, instead, went
 15 to Mexico. So now they build a bunch of power
 16 plants along the Mexican border and that's where
 17 San Diego gets their power from now.
 18 All right? So why are we going to
 19 become the patsies for this kind of project? All
 20 right? We don't need this project. We don't
 21 need it to meet our power needs. And it's time
 22 that elected officials and also administrators in
 23 the State of Rhode Island, right, stand up for
 24 Rhode Islanders, right, do the same thing as
 25 Arizona said. We're not getting any benefit out

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1 issues are important. The local ones in
 2 Burrillville are extremely important, but this is
 3 really for everybody.
 4 And I think the participatory process
 5 that you all have set up is critical and really
 6 it's going to have a huge impact on the level of
 7 cynicism or belief in our government on how this
 8 decision is handled and that is if the people
 9 making the decision are given the real latitude
 10 to judge based on the evidence that's brought.
 11 So I came to talk about three things.
 12 So the first one is sort of the Resilient Rhode
 13 Island Act and why it really matters. So we
 14 heard before that the targets are 10 percent
 15 emissions reductions by 2020 from a 1990
 16 baseline, 45 percent by 2035 and 80 percent by
 17 2050. That was a major achievement, a big deal
 18 for the State of Rhode Island to take that step.
 19 We were, in fact, though -- that was in 2014,
 20 signed into law. It passed almost unanimously in
 21 the Rhode Island House. It passed unanimously in
 22 the Senate. And it was based on production base
 23 that is generation-based accounting. I actually,
 24 in the hearing in the Senate committee, mentioned
 25 consumption-based accounting and said that might

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1 of this. Why are we doing this? That's my
 2 testimony.
 3 MS. GRANT: Thank you. The next speaker
 4 is Timmons Roberts. Again, a spoiler, he's from
 5 Providence, but we're good and (inaudible).
 6 MR. ROBERTS: Thank you, very much,
 7 Carol. And thank you all for taking our
 8 comments. My name is Timmons Roberts. I'm a
 9 professor at Brown University in the Institute at
 10 Brown for Environment and Society.
 11 THE REPORTER: Is that Timmon?
 12 MR. ROBERTS: T-I-M-M-O-N-S. John
 13 Timmons Roberts, if you want the whole thing. I
 14 am not speaking in my institutional capacity. I
 15 am not paid to do all this work commenting on
 16 these proposals. I also submitted testimony
 17 through the Conservation Law Foundation -- which
 18 is a longer version, and it's actually pretty
 19 different -- back in February through -- to the
 20 energy facility Siting Board.
 21 So there's a lot to talk about, but I
 22 guess I would say that I'm very happy to see one
 23 hearing or event just about climate change
 24 because it's getting a bit less attention but
 25 it's really the long-term, whatever. All the

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1 be better but it's not the basis of the law.
 2 It's based on generation-based accounting.
 3 And the agreement for the study that's
 4 going on right now, you know, by Nescount (sic),
 5 the consultant, and the Stockholm Environmental
 6 Institute is using consumption-based accounting,
 7 but that's -- that was just sort of agreed for
 8 that study. It's not really part of our statute
 9 in the State and it's not, I think, more
 10 generally agreed.
 11 So I have some more things. I have a
 12 whole section here about accounting. I submitted
 13 these comments electronically last night and I
 14 have one copy that I'll give. I -- I like
 15 consumption-based accounting, in general, but
 16 it's not really the law of the land. And I think
 17 it's problematic to switch, at this point, after
 18 we've agreed targets to a different accounting
 19 system. It also creates the problem that we just
 20 heard about of Rhode Island, in fact, you know,
 21 being the site of a lot of the emissions
 22 reductions. In fact -- I'm sorry, the increased
 23 emissions that are then flowing -- the energy
 24 flowing directly to Massachusetts and
 25 Connecticut. And you can see, in some of the

1 graphs we saw earlier, how Massachusetts is
 2 reducing its emissions pretty quickly. And it's
 3 going to be impossible for us, under the -- with
 4 this major project, to meet our -- those targets
 5 that I discussed.

