

HOUSE OF REPRESENTATIVES
COMMONWEALTH OF PENNSYLVANIA
ENVIRONMENTAL RESOURCES AND ENERGY COMMITTEE

KEYSTONE BUILDING
COMMONWEALTH & FORSTER STREETS
PUC HEARING ROOM NO. 1

TUESDAY, DECEMBER 6, 2005
9:05 A.M.

BEFORE:

HONORABLE WILLIAM F. ADOLPH, JR., CHAIRMAN
HONORABLE CAMILLE GEORGE
HONORABLE GIBSON ARMSTRONG
HONORABLE MARTIN CAUSER
HONORABLE JACQUELINE CRAHALLA
HONORABLE THOMAS CREIGHTON
HONORABLE KATE HARPER
HONORABLE SCOTT HUTCHINSON
HONORABLE RON MILLER
HONORABLE KATHY RAPP
HONORABLE DAVE REED
HONORABLE CAROLE RUBLEY
HONORABLE RICHARD STEVENSON
HONORABLE ALAN BUTKOVITZ
HONORABLE DAN SURRA
HONORABLE JIM WANSACZ
HONORABLE JOHN YUDICHAK

SHERRI A. REITANO, RPR
NOTARY PUBLIC

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1 CHAIRMAN ADOLPH: Good morning. I would like
2 to welcome everyone to this meeting of the
3 Environmental Resources and Energy Committee.

4 I would also like to extend a special welcome
5 and thank you to all of our presenters. I know that
6 each of you have spent a quite deal of time preparing
7 for today and your efforts are very much appreciated.

8 Today is the fourth session in our energy
9 policy in Pennsylvania which we kicked off in October.
10 I look forward to hearing from today's panelists.

11 The subject is quite timely as we discuss the
12 issues facing some of Pennsylvania's own energy
13 producers and learn more about a specific form of
14 energy, liquefied natural gas or LNG.

15 I hope we will also come to a better
16 understanding about how important these various forms
17 of energy can be in shaping a secure and economically
18 viable energy future for Pennsylvania.

19 The previous energy policy hearings have
20 provided a number of interesting ideas, areas for
21 consideration, and have helped us to get off to a
22 great start; but there remain other areas to learn
23 more about and fully understand. I anticipate today's
24 hearing will be helpful for members by providing some
25 very valuable background and informed decisions about

1 energy policy.

2 Before the Democratic Chair makes some
3 remarks, I'd like to start over there with
4 Representative Crahalla, would you please identify
5 yourself and counties that you represent.

6 REPRESENTATIVE CRAHALLA: Jackie Crahalla,
7 Montgomery County.

8 REPRESENTATIVE HUTCHINSON: Scott Hutchinson,
9 Venango and a portion of Butler County.

10 REPRESENTATIVE REED: Dave Reed, Indiana
11 County.

12 REPRESENTATIVE MILLER: Ron Miller, York
13 County.

14 REPRESENTATIVE STEVENSON: Dick Stevenson,
15 Bucks County and Butler County.

16 REPRESENTATIVE SURRA: Dan Surra, Elk and a
17 portion of Clearfield.

18 REPRESENTATIVE CAUSER: Martin Causer, McKean
19 County and Cameron County.

20 REPRESENTATIVE RAPP: Kathy Rapp, Warren,
21 Forest, and McKean.

22 CHAIRMAN ADOLPH: I believe we also have
23 Representative Creighton down at the other end.

24 REPRESENTATIVE CREIGHTON: Northern Lancaster
25 County.

1 CHAIRMAN ADOLPH: We also have Representative
2 Carole Rubley of Chester and Montgomery County is also
3 present. Representative George, any comments?

4 REPRESENTATIVE GEORGE: Yes, thank you. As
5 winter approaches and the furnaces are running at full
6 steam, unfortunately we took the care and compassion
7 that comes out of the legislative bodies. Millions
8 of Americans are reeling from high energy prices.

9 The recently signed Federal Energy Bill will
10 do nothing in the short term to alleviate the price
11 spikes. And I understand that numerous House
12 Committees are recommending cutting the low income
13 home energy assistance programs funding by more than
14 \$180 million.

15 I'm pleased to cooperate and work with the
16 Majority Chairman in identifying innovative approaches
17 and developing an energy strategy for Pennsylvania. I
18 look forward to the solution to these suggested by
19 today's presenters and working with the Chairman and
20 both sides of this committee so that we can do
21 ultimately what it is that you want to do, to place
22 Pennsylvania in the position where it is free from the
23 stressful need of energy and firing costs. And I
24 think together we can do that. We each have a
25 responsibility.

1 CHAIRMAN ADOLPH: Thank you, Mr. Chairman.
2 I'd also like to acknowledge the presence of
3 Representative Alan Butkovitz from Philadelphia. Good
4 morning, Alan.

5 I would now like to call upon our presenters.
6 First, I'd like to welcome Mr. Gordon Shearer who is
7 president and CEO of Hess LNG located in New York
8 City.

