

1 COMMONWEALTH OF PENNSYLVANIA
2 HOUSE OF REPRESENTATIVES

3 ENVIRONMENTAL RESOURCES & ENERGY COMMITTEE

4 MAIN CAPITOL BUILDING
5 ROOM B-31
6 HARRISBURG, PENNSYLVANIA

7 WEDNESDAY, NOVEMBER 20, 2013
8 9:05 A.M.

9 PUBLIC HEARING - HB 1699

10 BEFORE: HONORABLE RON MILLER, MAJORITY CHAIRMAN
11 HONORABLE JIM CHRISTIANA
12 HONORABLE BECKY CORBIN
13 HONORABLE ELI EVANKOVICH
14 HONORABLE GARTH D. EVERETT
15 HONORABLE MATTHEW GABLER
16 HONORABLE TIMOTHY KRIEGER
17 HONORABLE JIM MARSHALL
18 HONORABLE CARL WALKER METZGAR
19 HONORABLE DONNA OBERLANDER
20 HONORABLE JEFFREY PYLE
21 HONORABLE CHRIS ROSS
22 HONORABLE THOMAS SANKEY
23 HONORABLE GREG VITALI, MINORITY CHAIRMAN
24 HONORABLE BRYAN BARBIN
25 HONORABLE MIKE CARROLL
HONORABLE FRANK FARINA
HONORABLE JARET GIBBONS
HONORABLE JORDAN HARRIS
HONORABLE STEVE J. SANTARSIERO
HONORABLE PAM SNYDER

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COMMITTEE STAFF PRESENT:

JONATHAN LUTZ
MAJORITY EXECUTIVE DIRECTOR

SARAH CLARK
MINORITY EXECUTIVE DIRECTOR

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P R O C E E D I N G S

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2 -----
3 CHAIRMAN MILLER: I'd like to call this meeting of
4 the House Environmental Resources & Energy Committee to order.
5 Today we're having a hearing on Representative Ross' Bill,
6 House Bill 1699. I will note that, for the first time that
7 I've been in this room, I believe we might be recording in this
8 room. So they've upgraded the technology a little bit, so
9 everybody should be aware this is being recorded. It might be
10 broadcast on PCN or some other type broadcast.

11 I don't have much in the way of opening remarks.
12 I'm looking forward to the hearing. There's been a lot of
13 information disseminated over the past couple months about this
14 issue. Before I open it up to Representative Ross,
15 Representative Vitali, would you like to make any comments?

16 CHAIRMAN VITALI: Not at this time.

17 CHAIRMAN MILLER: Thank you, Mr. Chairman.
18 Representative Ross, would you like to comment on your bill?

19 REPRESENTATIVE ROSS: I would, indeed. And thank
20 you, Chairman Miller. We may be recording, but we're
21 apparently doing it in the dark. So maybe we'll --- I don't
22 know how much any of us is going to see of this, but ---.

23 CHAIRMAN MILLER: We may sell peanuts and popcorn in
24 a bit.

25 REPRESENTATIVE ROSS: I don't have any videos, films

1 or other forms of entertainment other than my comments, so I
2 hope that doesn't disappoint you all too much.

3 But I have long been a strong supporter of demand
4 response and conservation measures, and so I am delighted to
5 see that there's an increase in this area, in the electric
6 resources and grid. But as with so many things, sometimes we
7 have unintended consequences in efforts that we make. And in
8 this particular area, there has been an unintended consequence
9 that's been brought to my attention, which occasions the
10 creation of this bill, and that is that some of the demand
11 response that's been introduced into the system and is growing
12 is in the form of generation through diesel generators that do
13 not have emission controls attached to the systems. And it's
14 in a very focused area of the demand response array, and it's a
15 little bit technical, but I think I'm going to just very much
16 simplify it.

17 And I know you're going to be hearing much more
18 about this from the others, but we have almost sort of three
19 types of emergency generators, if you can think about them that
20 way, or generators that might fit into this general category,
21 ones that routinely bid into the system and would be covered by
22 air control --- there, light shines. Now you can see me. And
23 then the more traditional version that we think of, that some
24 of us may have in our homes, which are purely back-up
25 generators for when the electric power goes off and we use it

1 to provide power for our own facilities, our own house or our
2 own business. And then there is a third range, which many
3 people may not be aware of, where people are paid to have a
4 demand response facility available at times of relatively
5 high-power needs. And those wind up being paid for that
6 provision. And it fits into the system as a whole, it's a good
7 idea, and I think useful. But because these facilities
8 currently, by the federal government, are not being required to
9 meet air quality standards, there are a number of these,
10 particularly diesel generators, that are emitting. And they're
11 often emitting at a time when we have relatively challenged air
12 quality anyway. So they can wind up adding to the problem of
13 air pollution at a time when many of them are being used.

14 We have talked to people at PJM, and you have a
15 letter, I believe, from PJM in your packet, that indicates that
16 this type of power generation or alternative power generation
17 is growing. It is becoming a more substantial part of the
18 power generation that not only are we having today, as compared
19 to several years ago, but we're expecting --- PJM is expecting
20 it to become an increasing portion of power generation. And
21 we're asking for something fairly simple, that phased in over a
22 period of years, that the people who wish to participate in
23 this marketplace and get paid for it simply put air quality
24 controls along the lines of what EPA typically asks for onto
25 their facilities. If they choose not to engage in this

1 upgrade, then that's fine. They can still operate as a backup
2 to their own facilities, as they need it, but they --- if they
3 want to continue to participate, we're asking them to invest
4 and to provide no detriment to the air quality of the
5 Commonwealth.

6 As I mentioned, we've given them a period of time to
7 phase this in so that if any of the demand response
8 corporations are currently --- have contracts outstanding,
9 they'll have a chance to phase this into their future contracts
10 before they have to bid on those. So that's the sum and
11 substance of really the legislation. I'm looking forward to
12 hearing from the panelists. And I'll be happy to, of course,
13 answer questions from any of the committee members, either now
14 or later if they have any. Thank you very much, Mr. Chairman.

15 CHAIRMAN MILLER: Thank you. Before we call up the
16 first panel, Pam, would you do the roll call, please? I seem
17 to have omitted that.

18 ROLL CALL TAKEN

19 CHAIRMAN MILLER: Okay. And I would note that I
20 know Representative Corbin is in another meeting, will be
21 coming in a little bit later. I'm sure members will need to be
22 in and out as the meeting --- the hearing progresses. Does,
23 before we call up the first panel, anybody have any questions
24 for the prime sponsor of the bill, Representative Ross? Prefer
25 to hold off? Okay. Thank you.

1 Our first panel is Richard Counihan, Vice President
2 of Government Affairs; Don DiCristofaro, Air Quality
3 Meteorologist and President, Blue Sky Environmental, LLC; and
4 Frank Lacey, Vice President of Regulatory and Market Strategy,
5 Comverge. Please, if you would come forward to the seats. And
6 I apologize for any mispronunciations, gentlemen. And whoever
7 wants to go first may proceed when you're ready.

8 MR. COUNIHAN: Mr. Chairman ---.

9 CHAIRMAN MILLER: And if you need the lights dimmed,
10 just let us know. But we're going to leave them up until you
11 ask for it.

12 MR. COUNIHAN: Mr. Chairman, it is I who must
13 apologize to you, Mr. --- Chairman Miller. I apologize for the
14 typo in our testimony. My name is Rick ---

15 CHAIRMAN MILLER: No problem.

16 MR. COUNIHAN: --- Counihan. And pronunciation is
17 --- has been difficult my entire life. So thank you very much
18 for inviting us here, Chairman Vitali, members of the
19 Committee.

20 EnerNOC --- I'm Vice President of Government Affairs
21 for EnerNOC. EnerNOC is a leading provider of energy
22 management services to commercial, industrial and institutional
23 electric users. And we're the largest provider of
24 demand-response services in the world.

25 In Pennsylvania, we work with customers at over

1 1,800 sites across the Commonwealth, primarily to provide
2 demand-response capacity to the PJM interconnection in its
3 Emergency Load Reduction Program, or ELRP. These customers
4 range from steel mills, to food processing facilities, to
5 municipal wastewater treatment plants, to universities and
6 school districts. And a little map in our testimony of the
7 sites across the Commonwealth that we work on.

8 EnerNOC is opposed to HB 1699 because it would
9 impose unnecessary and burdensome regulations on Pennsylvania
10 businesses and institutions that go well beyond that has been
11 deemed necessary by the Obama EPA. This bill, if passed into
12 law, would prevent many of our customers and those of our
13 competitors from providing demand-response capacity to PJM,
14 thereby eliminating their demand-response income, raising costs
15 to all Pennsylvania consumers, and providing no environmental
16 benefit.

17 So let me start out by saying that the air
18 regulations proposed in HB 1699 are far more restrictive than
19 recent rules for emergency generators finalized in January of
20 this year by the federal EPA. On January 30th the Obama EPA
21 finalized rules for the Reciprocating Internal Combustion
22 Engines in its National Emission Standards for Hazardous Air
23 Pollutants, an alphabet soup oftentimes referred to as RICE
24 NESHAP. These final rules followed three years of study,
25 multiple public hearings and hundreds of comments from the

1 public, including all the parties that you will be hearing from
2 today.

3 The EPA concluded that owners of emergency diesel
4 generators, the subject of the legislation here today, would
5 not have to add pollution control equipment to their engines if
6 all they used them for were blackouts, testing and maintenance,
7 and participating in an emergency demand response program or
8 market. The EPA further put restrictions on them of requiring
9 a restriction of a hundred hours per year on allowable run time
10 for the first two --- the last two categories, i.e. testing
11 maintenance and emergency DR, and the requirement to use
12 ultra-low sulfur diesel and report annually to the EPA on its
13 run time. This was a good compromise.

14 However, if the owner wants to play the energy
15 market, shave their peak demand, or do other sorts of economic,
16 as opposed to emergency, demand response, then the RICE NESHAP
17 requires them to upgrade the pollution controls on their
18 emergency generator. Again, this is a good compromise that the
19 EPA reached after three years of study.

20 The pollution controls called for here in HB 1699 go
21 way beyond what the EPA has required. HB 1699 proposed to take
22 costlier controls for economic demand response than the EPA has
23 already required and then, in addition, apply them to emergency
24 demand response where EPA did not require such controls at all.

25 HB 1699 will not result in customers installing

1 these pollution controls on their emergency generators, but
2 instead will just result in them dropping out of PJM's capacity
3 market. The supporters that you will hear from later today may
4 claim that this law will lead to the cleanup of existing diesel
5 generators, but it will not. The owners of these generators
6 will not install the controls. They will simply drop out of
7 the PJM capacity market.

8 How do we know this? First, complying with this
9 legislation would be extremely expensive. We've submitted to
10 the Committee an actual cost quote to upgrade a generator to
11 the levels required by HB 1699 of \$362,000. So if these
12 businesses and institutions and townships had \$360,000, they're
13 not going to install pollution-control equipment. If they're a
14 hospital, they'll buy a new piece of equipment. If they're a
15 business, they'll probably improve their production line, but
16 they're not going to install this equipment. And we know this
17 because we talked to our customers. We've been talking to our
18 customers about this for three years during EPA's consideration
19 of the issue. And in fact, the few EnerNOC customers who had
20 been using their emergency generators for economic demand
21 response in PJM have declined to upgrade their engines in
22 response to the RICE NESHAP and instead have dropped out of
23 providing economic demand response.

24 Finally, while most of the states surrounding
25 Pennsylvania, including Ohio, West Virginia, Maryland and New

1 York, do allow emergency generators to participate in emergency
2 DR, Delaware and New Jersey do not. And in those states we do
3 not see owners of these generators upgrading their pollution
4 control equipment to participate in PJM's ELRP program.

5 So in summary, this bill will not lead to cleaner
6 emergency generators. They will continue to exist, they will
7 continue to need periodic testing, and they will turn on when a
8 blackout hits, but they will not be available to prevent the
9 blackout.

10 So what will be the effects on Pennsylvania if these
11 customers --- if these generators drop out of the market?
12 First, you have to remember that the owners of these generators
13 are Pennsylvania businesses, water districts, hospitals and
14 local governments. They will directly lose out on annual
15 direct payment in the tens of millions of dollars, which they
16 can use to keep the doors open, fund expansions, keep on extra
17 employees, maintain their generators, or whatever they choose
18 to do with it. It's hard to estimate an exact number for this
19 because we don't know the exact amount that our competitors
20 provide to their customers. But based on estimates of the
21 total amount of demand response in Pennsylvania, we believe
22 almost \$50 million will be paid to Pennsylvania businesses and
23 institutions that make their emergency generators available to
24 PJM in 2013, in just one year. Prices vary year to year, and
25 this is an estimate, but we are confident that the total loss

1 to Pennsylvania businesses and institutions will be in the tens
2 of millions of dollars per year.

3 Second, PJM will tell you that if HB 1699 were to be
4 enacted, other resources would take their place in the capacity
5 auction. This is true. But there's no guarantee that those
6 other resources that will replace this demand response will be
7 located in the Commonwealth. The replacement could come from
8 existing power plants in Ohio or imports of electricity from
9 the midwest, or demand response from Maryland.