6 So at the level of production that's in
 7 the Clean Air Act operating permit application
 8 from Invenegy to the DEM to run its turbines for
 9 30 days a year on fuel oil -- and that's at
 10 1,227 pounds of CO2 per megawatt hour -- and
 11 natural gas for the rest of the year, which is at
 12 781 pounds per megawatt hour. At this level, the
 13 plant would generate about 3.4 million tons of
 14 carbon dioxide per year. And if we are a little
 15 more generous and say, well, they might actually
 16 run it less than that, that's just their permit
 17 application, we're still at about 3.4 million
 18 tons of carbon dioxide a year. That's about
 19 almost seven billion pounds of CO2 per year. If
 20 it's lasting for the 40 years that this is
 21 expected to operate, that's 280 billion pounds of
 22 carbon dioxide.

23 My calculation is that our emissions at
 24 our 1990 baseline, that's in the Resilient Rhode
 25 Island Act, was about 11-and-a-half million

1 policy of the State. It's the only policy we
 2 have on climate change. It represents prudent
 3 policy for the orderly transition we have to
 4 make. In fact, I argue in here that it's not
 5 strong enough, that we should be reducing our
 6 emissions almost to zero by 2030. And then I
 7 have evidence in here that shows, for example, an
 8 Oxford study showing that we globally should not
 9 be building any new fossil fuel facilities after
 10 2017 if you're going to stay under two degrees of
 11 warming.

12 Finally, there's one section of the
 13 Resilient Rhode Island Act, it's 42-6.2-8. It
 14 states that State agencies must act in accordance
 15 with the law. And that law is that
 16 "consideration of the impacts of climate change
 17 shall be deemed to be within the powers and
 18 duties of all State departments, agencies,
 19 commissions, counsels and instrumentalities,
 20 including quasi public agencies. And each shall
 21 be deemed to have, and to exercise among its
 22 purpose in the exercise of its existing
 23 authority, the purposes set forth in this chapter
 24 that is the Resilient Rhode Island Act
 25 persistent -- pertaining to climate change

1 metric tons. Converting that to short tons or
 2 American tons, that's about 10.3 American U.S.
 3 tons.

4 So it emits about three-and-a-half
 5 million tons on top of our -- and right now,
 6 we're close to where we were in 1990. So this is
 7 about a 30 percent increase, as I understand
 8 this, unless I'm getting this math very wrong,
 9 increase in the State's overall emissions. So
 10 it's huge and I think it will make it impossible
 11 for the State to meet its targets. In the
 12 short-term especially.

13 We have targets for 2020 that would
 14 require -- and we're supposed to be 10 percent
 15 below 1990 by 2020. That would require us to
 16 reduce our emissions by 10 percent a year,
 17 practically, in the next four years, which I'm
 18 game for but I'd be very hopeful that the State
 19 agencies and so on would do so. It's going to be
 20 extremely hard to meet these goals.

21 MS. GRANT: Thank you, Mr. Roberts,
 22 you've hit your time limit.

23 MR. ROBERTS: So one last thing, and
 24 I'll wrap up with this. The Resilient Rhode
 25 Island Act is aspiration, but it's the public

1 mitigation, adaptation, and resilience, insofar
 2 as climate change effects the mission, duties,
 3 responsibilities, projects or programs of the
 4 entity." That is you all are empowered to act to
 5 protect the climate globally and to meet these
 6 targets and we hope that you'll do so. Thank
 7 you.

8 MS. GRANT: Thank you.

9 MR. ROBERTS: Would you like this one
 10 copy?

11 MS. GRANT: The next person who's
 12 speaking is Lisa Petrie.

13 MS. PETRIE: I'm Lisa Petrie and I live
 14 in Richmond. I'm a stay-at-home mom turned
 15 climate activist and I'm also a member of Fossil
 16 Free Rhode Island. I became a climate activist
 17 because, as a mother, I'm committed to doing
 18 everything I can to safeguard my children's
 19 future. And I'd like to remind the Office of
 20 Energy Resources and the Department of
 21 Environmental Management that in making this
 22 decision you're not just responsible to your
 23 supervisors and to the Governor, you're
 24 responsible to the people of Rhode Island and,
 25 above all, to our children and future