9 Hess LNG is a joint venture of Poten &
10 Partners and Amerada Hess Corporation, one of the
11 nation's largest producers of LNG. Good morning,
12 Gordon.

13 MR. SHEARER: Good morning, Mr. Chairman,
14 Representatives. Thank you for inviting me here to
15 speak to you today. I have to disclose in all
16 fairness I used to live in the Commonwealth. I spent
17 three years in Pittsburgh, and two of my children were
18 born there.

19 CHAIRMAN ADOLPH: Thank you.

20 MR. SHEARER: So I have a small claim to
21 native tolerance for the state, and it's a pleasure to
22 be back.

23 I also recognize the situation that we're
24 facing on the energy front, not just in Pennsylvania
25 but nationally. And I will focus my remarks briefly

1 today. My testimony is significantly more extensive
2 on the natural gas and specifically liquefied natural
3 gas which is an issue getting increasing attention in
4 this country.

5 Natural gas has been over the last decade or
6 so the preferred fuel in North America, not just the
7 United States but Canada and Mexico because of its
8 environmental characteristics, its relative abundance,
9 and relatively low cost.

10 And we, as an industry, have done a
11 spectacular job of marketing those benefits to
12 consumers in the residential, commercial, industrial,
13 and especially in the power sector.

14 And we've done so well that we've exceeded
15 our own ability to keep up with the demand we have
16 created. The result has been I think as the Minority
17 Chair alluded to a very sharp run-up in natural gas
18 prices which are now double what they were a year ago.
19 They are approximately three times what they were two
20 years ago.

21 And certainly for what I experienced in most
22 of my career, they are running about five times the
23 level the wholesale level has been.

24 Unfortunately, we are running out of domestic
25 alternatives, not totally. But we're having a hard

1 time keeping up with domestic production. And as a
2 result, there is almost a uniform agreement nationally
3 that we are going to have to import natural gas into
4 this country as we will the rest of North America to
5 make up this gap between supply and demand.

6 The results over the last few months has been
7 I think as many of you are probably aware -- and if
8 you're not your constituents will make you shortly
9 aware -- that at the residential level natural gas
10 rates in the Commonwealth have been increased as much
11 as 40 percent over a year ago levels.

12 While this may be of less concern with the
13 better off, it certainly is disproportionate to fall
14 upon the disadvantaged members of society who are on
15 fixed incomes. And as we know, the ability of the
16 federal government or willingness of the federal
17 government to step in and subsidize those homeowners
18 is in question for those renters and others.

19 This also is not good news for people on the
20 producing side of the business. Normally you would
21 think that producers love high prices. In fact, it is
22 not good. We are losing significant parts of our
23 market.

24 The US chemical industry has shed over a
25 hundred thousand jobs in the last three years because

1 of the high natural gas prices, largely relocating
2 production overseas. And those jobs are not coming
3 back to the United States.

4 And while the chemical industry is the most
5 vulnerable, other industries feel some of the same
6 pressures. We, as an industry, can do one of two
7 things. As policymakers, we can try to reduce demand
8 which I heard through conservation and other features
9 or we can try and increase supply.

10 I think it is important to emphasize at this
11 point that I would clearly recognize the role
12 Pennsylvania plays as a producer of oil, gas, and also
13 greatly of coal. This is not an either/or
14 proposition. It is not either coal or natural gas or
15 oil or natural gas. We need some of all of the above
16 both nationally and regionally to address the problems
17 we're facing.

18 Globally we consider North America about a
19 third of the world's natural gas. And we have 4
20 percent of the world's gas reserves. The only way we
21 can tap the world supplies is through the introduction
22 of liquefied natural gas. That is gas that has been
23 chilled, turned into liquid, brought here by tankers,
24 stored, and then redistributed into the nation's
25 pipeline grid in the form of natural gas, the form you

1 are used to seeing the homes and businesses.

2 Unlike oil, natural gas is much more widely
3 distributed throughout the globe. There is no OPEC
4 for natural gas. Many other countries are importers
5 of LNG.

6 Many economies we compete against are heavy
7 importers. Japan, for example, relies on about 15
8 percent of its prime energy is natural gas, all of
9 which arrives in the form of liquefied natural gas.

10 When we look at the United States' situation,
11 only about 2 percent of our gas supply comes in the
12 form of LNG today.

13 That is expected to go to about 25 percent by
14 the year 2025. A lot of that right now is starting to
15 arrive in the Gulf of Mexico. While LNG in the Gulf
16 of Mexico will no doubt help the overall wholesale
17 price in the United States, it won't necessarily do a
18 lot to relieve Pennsylvania of pricing.

19 And by way of example, two years ago in
20 January, January 2004, if you remember there were
21 very, very cold weather conditions here. Natural gas
22 in the Philadelphia market area was selling for ten
23 times the price of natural gas in Louisiana.

24 What that tells us is not only the gas itself
25 was in short supply but the infrastructure needed to

1 get it here is also running very tight, very close to
2 capacity. And it is the combination of those factors
3 that tend to drive prices quite high.