10 While PJM will say that these resources can be
11 replaced in the capacity auction, they also have said that DR
12 has been very reliable and helped them through emergencies as
13 recently as this September. PJM stated in a press release,
14 which we attached to our written testimony, unusually hot
15 weather this week created two of the highest electricity use
16 days of the year in the 13-state region served by the PJM
17 Interconnection, operator of North America's largest electric
18 power grid. Demand response, consumers' voluntary reduction in
19 power use, played a vital role in keeping the power grid stable
20 and air conditioning running.

21 Generation performance and demand response played
22 significant roles in balancing the supply and demand on the
23 grid during unusual conditions this week, said Andy Ott, PJM
24 Executive Vice President for Markets. PJM continues to see the
25 value and success of demand response participating in PJM

1 markets. And this is from a PJM press release from September
2 20th, 2013.

3 What is certain --- we don't know where the
4 replacement resources will come, but what is certain is that
5 they will be more expensive. Why? Because these DR resources
6 were bid into PJM's auction. And as winners, they beat out
7 other higher-priced resources. If you take DR out of the
8 bidding, they will be replaced by some other unknown
9 higher-priced resources. And frankly, this is the goal of the
10 proponents of this legislation. They want to remove a low-cost
11 competitor from the market to increase capacity prices for
12 their own preferred resources, whether they be solar, wind,
13 coal or whatever, natural gas, whatever.

14 So how much will it raise prices to Pennsylvania
15 customers? We believe hundreds of millions of dollars per
16 year. The PJM Market Monitor, who will be testifying here
17 today, estimated that in 2013 the presence of all kinds of DR
18 in the PJ capacity market reduced the overall cost of capacity
19 by over \$11.8 billion to consumers across the entire PJM
20 footprint. If we roughly --- assume roughly that 25 percent of
21 that was from emergency generators in PJM, and approximately
22 one-third of those generators are located in Pennsylvania, you
23 get savings to PJM ratepayers of roughly a billion dollars.
24 This is real money.

25 While emergency DR has kept overall costs down, it

1 has not retarded the growth of renewable energy. Supporters of
2 HB 1699 may say that banning emergency generators from
3 participating in PJM will result in greater expansion of
4 renewable energy, presumably because the higher prices will
5 make it more economic, but there is no evidence that demand
6 response in the capacity market has had any negative effect on
7 the growth of renewable energy.

8 For example, in PJM, where DR has grown faster than
9 anywhere else in the country, renewable energy resources are
10 growing at an equally fast pace. And in the --- I have a
11 figure in my testimony, on page five, Figure 1, that shows the
12 growth of both of those.

13 Over the last two auctions in PJM, 1,341 megawatts
14 of renewable resources were offered into the auction, and all
15 1,341 megawatts cleared the auction. Clearly, neither DR, nor
16 any other resource, has prevented renewable energy from
17 securing a commitment in the PJM capacity market. Also, it is
18 important to remember that, as long as it is available,
19 renewable energy will always be dispatched by the system
20 operator before emergency DR engines.

21 Now, there's no correlation --- I've been talking
22 about the economic impacts of this, because that is what this
23 bill is primarily about, but there's no correlation between
24 emergency DR and air pollution. While HB 1699 would cause
25 economic hardship on Pennsylvanians, including the hundreds,

1 perhaps thousands of businesses, schools, local governments
2 that are currently receiving payments to help keep the lights
3 on, it will not result in a cleaner environment. My colleague,
4 Don DiCristofaro, here will go into more detail on this point.

5 In conclusion, I'd like to close my portion of the
6 testimony by saying that the federal Obama EPA came to a good
7 compromise on this issue after three years of study, hearings
8 and comment rounds. The compromise they came to is similar to
9 the current regulations in effect in Pennsylvania. The
10 compromise is that if you only want to use your emergency
11 generator to help out in a PJM-declared emergency, then you
12 have to upgrade --- then you do not have to upgrade your
13 pollution control equipment. However, if you want to play the
14 energy market, shave your peak, or do other sorts of economic,
15 as opposed to emergency DR, then you have to upgrade your
16 emergency generator. This is a good compromise, and
17 Pennsylvania should stick with it. And I turn it over to my
18 colleague, Mr. DiCristofaro.

19 MR. DICRISTOFARO: Good morning. My name is Don
20 DiCristofaro, and I'm an Air Quality Meteorologist, who is also
21 president of Blue Sky Environmental. I'm also a Certified
22 Consulting Meteorologist, as designated by the American
23 Meteorological Society. And more importantly, I'm a proud Penn
24 Stater with two degrees in meteorology. I'm not sure you
25 realize, but Penn State is the premier meteorological school in

1 the world, where one out of every four meteorologists graduate
2 from. I have been permitting the use of engines in demand
3 response programs since 2002.

4 And the first point I want to make is that emergency
5 demand response events are very rare. I've attached to our
6 testimony a memo entitled Analysis of Emergency DR and Ozone
7 Concentrations for Pennsylvania that analyzes data from 2003 to
8 the present. And to understand why this legislation will have
9 little or no impact on air quality, one first needs to
10 understand that such emergency demand response events are
11 rarely called by PJM. The first table in our testimony in the
12 tables that I presented in our --- my analysis examines the
13 ELRP events in each of the seven PJM zones in Pennsylvania from
14 2003 to the present, 2013, this year.

15 For the past 11 years, the ELRP, the Emergency Load
16 Response Program, has been called from zero to 3.7 hours per
17 year on average. Let me repeat that, zero to 3.7 hours per
18 year on average. For four of the past 11 years, the ELRP was
19 never called. In one of the PJM zones, APS, it's never been
20 called in 11 years. This is why many states have changed their
21 definition of emergency to allow emergency engines to
22 participate in emergency DR and why the EPA allows emergency
23 engines to participate in emergency DR. Emergency demand
24 response is very rarely called. It makes sense to use a subset
25 of generators for a short period of time to avoid a blackout

1 rather than waiting for a blackout when every generator,
2 whether it's properly permitted or not, could operate for hours
3 or days until the electric grid is stabilized, thereby causing
4 way more pollution.

5 The second point I'd like to make is that there is
6 no correlation between emergency demand response and air
7 pollution. Now, some allege that emergency DR is dispatched by
8 PJM on days of high ozone, thereby implying that the use of
9 emergency generators will increase the number of ozone
10 exceedance days. Now, I'm an air quality meteorologist with
11 over 30 years of experience, and I've studied this issue
12 extensively. There is no correlation between emergency DR and
13 ozone exceedance days. Although some emergency DR events are
14 called during high ozone days, many DR events occur on
15 non-ozone exceedance days, and many more days have ozone alerts
16 but no DR events. The data does not show that the use of
17 engines during emergency DR events causes high ozone,
18 particularly since, in many instances, the ozone concentrations
19 are as high or higher on the day preceding a DR event.

20 Now, the Obama Administration EPA reviewed my
21 analysis and found, and I quote directly from the EPA, quote,
22 this more robust and comprehensive study concluded that there
23 is no correlation between emergency DR and high ozone
24 concentrations. While EPA acknowledges that emergency DR may
25 be called during high electric demand days in the summer, when

1 days are especially warm and ozone is problematic, the use of
2 emergency DR at such times cannot be directly correlated as
3 causing or contributing to the ozone exceedances. And I've
4 attached the pertinent pages from the EPA's response to
5 comments to my testimony. And I'm quoting from a 280-page
6 document that the EPA prepared, responding to everyone's
7 comments in their exhaustive three-year analysis, concluding
8 why they made the changes to their regulations, including the
9 use of emergency engines in DR.

10 EPA went on to say, and I quote again from this
11 document, the EPA does not agree that emissions of diesel
12 exhaust are likely to go up significantly...given the very
13 limited usage of such engines in emergency DR. It's worth
14 noting that the circumstances during which these engines will
15 be permitted to run under the rule are in circumstances that
16 would prevent blackouts, which, if not prevented, would mean
17 the use of all emergency engines in the affected area, which
18 would create substantially greater emissions from diesel
19 emissions (sic) if these limited emergency DR engines are used
20 for a short period of time, end quote.

21 And finally, EPA went on to say, quote, in the event
22 of blackouts, people's health and safety are jeopardized.
23 During a blackout, there are human health effects that can
24 result from extreme weather temperatures, hot or cold, that
25 become uncontrollable during the loss of electricity...In a

1 study published by the National Institute of Health, it was
2 found that during the New York City blackout of 2003, that put
3 people in greater health peril, end quote. These are all
4 direct quotes from the EPA that performed its own exhaustive
5 study of the use of emergency generators in emergency demand
6 response programs. Finally, I updated my analysis through
7 2013, specifically for Pennsylvania, and the results did not
8 change. And I've attached that to my testimony.

9 Now, according to the Pennsylvania DEP ozone summary
10 data, in 2012, there were 263 recorded exceedances over 25
11 days, and yet there was only one emergency demand response
12 event. In 2011, there were 136 recorded exceedances over 27
13 days and there were only two emergency DR events.

14 So in conclusion, other testifiers are going to tell
15 you that the use of backup engines for emergency DR is bad for
16 the environment. I, along with the Obama Administration and
17 EPA, disagree with that. The EPA and I have studied this issue
18 extensively for over three years, and I have provided you today
19 with the updated data that confirms the EPA's findings,
20 specifically for Pennsylvania. And this concludes my prepared
21 testimony. Thank you.

22 MR. LACEY: Thank you, Mr. Chairman. Good morning,
23 Mr. Chairman and members of the Committee. Thank you for
24 hosting this hearing on this very important issue and inviting
25 me to provide Comverge's views on HB 1699.

1 My name is Frank Lacey. I'm the Vice President of
2 Regulatory and Market Strategy for Comverge. Comverge is one
3 of the leading demand response companies in the country,
4 serving residential and business customers across the country
5 and internationally. I believe we are probably the second
6 largest global provider of demand response services, behind
7 EnerNOC.

8 Comverge runs what we call our open-market division,
9 one of two business units in the company, from Kennett Square,
10 Chester County, Pennsylvania. In that office we have
11 approximately 40 employees, and we have about 50 employees
12 statewide. We located in Pennsylvania largely because of the
13 competitive energy policies enacted by the state over the last
14 decade-and-a-half. Comverge's Pennsylvania-based business, our
15 Pennsylvania-based customers and our local employees will be
16 directly and negatively impacted by HB 1699. Comverge, its
17 customers and all of its employees are resoundingly opposed to
18 this legislation.

19 Demand response is an electricity market tool that
20 has proven itself again and again to be the least expensive and
21 most environmentally responsible way for electric grid
22 operators to meet the system peak demands. Demand response is
23 a market mechanism that is well established in the PJM market.
24 It allows PJM to call on customers to reduce load in times when
25 the electric system is constrained or in emergency conditions.

1 DR provides a valuable tool for end-use customers to control
2 their own energy costs while simultaneously providing
3 reliability tools to the PJM grid operators. Additionally, as
4 was stated before, demand response provides a net benefit to
5 everyone else in the market by lowering costs for everybody.

6 The DR business is unique in that we actually pay
7 our customers; they don't pay us. Funds are generated from the
8 PJM capacity market. They are capacity payments akin to what
9 the generators receive for generating electricity. Our
10 customers are paid for reducing electricity consumption.

11 The PJM rules are applicable from all states in the
12 market. That goes from the very northern edge of North
13 Carolina up to New Jersey and west to Illinois. Our analysis
14 of the PJM data is very similar to what Mr. Counihan presented.
15 We estimate that somewhere between \$40 million and \$50 million
16 worth of demand response payments were made to customers that
17 would be impacted by this legislation this year in
18 Pennsylvania. So in other words, if this legislation was
19 enacted and it was in effect this year, \$40 million to \$50
20 million would not have been paid to those customers, and that
21 would have gone to other higher-priced resources, quite
22 possibly --- quite probably not located in the state.

23 The DR funds stay in state. They go to the
24 hospitals, the schools, the government agencies that were
25 alluded to before. Interestingly, the neighboring states are

1 not affected by this legislation. HB 1699 will only make
2 Maryland, New York, Ohio and West Virginia seem that much more
3 business friendly. The \$40 million to \$50 million in economic
4 value will just evaporate and be gone from the state. This is
5 not the right time to be pushing that kind of money out of the
6 state.

7 You might hear from others today testifying that HB
8 1699 won't harm electric reliability in any way. We believe
9 that is just semantics. There's nothing in the bill that would
10 prevent these customers from participating in the demand
11 response market. But as was pointed out before, customers are
12 not going to make this type of investment that is required
13 under the legislation to continue to participate in the DR
14 markets. They'll simply drop out of the DR programs. So based
15 on the simple laws of supply and demand, each megawatt that
16 leaves the market will be replaced by a higher-priced megawatt,
17 increasing prices for everybody in the Commonwealth.