1 generations.
 2 All of us who are alive today have the
 3 responsibility to do everything possible to avert
 4 runaway, catastrophic global warming. Why?
 5 Because we are the ones who can do it. Future
 6 generations who will be impacted will be
 7 powerless to address this problem. And we are
 8 the last people who will have this opportunity.
 9 And, particularly, people in positions of
 10 authority, such as yourselves, have a special
 11 weight of responsibility on your shoulders. And
 12 your legacy will be judged in terms of whether or
 13 not you met this challenge, the challenge of our
 14 time avoiding runaway, catastrophic global
 15 warming that will kill hundreds of millions, if
 16 not billions, of people and submerge many major
 17 cities worldwide, that will have extremely severe
 18 impacts on Rhode Island which has more coast per
 19 square mile than any other state in the nation.
 20 As Professor Nightingale and others have
 21 pointed out, your approach to the question of the
 22 power plant's greenhouse gas impact is
 23 fundamentally flawed. It's fundamentally flawed
 24 because it fails take into account the upstream
 25 climate impacts of the methane that will be

1 process of extraction, transport, processing, et
 2 cetera.
 3 Governor Raimondo likes to tout the fact
 4 that she's pushing for the expansion of renewable
 5 energy and that's one part of the solution.
 6 That's an important part. But, again, that will
 7 not help -- that will not improve our future at
 8 all if we continue to burn fossil fuels at the
 9 current rate. It's only the amount of greenhouse
 10 gases that we put into the atmosphere that will
 11 determine our future.
 12 So if we build Block Island wind and put
 13 up solar panels on all kinds of rooftops, if
 14 Rhode Island government cuts its emissions to
 15 zero but we still build this power plant, then
 16 our overall direction is doubling down on fossil
 17 fuels and increasing, not decreasing, our climate
 18 impacts.
 19 One second.
 20 MS. GRANT: Sure.
 21 MS. PETRIE: Most people don't --
 22 including myself, don't have much of an intuitive
 23 grasp of megawatts. So just to put it in
 24 perspective, a 900- to 1,000-megawatt power plant
 25 is 20 times as much energy as the renewable

1 released into the atmosphere and the process of
 2 that extracting and transporting the natural gas
 3 that the power plant will burn. If I use
 4 electric heat but my electricity is generated by
 5 burning coal, can I say that I'm heating my house
 6 in a climate friendly way just because there's no
 7 smoke coming out of my chimney when I turn on the
 8 heat? I don't think so. I have to take into
 9 account where that electricity comes from and all
 10 the impacts associated with producing it.
 11 Similarly with the power plant, we must
 12 take into account where the fuel comes from and
 13 all the impacts associated with producing and
 14 transporting it; otherwise, your analysis will be
 15 meaningless. Similarly, I believe the list of
 16 greenhouse gases that you will be assessing did
 17 not include methane. Am I correct in that
 18 perception?
 19 MS. GRANT: No, we'll be looking at
 20 everything that is associated with it.
 21 MS. PETRIE: Okay. That's reassuring,
 22 because methane is one of the most significant
 23 greenhouse gases that will be emitted by the
 24 power plant. Both the methane that escapes
 25 on-site and the methane that will escape in the

1 energy growth program we'll be adding to the grid
 2 every year. The 40 megawatts of new, renewable
 3 energy will be completely dwarfed by the 900 to
 4 1,000 megawatts of energy -- of fossil fuel
 5 energy that this power plant will be adding to
 6 the grid. The Block Island wind farm is
 7 30 megawatts. So that's less that 1/30th the
 8 amount of energy that will be created by this
 9 power plant.
 10 So in order to assess the true
 11 trajectory of our state when it comes to
 12 addressing climate change, we need to not just
 13 listen to the words about how we're expanding
 14 renewable energy, we need to look at the numbers.
 15 And it's clear that our overall direction is
 16 overwhelmingly doubling down on fossil fuels, if
 17 this plant is built. And even in the highly
 18 optimistic scenario that Invenergy has presented
 19 where we're -- the plant would lead to a 1
 20 percent reduction in our greenhouse gas emissions
 21 every year, that's not nearly enough. The
 22 Resilient Rhode Island Act calls for at least a 6
 23 to 7 percent reduction in greenhouse gases every
 24 year if we're going to hope to reach those
 25 targets.