4 Now the best way I would encourage you to
5 think about to relieve that problem is to try to find
6 ways to bring natural gas or LNG as close to the
7 market as possible.

8 One of the advantages that LNG has is it is
9 relatively transportable. It doesn't depend on where
10 the existing gas fields are. We have a lot of
11 infrastructure in the Gulf of Mexico. As many of you
12 know, we are acutely aware from the recent hurricanes.
13 But bringing LNG to the market area as close to the
14 customer as possible does the most in every sense of
15 the word to relieve these price pressures.

16 LNG outside of this region will incur a cost
17 to be delivered into the region. Whereas LNG in the
18 region will in fact have to pay to get out of the
19 region. So that in turn supply in the market area is
20 the way we think to lower prices.

21 Another reason to think about LNG outside, as
22 I said, the majority of the new LNG projects which
23 were developed in the United States were imported in
24 the Gulf of Mexico. I think we saw this summer the
25 impact of placing a refinery in the Gulf of Mexico and

1 what it did to the gasoline prices.

2 There is a real concern at the policy level
3 nationally that if we place all of our LNG facilities
4 in the Gulf of Mexico, some of the similar risks with
5 LNG as we see with gasoline.

6 Now there is LNG coming into the region.
7 There is a terminal in Maryland, Cove Point, at the
8 Chesapeake Bay that delivers some LNG into
9 Pennsylvania. And there are other facilities in
10 potential development, one on the Delaware River down
11 in New Jersey although it's running into legal
12 problems. There's actually a border war between New
13 Jersey and Delaware.

14 That has now gone to the Supreme Court with I
15 think an uncertain schedule and uncertain future
16 attached to it. And of course, there is -- as some of
17 you are aware -- the proposal of taking an existing
18 Gas Works LNG facility that sits in North Philadelphia
19 and convert that into a facility that can import
20 liquefied natural gas directly into the heart of the
21 market area in Philadelphia where it presumably
22 would -- not presumably. I would assert it would
23 lower the price of natural gas and improve the
24 region's security of gas supply and diversity of gas
25 supply.

1 And bringing it in to a municipal utility
2 which I think also many of you are aware has a
3 disproportionate number of customers who have fallen
4 into the disadvantaged category that I mentioned up
5 front.

6 One of the issues I was asked to address as
7 one of the obstacles to expanding the utilization of
8 the importation of LNG and the key number one front
9 and center is safety.

10 LNG is a product that most people are
11 unfamiliar with. They do not pull into the gas
12 station once a week and pump it into the tank of your
13 car.

14 And it is a hydrocarbon. When it is
15 evaporated and turned back into gas, LNG will burn.
16 That's why we value it just like we value gasoline,
17 kerosene, diesel, and oil. But there is a lot of
18 misapprehension around this because of the
19 unfamiliarity.

20 I think it is important here to place in a
21 global context over the last 40 years, this industry
22 had been in the real commercial activity. The
23 industry has delivered worldwide about 45,000 cargoes
24 of liquefied natural gas. All of this without any
25 injury to the public, any environmental damage of any

1 kind.

2 Today there are four LNG terminals in Tokyo
3 Bay, one of the busiest shipping ports of the world.
4 An LNG tanker goes in and out of Tokyo Bay every 20
5 hours delivering liquefied natural gas to Tokyo.

6 When we get into these projects, they evoke a
7 lot of emotion. Particularly people turn to an
8 accident that occurred in Cleveland in 1944 during the
9 war where the use of substandard metals and poor
10 facility design resulted in the tank breaking and
11 spilling LNG onto the ground, through the sewers. And
12 the result was an explosion and fire that killed about
13 125 people in Cleveland and devastated a fairly wide
14 area around the plant.

15 I think we learned from that as an industry.
16 And we have since then adopted a lot of protective
17 measures and much more rigid regulatory requirements
18 that have avoided any kind of loss of life like that
19 since that time.

20 Let me cover why we're at that point. One,
21 we have very conservative regulations both in this
22 country and internationally. Very close oversight by
23 the federal regulatory industry, the US Department of
24 Transportation, and the United States Coast Guard.
25 These guidelines assume worse case scenarios. They

1 assume that people make errors and failures. And they
2 are designed to protect the public in those worst case
3 scenarios.

4 The other second leg of why we can do it
5 safely is the design of the facilities and the ships
6 themselves. These are probably some of the strongest,
7 most robustly designed facilities for their purpose on
8 the planet.

9 The storage facility for LNG is comprised
10 generally of an inner tank made out of a special
11 cryogenic or cold resistant metal surrounded by
12 several feet of insulated material to keep the LNG
13 cold. And in the case of most terminals now in
14 construction in the United States and certainly the
15 case ironically in Philadelphia of a very thick layer
16 of reinforced concrete around all of that which acts
17 as a barrier.

18 In fact in many of these cases, these
19 facilities are designed to withstand the impact of an
20 aircraft flying into the side of them.

21 On the shipping side, the ships are double
22 hull ships and double-deck ships, again, with a large
23 separation of inner and outer hulls and then several
24 feet of insulation around cargo containment.