18 The higher prices are paid by everybody. It's not
19 --- so you have a compounding effect. You've got the \$40
20 million to \$50 million that's directly paid to customers in the
21 market that are providing the reliability tools. But when that
22 goes away, electricity costs will go up for everybody because
23 those higher-priced market --- the higher-prices resources will
24 come in, and they'll clear the capacity market. So every
25 consumer, every business, everybody in the Commonwealth will

1 pay higher electricity rates because of this legislation. And
2 to what end? I think Mr. Ross said earlier that, in the
3 absence of this legislation, the companies are getting --- the
4 companies that participate are going to get these payments.
5 But if this legislation goes away and they don't participate,
6 there's no benefit. They'll just continue doing exactly what
7 they do today. If the lights go out, they'll turn the
8 generators on anyway. So there's no benefit to anybody from
9 this legislation.

10 The legislation also sends a message to customers
11 that the government is just going to continue to interfere with
12 good things. As these two gentlemen have alluded to, the EPA
13 did an exhaustive study of this and reached a very fair
14 compromise for everybody. And now Pennsylvania wants to come
15 in and make it more difficult for these customers to engage in
16 this market. It just doesn't make sense. Are we trying to
17 outregulate the EPA? Are we trying to be more hostile to
18 businesses than the neighboring states are? There's really not
19 a problem that needs to be addressed now.

20 According to PJM, since 1991 --- I've got a little
21 different take on the statistics that Mr. DiCristofaro just
22 presented. Since 1991, when PJM began keeping track of its
23 demand response calls, it has been called statewide in
24 Pennsylvania for a grand total of 2.5 hours. That's it. 2.5
25 hours since 1991. If you were born in 1991, you would have

1 graduated from college this year. And demand response in that
2 time has been called 2.5 hours statewide.

3 In the past 22 years, there have been 35 summer days
4 where demand response has been called somewhere in the PJM
5 zone. That is it. So again, that area is from Virginia up to
6 New Jersey, all the way west to Illinois. PJM typically calls
7 demand response on a utility basis. So they'll call a utility
8 zone to ask those customers to curtail their power usage. Only
9 once, for 2.5 hours, has that curtailment been Pennsylvania
10 statewide.

11 And demand response is only called when there's an
12 emergency, when reliability is threatened. So in the absence
13 of demand response resources, you could very well have
14 blackouts. If the market is functioning and PJM is doing its
15 job correctly, demand response calls should continue to be very
16 infrequent.

17 PJM is also empowered to make its own market rules,
18 and it's going through a rule change process right now whereby
19 they're looking at separating demand response into two buckets
20 of customers. The first bucket would be those customers that
21 don't have emergency backup generation. And the second bucket
22 would be those customers with emergency backup generation. And
23 under the proposed --- or they're not quite proposed yet, but
24 under the rules being considered by PJM right now, the
25 non-generating resources would be called first. And only when

1 they get to a true emergency would the emergency generators be
2 called. So that rule does --- well, that rule does one very
3 important thing, I think, as far as this legislature should be
4 concerned with. It puts all over the states in the PJM
5 footprint on equal economic ground. I'm not saying we support
6 that rule change, but it is a reasonable compromise. And it is
7 much fairer than what is being presented in HB 1699.

8 We believe 1699 is bad public policy. We believe
9 it's bad for electric --- Pennsylvania electricity consumers,
10 it's bad for demand response companies and will do nothing to
11 improve air quality or the environment. We believe that, to
12 protect the citizens and business in Pennsylvania, you should
13 reject this legislation. Thank you.

14 CHAIRMAN MILLER: Thank you for your testimony.
15 Before we go to questions, I would recognize that we've been
16 joined by Representative Harris and Representative Gibbons.
17 Representative Ross, we will start questions with you.

18 REPRESENTATIVE ROSS: Thank you, Mr. Chairman. And
19 I would have a very, very long list of questions, and I'm not
20 going to do that. My colleagues and I will have a chance to
21 talk more, and we have quite a few other testifiers that are I
22 think are going to dispute some of what has been presented
23 here. But I'll limit myself, if I may, to two brief questions.
24 Or would you like me to do one and then wait for ---?

25 CHAIRMAN MILLER: Two brief ones would be fine.

1 REPRESENTATIVE ROSS: Two brief ones to two
2 different people. First of all, Mr. Counihan, you have
3 mentioned that there's going to be some significant costs to
4 the generators that would be required to meet the requirements
5 of this legislation, and you indicate that there are going to
6 be millions of dollars of costs to them. Is it accurate to say
7 that other generators that are currently participating in the
8 marketplace that use fossil fuel of one sort or another are
9 currently having to and have had to pay those costs in order to
10 participate in the marketplace and that, in fact, actually
11 those that are in the other parts of the demand response field
12 that are regular economic providers are also having to meet
13 those pollution control costs?

14 MR. COUNIHAN: Well, I'm not sure I totally
15 understand the question, but certainly owners of, you know,
16 large power plants that operate for thousands of hours per year
17 have had to install pollution control equipment by various EPA
18 regulations. And that's appropriate, given the fact that they
19 run for thousands of hours every year.

20 On the economic demand response providers, no, we
21 don't see that they have installed pollution control equipment.
22 Our experience, our customers, they're just dropping out of the
23 market.

24 REPRESENTATIVE ROSS: No, I didn't mean that. I
25 meant the other --- you know, we have two tiers right now. We

1 have the so-called emergency, and then you have the people that
2 are using demand response and are bidding into the marketplace.
3 Those people would also be required to meet pollution control
4 standards if they were --- if they wished to continue to
5 participate in that marketplace, wouldn't they?

6 MR. COUNIHAN: I'm sorry. I'm confused by your two
7 tiers. Within demand response, there are those --- there are
8 two different kinds of demand response, emergency and economic.

9 REPRESENTATIVE ROSS: Economic is the one I'm
10 talking about, yes.

11 MR. COUNIHAN: So if one wanted to participate in
12 the economic ---

13 REPRESENTATIVE ROSS: The economic, yeah.

14 MR. COUNIHAN: --- with a demand response resource,
15 you could do it through curtailment.

16 REPRESENTATIVE ROSS: Yeah.

17 MR. COUNIHAN: You would have to upgrade the
18 pollution control equipment if you wanted to use a generator.

19 REPRESENTATIVE ROSS: That's what I meant.

20 MR. COUNIHAN: But what we're seeing is that they're
21 not. They're just dropping out.

22 REPRESENTATIVE ROSS: Okay. And you mentioned
23 thousands of hours. If a power plant was used less than
24 thousands of hours, a standard typical power plant, if it was
25 because PJM calls on power plants through the economic queue,

1 so some participate more regularly, some are unable to meet the
2 bid, and so they drop out, so it really doesn't matter whether
3 they're doing thousands of hours or not, it's just basically
4 whether they participate or not; correct?

5 MR. COUNIHAN: I think it's actually not based on
6 either one. It's about --- based on the technical
7 characteristics of the plant, as permitted.

8 REPRESENTATIVE ROSS: But they don't get a free pass
9 if they're used for fewer hours? They don't get to not
10 put ---?

11 MR. COUNIHAN: That's correct.

12 REPRESENTATIVE ROSS: Yeah. Okay. Thank you. And
13 then I had a question for Mr. DiCristofaro. Sorry. Not for
14 you yet. I think we're going to hear more about the number of
15 hours. And I'm really going to let PJM talk about how many
16 hours they're currently using and how many hours they're
17 expecting to use in the future, because I think they're
18 probably a neutral referee on that discussion. But for Mr.
19 Lacey, you were talking about the displacement of Pennsylvania
20 sources here, and you were indicating your speculation was
21 that, if the bill was passed, and these people who are
22 currently in the emergency demand response, that's your
23 customers essentially, would --- if they were to drop out, that
24 they would be likely replaced by power sources from outside of
25 Pennsylvania. And you mentioned New York, which I think is

1 probably not the case since they're in a different system
2 rather than PJM. But just talking about that for a brief
3 moment, is it not true that Pennsylvania is a net power
4 exporter? So why do you assume that the replacement power is
5 going to come from out of state?

6 MR. LACEY: The assumption is that the businesses
7 are headquartered out of state, not that the power is going to
8 come from out of state. So the money ultimately flows out of
9 state. That was the point I was trying to make.

10 REPRESENTATIVE ROSS: Even though this is being
11 applied to some of the major portions of the PJM territory
12 currently, these type of standards that we're offering here?
13 New Jersey, Delaware and I believe Maryland is in the midst of
14 looking at this as well.

15 MR. LACEY: Yeah, they're --- yeah, I mean, I think
16 you're forcing resources out of those areas and into other
17 areas. So you're --- New Jersey has effectively killed this
18 segment of the market.

19 REPRESENTATIVE ROSS: Well, then how can they be ---
20 how can they --- this demand response flee to New Jersey if New
21 Jersey has killed it? In other words, you're --- I mean,
22 there's a whole queue here, so you're assuming it has to be
23 demand response. There are other alternative generation
24 sources that are currently not participating that could be
25 participating, obviously. I was just wondering why they

1 couldn't be from Pennsylvania. May be more likely from
2 Pennsylvania than from out of state.

3 MR. LACEY: No, I think that's exactly what --- the
4 point I was trying to make is that they won't be demand
5 resources. They'll be generation resources. They'll be
6 higher-priced generation resources. And those companies that
7 own those are largely headquartered out of state.

8 REPRESENTATIVE ROSS: Well, yeah, but we're ---
9 you're saying they're headquartered from out of state, but yet
10 we're net power exporters from Pennsylvania. It's an
11 interesting question. I'll let it go at that. Thank you, Mr.
12 Chairman.

13 CHAIRMAN MILLER: Thank you. Chairman Vitali?

14 CHAIRMAN VITALI: Thank you, Mr. Chairman. This is
15 a kind of interesting issue or difficult issue to kind of get
16 your head around because each side seems to be arguing their
17 economic interest. The people get the money, like Aqua PA and
18 EnerNOC, you're against it. The people who make money with the
19 generators by selling this, they're for it. So it's --- you
20 know, it's really --- I mean, the environmental groups are for
21 it, so I mean, they're perhaps one independent horse in the
22 system. So it's really tough to figure this out, but I just
23 --- I just --- a couple questions as I try to figure this out
24 myself. If, as it's claimed, and I'm not sold on this, that
25 the people receiving the payments are going to drop out, if

1 that happens, won't the generation ultimately be replaced by
2 sources that do have pollution control devices on them, thus
3 having a net benefit with regard to cleaner air?

4 MR. COUNIHAN: Sir, it's very difficult to say what
5 exact resources would replace these if this bill were to pass.
6 It is possible that they would be replaced by generators that
7 have pollution controls on them. In fact, all large generators
8 have some level of pollution controls on them. However, it
9 doesn't necessarily mean that there'd be an improvement in the
10 air quality. And the reason for that is a couple. First,
11 these resources very rarely run, as my colleague indicated.
12 And some of the generators that might replace them would have
13 to run on standby at a low level to be prepared to operate. So
14 they're --- they're basically idling the engine, getting ready
15 to be called on by PJM.

16 Also, we submitted a study to the EPA, which we can
17 submit to the committee, by the National Economic Research
18 Associates, and their conclusion was you can't really know what
19 will replace it. But if the replacement were certain
20 relatively uncontrolled coal plants to the West of
21 Pennsylvania, that that could actually increase pollution in
22 Pennsylvania. It's just --- it's not clearcut that there would
23 be a reduction in air pollution if this bill were to be passed.
24 And it partly depends on what the replacements would be.

25 CHAIRMAN VITALI: Do you know how many --- well, let

1 me ask you this. Does the public at large know how much
2 generation is produced by the demand response program, in other
3 words, what generators are participating? And if the answer is
4 no, would you support at least portions of this legislation
5 that require registration of generators participating in the
6 demands response program? And if not, why not?

7 MR. DICRISTOFARO: One of the changes that EPA made
8 to its engine regulations was a requirement that, starting in
9 2016 for calendar year 2015, all engines participating in
10 emergency DR programs need to report their usage to the EPA.
11 So that starts in 2016.

12 CHAIRMAN VITALI: So you're saying it's coming?

13 MR. DICRISTOFARO: Yes.

14 CHAIRMAN VITALI: We will know that?

15 MR. DICRISTOFARO: Yes.

16 CHAIRMAN VITALI: It is coming? Got you. And I'm
17 not --- okay. I mean, the problem I have with --- okay. Help
18 me understand the flow of money. What I heard from you is that
19 if, you know, this bill passes, this, you know, people
20 participating in demands response are going to drop out and
21 there's this flow of money that goes to them now. I'm trying
22 to trace that back. Does that money ultimately come from like
23 the citizens of Pennsylvania now? I mean, the money that's
24 going to these people --- just help me trace that back, where
25 those dollars --- how they travel to get to, let's say, an Aqua

1 PA or someone else.

2 MR. COUNIHAN: So the money originates in capacity
3 payments from PJM to companies like EnerNOC and Comverge who
4 bid in an auction to provide capacity.