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1 MS. GRANT: Are you almost complete,
 2 Ms. Petri, because you've gone past your time.
 3 MS. PETRIE: Okay. So the bottom line
 4 is if, as Professor Timmons Roberts has stated,
 5 and as Jerry Elmer, senior attorney with the
 6 Conservation Law Foundation has also concluded,
 7 building this power plant would make it
 8 impossible to comply with the Resilient Rhode
 9 Island Act or with the Paris Climate Accord. And
 10 it will make Rhode Island part of the problem,
 11 not part of the solution to global warming.
 12 THE REPORTER: Could you spell your last
 13 name.
 14 MS. PETRIE: P-E-T-R-I-E, L-I-S-A.
 15 MS. GRANT: And I'll submit written
 16 comments later.
 17 Next person who wants to speak is Robert
 18 Malin.
 19 THE REPORTER: And can you spell it.
 20 MR. MALIN: Yes, M-A-L-I-N. And I'm
 21 from Charlestown, Rhode Island. And I worked
 22 with the Sierra Club to get both the Blackstone
 23 Corridor Heritage Program and the Resilient Rhode
 24 Island Act passed for about ten years, and I'm
 25 going to submit written comments from --

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1 including comments from Sierra Club National
 2 Board, so I'm just going to give you some
 3 observations here.
 4 First, this thing destroys both of those
 5 things. To take a pristine environment and to
 6 stick an industrial zone in the middle of it is
 7 just insane. It just does not seem like it has
 8 any concept of what a heritage corridor means, a
 9 natural corridor.
 10 And the water which Mr. Roselli pointed
 11 out, this is coming at a time when people are
 12 looking for water. I came from Blue Green
 13 Coalition in Cleveland and one of the things
 14 they're selling Cleveland on is we've got the
 15 Great Lakes. When everybody else is running out
 16 of water, we've got the Great Lakes. So what are
 17 we going to do? We're going to go in and stick
 18 something right in a base aquifer. Bad idea.
 19 From an energy point of view we've been
 20 arguing for a number of years that you can invest
 21 in two things. This disincentivizes investment
 22 in renewables at a time when we don't even need
 23 this energy, and we have the Block Island
 24 landmark project that we will want to see built
 25 out.

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1 The Resilient Rhode Island Act also has
 2 a clause in it that the targets are adjusted, can
 3 be adjusted for the rate of climate change.
 4 Since that was passed we have seen changes even
 5 in Charlestown, visible changes of climate
 6 change. You shouldn't be able to see geological
 7 time.
 8 So those targets when they're adjusted
 9 which will -- which ties into what Professor
 10 Nightingale talked about, the methane accelerated
 11 climate change will mean that we are way far away
 12 from reaching the goals. Not only doesn't this
 13 reach the present goals, but because of its
 14 contribution to fracking and the pipeline
 15 leakage, there was also the Mass Attorney General
 16 study on pipeline leakage and they couldn't find
 17 any pipelines that leak at the lower level that
 18 the fossil fuel companies or delivery companies
 19 said that they leaked at. Every one that they
 20 checked leaked more. So we need those kind of
 21 investments, not this kind of investment.
 22 The diesel fuel part of it wasn't even
 23 mentioned until we saw the map with the diesel
 24 tax and we said, well, what are these? Well,
 25 from Sierra Club prospective we've never found an

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1 oil tank that doesn't leak or that there isn't
 2 some kind of spill or there isn't some kind of a
 3 truck problem somewhere along the line of the
 4 life cycle of it. And to have that right on the
 5 bank of the river just spells disaster.
 6 I spoke to one of our national people
 7 and he was like, oh, my God. He goes, "What is
 8 it that they don't understand that you can't do
 9 this?" Well, that's why I'm appealing to you.
 10 Finally, I wanted to talk about the life
 11 cycle. This brings us to the life cycle point.
 12 And there was a term used "the tipping point,"
 13 but people don't understand what the tipping
 14 point means. The way that I like to describe it
 15 is this is the point of no return. Okay? This
 16 is the point where climate is so ecologically
 17 involved in so many different levels that one
 18 thing is pushing another thing that's pushing
 19 another thing and everything starts to come
 20 undone.
 21 In our case it means Greenland ice sheet
 22 sliding into the ocean would be one of the things
 23 that would spell disaster, so being where we are
 24 we can't afford to be so optimistic to think that
 25 these things aren't going to happen. We have to

1 err on the safe side which means to double down
 2 on renewables incentivizing those things, build
 3 on the great conservation that we've done in the
 4 state. And it would be nice to have it include
 5 URI. That's not one of the great conservation
 6 buildings, you know, the campus, but we would
 7 really like to see those investments that focus,
 8 and to make Rhode Island known as the little
 9 state that could and did. Thank you.
 10 MS. GRANT: Thank you very much. The
 11 next person who wants to speak is Terry Meyer.
 12 TERRY MEYER: Hi. I'm Terry Meyer. I'm
 13 a GIS analyst. I've worked for the nature
 14 conservancy in Massachusetts, for Rhode Island
 15 DEM. I am here as a private citizen. I made
 16 this map for the cesspool law to -- for the
 17 cesspool law that did pass, but it is very useful
 18 to show for this example.
 19 It is said that the solution to
 20 pollution is dilution, so please tuck that in
 21 your back pocket and I will come back to it.
 22 This is a losing game for the Clear River. Here
 23 is a map that shows the Wilson Reservoir which is
 24 smack dab in the middle of Burrillville.
 25 UNIDENTIFIED SPEAKER: You should be