25 Another thing worth noting is that LNG is not

1 transported under pressure. It is stored as a liquid
2 at atmospheric pressure so when it does leak or spill,
3 it doesn't expand as the pressure releases.

4 Is there a risk to the public in any of this
5 activity? Yes, there is. And I'm afraid as a country
6 and certainly as a public, we have a hard time
7 assessing risk on an objective basis.

8 However, I think that we, as an industry and
9 as a government, have taken large steps to identify
10 what the objective risks are associated with this and
11 take the appropriate measures.

12 So for example when LNG tankers arrive in US
13 ports, they are subjected to a severe set of
14 inspection and safety criteria and often are escorted
15 through the waterways by Coast Guard law enforcement
16 vessels to deter anyone who means harm. On the
17 shore-based facilities side, there is a rigid
18 inspection regime and the facility is subject to
19 frequent and ongoing inspection.

20 And I think the results of the safety record
21 of this industry both nationally here and globally
22 speak for themselves.

23 Public acceptance I think is the biggest
24 issue on that. And in that respect I would say as
25 members of a public policy, the best service you can

1 do from a policy perspective perhaps is to find a way
2 to let the processes when these processes, regulatory
3 processes, start take their course. That is allow the
4 regulators, allow the experts time to make the
5 assessments, time to analyze the specific projects,
6 the risks involved. The regulatory processes are
7 unfamiliar to most people and most members of the
8 public. Most people have never heard of the Federal
9 Regulatory Energy Commission. And they are lengthy.
10 They are designed for political and public input.

11 Unfortunately, projects such as Philadelphia,
12 the response very often is give us all of the answers.
13 Now the industry will not have all of the answers
14 until towards the end of their cycle. And I think I
15 would say in Philadelphia's case, you're lucky you see
16 Mayor Street take the position that if it is going to
17 work in Philadelphia, perhaps we should let it take
18 its course and see before we rush to judgment.

19 See, in fact, what the objective benefits are
20 going to be and the risks are going to be and whether
21 they will balance or they are prepared to take some of
22 the risks in order to derive benefits.

23 So on behalf of our part of the industry, if
24 any of these things do materialize in Pennsylvania or
25 in the region, I encourage you to support the

1 regulatory process, to participate in it, and to
2 encourage your constituents to do the same, to try to
3 take the time to understand the factual based
4 conclusions. And I think the facts of this industry
5 as I mentioned on a global basis lend itself to a
6 very, very strong and positive operational record.
7 And I think the benefits of bringing more supply in an
8 energy constrained world in an environmentally
9 beneficial way speaks for themselves. Thank you very
10 much.

11 CHAIRMAN ADOLPH: Thank you, Gordon. I'd
12 like to acknowledge the presence of Representative
13 Wansacz. And also in the audience today we have
14 Commissioner Bill Shane with the Pennsylvania PUC and
15 State Senator Connie Williams.

16 Representative Rubley has a question.

17 REPRESENTATIVE RUBLEY: Thank you, Mr.
18 Chairman. And thank you, Mr. Shearer, for your very
19 informative testimony this morning. I think you did a
20 good job of pointing out what the need is as well as
21 the safety and some of the problems that we're having
22 in terms of public acceptance.

23 But I've been following with great interest
24 the proposal on the Delaware River and the process
25 and, you know, I've noticed the opposition that has

1 come up.

2 And I would think that now more than any time
3 in the past, it is time for the industry to try to get
4 out the other side of the story and, you know, do more
5 with your public information. Because based on this
6 winter, it is almost unprecedented in terms of the
7 cost people are going to be paying. It is a serious,
8 serious concern and letting people know about this
9 shortage. We have to do that additional work now.

10 And it should have been done before. But if
11 we're ever going to move forward -- so I really wanted
12 to comment more than a question. But maybe the
13 question is, is the industry moving forward? I mean
14 certainly being here today is a big help. But what
15 else are you doing to try to get the accurate
16 information out?

17 MR. SHEARER: Well, ma'am, there are a number
18 of initiatives. And it is a very good point you
19 raised. There are a number of initiatives underway.

20 The federal government, the Department of
21 Energy has invested a significant amount of time on
22 what is called the National Association of Regulatory
23 Utility Commissioners of which Commissioner Shane is
24 very, very familiar. And they developed a series of
25 informational educational materials on LNG that state

1 regulators can use for purposes of education.
2 Likewise, the Federal Energy Regulatory Commission has
3 put out a lot of information and material on the web
4 site.

5 And I think frankly we would welcome your
6 input as political leadership with your constituents
7 as to what is the most effective way of addressing
8 that.

9 Because I think every circumstance is
10 different and everybody has a different set of
11 concerns. And I think just as the pressure of these
12 prices this winter will cause us to feel a lot of
13 pressure to do things, we also shouldn't rush into
14 doing things that we will later regret any more than
15 we should not do things that we should do to benefit
16 the public in general.

17 And I think frankly one of the key problems
18 on these types of facilities -- and it is true of many
19 energy facilities -- is the impact of the facility
20 itself is very local and the benefit is spread over a
21 much wider range of the population.