5 CHAIRMAN VITALI: Let me just say this, because I
6 always kind of understood PJM is more like an air traffic
7 controller that kind of, you know, ---

8 MR. COUNIHAN: Yes, they do that.

9 CHAIRMAN VITALI: --- directs the planes. But where
10 do they get the money?

11 MR. COUNIHAN: They get the money from ratepayers,
12 customers from all across PJM.

13 CHAIRMAN VITALI: Okay. So it is. I mean, ---

14 MR. COUNIHAN: All payments for capacity come from
15 customers.

16 CHAIRMAN VITALI: --- in all fairness, it's not PJM,
17 it's ratepayers who are ---?

18 MR. COUNIHAN: Yeah.

19 CHAIRMAN VITALI: Got it.

20 MR. COUNIHAN: Right.

21 CHAIRMAN VITALI: Okay. And my other comment is
22 this --- the idea that, okay, if we eliminate the generators of
23 electricity that don't have to use pollution control devices,
24 it's going to be more expensive. But isn't that like, of
25 course, because whenever you, you know, have this benefit of

1 putting pollution control devices on something, yes, there is a
2 cost, but there is this benefit to the health and environment?
3 So should that be surprising and should that be a real arguing
4 point, that it's going to be a little more expensive if we
5 require these things to have pollution control devices on them?

6 MR. COUNIHAN: I definitely see your point, Mr.
7 Chairman, but typically you have to look at cost and benefit.
8 And the federal EPA came to the conclusion that it wasn't worth
9 the cost. The reason being, the savings would have to be
10 spread over so few hours that the cost of pollution control in
11 dollars per ton is really, really large. So they found small
12 benefit and saw no reason to impose the cost.

13 CHAIRMAN VITALI: I have other questions, but I'll
14 restrain myself.

15 CHAIRMAN MILLER: I appreciate that, Chairman
16 Vitali. Representative Metzgar?

17 REPRESENTATIVE METZGAR: Thank you, Mr. Chairman.
18 Mr. Counihan, you know, Mr. Lacey's last testimony to Chairman
19 Ross gave me great pause. He said that if we enact this bill,
20 then the companies that source these programs will leave the
21 Commonwealth. Where's EnerNOC from?

22 MR. COUNIHAN: EnerNOC is headquartered in Boston,
23 Massachusetts.

24 REPRESENTATIVE METZGAR: Very good. Did --- I
25 noticed in your testimony you say about the EPA repeatedly.

1 Did EnerNOC sue the EPA?

2 MR. COUNIHAN: We were part of a coalition of groups
3 that sued the EPA, yes.

4 REPRESENTATIVE METZGAR: What was the result of that
5 lawsuit?

6 MR. COUNIHAN: The EPA granted administrative
7 reconsideration of the issues that we raised. And at the end
8 of that administrative reconsideration, the three-year process
9 that we talked about, the hearings and the public comments,
10 they came out with a final rule, and that final rule then
11 became the basis for dismissing the lawsuit.

12 REPRESENTATIVE METZGAR: So did the hundred-hour
13 exemption come from that?

14 MR. COUNIHAN: The hundred hours was --- came from
15 the final EPA regulation that they put out.

16 REPRESENTATIVE METZGAR: Okay. So I guess in the
17 thought of equity and coming together, would you then support a
18 hundred-hour exemption for other providers, base load
19 providers?

20 MR. COUNIHAN: We haven't taken that into
21 consideration. And I don't want to make a snap judgment here
22 on the stand.

23 REPRESENTATIVE METZGAR: I mean, but the thought
24 would be that if it's good for you guys, it would be good for
25 them as well, that they wouldn't have to comply for a hundred

1 hours either; correct?

2 MR. COUNIHAN: You know, I can see why you believe
3 that, but most of those generators are going to run for more
4 than a hundred hours, in which case it would be moot.

5 REPRESENTATIVE METZGAR: Right. But they wouldn't
6 have to use their pollution controls for a hundred hours?

7 MR. COUNIHAN: No, that's not true. Because if you
8 exceed the 101 --- if you go to 101 hours under the EPA rule,
9 then you have to install the equipment.

10 REPRESENTATIVE METZGAR: Right. But would you
11 support, though, changing the rule so that they would have that
12 hundred hours of exemption and they could ---

13 MR. COUNIHAN: I'm not willing to ---

14 REPRESENTATIVE METZGAR: --- spew as much as they
15 want?

16 MR. COUNIHAN: --- make an opinion on that now.

17 REPRESENTATIVE METZGAR: Okay. In here it says that
18 if House --- House Bill 1699 will not result in customers
19 installing pollution controls on their emergency generators but
20 instead dropping out. So when they drop out, they're going
21 back to the original purpose of their generator, which was as a
22 back-up generator; correct? Okay.

23 MR. COUNIHAN: Yes.

24 REPRESENTATIVE METZGAR: So that will still have the
25 benefit of their own backup generator as a hospital, it's just

1 the ratepayers aren't going to subsidize it to sit; correct?

2 MR. COUNIHAN: Well, the ratepayers will then be
3 paying more money, so they would not --- no longer get the
4 benefit of the low-cost resource.

5 REPRESENTATIVE METZGAR: Okay. Are these
6 generators, are they making loads of money or a little bit of
7 money? I mean, how would you characterize it? Is it ---?

8 MR. COUNIHAN: You know, it depends year to year.
9 It depends on how big their generator is and so forth. But you
10 know, typically they could be making \$10,000 to \$50,000 a year.

11 REPRESENTATIVE METZGAR: Okay. You know, I was on
12 your website, and I looked at this and I saw this line, and I'm
13 just flabbergasted by it, because it sounds more like Enron,
14 not EnerNOC. But it says, by enrolling in demand response with
15 EnerNOC, you will join the world's largest virtual power plant.
16 I don't know. I'm concerned that my power grid is a virtual
17 power plant to EnerNOC. How is that --- my reliability hurts
18 when you say that, so I'm confused. Can you --- can you
19 explain what do you mean by a virtual power plant?

20 MR. COUNIHAN: Well, I don't think there is ---
21 should be any reason for concern at all. The resources we're
22 talking about are extremely reliable, and we connect to them
23 through communication networks. We can see every single one of
24 them, what's going on at every customer. And so it's a
25 disaggregated group of resources that is extremely reliable.

1 So I don't think you should have some --- I don't think you
2 should have concerns about reliability.

3 CHAIRMAN MILLER: Representative, that's quite a few
4 questions. We have others. May I proceed with some other
5 questioners, please?

6 REPRESENTATIVE METZGAR: If you'd like, Mr.
7 Chairman. Anything for you.

8 CHAIRMAN MILLER: I thank you. Representative
9 Evankovich?

10 REPRESENTATIVE EVANKOVICH: Thank you, Mr. Chairman.
11 You know, I'm somewhat torn on this --- on this bill. As
12 somebody who participated a little bit in these programs in the
13 private sector, I kind of see --- I kind of seem to understand
14 that the rules of the game were set. These markets were
15 created, and your companies are just trying to participate in
16 the markets that were created to try to address a problem by
17 people like the PJM. I have two questions. The first one is
18 that you have --- for the clarity of the committee, you have
19 referenced two different types of responses. You have
20 identified peak demand response or I think you characterized it
21 earlier as economic response, and you mentioned emergency
22 demand response. Can you give some clarity to the committee as
23 to the difference between the two of them?

24 MR. COUNIHAN: I would be happy to, Representative.
25 Emergency --- the key here is what triggers the action. In

1 emergency demand response the trigger is PJM making a
2 determination that there is a physical risk that the grid could
3 go dark, and then they dispatch --- they tell us and we turn
4 around and tell our customers that now is the time when you
5 need to reduce your load. Economic demand response or peak
6 shaving are actually initiated by the customer, the owner of
7 the generator. They are doing it because they believe that
8 maybe they can save money on --- by avoiding high prices, they
9 can save money by avoiding peak demand charges that are often
10 charged on commercial and industrial customers. And so the key
11 distinction is one is based on a decision by PJM for physical
12 reasons. The other is a decision by the end-use customer for
13 economic reasons. That's the distinction.

14 REPRESENTATIVE EVANKOVICH: So I think to add some
15 clarity to Chairman Vitali's question, the economic response is
16 a subset market that's created so that PJM does not have to go
17 to the prime market for peak demand electricity prices. PJM
18 saves money. They pass some of that savings on to the company
19 that enters into a contract with them because they helped them
20 save money. So they give them a cut of that. Is that a
21 correct characterization? Just a real simple yes or no is
22 sufficient.

23 MR. LACEY: It's not quite accurate. I mean,
24 economic demand response is driven by the customer. PJM has
25 put in place a mechanism where, if I'm an electricity consumer,

1 I can effectively sell my consumption rights back to the grid.

2 REPRESENTATIVE EVANKOVICH: Right. I mean, with all
3 due respect, if you look at the sites across the State of
4 Pennsylvania that you have outlined here, how many of these are
5 companies that are receiving --- that are such electricity
6 consumers that they are paying peak demand prices for their
7 electricity? I think that, if you look at the math that you
8 provided, the vast --- I mean, the vast majority are probably
9 not companies that are receiving --- that are paying peak
10 demand electricity prices; is that correct?

11 MR. COUNIHAN: Well, we don't actually know what
12 their --- what they pay for electricity because we don't sell
13 it to them.

14 REPRESENTATIVE EVANKOVICH: I guess --- I guess this
15 is --- this is, I think, the --- one of the defining issues for
16 me at least is what was the original intent of demand response?
17 Was the original intent of demand response to have the
18 consumers shed consumption of electricity or was it to create a
19 subset market for power generation? To me, that's the key
20 question. Was the original intent of demand response to
21 curtail usage of electricity so that there wouldn't have to be
22 the generation, or was the original intent to create a subset
23 market for generation? And I think we know the answer to that.

24 MR. COUNIHAN: I think it's the former.

25 CHAIRMAN MILLER: Thank you.

1 REPRESENTATIVE EVANKOVICH: Thank you.

2 CHAIRMAN MILLER: Thank you. Representative Barbin?

3 REPRESENTATIVE BARBIN: Thank you, Mr. Chairman.

4 CHAIRMAN MILLER: Pull your mic around. There's one
5 there.

6 REPRESENTATIVE BARBIN: Thank you, Mr. Chairman. My
7 question goes to the fee that is proposed under this bill. And
8 in order for us to --- you know, to consider that, we need to
9 know how many non-emergency response or non-emergency
10 generators are now in Pennsylvania. How many are there?

11 MR. COUNIHAN: So I don't think we know the exact
12 answer. We know how many EnerNOC has.

13 REPRESENTATIVE BARBIN: Well, how many does EnerNOC
14 have?

15 MR. COUNIHAN: I'd prefer to make a guess that
16 there's a low 1,000, 1,200 maybe in the Commonwealth.
17 Altogether, not just EnerNoc.

18 REPRESENTATIVE BARBIN: 1,200. Okay. So we're not
19 talking about --- go ahead, Mr. ---.

20 MR. LACEY: I think --- I'm not sure that was the
21 right answer to your question because I think your question was
22 non-emergency generators.

23 REPRESENTATIVE BARBIN: Yes, it was non-emergency
24 generators, because that's what's dealt with under the
25 registration of this act. How many total?

1 MR. LACEY: Far fewer. Non-emergency, you
2 know, ---.

3 MR. DICRISTOFARO: Let me respond. There's very few
4 because, effective May 3rd, under the EPA regulations, if an
5 engine wanted to continue to participate as a non-emergency
6 engine, it would have had to make the upgrades required by EPA.
7 And we've seen very few engines do that.

8 REPRESENTATIVE BARBIN: My question --- I'm trying
9 to stick on point here and make this move along. I'm
10 interested in knowing whether or not the registration fee of
11 \$40 per non-emergency generator is a significant cost. And
12 what you're telling the Committee is that it's not, because
13 there are very few generators. Now, if it's more, tell me that
14 it's more, but I'm going to make my decisions on whether this
15 is a good regulation of this industry or not based on what the
16 costs are. And if you can't give me the information from the
17 costs today, then I'd ask that you give it to the Chairman and
18 we'll make that decision going forward.

19 MR. DICRISTOFARO: Actually, now I understand the
20 question. This bill would make all the generators that we're
21 talking about non-emergency generators.

22 REPRESENTATIVE BARBIN: Okay. So we're talking
23 about ---

24 MR. DICRISTOFARO: So it would be many.

25 REPRESENTATIVE BARBIN: --- the fees.

1 MR. COUNIHAN: \$45,000.

2 REPRESENTATIVE BARBIN: Total for you.

3 MR. COUNIHAN: No, not just for us, but for all
4 these ---.

5 REPRESENTATIVE BARBIN: Okay. So why is that a
6 significant cost? Why shouldn't you be registering if all
7 other generation --- generators are and all other generators
8 are subject to higher clean air standards? Why wouldn't ---
9 why shouldn't you be?

10 MR. COUNIHAN: Well, I think we were not arguing
11 that the registration fee was financially undoable, it's the
12 control upgrades that have the big costs. It's not the
13 registration fee.

14 REPRESENTATIVE BARBIN: All right. So it's not the
15 --- you have a number of these generators. You don't want to
16 upgrade them. What's the upgrading cost for the generators?

17 MR. COUNIHAN: We have a quote which we submitted to
18 the Committee of \$360,000 for one generator.

19 REPRESENTATIVE BARBIN: All right. And you're
20 saying the total amount of generators that are in your industry
21 is what?