1 Why would we willingly engage in this
 2 scenario, and also worth mentioning is denuding
 3 the forest to build the facility would make the
 4 area more susceptible to flash flooding and this
 5 results in high run off, no water percolation
 6 into the soil and this condition tends to erode
 7 and carry silt into the downstream water bodies.
 8 Thank you.
 9 MS. GRANT: Thank you very much.
 10 MR. UCCI: Do you intend to leave this
 11 or do you want to take this?
 12 MS. GRANT: We will keep the copy that
 13 you gave us for the record if that's helpful to
 14 you.
 15 And the last speaker that I have listed
 16 here at the moment is Christine Muller.
 17 CHRISTINE MULLER: Hi. I'm Christine
 18 Muller. I'm the Board Secretary of Rhode Island
 19 Interfaith Power & Light. Rhode Island
 20 Interfaith Power & Light works with faith-based
 21 organizations to raise awareness about the
 22 serious threat of climate change and assists them
 23 to lower their carbon footprint. We are
 24 submitting comments to emphasize the moral
 25 problem with building a fracked gas power plant

1 showing them.
 2 MS. GRANT: We have a copy of it. Thank
 3 you.
 4 MR. UCCI: Do you want me to hold that
 5 for you? Would it be easier? I don't mind.
 6 MS. MEYER: What I've done is mapped the
 7 areas, the parcels of land that are likely to
 8 have cesspools, and you can see them in red.
 9 It's a fair amount of homes and those are the
 10 ones that I will be happy to speak on my process
 11 to anyone who's interested.
 12 These homes have a certain amount of
 13 pollution associated with all of the cesspools
 14 and they will remain so. If you put less water
 15 in the Reservoir you will have more pollution, so
 16 the secret to pollution or the solution to
 17 pollution is dilution. This -- this Invenegy
 18 proposes to take water which will end up for less
 19 water for the ponds and rivers downstream as Paul
 20 Roselli mentioned is a significant amount of
 21 water.
 22 This is true for all bodies of water
 23 downstream, this is going into the Branch River
 24 watershed, the Blackstone River watershed and, of
 25 course, Narragansett.

1 in Burrillville.
 2 The Board of Rhode Island Interfaith
 3 Power & Light consists of clergy and lay people.
 4 We are also scientists, engineers, health
 5 professionals and educators. We represent many
 6 different religious communities in Rhode Island
 7 but speak with one clear voice.
 8 This power plant would be harmful to the
 9 people of Burrillville, harmful to the people of
 10 Rhode Island and harmful to every person and
 11 living being on this planet.
 12 We will comment on the last point. The
 13 science is clear. Climate change is the largest
 14 threat human kind is facing today. The world is
 15 now slowly waking up to this fact and all
 16 enlightened people and governments of the world
 17 are making efforts to reduce their use of fossil
 18 fuels.
 19 Just this June 30th, for example, the
 20 United States, Canada and Mexico joined together
 21 at the North American Leader Summit to set an
 22 historic goal to achieve 50 percent clean power
 23 across North America by 2025.
 24 The Resilient Rhode Island Act
 25 establishes targets for greenhouse gas emissions

1 with an 85 percent reduction by 2050 below 1990
 2 levels.
 3 In 1990 Rhode Island's total greenhouse
 4 gas emissions amounted to 10.7 million metric
 5 tons of CO2 equivalent for all sectors. I will
 6 provide my comments by email with the
 7 references --
 8 MS. GRANT: Thank you.
 9 MS. MULLER: -- of the numbers. So
 10 10.7 million metric tons of CO2 were the
 11 emissions in 1990. Reducing emissions by
 12 85 percent brings us to an emissions target of no
 13 more than 2.55 million metric tons. That number
 14 includes all sectors, not only energy but also
 15 transportation, residential heating, agriculture,
 16 solid waste and industrial activities.
 17 The Burrillville power plant alone would
 18 release 3.6 million tons of CO2 into the
 19 atmosphere every year. It will be impossible to
 20 reach the goal of the Resilient Rhode Island Act
 21 if this power plant will be built.
 22 In the past it was believed that gas
 23 could serve as bridge from coal to renewable
 24 energy. However, there are two major reasons why
 25 this argument doesn't pose true. Even if gas