22 So as the project in Delaware goes forward,
23 there are a couple communities that will feel the most
24 direct impact. But the benefit will be a regional
25 benefit to Pennsylvania, New Jersey, and Delaware. So

1 that's one of the intentions.

2 As for the industry, while I regret to say
3 this being a member of that, but frankly most of the
4 public doesn't believe what they hear from the energy
5 industry.

6 Our credibility is -- I'm not sure quite
7 where it fits on the spectrum of public credibility,
8 but it is towards the low end of the range. It
9 doesn't mean we don't try. It doesn't mean we're not
10 willing to communicate and be very frank about it. I
11 spend a lot of my time at meetings like this and local
12 community meetings, town meetings in Massachusetts and
13 other places.

14 We just -- we're trying our very best to get
15 the message out. It is a complicated one. It is very
16 easy for people who don't want these facilities to
17 talk about nuclear bombs and dramatic kinds of
18 stories. The reality -- the harsh reality is much
19 more technical and most people don't have the patience
20 to listen. So any advice, help, guidance you can give
21 us would be most appreciated.

22 REPRESENTATIVE RUBLEY: Maybe just one
23 comment if I may, Mr. Chairman. More work for the
24 journalists who are covering the stories, certainly
25 covering the costs. We're reading every day about the

1 increase in the cost. And you could work with them to
2 say yes, these are the costs today but here are some
3 options that maybe down the road can offset that.
4 That might help getting the word out to the public.

5 MR. SHEARER: Absolutely. And I think you --
6 I commend you. In Providence, Rhode Island, the
7 Providence Journal, the newspaper of record there, has
8 actually been very supportive on the editorial side in
9 exactly that dimension. So there is a very good
10 example of where working with the press works. Thank
11 you.

12 REPRESENTATIVE RUBLEY: Thank you, Mr.
13 Chairman.

14 CHAIRMAN ADOLPH: We have a very good working
15 relationship with the print media here in
16 Pennsylvania. Representative Hutchinson.

17 REPRESENTATIVE HUTCHINSON: Thank you for
18 your testimony. I have a bigger question about -- it
19 astounds me that it is cheaper to bring LNG into a
20 port and all that it entails than to use existing
21 natural gas.

22 But be that as it may, I wanted to focus on
23 the part of your testimony that you talked about the
24 loss of jobs in the petro -- the chemical industry
25 because of natural gas. How would that -- why would

1 those jobs leave America if the price of natural gas
2 is -- I mean isn't the price of natural gas high
3 everywhere, and why would that price mean the loss of
4 jobs permanently? I don't understand how that works.

5 MR. SHEARER: That's a great question. Let
6 me give you a few minutes and then I'll also refer you
7 to a couple of places for additional information on
8 this.

9 Most of the energy intensive petro chemical
10 industry is located on the Gulf of Mexico for very
11 obvious reasons. We have Texas and Louisiana that is
12 the gas producing region. Generally, that's where gas
13 prices have been cheaper. That is also true in
14 eastern Pennsylvania and West Virginia. There were
15 significant petro chemical developments for the same
16 similar reasons.

17 In the US because of lack of access to
18 imported natural gas, what has happened is we've got
19 in this tight situation. Our price has climbed
20 dramatically higher than the rest of the world.

21 So for example the CEO of Dow Chemical, the
22 largest basic chemical producer in the country,
23 testified in front of Congress two months ago. His
24 testimony is available on Dow's web site as well as
25 the American Chemistry Council. They were building

1 their next chemical plant in Germany of all places,
2 not in the United States which you and I would
3 immediately say doesn't make any sense.

4 It turns out that the price of natural gas in
5 Germany because they can tap into Russian gas fields
6 is half the price they expected to pay in Texas. So
7 that's one thing.

8 We're looking at prices here that are \$14
9 wholesale per mcf which is what the chemical industry
10 is looking at. If you go today, Japan is importing
11 around \$6. Europe is importing -- outside of the UK
12 which has created its own little energy crisis but the
13 rest of Europe is running around \$6 or \$7 on wholesale
14 prices. So the rest of the world is running at about
15 half the level we're running at.

16 And unless we do something to expand our
17 capacity to import, we can't tap into this global
18 marketplace and bring our prices into competitive line
19 with our industrial -- the nations we're competing
20 industrially.

21 And actually who's been extremely -- going
22 back to since really mid 2003, Alan Greenspan
23 testified several times one way to bring prices down
24 and deal with the competitiveness, we have to get into
25 the global gas market. And he's also clearly

1 identified that public resistance in environmental and
2 safety considerations are an obstacle to doing that.
3 So it's been out there.

4 We're really seeing the impact dramatically.
5 And it's also been ways you wouldn't even think about.
6 Agriculture, 80 percent of the cost of fertilizer is
7 the price of natural gas. So farmers are being
8 hammered by fertilizer prices. And that's going to
9 translate in an inflation in food prices.