22 MR. COUNIHAN: Maybe --- in the Commonwealth maybe
23 1,000 to 1,200.

24 REPRESENTATIVE BARBIN: All right. Thank you, Mr.
25 Chairman.

1 CHAIRMAN MILLER: Thank you. Seeing no other
2 questions, thank you, gentlemen. Jake, if you want to give
3 these gentlemen a minute here to clear the table, and then
4 you're up.

5 Next up is Jake Smeltz, president, Electric Power
6 Generation Association.

7 MR. SMELTZ: Good morning, everyone, and thank you
8 for your time. I know we're a little behind schedule, so I'll
9 keep things moving from my end. But we certainly appreciate
10 the opportunity to talk about what we believe to be a very
11 important issue, both a market issue, which we spent the
12 majority of the morning talking about, but also an
13 environmental and public health issue.

14 And I want to say that I'm proud of the group that I
15 represent. They safely and reliably produce power in
16 Pennsylvania. Many of you have been to the power plants in the
17 state. You understand the requirements that are put upon them.
18 And I wanted to offer my thanks to Representative Ross for
19 tackling what clearly is a difficult issue. These issues are
20 no less difficult than maybe a transportation issue you've been
21 dealing with or other things. And we appreciate your time to
22 learn about it, because that's a big part of what we're trying
23 to do, educate you folks not just about what we do but about
24 how we do it.

25 And as I like to say, Pennsylvania is the keystone

1 state of electric power generation. We have everything here.
2 We are, I would use the term, blessed to have the ability to
3 produce power, the number two power-producing state in the
4 nation. And like all manufacturers, we're proud of the
5 economic output that we produce for the state.

6 I'm going to try and skip over some things that are
7 in my presentation. And for time, I won't broadcast it. For
8 anyone who doesn't have it, it will be on the EPGA website.
9 But they're correct, this story really began several years ago
10 at EPA. EPA --- Representative Metzgar, you were correct, EPA
11 was sued. As part of that legal process, in the settlement
12 they offered, as part of a settlement, a legal settlement, that
13 they would give a pollution exemption to this particular class
14 of market participants. They kept with the settlement that was
15 promulgated. And in fact, the final rule included a
16 hundred-hour pollution exemption. In fact, I would offer, if
17 it didn't, they would probably still be in court.

18 When that settlement was offered, many, many, many
19 people along the eastern seaboard and the mid-Atlantic, our own
20 PA DEP, our PA PUC, environmental regulators up and down the
21 east coast, environmental advocates, public health advocates,
22 all argued, I would say, strenuously against the exemption.
23 Now, that would naturally --- and I would invite the Committee
24 to consider why would all these people be arguing if it weren't
25 an important public policy consideration? That's why we're

1 here today. That's what House Bill 1699 represents.

2 Just in fairness, part of that rule is being
3 reconsidered by EPA. I don't know what will come of that. And
4 there's a federal lawsuit dangling because you just heard from
5 the previous people that there is a lack of transparent data
6 about who, in fact, is doing this activity. They know their
7 customers. Our DEP does not. So that would naturally beg the
8 question, why would EPA grant an exemption to a class of units
9 it doesn't --- it can't even identify, and what's the value ---
10 the pollution that could result from that?

11 So with that, why are we here in support of Senate
12 Bill --- or House Bill 1699? We're here because fair markets
13 and competitive markets actually do matter. For each megawatt
14 or, in this case, a negawatt, an avoided megawatt, for each
15 megawatt of this type of product that enters the market, it has
16 to displace something else. You heard them say it. We are the
17 low cost bidder. There's a reason. It's not cheap to have
18 pollution controls on your systems. There's a societal benefit
19 that we all have recognized which flows from that. So in a
20 competitive market, if I don't have to comply and you do, who
21 is likely to win? That's the --- that's the displacement that
22 I talk about in the marketplace. We have well-controlled,
23 super critical coal units that have exited our system. We have
24 12 coal plants in this state that have retired. I'm not here
25 to suggest that this is the only reason, but this type of

1 market unfairness is. That's what 1699 seeks to address. It
2 doesn't displace them from the market. It requires them to
3 follow environmental rules like everybody else. So there's an
4 element of fundamental fairness that we raise. All subsidies,
5 including this pollution subsidy, distort markets. I have sat
6 before, I believe it was another committee, and argued against
7 renewable subsidies. We believe that markets have to be fair
8 in order to produce the best outcome. You don't need to pay or
9 to give subsidies or a free pass to pollute to people who are
10 making money. These are economic activities.

11 The term emergency is, in some respects, a misnomer.
12 It's a matter of how we categorize their activity. In reality,
13 they're being paid. That's economic. They're not doing this
14 in gratis to the --- to the power system or the grid. They're
15 doing it to make money. And we believe that for-profit
16 generation activities should have to follow environmental rules
17 and account for the costs that they impose upon the system.
18 There's an up-front issue, that's the fairness issue, but
19 there's also an issue on the back end. Who will pay for the
20 pollution that results? They argue we don't run that much.
21 That's a historical argument. I'm here to tell you --- I
22 believe you'll hear from Dr. Bowring, anyone can go on PJM's
23 website, 15,000 megawatts of coal have exited the system.
24 What's left will run more. This is precisely why this
25 committee should consider this bill now. Give them the lead

1 time they need to control for their emissions, because they
2 will be running.

3 We also fully believe, and you'll hear from other
4 advocates that, quite frankly, don't have a financial stake in
5 the bill, that there are environmental and public health issues
6 here. Consider the groups that you've heard from. The only
7 people that have opposed the bill are the ones that have to
8 control for their emissions.

9 Finally, we support the fact that if you have a
10 generator and you want to use it for emergency purposes, when
11 the lights go out, when there's a disruption in service, fair
12 enough, this should not apply to you. If you use your
13 generator to make money, you should control for your emissions.

14 Now, I've sort of skipped around, and I apologize,
15 because I think there are other very important people that want
16 to offer their views, but at the end of the day we are building
17 our system on negawatts. That may come as a surprise to some
18 of you. We are not building power plants to replace retiring
19 power plants. Not megawatt for megawatt. In fact, it's quite
20 the opposite. For every three megawatts of coal that have left
21 the system, only one megawatt of iron in the ground has
22 replaced it. Two of those megawatts have been replaced with
23 demand response. I included a chart. It shows the growth, a
24 thousand percent over five years. They are, indeed, a
25 competitor. Fair enough. What we struggle with aren't all

1 demand response. The concept, as was discussed earlier, is
2 that the cheapest --- or in our world we'd say most economic
3 and environmentally friendly electron is the one never
4 produced. That was the whole purpose of the program. That's
5 what we talked about when --- when House Bill 2200 was done a
6 few years ago.

7 What we're talking about today is not the avoided
8 megawatt but the recreated one, the one that is recreated
9 through load shifting. And I included a slide that shows that
10 much of this --- not much, but about 21 percent of the people
11 that are participating in this economic activity called
12 emergency demand response are using backup generators. They're
13 being paid to run their generator. Eighty-eight (88) percent
14 of those generators are diesel-fired. That's not disputed here
15 today.

16 Now, I think it was interesting, because there are a
17 few arguments that have been made, and I would like to respond
18 to those. The first is this is terribly expensive. I think
19 that there are a whole host of options between doing nothing
20 and what is proposed in the bill. I heard no alternative.
21 What I heard is we would like to continue to get paid to do
22 what we do today. We want no further restriction. I don't
23 think that that's an option. I don't think that's an option
24 for the environmental result. I don't think it's an option for
25 the public health result. And I know it's not a good option

1 for a fair market result. They have a brochure. I included it
2 in my presentation. And it says --- and I'm going to quote
3 from it because this is not my marketing material, it's theirs
4 --- generate new payments for your business. You may qualify
5 for a simple and lucrative opportunity to be paid to run your
6 generator. As was said, join the world's largest virtual power
7 plant. Tell me what the difference is if you have a 2,000
8 megawatt stationary --- a large stationary, centralized plant
9 or 2,000 megawatts that just happen to be scattered here and
10 there low to the ground, on top of rooftops or behind fences.
11 Our demand response customers have earned millions of dollars,
12 yet we heard there's no money to install pollution controls.

13 I also included a slide about how much the market
14 has produced in revenue. Two years ago, all emergency demand
15 response, of which these are about 20, 21 percent, earned about
16 half a billion dollars. Not all of that flowed to
17 Pennsylvania. I still think that's a lot of money. Maybe I'm
18 conservative. Through the end of September they earned around
19 \$300 million. This is --- I take them at their word. They're
20 right. It is a lucrative activity. Why do we care? We care
21 because, at the end of the day, the markets have to be able to
22 work right or we're going to get a result which will be
23 contrary to the interests of this state. Our power plants have
24 to be able to compete fairly or they won't be able to compete
25 at all. We don't need dirtier sources displacing

1 highly-regulated, controlled generation. As the system loses
2 other capacity, I just talked about that, these little guys,
3 they're going to run more. PJM's analysis of the system for
4 '14/'15, '15/'16, that's exactly what it says.

5 I don't want to spend a lot of time talking about
6 the environmental impacts. I think there are other groups who
7 can more eloquently speak to those, but here is what we do
8 know. They have much higher emission rates. Even with the
9 controls that are required in the bill, the highest controls
10 that we could impose, they would still have emission rates that
11 would meet an uncontrolled simple-cycle natural gas plant.
12 Now, imagine that. They are dispatched to work on the worst
13 air quality days of the year. We know that they tend to be
14 congregated in non-attainment areas where air quality is
15 already a problem. And my question to the Committee would be
16 who will pay for the emissions? Somebody will. The emissions
17 have to be accounted for. I've heard the term, and it's
18 entirely appropriate, this is a zero-sum game. Every point
19 source that's permitted will be made to do more when other
20 people don't do anything. And I'm here to tell you --- to
21 convey a message. We're doing everything we can. Please don't
22 make us pay for their emissions, too.

23 I included a slide, because I think it's part of a
24 positive story for Pennsylvania. Here we're talking about an
25 air quality issue. Let me tell you what the centralized

1 regulated plants have done. SO2 reduction since 2000, 75
2 percent. NOx reduction since 2000, 42 percent. By 2016, our
3 DEP estimates that we will reduce carbon dioxide emissions in
4 this state from Pennsylvania EGUs by 21 percent. Now, that one
5 happens to be coming on the heels of retirements, again, partly
6 because we've been asked to do more. Particulate matter, 75
7 percent down. That's a success story. We don't want to go
8 backward. And we don't want to be made to pay for other
9 peoples' pollution when they clearly have revenues to pay for
10 their own.

11 So, I tried to keep it short. I left some important
12 policy questions for you at the end of the presentation. I
13 encourage you to consider those. I'll be happy to entertain
14 your questions.

15 CHAIRMAN MILLER: Thank you, Mr. Smeltz? Chris ---
16 Representative Ross?

17 REPRESENTATIVE ROSS: Thank you. Very brief, it was
18 asserted that the --- if this bill goes through, that power
19 generation will come from outside the state to replace it, that
20 demand response will come from outside the state to replace it.
21 I see you have a slide in here referencing Maryland, New
22 Jersey, Ohio. PJM is basically made up of these mid-Atlantic
23 states, along with Delaware. Do you believe that demand
24 response is going to flee to other states in the PJM if we pass
25 this legislation?

1 MR. SMELTZ: I think that that is speculative, at
2 best. At the end of the day, the market will determine what
3 happens. It very well may be these sources that continue to
4 participate. I do believe in some other states companies like
5 EnerNOC help pay their --- pay for their end-use customers'
6 pollution controls. Nothing precludes other, what we would
7 term, clean demand response from backfilling what's here. And
8 in fact, in the last auction, a lot of that clean demand
9 response didn't clear, partly because these folks had their
10 exemption and, you know, that was the result.

11 REPRESENTATIVE ROSS: And just one follow-up. I
12 know we're going to have later testimony on the cost of
13 compliance relatively. They picked one company. They didn't
14 do a broad survey of a range of different kinds of generators.
15 I see it's a pretty large generator, emergency generator, isn't
16 it, a 2,000-kilowatt generator, diesel generator? And I used
17 to figure when I was in business that I had to try and recover
18 my money in, you know, about seven years for a capital
19 investment. And even going by their numbers, it looks to me
20 like you could recover, even in that fairly strong extreme
21 case, within seven years. Is that how you see it?

22 MR. SMELTZ: Well, part of the problem is we don't
23 know who they are. We don't know how old the engines are. We
24 don't know how big they are. I've struggled with that question
25 myself. I want to impart to the Committee, on behalf of people

1 who do know what the true cost of pollution controls are,
2 there's a station in this state that's spending a
3 billion-and-a-half dollars right now to install scrubbers. And
4 they didn't do it because they wanted to. They did it because
5 they were required to. We are more than fair minded when it
6 comes to these types of issues. And to the extent that you
7 would like to explore alternatives, we would certainly
8 entertain it.

9 CHAIRMAN MILLER: Chairman Vitali?

10 CHAIRMAN VITALI: Thank you. A couple questions. I
11 think one of the previous speakers, Mr. Counihan perhaps, said
12 that if those participating in the demands --- demand response
13 program drop out, that electricity could be supplied by
14 uncontrolled coal-fired power plants, thus causing more
15 pollution. Do you agree with that?