1 It is immensely immoral for us to
 2 continue to produce electricity by means that
 3 produce greenhouse gasses that will cause
 4 suffering and death of millions of people. What
 5 greater injustice could we commit.
 6 If we would not have the moral and
 7 political will to urgently and dramatically
 8 reduce our total greenhouse gas emissions, we
 9 will be condemning our children and future
 10 generations to living on a hotter planet that may
 11 no longer support a human civilization.
 12 We must keep most of the remaining
 13 fossil fuels in the ground. Expanding gas
 14 infrastructure is clearly a huge step into the
 15 wrong direction.
 16 Thank you for taking all the comments
 17 that have been made today into your
 18 consideration.
 19 MS. GRANT: Thank you, Ms. Muller. And
 20 I believe we have -- do we have any other people
 21 that would like to speak? Sir? Thank you.
 22 Raymond -- and I can't read it. If you would
 23 give your name and your residence and your
 24 comments, we would appreciate it.
 25 RAYMOND TRINQUE: Thank you. My name is

1 were less harmful to coal, greenhouse gas
 2 concentrations in the atmosphere have already
 3 reached an extremely dangerous level.
 4 We cannot afford to increase any use of
 5 fossil fuels, be it coal, oil or gas. Moreover,
 6 recent scientific research suggests that
 7 widespread leakage from methane may even be more
 8 harmful to the climate than coal. I think I
 9 already explained that before.
 10 There is an additional reason why it
 11 does not make sense to build this power plant.
 12 With increasing energy efficiency, conservation
 13 measures in all sectors, and the rapid growth of
 14 renewable energy there is absolutely no need for
 15 this plan.
 16 Climate change impacts already affect
 17 Rhode Island. We are experiencing more intense
 18 precipitation, floods, sea level rise, storm
 19 surges and warmer and more acidic water in the
 20 bay which affects our fisheries.
 21 Worldwide the poor are suffering first
 22 from climate disruptions such as rising food
 23 prices, famines, floods, droughts, more extreme
 24 storms and single unrest that is often
 25 exacerbated by these disasters.

1 Raymond Trinique and I live at 300 Centennial
 2 Street, Pascoag, Rhode Island.
 3 I was on vacation at the beach, but I
 4 guess mother nature doesn't take a vacation so I
 5 had to come up and talk to you.
 6 Timmons Roberts, who's at Brown
 7 University, recently talked about the bridge fuel
 8 and the fact that this would be going the wrong
 9 way back over the bridge. I agree with that and
 10 I've e-mailed you that opinion piece that
 11 Mr. Roberts put out.
 12 And one of the other things that he
 13 mentioned in there was that the emissions from
 14 this plant with the natural gas is going to be
 15 worse than carbon dioxide to the air. And we've
 16 had a lot of testimony over the last few months,
 17 and our union brothers come and they talk about
 18 nimby (sic), and they say, well, you don't want
 19 this because it's in your backyard.
 20 That's not what we want. What we want
 21 is this to be in no one's backyard. Not Rhode
 22 Island's backyard, not the nature's, not the
 23 world's backyard, not God's backyard. This
 24 monster doesn't belong here. And the emissions
 25 that it's going to put out for miles, when you

1 draw a circle, and I've got a friend of mine here
 2 that's got a great chart with a circle on it,
 3 when you draw the circle we're all in the circle.
 4 Whether it's in Burrillville, whether it's in
 5 Charlestown, wherever it is, these emissions are
 6 gonna go out.
 7 Now there's a question on the emissions.
 8 Obviously they filed a report for all the
 9 pollutants that they're going to put into the
 10 air. That's a greenhouse disaster as we know and
 11 it's absolutely gonna cause us not to be able to
 12 meet the emissions standards under the Rhode
 13 Island Act.
 14 But the question is what's gonna happen
 15 when the poison water from the largest -- from
 16 the well that was part of the largest MBTE spill
 17 in the history of the United States in Pascoag is
 18 unleashed to the air. There's very little
 19 research. There's a lot of like fantasy like
 20 magic, but here is polluted water and they're
 21 running it out the well on the other hand.
 22 But the thing is, when we had that water
 23 rolling at 1,700 parts per billion, we had -- my
 24 wife had a brain tumor. She suffered from that.
 25 She survived. Our neighbor, we all lived