10 REPRESENTATIVE HUTCHINSON: Thank you.

11 CHAIRMAN ADOLPH: Thank you, Gordon, for
12 your presentation. Our next presenter will be Mr.
13 Steve Rhoads. Steve is the president of Pennsylvania
14 Oil and Gas Association. The Association represents
15 the Independent Oil and Gas Producers throughout
16 Pennsylvania. Good morning, Steve.

17 MR. RHOADS: Good morning, Chairman Adolph,
18 Chairman George, members of the committee. I'd like
19 to thank you all very much for this opportunity. Our
20 presentation will be significantly more parochial than
21 Gordon's.

22 I'm here to focus on Pennsylvania's oil and
23 gas supplies and contributions we make to the supply
24 side of things.

25 Pennsylvania's exploration and production

1 industry produces enough natural gas each year to meet
2 about 20 to 25 percent of our state's total demand.
3 Pennsylvania consumers use about 650 to 660 billion
4 cubic feet of natural gas each year. We in
5 Pennsylvania produce about 160 billion cubic feet of
6 gas a year. And that gas comes from about 43,000
7 wells that are located in 31 of our counties.

8 With the increase of price of natural gas --
9 it's been up about 350 percent over the last 8
10 years -- we have seen a great deal of interest in new
11 drilling in the state.

12 In 2005 with gas prices averaging \$10.35,
13 \$10.30 a thousand cubic feet, producers will seek
14 permits for about 5300 new wells, and they will drill
15 approximately 60 percent of them. That's an all time
16 high since 1984 when permit fees were first
17 established for well permits.

18 (Fire alarm sounded.)

19 CHAIRMAN ADOLPH: I believe we can continue.

20 MR. RHOADS: Thank you, Mr. Chairman. Almost
21 all of the drilling activity that goes on in this
22 state is focused on mature shallow natural gas fields.
23 Those fields account for the lion's share of our
24 production.

25 Pennsylvania -- in over the course of our

1 history here, Pennsylvania has produced about 11
2 trillion cubic feet from these fields. And we believe
3 that we have an estimated -- we have an estimate of
4 2.4 trillion feet of crude reserves remaining in the
5 ground. And those reserves will be the primary target
6 for our natural gas production industry for the
7 foreseeable future.

8 But there are other prospects out there.
9 Some potentially significant undeveloped and
10 undiscovered reserves in Pennsylvania that could play
11 a very substantial role in the supply side of this
12 country.

13 Pennsylvania Geological Survey estimates that
14 there is approximately 2.7 trillion cubic feet of
15 marketable -- recoverable, marketable methane in
16 Pennsylvania's coal seams.

17 Another significant potential resource lies
18 between 10- and 18,000 feet in the Trenton Black River
19 formation. Wells built in this trend are among the
20 highest producers on the east coast, some of which
21 individually have reserves of 20 billion cubic feet.

22 The booklet that you have in your packet is
23 something that was recently published by the
24 Interstate Oil and Gas Compact Commission. It
25 discusses the natural gas potential in the Appalachian

1 Basin of which Pennsylvania is a component and also
2 the Illinois Basin.

3 As we -- as I think we all know and
4 understand, the price of energy in this country,
5 particularly natural gas, is rising and is expected to
6 stay high for quite a long time. This is primarily
7 because of the extremely tight balance between energy
8 supply and demand.

9 So we, as an industry, believe that it is
10 extremely important that we take advantage of our
11 indigenous energy wealth and maximize the production
12 of our natural gas and crude oil reserves to hopefully
13 add some stability to the market and help ease the
14 price of utilities. We're not a big player in the
15 industry by in large. But every molecule of gas,
16 every drop of oil does count in the balance.

17 Now when you consider the amount of well
18 drilling that is going on in the state -- it is very
19 high -- it's obvious that the regulatory climate in
20 the state for oil and gas production is pretty good.

21 But nevertheless, there is some room for
22 improvements. And what I'd like to do is go over a
23 few of the issues that are on our plate right now so
24 you understand some of the things we're concerned
25 about.

1 With the increase in interest in new
2 exploration in Pennsylvania, producers are
3 encountering a problem that relates to their ability
4 to consolidate large tracts of oil and gas leases to
5 enable them to do the deeper exploration work.

6 What happens is when you go out and try to
7 locate title to oil and gas, you find times where you
8 can't identify it or you can't locate an owner of some
9 of those interests.

10 Title to oil and gas estates in this state
11 have been severed from the surface title as long as
12 you know it is a hundred or more years. And they get
13 passed down through wills and trusts and occasionally
14 they get lost. And even in the most diligent title
15 search, you can't find them all.

16 But what happens here is without a clear and
17 complete title to all of the interests that you need
18 to lease, operators are very reluctant to invest their
19 capital in new exploration and development because of
20 the potential liability they face if an unknown or
21 unlocated owner surfaces and lays claim to the oil and
22 gas. As a result, these interests lie dormant and
23 unproduced.