16 MR. SMELTZ: No. I think that that is, you know, a
17 red herring. There are no --- the types of plants that he
18 would suppose exist have long since left the system. Those
19 were the 15,000 megawatts that are leaving. You know, there
20 are no centralized stations that aren't highly controlled or
21 will be, you know, based on the EPA rules that have been
22 promulgated.

23 CHAIRMAN VITALI: Okay. My second question is what
24 --- if, in fact, the participants of the demand response drop
25 out because this bill is enacted, how does that affect the

1 likelihood of increased --- an increased risk of blackout, in
2 other words, because we exceed our grid's capacity? How does
3 --- how does ---?

4 MR. SMELTZ: Well, I did see a letter that
5 Representative Ross sent to PJM. I have it here in my stack
6 somewhere. I'm not sure that the rest of the committee got a
7 chance to see it. PJM said that if the bill were to become
8 law, that there would be absolutely no reliability issues
9 raised. They've --- they've managed through New Jersey. They
10 managed through other states that have dealt with this issue.
11 It's not going to be a problem.

12 CHAIRMAN VITALI: Now, you said something near the
13 end that just kind of got me to thinking. I haven't fully
14 thought through this, but the idea was that if they --- if the
15 demand response people drop out, the idea was that someone
16 would have to make up for this pollution. If they're allowed
17 to pollute, someone ---

18 MR. SMELTZ: Sure.

19 CHAIRMAN VITALI: --- else has to ---? Now, if you
20 sort of think that through a couple of steps, does that mean
21 that, no matter what happens from an environmental level, this
22 is all awash because state and federal laws allow a certain
23 amount of pollution, and no matter what happens, that won't be
24 exceeded, at least in theory, so that this just becomes a
25 question of who pays for the pollution and ---?

1 MR. SMELTZ: Correct.

2 CHAIRMAN VITALI: Is that ---?

3 MR. SMELTZ: Correct. I mean, at some point, the
4 EPA, through DEP, will come looking for additional reductions.
5 Just yesterday, the Environmental Quality Board, of which, you
6 know, I know you're a member, adopted a preliminary regulation
7 imposing stricter NOx standards on large, stationary sources
8 and volatile organic compound standards. At the end of the
9 day, it is a --- the best term to use is a zero-sum game.
10 Someone will pay. And what we are asking for and supporting in
11 this bill is what I refer to as a cost causative principle. If
12 you cause the cost, you ought to pay for it, particularly if
13 you're making money.

14 CHAIRMAN VITALI: I'll restrain myself. Thank you.
15 Thank you.

16 CHAIRMAN MILLER: Representative Oberlander?

17 REPRESENTATIVE OBERLANDER: Thank you, Chairman.
18 Good morning.

19 MR. SMELTZ: Good morning.

20 REPRESENTATIVE OBERLANDER: I find myself in an
21 interesting position because I'm usually supporting the
22 industry and working hard to make sure that they're not
23 overregulated. And over the past two years, since the
24 regulations were announced by EPA, we've had a number of power
25 plants closed, and specifically one in my district, costing

1 hundreds of jobs, and I find that it's overkill. So I find
2 myself in a strange position to ask why would you want another
3 industry to have to put up with these job-killing regulations,
4 and I'm --- can you give me an idea of your pollution versus
5 their pollution? Are we talking a teaspoon versus a gallon jug
6 versus --- can you give me some idea of the equality of what
7 we're talking about?

8 MR. SMELTZ: Sure. And you know, as I've said to
9 several of you in discussions about this bill, it's a --- it's
10 an unusual situation because we rarely come before the
11 Committee and ask for regulation. Quite usually, it's --- it's
12 something other than that. It's --- there's an issue ---
13 you've asked about the emissions. What matters --- and you're
14 going to hear this from PennFuture and DEP. So I don't want to
15 speak, because I know that they're going to get into it in more
16 depth. But what matters is when it happens, where it happens,
17 and how often it happens. People tend to be focused on volume,
18 you know, oh, there's a big smokestack, there's a lot of
19 volume, they run thousands of hours a year. You know, that
20 creates an issue. At the end of the day, I think that the
21 impact can be --- can be much more severe because of the types
22 of units we're discussing, where they're located in terms of
23 their physical location and proximity to the ground, becoming
24 area sources. I mean, there's a reason smokestacks go up 100,
25 150 feet. And also, by the nature of when they run, which of,

1 course, are in these hazy, hot, humid days, when the grid is
2 stressed and they have to provide for some relief to the grid,
3 which again, can come from any number of sources. You know, if
4 you take them at their word, these folks are --- have come in
5 and saved the day many times. I think they're important, but
6 they can be no less important than the people who come to work
7 every day. I'm not --- I didn't get at the depth of your
8 question because I know that there are others who can speak to
9 it more eloquently.

10 REPRESENTATIVE OBERLANDER: Thank you. My concern
11 will remain that this is a costly job-killing regulation, with
12 very little to no effect on our air quality. And I appreciate
13 your testimony. Thank you.

14 MR. SMELTZ: Sure.

15 CHAIRMAN MILLER: Representative Krieger?

16 REPRESENTATIVE KRIEGER: Yes. Thank you, Mr.
17 Chairman. Mr. Smeltz, I followed your argument with regard to
18 the zero-sum game, and I think I understand what you're trying
19 to say there. And it doesn't sound like it's that complicated,
20 as a concept anyway. Now, the EPA seems to have come to an
21 opposite conclusion on that. Is it the fact that they don't
22 understand the zero-sum game you're talking about? Could you
23 comment on the EPA's decision apparently to the contrary?

24 MR. SMELTZ: If I could put myself in the mind of
25 EPA regulators, I may be able to illuminate a little bit

1 better. I tend to use a little bit of common sense. If you
2 run the dirtiest machines on the worst days of the year, it's
3 not going to have a good result. I think that what happened,
4 as best I can ascertain, is that EPA had just come off the
5 heels of several major rulemakings with regard to the power
6 industry, and we had raised very legitimate reliability issues
7 with regard to the imposition of very significant rules. EPA
8 became very sensitive to those arguments. And in fact, most of
9 the rule --- they don't argue necessarily an environmental
10 benefit. They go out of their way in this rule to say we don't
11 want to jeopardize reliability. Now, no one, including our
12 system administrator, ever argued to them that there would be a
13 reliability issue. I think they had become so sensitive to it
14 that they decided not to roll the dice to find out. That,
15 coupled with the legal settlement. Remember, they were
16 required, under the rules of the settlement, to promulgate an
17 exemption. That's what they did. So I wish I could give you a
18 better understanding. I guess I would invite us to consider
19 what happens when you run dirty machines on bad air quality
20 days, which is exactly what happens.

21 REPRESENTATIVE KRIEGER: Could I have one quick
22 follow-up, Mr. Chairman?

23 CHAIRMAN MILLER: Quick.

24 REPRESENTATIVE KRIEGER: Okay. Again, going to the
25 zero-sum game, assuming dirtier machines run more often and

1 there's an absolute limit on how much pollution can be out
2 there, would I be correct to assume that the cost for your
3 industry increases not linearly because I'm assuming the more
4 stringent the demands are placed on you, that it's almost like
5 a geometric progression in the cost to obtain that incremental
6 benefit? Is that correct?

7 MR. SMELTZ: Correct, it's incremental.

8 REPRESENTATIVE KRIEGER: Thank you, Mr. Chairman.

9 CHAIRMAN MILLER: Just for the Committee members ---
10 thank you, Jake --- Mr. Smeltz. We're going to go forward here
11 with the next presenter, but I will note that, for the
12 Committee members, we have been cleared by the Speaker's Office
13 to go to 11:15 if we need to, so --- and also for our
14 presenters. We're trying to be fair to everyone.

15 Next up is Vince Brisini, Deputy Secretary for
16 Waste, Air, Radiation and Remediation, Pennsylvania Department
17 of Environmental Resources. You may proceed when you're ready,
18 sir.

19 DEPUTY SECRETARY BRISINI: Good morning. Thank you
20 for the opportunity to present testify --- testimony on House
21 Bill 1699. I've also submitted a more detailed and specific
22 written testimony for the record but will now provide an
23 overview of that testimony.

24 As large stationary sources, such as coal-fired
25 power plants, become more controlled to meet tighter national

1 ambient air quality standards and other regulatory and
2 statutory requirements, Pennsylvania's Department of
3 Environmental Protection is now being required to shift its
4 attention to smaller sources, such as diesel-fired engines,
5 some of which are generating electricity through the grid.
6 These engines are largely uncontrolled and represent an
7 increasing share of harmful air pollutants, such as nitrogen
8 oxides and fine particulate matter.

9 As a result of the recent development of capacity
10 markets for electricity procurement in Pennsylvania, these
11 engines are now also directly and indirectly providing
12 electricity to the grid through participation in demand
13 response programs. The Department understands the role of
14 these demand response programs in the electricity market, so
15 long as the engines that generate electricity to participate in
16 the demand response program do not exacerbate the air quality,
17 particular during the peak ozone days.

18 It is critical to note that, not only is the amount
19 of pollution being emitted important, but also when and where
20 it's being emitted. Consequently, the Department is concerned
21 with the lack of transparency regarding the location and
22 operation of these engines. The location and operational data
23 of these engines are being treated as confidential business
24 information by PJM. According to the recent PJM data, 21
25 percent of the end users participating in the demand response

1 program use distributed electric generators, which 88 percent
2 are powered by diesel engines. Typically, these diesel-fired
3 engines emit approximately 21.8 pounds of nitrogen oxides per
4 megawatt hour, as compared to two pounds of nitrogen oxides per
5 megawatt hour emitted by an uncontrolled gas-fired simple-cycle
6 combustion turbine, or more than ten times the level of
7 emissions. Again, it's important to note that these engines
8 would typically operate during peak ozone and high energy
9 demand days. And because the simple-cycle gas turbine is also
10 used for these kinds of operations, this is a valid comparison.
11 It's important to understand that it is --- we're talking about
12 large coal-fired power plants. When we're talking about the
13 emissions, it's really a comparison to the simple-cycle
14 combustion turbine operated by electric-generating companies.

15 The Department believes that the registration of
16 non-emergency generators participating as a demand response
17 resource is necessary to better estimate the emission inventory
18 and local impacts from this category of engine. Emission
19 standards, as provided for in HB 1699, are also needed because
20 most of these engines are currently not subject to any emission
21 standard. The Department recommends certain amendments to this
22 bill to improve its clarity and to provide adequate time to
23 comply with emission standards. The Department recommends the
24 compliance with the emission standards for new sources should
25 be effective upon installation and the compliance for existing

1 sources should be revised to the year 2017 to provide adequate
2 time to determine how the source will be brought into
3 compliance. The Department supports HB 1699, requiring EPA's
4 tier emission standards for diesel engines and EPA's new source
5 performance standards for gas-fired engines. Because of
6 generators participating in the demand response program are
7 compensated for the entire year rather than just for the hours
8 they operate or are allowed to operate, we believe it is
9 economically feasible for them to comply with the emission
10 standards included in the bill.

11 In summation, the Department supports HB 1699 with
12 our recommended amendments. Once again, thank you for
13 providing the opportunity to the Department to testify on HB
14 1699.

15 CHAIRMAN MILLER: Thank you, Deputy Secretary, for
16 your testimony. I would just have one point --- question for
17 you. We heard earlier that there are new EPA requirements
18 coming for registration. Is that your understanding, also?

19 DEPUTY SECRETARY BRISINI: Yes. We understand that
20 there is --- that they are identifying that, but we are not
21 certain what will be actually identified as far as the
22 information relating to the engine and its location and
23 operational information.

24 CHAIRMAN MILLER: Thank you. Representative Ross?

25 REPRESENTATIVE ROSS: Just a quick comment rather

1 than a question. I want to, first of all, thank Deputy
2 Secretary Brisini for all the cooperation and help that he's
3 given me in drafting this. And I want to let the members know
4 that I am fully supportive of the amendment as it's been
5 suggested and intend to offer it as an amendment and support it
6 before the Committee, if and when this bill comes up for a
7 vote. Thank you, Mr. Chairman.

8 CHAIRMAN MILLER: Thank you. Chairman Vitali?

9 CHAIRMAN VITALI: Thank you. The previous
10 testifier, Mr. Smeltz, basically said that, as far as the
11 pollution emission goes, this is --- will be a zero-sum gain in
12 that there is an allowed --- there will be an allowable
13 pollution level and if --- in the pollution reduction, and that
14 will be achieved in some fashion. Someone will need to install
15 the pollution control devices. Now, do you agree with that
16 assessment?