1 11 years, \$66 million and they didn't do it this
 2 way.
 3 This way they're going to try to take
 4 water out of a 600-gallon per minute well and
 5 clean it with carbon filters. That's not how it
 6 was done when it was successful. When it was
 7 successful they dug a well and found the biggest
 8 plume of the pollutants and drew it away from
 9 both sites, of the super fund gas site and the
 10 well. Eleven years, \$66,000,000 later they got
 11 water at about .05. Well, I don't want to be a
 12 stickler but I'd like to drink my water that's
 13 clear. Not .05.
 14 So the bottom line is I have that report
 15 that I faxed -- that I've e-mailed to you. I
 16 think it's very important to read what a
 17 professional on climate change thinks about these
 18 emissions.
 19 But the other thing is it's important to
 20 consider the source of information, and the
 21 source of information so far is Invenergy. And
 22 they are like a magician, they'll show you this
 23 and they'll give you this.
 24 And the fact of the matter is that kind
 25 of dog-ate-your-homework information is not good

1 100 yards from the well, she didn't make out
 2 quite so go good.
 3 And so the question is what's gonna
 4 happen when this MBTE gets airborne. Now,
 5 Invenergy will tell you that they're gonna clean
 6 the well for us. Well, that's nice. That's a
 7 fantasy, a carbon filter fantasy, but that's
 8 nice, except that they're going to use all of the
 9 water and perhaps even more.
 10 So who are they cleaning it out for?
 11 Can we have it back in 40 years? Because the one
 12 thing the people of Burrillville don't have to
 13 imagine is what it's like to be hurt by
 14 pollutants, what it's like for pollution to take
 15 over your life because we've given at the office.
 16 It's happened to us. We've gone years without
 17 being able to bathe, without being able to cook,
 18 without being able to drink, without being able
 19 to live healthy lives.
 20 And so when these fantasy reports come
 21 out from Invenergy I'm skeptical, especially on
 22 the water where they say that they're going to
 23 clean the water with a simple carbon filter which
 24 has never been done in the history of man. There
 25 was one well cleaned up in San Diego, took

1 enough for me and it shouldn't be good enough for
 2 anybody here. Thank you very much.
 3 MS. GRANT: Thank you very much,
 4 Mr. Trinque. Mr. Roberts did testify earlier
 5 today so I appreciate that you also forwarded the
 6 report. Thank you for that.
 7 MR. TRINQUE: He's smarter than I am.
 8 MS. GRANT: Is there anybody else that
 9 would like to make public comment at this time
 10 before we circle back, because the first person
 11 that we called on said that -- actually, that you
 12 had a question, so unless somebody else wants to
 13 speak, let's then turn to you and we may or may
 14 not be able to answer it but we'll certainly take
 15 your question.
 16 OLEG NIKOLYSZYN: My name is Oleg
 17 Nikolyszyn, N-I-K-O-L-Y-S-Z-Y-N, and I have a
 18 question for OER's expert consultant from L.A.
 19 If my memory serves me you have two assignments
 20 that you presented that you are obligated to
 21 opine upon. One assignment -- the first
 22 assignment from my memory is that your
 23 responsibility is to look at what affect this
 24 particular power plant will have on greenhouse
 25 gas effect region wide.

1 My question to you is: In your analysis
 2 the location of this power plant in the town that
 3 I represent, the Town of Burrillville, play any
 4 factor whatsoever in your analysis?
 5 MS. COOL: The overall impact, of
 6 course, of greenhouse gases is global.
 7 UNIDENTIFIED SPEAKER: Can you go up to
 8 a microphone, please.
 9 MS. COOL: I guess it's a two-part
 10 answer. Overall we'll be looking at the net
 11 impact on greenhouse gasses, but the way that the
 12 plant operates, whether it runs or doesn't run
 13 based on dispatch orders from ISO New England,
 14 does depend on the location because it's
 15 connected to the transmission system and it
 16 serves different parts of the region, so it's
 17 a -- it is and it isn't locationally dependent.
 18 As far as the total emissions using the
 19 consumption-based approach it will all get into
 20 the -- into the mix, into the spaghetti sauce
 21 so-to-speak, but the way that the plant operates
 22 on an hour-to-hour basis does, in fact, depend on
 23 where it is located in the greater electric grid
 24 of the region.
 25 MR. NIKOLYSZYN: If I may follow up with