24 Fortunately there is a very simple way to
25 address this issue. Senate Bill 594 is a measure that

1 we created in the state law, the Dormant Oil and Gas
2 Act. It would authorize a producer who after a
3 diligent title search has found a number of leasehold
4 interests that he can't identify the owners of to go
5 to the local court and ask the court to place those --
6 to place the title of those interests in trust, in a
7 third-party trust, and allow the trustee then to
8 negotiate leases for those interests under the
9 protection of the court.

10 Once the operator has consolidated the title
11 to all of the estates he needs to control to do his
12 development work and he explores the development of
13 natural gas or crude oil, he would be responsible to
14 pay the royalty interest or other payments that would
15 be due to the owner, the unknown or unlocated owner,
16 into the trust. And the money in that trust would
17 then be managed as normal unclaimed property would
18 under Pennsylvania state law.

19 This bill has been modeled after laws that
20 are on the books in a number of other states, and it
21 is a very workable solution to allow the development
22 of the state's indigenous oil and gas while protecting
23 the property rights of the oil and gas owners that
24 can't be located or identified.

25 Since the Senate passed this bill unanimously

1 in June, it now sits in your committee. And we would
2 strongly urge you to bring the bill forth for
3 consideration and action.

4 Another issue is stranded natural gas.
5 Western Pennsylvania has considerable natural gas
6 reserves. But unfortunately, some of that production
7 can't get to the market because of problems associated
8 with the pipeline systems operated by local
9 distribution companies in producing areas.

10 Southwestern Pennsylvania for example,
11 certain low pressure distribution systems operated by
12 Equitable Resources cannot accept gas from new wells
13 in Greene, Fayette, and Westmoreland counties because
14 they are very old and not very well maintained.

15 Systems leak as much as 10 to 15 percent of
16 new higher pressured gas that goes into these lines.
17 Rather than repair them, the distribution company
18 would impose a line loss charge to the producer to
19 discount that 10 or 15 percent lost gas because of
20 leakage.

21 Columbia Gas of Pennsylvania for years has
22 refused to accept gas produced in Pennsylvania.
23 Instead I believe all of the gas in that system comes
24 from interstate transmission lines.

25 We don't know why Columbia Gas of PA will not

1 take local gas. But we do know that their policy
2 strands large volumes of indigenous production located
3 in Westmoreland and Fayette County.

4 In Mercer County new production can't get to
5 market because of the lack of unavailable pipelines
6 serving the national fuel gas transmission and
7 distribution system.

8 These problems can and should be corrected.
9 And we would urge the General Assembly to consider
10 offering the LDCs some kind of incentives to improve
11 and modernize their infrastructure and expand systems
12 to ensure that local production has an opportunity to
13 get to market.

14 Another area of concern relates to potential
15 conflicts between the developers and producers of
16 conventional natural gas and the developers and
17 producers of coalbed methane.

18 In Act 214 of 1984, The Coal and Gas Resource
19 Coordination Act, there are provisions for 1,000-foot
20 spacing requirement between all gas wells that
21 penetrate workable coal.

22 The vertical spacing limit has the potential
23 to stifle the development of conventional gas reserves
24 that are located within a thousand feet below the seam
25 containing producible coalbed methane. If the coalbed

1 methane operator puts a well in, I will not be able to
2 drill a well into producing formations that are within
3 a thousand feet below that well.

4 Likewise, the horizontal spacing limitation
5 may do some damage to the coalbed methane operator's
6 ability to produce his resource by drilling a well --
7 a conventional gas well through that coal seam.

8 This unfortunate conflict I don't believe was
9 seen back when the law was passed in 1984. We have
10 initiated a dialogue with the Pennsylvania Coal
11 Association to see if we can come up with a mutually
12 acceptable resolution to this problem.

13 If we do, I would hope to come to you
14 sometime in the near future with a proposal to rectify
15 this situation. This correction would require an
16 amendment to Act 214.

17 Two other issues I'd like to bring to your
18 attention related to the issues that are pending
19 before the Department of Environmental Protection.

20 When Congress passed the Clean Water Act back
21 in 1970, they exempted uncontaminated stormwater
22 runoff from the oil and gas extraction from the NPDES
23 permit requirements.

24 Because of some controversies over the scope
25 of that exemption that EPA created when it promulgated

1 the rules when it implemented that exemption, it
2 became clouded and confused. And EPA essentially
3 bifurcated the industry into the oil and gas
4 extraction industry and the construction industry.
5 And when we had earth disturbance activities on site,
6 we were subject to the permit. But when we were
7 simply acting as the oil and gas industry, we weren't.

8 So in Pennsylvania -- and through regs and in
9 Pennsylvania, we have to be subject to the stormwater
10 permit for construction activities since the law and
11 regulations were passed.

12 We've objected to it all along because we
13 didn't think that EPA was honoring the full scope of
14 exemption that Congress granted us.

15 But that debate has largely been academic
16 because the earth disturbance permit professional is
17 five acres. If you disturb five acres or more, then
18 you're subject to the permit. If you disturb five
19 acres or less -- less than five acres, you're not.

20 Most of our activities don't disturb five
21 acres of land when we involve our building access road
22 construction. All of this changed about three or four
23 years ago when EPA came out with a new rule to lower
24 the professional permit from five to one acre.