17 DEPUTY SECRETARY BRISINI: Yes, that's correct. But
18 it needs to be probably clarified in that it's been termed a
19 zero-sum, but it's really not a zero-sum because of the
20 proximity of the emissions, the level of emissions. For
21 example, if you have demand response generators that are
22 located in an urban area or immediately upwind of an urban
23 area, their effect on ozone in that proximity is different. So
24 if you were to reach out and say I need to control some place
25 in western Pennsylvania to address that, the number of tons of

1 precursors that you would need to address would be far
2 different than if you addressed them in the proximity
3 immediately upwind of that location. So it is zero-sum in that
4 you will need to control somebody to make up for what is being
5 emitted. It's not necessarily identified on a ton-per-ton
6 basis. You have to consider that --- when you look at these,
7 there's --- it's not just the amount of pollution, especially
8 in the case of ozone, because it's formed in the environment.
9 And as part of that, there's a photochemical reaction that's
10 occurring. So proximity becomes extremely important in
11 determining how much represents that equivalent reduction.

12 CHAIRMAN VITALI: Right. So you're suggesting that
13 it's more important to get that reduction, let's say, by a
14 hospital participating in the demand response to run the
15 University of Pennsylvania as opposed to getting that same
16 response of a generating plant out in the countryside
17 somewhere?

18 DEPUTY SECRETARY BRISINI: And vice versa. It may
19 be more appropriate if you have --- if you receive those
20 reductions from a power plant that's located closer to the
21 proximity of non-attainment, their emissions reductions would
22 be more beneficial. It's not so much who it is, it's where
23 they're located.

24 CHAIRMAN VITALI: Gotcha. So that's why you're ---
25 I mean, that's one of the reasons why you're supporting ---

1 DEPUTY SECRETARY BRISINI: Yeah.

2 CHAIRMAN VITALI: --- this bill then?

3 DEPUTY SECRETARY BRISINI: You know, frankly, the
4 biggest component is the lack of information. And that's where
5 we look at 1699. It's going to obligate PJM to provide us with
6 that information.

7 CHAIRMAN VITALI: Got it. Okay. Thanks.

8 CHAIRMAN MILLER: Representative Carroll?

9 REPRESENTATIVE CARROLL: Thank you, Mr. Chairman.
10 Mr. Deputy Secretary, thank you for being here today. It's
11 always been my position and a policy that I have embraced as a
12 representative for the anthracite region in northeastern
13 Pennsylvania to advance legislation and policies that help us
14 deal with the landscape littered with waste coal piles. And
15 so, to the extent that those --- the facilities, if we can call
16 them that, advance the cleanup of our environment in
17 northeastern Pennsylvania, how would you characterize 1699 with
18 respect to the continued use of waste coal piles in our
19 Commonwealth?

20 DEPUTY SECRETARY BRISINI: That's probably something
21 better responded to by PJM. But as we've heard previously,
22 it's a matter of --- in the case of the waste coal burners,
23 they're very effective in addressing multi-media pollution.
24 And I know from discussions from them --- and we --- in fact,
25 the DEP, we have been highly supportive of the waste coal

1 burning industry because of all of those multiple benefits.
2 But I think, on a general level, if, indeed, you have
3 uncontrolled sources --- and in the case of the waste coal
4 refuse burners ---.

5 REPRESENTATIVE CARROLL: Let me stop you for a
6 second. The perspective that I have is really from the
7 environmental protection perspective, not --- so I really don't
8 need to hear PJM weigh in on that. I'm more interested in the
9 Department of Environmental Protection's position related to
10 the overall concept of cleaner air, but also the reduction and
11 the elimination of the waste coal piles. And so, to the extent
12 that 1699, if enacted, does --- in your view, does that advance
13 the environmental protections not just for cleaner air but also
14 for landscape?

15 DEPUTY SECRETARY BRISINI: Yeah, 1699 provides that.
16 And in the case of the coal refuse burners, they also would be
17 emitting nitrogen oxides at a level of approximately two pounds
18 per megawatt hour as well, which would be consistent with an
19 uncontrolled gas-fired simple-cycle peaking turbine. So,
20 ultimately, they are a cleaner source, if I'm understanding you
21 correctly. As far as --- but what's also important to these
22 waste coal burners are their power purchase agreements and
23 moving out of the power purchase agreement into the competitive
24 marketplace and the issues around the ability for those plants
25 to be economically viable in the competitive marketplace. And

1 those are issues that are --- I believe are more important to
2 the waste coal burners than comparative emission rate.

3 REPRESENTATIVE CARROLL: Okay. Thanks.

4 CHAIRMAN MILLER: Thank you. Seeing no other
5 questions, thank you.

6 DEPUTY SECRETARY BRISINI: Thank you very much.

7 CHAIRMAN MILLER: Next we have Dr. Joseph Bowring,
8 president, Monitoring Analytics. Welcome.

9 DR. BOWRING: Thank you. Good morning. Thanks for
10 the opportunity to testify before you today. I am --- I'm the
11 market monitor for PJM. So just --- I want to be clear about
12 my role and PJM's role. I'm not actually an employee of PJM,
13 but we serve a FERC-mandated obligation of PJM to have a market
14 monitor. So we are the market monitor. I'm responsible to the
15 PJM Board, to the Federal Energy Regulatory Commission,
16 ultimately, really, to all market participants.

17 So you know a great deal about PJM, the market
18 monitoring unit serves really three functions. We report on
19 markets. We publish reports regularly. And there's a lot of
20 information. For example, our most recent third-quarter state
21 of the market report was posted on our web page about some of
22 the issues you're reviewing today. We also work to improve
23 market rules, and we look for instances of market power. So
24 the reason I'm here today is not to testify directly about the
25 costs or benefits of the environmental regulations, I'm not an

1 environmental regulator, or the related policy issues, but it
2 is to address the impacts, potential impacts, on PJM's
3 wholesale power markets.

4 So, there are really two big kinds of markets in
5 PJM. One is the energy market and one is the capacity market.
6 The energy market, even though it hasn't been talked about a
7 lot today, is where about 75 percent of total revenues are,
8 total dollars in PJM, and about 15 to 20 percent, depending on
9 the year, are in the capacity market.

10 There are, correspondingly, two different kinds of
11 demand-side resources being bought and sold in PJM. One is
12 what's called economic. It's been referred to today. And that
13 participates in the energy market alone. And it's simply you
14 can offer to reduce your load at any point during the day and
15 be paid what's called the LMP, the locational marginal price.
16 You can also participate in the capacity market. And you sell
17 capacity competing directly with generators to sell capacity.
18 About 95 percent or more of all the revenues received by
19 demand-side resources are in the capacity market. The money is
20 in the capacity market, and that's why, really, we're talking
21 fundamentally about the capacity market.

22 What DR provides we can think of as
23 interruptability. A DR provider sells to the system the
24 willingness to get off the system when the capacity they don't
25 want to pay for is needed by those who are willing to pay for

1 it. It's a perfectly fine product. DR has brought a lot of
2 benefits to PJM, and I want to be very clear about that from
3 the beginning. DR is a valuable product. Demand side is an
4 important part of every mark --- of every market. And we want
5 to make sure that the demand side continues to be viable in
6 PJM.

7 So within the capacity market then there are three
8 kinds --- I know it gets --- it seems like it's getting
9 excessively complicated, sorry, but there are three kinds of
10 DR. One is limited demand side, which only has an obligation
11 to provide 60 hours of reduction during a year, ten calls, six
12 hours, a maximum of 60 hours, compared to 8,760 hours in a
13 year, which is what a power plant is called on to do. And what
14 that means is it's a minimum of ten hours, ten calls, for one
15 hour a call. Limited DR, in our view, is an inferior product.
16 We recommended that it be eliminated. PJM is in the process,
17 even as we speak, of proposing to reduce the amount of limited
18 DR. And it's a limited DR that the diesel engines we're
19 talking about today are primarily providing. There are also
20 --- there are also --- there's also --- some are unlimited and
21 annual products, which are more consistent with the generation
22 product as ---.

23 There's been --- there was some discussion earlier
24 on the first panel about the fact that DR hasn't been called
25 very much. As economists have maybe --- maybe learned, maybe

1 not learned, history is not always that great a guide to the
2 future. The fact that there have been very few calls over the
3 last 10 or 11 years, and the PJM market started in 1999, is
4 entirely irrelevant to what we expect. It's worth repeating
5 that and think about it, is entirely irrelevant to what we
6 should expect.

7 On June 1st, 2007, there were about 1,700 megawatts
8 of DR in place across PJM. Effective June 1st, 2015, there
9 will be about 15,000. It goes without saying that the logic of
10 adding more DR and relying more on DR as a capacity resource,
11 relying more on DR for liability, will mean, without any
12 question, that the number of calls will increase. You buy more
13 of it, you rely more on it, the calls will increase. So the
14 statement that it's only called for a few hours in the past is
15 irrelevant. This past summer, in the ACSI Zone, which is
16 around Cleveland, DR was called on for 20 hours over the course
17 of five days. That --- those --- those trends will continue.
18 DR was also called in on some other --- for some other zones in
19 PJM over the summer.

20 Another fundamental point to make about DR is that,
21 although it's called an emergency product, it's an economic
22 product. It is bought and sold in the capacity market. It
23 competes directly with generation. It is an economic product.
24 PJM is realizing that some of the rule changes that PJM is
25 proposing in the membership process recognize that explicitly.

1 And of course, DR helps with reliability. Of course, DR helps
2 with blackouts. But so does generation. They are treated
3 comparably in the capacity market. And if DR is the most
4 expensive resource, it will be called last. If it's the most
5 limited, it will be called last. But it's no more essential to
6 reliability, obviously, than any other resource, and
7 particularly in generation. So it's not --- it's not truly an
8 emergency resource.

9 And in addition, there's been some talk about the
10 emergency procedures that PJM goes through. PJM has a great
11 deal of discretion about what order they call --- they call
12 their various emergency resources. And PJM will call on DR
13 when it thinks it's necessary, as it does with other resources,
14 including generation resources, to maintain system reliability.

15 Demand-side resources under their rules don't
16 actually have to directly identify either the customer or the
17 types of actions that customer is going to take to reduce
18 power, reduce load, until 90 days before the actual delivery.
19 Those interior rules are proposed to go into place effective,
20 as I recall, June 1st, 2016, but there's no requirement to
21 actually identify those customers. And as has been made clear
22 recently in the PJM process, many of those customers have not
23 been identified and are not expected to be identified until 90
24 days before. So the assertions about what will definitely
25 happen to those customers, whether they're definitely relying

1 on diesels, I don't think has much foundation in fact. But
2 what is true is there's plenty of time to develop alternatives.
3 If --- to the extent that DRs were relying on diesel, plenty of
4 time to develop alternatives to that, including direct
5 conservation based demand-side resources.

6 The PJM markets have reacted and responded quickly
7 and effectively to much more significant dislocations,
8 including --- and the reference was to coal units --- including
9 very significant impacts of coal environmental changes, and
10 particularly MATS. So the PJM markets have reacted to that.
11 Units have --- units have even retired, and it's actually
12 21,000 megawatts total that retired between 2011 to 2020, as
13 well as by adding MATS-compliant technology.

14 But demand side does displace other resources. In
15 the capacity market, when a demand-side resource clears it
16 means another kind of resource doesn't clear. And as an actual
17 matter of fact, demand-side resources have, for example, in
18 some cases, displaced both unit --- coal units that would have
19 otherwise invested in MATS-compliant technology and also brand
20 new energy-efficient combined cycles. So the notion that
21 demand side necessarily reduces prices is also not well
22 founded. It is the case, as we pointed out, and we were quoted
23 earlier on this, is that the limited DR product, which we
24 regard as an inferior product, has what --- and what we regard
25 as suppressed the price well below the competitive level. Due

1 to that, our annual DR has also reduced the price consistent
2 with a competitive market. Limited DR has actually reduced the
3 price below a competitive level, unfairly competing, in our
4 view, with brand new, efficient combined cycles and existing
5 coal units, deciding about whether to invest in MATS-compliant
6 technology.

7 One of the --- one of the things to think about is
8 when DR displaces a new efficient combined cycle, you're
9 getting 60 hours of resource rather than 8,760 hours of the
10 resource, and you're getting a resource which, in fact, in the
11 energy market, is dramatically more expensive. Not less
12 expensive, but more expensive. DR resources are allowed to
13 have a strike price in the energy market, and the strike price
14 can be as high as \$1,800 this summer and as high as \$2,700 next
15 summer. A large number of DR resources have used that very
16 high strike price. And in fact, the price was set in the ACSI
17 Zone this summer for a number of hours at \$1,800. The price
18 otherwise would have been in the \$500 range. So DR, on the
19 energy side, does not result in lower cost. In fact, it
20 results directly in higher cost. In addition, it's displacing
21 8,760 hours a year of relatively inexpensive power from a
22 gas-fired combined cycle, which are particularly inexpensive
23 these days, with the --- with the development of shale gas.

24 My basic point is that the choice of any technology,
25 whether it's demand side, energy efficiency or generation,

1 should be an economic choice based on the associated --- all of
2 the associated costs and benefits. There's no reason, in PJM
3 markets, to provide any special advantages to RICE or to any
4 other technology. The run time --- in my view, the run time
5 exemptions for RICE are not required by any aspect of
6 competitive wholesale power markets, and such exemptions would
7 result in the displacement of conservation demand side ---
8 conservation-based demand resources and negatively affect
9 wholesale power markets. Again, thank you for the opportunity,
10 and I'm available to answer any questions you may have.