1 approaches congruous? First question you have to
 2 work with is the region wide effect and second is
 3 what is the effect on the Rhode Island Resilient
 4 Act? How do those two converse with each other?
 5 MS. COOL: Well, as I mentioned before,
 6 the EC4's decision in preparing its plan to meet
 7 the Resilient Rhode Island Act was to take the
 8 consumption-based approach which is oriented
 9 around how the state itself manages its
 10 consumption of electricity, and it draws that
 11 electricity from within Rhode Island, from
 12 outside of Rhode Island, and, in fact, from
 13 outside of New England.
 14 MR. NIKOLYSZYN: Okay. Thank you.
 15 MS. GRANT: All right. At this point,
 16 thank you to everybody who commented. Really
 17 added a lot to the conversation. I appreciate
 18 that. And as we have said all along, we will
 19 continue to take written comments. We'll be --
 20 just a minute, please. We'll continue to take
 21 written comments so we want to be sure that
 22 everybody has the information to submit that
 23 going forward.
 24 At this point that's the end of what we
 25 had planned. And as we had said, we will be glad

1 that. So whether it's in Burrillville or within,
 2 let's say, 10 or 15-mile radius of Burrillville
 3 would not have an impact on your opinion?
 4 MS. COOL: The locational aspects depend
 5 on where the plant is connected to the electric
 6 grid, so I'd have to look more closely at what
 7 other alternatives there would be to connect with
 8 the grid if that's your question, but right now
 9 there's a plan for it to be connected at a
 10 particular substation in the greater regional
 11 grid.
 12 Mr. NIKOLYSZYN: And my second question
 13 also to you, Doctor, is your first question to
 14 answer, was the effect of the greenhouse gas
 15 effect region wide, I believe, upon six states;
 16 is that accurate?
 17 MS. COOL: I showed a chart with the
 18 six-state annual totals of emissions, that is
 19 correct.
 20 MR. NIKOLYSZYN: And the second
 21 assignment that was given to you was how will
 22 this plant be impacted or impact the Resilient
 23 Act of Rhode Island, correct?
 24 MS. COOL: Yes.
 25 MR. NIKOLYSZYN: How are the two

1 to continue to have conversations with you all.
 2 If there are, you know, specifically any other
 3 comments that people want to make, having heard
 4 none, my proposal would be that we then adjourn
 5 the official part of the workshop but continue to
 6 be available for conversation so that if people
 7 want to have an ongoing conversation with Dr.
 8 Cool or with Doug or with us that we can do that.
 9 So with that, is there anything else, Nick?
 10 MR. UCCI: No. That's all. We will
 11 again make the presentation available on our
 12 website. Once we have a final report from the
 13 stenographer we are also going to post that on
 14 our website and we will collate public comment
 15 received both in this forum and through the
 16 Internet address that we provided and we will
 17 post that as well all on our website.
 18 UNIDENTIFIED SPEAKER: When will that
 19 be?
 20 MR. UCCI: We'll be collecting public
 21 comment through August 1st at 4:00 p.m. on the
 22 email, and so we will post the cumulative public
 23 comment that we have received at that time.
 24 We will post this transcript as soon as
 25 it's available to us.

1 UNIDENTIFIED SPEAKER: And the
 2 presentation, could you post that right away.
 3 MR. UCCI: If it's not online already it
 4 will hopefully be done within the next 24 hours.
 5 MS. GRANT: Thank you all very much for
 6 a really helpful set of input. We appreciate it.
 7 Thank you.
 8 (Hearing adjourned at 12:07 p.m.)

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1 C E R T I F I C A T E
 2
 3
 4 I, Devin J. Baccari, hereby certify that the
 5 egoing is a true, accurate, and complete transcript
 6 my notes taken at the above entitled hearing.
 7
 8 WITNESS WHEREOF, I have hereunto set my hand this
 9 day of August, 2016.

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DEVIN J. BACCARI, NOTARY PUBLIC
My commission expires 8/17/18

July 21, 2016
OFFICE OF ENERGY RESOURCES, EFSB-2015-06
ADVISORY OPINION PUBLIC WORKSHOP AND
COMMENT OPPORTUNITY

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