11 CHAIRMAN MILLER: Thank you for your testimony. I
12 do have a question. See if I can phrase this in a proper
13 manner. My concern is with the integrity of the grid. And we
14 heard that New Jersey implemented this rule, and it really
15 didn't affect much in New Jersey. But knowing that New Jersey
16 is a net importer of electricity, I wouldn't expect it would
17 affect New Jersey. Pennsylvania is a net exporter of
18 electricity, but basically Pennsylvania and West Virginia
19 export. All other states around us import. They don't produce
20 what they use. Will this have any impact? If the limited DR
21 does exit the market because of this regulation or this
22 legislation, will it have an impact on the integrity of the
23 grid?

24 DR. BOWRING: No.

25 CHAIRMAN MILLER: Why not?

1 DR. BOWRING: Because, first of all, I mean, there's
2 nothing magic about demand side. Demand side can and will be
3 replaced by other resources, and particularly when we talk
4 about diesel-backed demand side. So demand-side providers have
5 already sold capacity for it into the '16/'17 market, which
6 begins on June 1st, 2016. If it's actually the case that the
7 providers of diesel choose not to continue to provide it, that
8 will be replaced by other forms of either demand side or
9 generation. Demand side has historically bought out of their
10 positions at a very high rate, as much as 50 to 60 percent, in
11 incremental options. As I indicated, there's plenty of time to
12 replace any issues that might arise from the removal of any
13 diesel --- diesel-backed resources with other resources. In
14 fact, there's also generation resources that can be purchased.
15 So the capacity market has adequate supply to cover the
16 reliabilities of PJM. So I do not believe that there are any
17 reliability impacts or would be any reliability impacts of this
18 rule.

19 CHAIRMAN MILLER: Thank you. Any other questions?
20 Seeing none, thank you very much.

21 DR. BOWRING: Thank you.

22 CHAIRMAN MILLER: Christina Simeone, Energy Direct
23 --- Center Director of PennFuture. Christina, I don't know
24 what to say. Somebody always ends up having to be last.

25 MS. SIMEONE: That's okay. Chairman Miller, thank

1 you very much for allowing me to testify today, Chairman Vitali
2 and members of the Committee. I'm just going to use this
3 presentation because it has some graphics that I think will
4 answer a few questions that have already been asked today. You
5 all hopefully know who PennFuture is, so I will skip over that.

6 We are very supportive of demand response for the
7 benefits that are listed up here; however, we see demand
8 response as actual load consumption reduction, similar to what
9 Representative Evankovich had mentioned. We have severe
10 concerns about behind-the-meter generation that's uncontrolled.
11 We believe U.S. EPA created a loophole. They did this in
12 absence of evidence about where these units are located, and
13 they did not model the full operational emissions --- results
14 from the full hundred hours of operations. As a result, the
15 rule is being challenged in court by both sides, opponents and
16 supporters. PennFuture and many other national environmental
17 organizations fought against EPA's 100-hour Waiver.

18 The key points to understand is the federal rule
19 punts this issue to the states, issues of diesel emissions,
20 which has cancer and non-cancer impacts, violations of daily
21 attainment, not annual attainment but daily attainment, and
22 reduces effectiveness of other regulations. The preponderance
23 of studies show that there are environmental concerns and
24 public health concerns, and there are cleaner alternatives to
25 dirty diesel, but --- dirty diesel demand response, but

1 Pennsylvania has to act.

2 Why should policymakers care? Well, as was
3 mentioned, 21 percent of the PJM demand response market is
4 generation based. Eighty-eight (88) percent is diesel. I've
5 calculated some of those numbers so you can see based on some
6 PJM data and provided a map where you can basically get an
7 understanding, per zone, where some of these units are located.
8 And that's in my presentation. I'll have you know the bottom
9 left-hand and the bottom right-hand corner and the lower tier
10 of the state is where we have most of the attainment, daily
11 attainment issues for NOx and particulate matter. There also
12 happens to be concentration of these units in those areas.

13 The demand response market is growing, mostly as a
14 result of the way that demand response is being compensated.
15 So, not only is the market growing, but we're going to be more
16 reliant. These resources are going to be called on more often.
17 That comes directly from PJM. So again, historic run times for
18 these units are not necessarily a good indication of what will
19 happen in the future.

20 How do diesel emissions compare to traditional power
21 generation? I think some Representatives were asking this
22 question before. Four times higher on NOx emissions compared
23 to U.S. average generation. And you can see the Tier 1, Tier 2
24 and Tier 3 standards are listed here. This is courtesy of the
25 Mid-Atlantic Regional Air Management Association, who has also

1 expressed concerns about uncontrolled diesel DR. For
2 particulate matter it's about three times the average of all
3 U.S. generation. Is this an environmental problem? Well, yes.
4 Again, high temperatures trigger high electricity demand, which
5 would trigger the DR events, and is conducive to different
6 types of pollution impacts.

7 I used some numbers from the Mid-Atlantic Regional
8 Air Management Association to just do a comparison of the High
9 Electricity Demand Day regulations that some states within the
10 Ozone Transport Commission were trying to target. If you just
11 look at a six-hour operation for diesel engines, it would
12 basically do away with all of the daily reductions that the
13 High Electricity Demand Day program aims to achieve. Now, this
14 program was specifically --- and most other states focused on
15 larger EGUs. Now, Connecticut, there's a limit on DR, 600
16 megawatts in ISO New England. Delaware has limits on diesel
17 DR. New Jersey has limits on diesel DR. Those are just ---
18 those bars are just for illustrative purposes. But you can see
19 for Pennsylvania, it would basically zero out those gains.
20 This is just methodology for this next slide, illustrating that
21 when --- DR is called relatively infrequently. We're talking
22 about, you know, 10, 20, 30 hours per year. It doesn't matter
23 the total volume. It matters the days, the days when these are
24 called. So daily NOx emissions, this is a percentage of diesel
25 DR NOx compared to EGU NOx for all of these states. Again,

1 Delaware has limits on DR NOx and New Jersey has limits, so
2 it's just a comparison. I believe D.C. has limits, too. But
3 you can see, 12 percent, a six-hour run time of diesel DR on
4 one day can be about 12 percent of NOx emissions from all EGUs
5 running in Pennsylvania on that day.

6 The Northeast States for Coordinated Air Use
7 Management has expressed significant concerns, saying that
8 these units can contribute to elevated levels of harmful
9 pollutants on the days when emissions have the most impact on
10 air quality. Again, Delaware Department of Natural Resources
11 and Environmental Control has done an analysis, talking about
12 exceedance of the one-hour NAAQS particulate matter exceedances
13 and also increased risk of cancer. The analysis group also
14 says that participation in RICE --- diesel-backed RICE DR can
15 actually result in increased emissions of CO2, NOx, SO2 and
16 mercury and can prevent or delay the development of new,
17 cleaner generation resources. There's one report from 2003
18 that identifies a potential air quality benefit of running
19 these units. That unit has --- this report has been cited so
20 improperly that the author had to --- actually had to do a
21 clarification at a presentation saying that these results are
22 specific to a certain period of time in ISO New England when
23 there was oil-fired spinning reserve. That's no longer the
24 case in New England. It's certainly not the case in PJM. And
25 there are --- there's no appreciable environmental benefit to

1 running these units. The report still said emit that time in
2 that location. In specific locations it could still contribute
3 to non-attainment.

4 Public health concern. Not only are we having
5 issues with attainment and impacting the effectiveness of other
6 regulations, these things are extremely dirty. I believe the
7 American Lung Association has supported the bill today, along
8 with the Sierra Club and some others. Diesel has --- diesel
9 exhaust is considered a human carcinogen by the World Health
10 Organization, has over 600 toxic pollutants. Other non-cancer
11 impacts can be premature death, congenital abnormalities,
12 pulmonary disease, cardiovascular effects. And even short-term
13 exposure to diesel exhaust can have negative impacts on human
14 health. This is the wrong stuff, at the wrong place, at the
15 wrong time, in the hottest summer days, at low elevation, in
16 highly-populated areas where people are breathing, and it has a
17 toxic profile. This is nasty, nasty stuff. House Bill 1699
18 provides solutions.

19 And the one question that's come up is are these
20 pollution controls affordable. Well, one study by Synapse has
21 shown \$10,000 to \$80,000 for a one megawatt unit operating in
22 these programs. Again, the capacity payments change from year
23 to year, but there have been conservation service providers
24 that, as a part of their business model, they help finance the
25 installation of these pollution controls in order to keep these

1 units or bring these units into the market, which is a viable
2 alternative.

3 Again, in conclusion, the federal loophole punts
4 this issue to the states, and that's why you see so many states
5 starting to act. Again, Delaware has acted. New Jersey has
6 acted. Maryland is looking to act. Ohio is looking to act.
7 ISO New England has limited DR. This is a state issue now.
8 The preponderance of studies indicates environmental and public
9 health concerns with these. There are alternative solutions to
10 dirty diesel --- diesel DR, and House Bill 1699 is a solution.
11 And I think I did that in six minutes.

12 CHAIRMAN MILLER: You may take a breath, and then
13 we're going to go to Chairman Vitali for a question. If
14 someone might get the lights. Ready?

15 MS. SIMEONE: Yes.

16 CHAIRMAN VITALI: Thank you. We heard in the course
17 of this hearing that in the whole zero-sum game concept, where
18 there's going to be a --- theoretically, at least, a fixed
19 level of pollution produced. And then we also heard from DEP
20 with regard to the importance with regard to the location, the
21 30 diesel generators in urban areas and so forth, which just
22 sort of led me to think would --- could the bill be tweaked in
23 such a way to only extend the requirements of this bill to
24 certain geographic areas, you know, based on non-attainment?
25 In other words, let's say if Aqua PA has a pumping station in

1 downtown Philly versus a pumping station on the Susquehanna
2 River somewhere, you know. One, it seems to me, would have a
3 different public health effect than the other. I mean, is that
4 an idea worth considering?

5 MS. SIMEONE: The City of Philadelphia actually
6 limits the use of these units. But to answer your question, I
7 think there are many potential alternatives that we --- that
8 could be discussed to address this problem. One would be to
9 say, hey, these units can't operate on ozone action days at
10 all. There's many other potential solutions. I think the only
11 --- the only alternative that is unacceptable is to not act on
12 this issue because of the significant public health concerns
13 and the growth of this market. This will only be a bigger
14 problem in the future.

15 CHAIRMAN VITALI: Thank you.

16 MS. SIMEONE: Uh-huh (yes).

17 CHAIRMAN MILLER: Any other questions?

18 Representative Ross, some closing remarks?

19 REPRESENTATIVE ROSS: Well, actually, I'm going to
20 just follow up on an earlier question very briefly. And I see
21 the time we got left, so ---. Christina, I know that you've
22 investigated, and you do have a slide on here about the cost of
23 the pollution controls. And we were given an example, which I
24 believe was a fairly large generating system, which, therefore,
25 would be, I assume, paid a larger amount. So they'd be on the

1 upper end of both the cost of retrofitting and also the amount
2 of money that they would be receiving on an annual basis. And
3 I just wanted to get --- I know you've done a broad range,
4 talking to a variety of the companies that do the pollution
5 control equipment, looking at the various different sizes of
6 generators, and I know we've had a conversation about this
7 already, but could you repeat what you've told me earlier in
8 terms of the time frame that people could effectively recover
9 their investment on this type of retrofit?

10 MS. SIMEONE: Sure. So for the RICE NESHAP Rule,
11 which is a lower pollution standard, the payback period is
12 about a one-year period. And that was a study done by M.J.
13 Bradley. That does not include the profit margin that this
14 conservation service provider takes out for bringing the unit
15 to market. So a one-year payback.

16 The tier three, tier four standard, depending on
17 what your base engine is, it's a cost per forced power for the
18 control technology, plus a portion of additional cost to
19 actually install. So what --- the calculations I've done is
20 anywhere from a seven to a nine-year payback, not including the
21 conservation service provider profit.

22 REPRESENTATIVE ROSS: Okay.

23 MS. SIMEONE: And we can provide those numbers to
24 you.

25 REPRESENTATIVE ROSS: All right. And, you know,

1 obviously, we're giving people --- if we pass the amendment
2 into the bill, we're giving people three years plus in order to
3 even consider it and work toward that. And I recognize that
4 some people may decide they want to continue to participate in
5 this market and they see it as beneficial and others may want
6 to drop out, but ---.

7 MS. SIMEONE: Another point, just to expand upon
8 that, is once the pollution controls are installed, there are
9 no longer run time limitations of a hundred hours under that
10 federal loophole. So if a owner of a unit wanted to install
11 those pollution controls, not only could they participate in
12 economic --- in emergency DR programs, which have revenues, but
13 they can start to participate in some of the energy market
14 programs to bring in additional revenues, which would cut down
15 their payback period on the investment.

16 REPRESENTATIVE ROSS: Thank you.

17 CHAIRMAN MILLER: Okay. We are in session. And we
18 are within four minutes of what we were granted to go over, so
19 I appreciate all the testifiers today. We'll take all the
20 testimony, distill it, and talk to the Committee members, and
21 say tuned. Thank you. Meeting adjourned.

22 MEETING ADJOURNED AT 11:14 A.M.

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