25 This has the potential of bringing thousands

1 of well sites into the permitting system. Because of
2 the problem and the way EPA promulgated the reg, they
3 postponed the applicability to the oil and gas
4 industry to do a further economic analysis. All this
5 was rendered moot in August when Congress enacted the
6 Energy Policy Act of 2005.

7 In that Act, it included a -- they clarified
8 that the statutory permit exemption for oil and gas
9 exploration and production does, in fact, cover
10 construction related to stormwater runoff.

11 DEP regs have always been in some areas more
12 stringent than the federal program. Right now DEP is
13 looking at this statutory exemption. And we do not
14 know how they will respond.

15 The exemption is somewhat controversial
16 within the department and we understand they are
17 looking at different alternatives to address them.

18 Our concern is that if the department decides
19 to impose the NPDES permit, we are going to run into
20 some very substantial permitting delays.

21 DEP is already dealing with a heavy permit
22 workload in Northeastern Pennsylvania because of the
23 new federal rule. On October 24th, it issued a press
24 release announcing they had to shift staff and
25 resources to clear up a large permit backlog in

1 Lehigh, Northampton, Monroe, and Pike counties because
2 of these new stormwater permit requirements.

3 Given the substantial increase in oil and gas
4 permitting in Pennsylvania, we have every reason to
5 believe that we will run into similar problems if the
6 department decides to ignore the exemption and require
7 the permit.

8 We have urgently -- I'm sorry. We have urged
9 the department to honor the federal permit and we are
10 very anxiously awaiting its response.

11 The final issue that I would bring to your
12 attention relates to the Oil and Gas Act and bonding
13 for oil and gas. In 1984 when the Act was
14 established, it created a penalty bond for operators
15 who fail to satisfy their water supply replacement,
16 their well site exploration, and their plugging
17 responsibilities.

18 The law set the bond amount at \$2500 for
19 individual wells and \$25,000 for a blanket bond for
20 ten or more wells. It also gave the authority to
21 raise bond amounts every few years to reflect the cost
22 that DEP would incur in plugging orphan or abandoned
23 wells.

24 Dep never raised the bond amounts in 20 years
25 and now they are looking at it. And the numbers we're

1 seeing are huge from -- relatively speaking.

2 The department is looking at a 140 percent
3 increase in a single well bond, taking it from \$2500
4 to \$6,000 and a blanket bond from \$25,000 to \$150,000.

5 These figures are so high because DEP's
6 plugging costs are about six times higher than the
7 industry's.

8 The department has also calculated this bond
9 increase on the assumption that it will ultimately be
10 responsible for plugging every well in the state even
11 though the department has forfeited only eight well
12 bonds in the 20 year history of the program. And
13 those eight well bonds only cover about 260 wells.

14 We don't believe this increase is necessary.
15 We are very concerned that the increase will force
16 small independent operators to prematurely abandon
17 their wells.

18 In certain parts of the state in Bradford and
19 McKean County for example where you have the American
20 Refinery Groups refinery, this is the last refinery in
21 the state that exclusively uses Pennsylvania grade
22 crude oil, Appalachian based oil. 60 percent of the
23 crude oil that goes into that refinery comes from
24 Pennsylvania small well producers.

25 This bond increase we feel fairly certain

1 could wipe out a substantial amount of profits. It
2 would make them set aside a substantial sum of money
3 in perpetuity. And it may very well force premature
4 abandonment of those wells that supply that refinery.
5 That would have a substantial impact on the refinery
6 and also on Bradford, the community of Bradford.

7 The conflict we're facing with the department
8 over this bond is purely a result of what we believe
9 is a poorly drafted law. Instead of imposing what is
10 in essence a prepaid penalty on the assumption that
11 producers will not live up to their statutory
12 obligations, it requires we set aside in perpetuity
13 what amounts to about \$45 million.

14 The Oil and Gas Act should have structured
15 its surety requirement as a performance bond,
16 something that is easily attainable through the
17 insurance industry, something that is easy to obtain,
18 easy to be paid for, and easy to enforce.

19 We've talked to the management in the
20 department about this issue. The department has
21 acknowledged to me that the structure of the bond
22 instrument is flawed.

23 And they are open to the possibility of
24 amending the law to try to fix the situation and make
25 it a more workable type of instrument. We have not

1 begun any formal discussions on the language, but we
2 hope to do so. And if we are able to come to some
3 kind of agreement, we may have to come to you and ask
4 you for a possible amendment to the oil and gas bill.

5 There are a few more issues that I have in my
6 written testimony. I know I'm short on time here, so
7 I will stop. I do want to -- one thing though, I gave
8 you a DVD. The DVD is produced by Penn State Public
9 Television. It was funded by the Pennsylvania
10 Stripper -- I'm sorry, by the Stripper Well Consortium
11 which is a joint venture between industry and Penn
12 State and the DOE.

13 It is an excellent piece of work. It is
14 about a half an hour program. It talks about
15 Pennsylvania and New York's marginal oil wells and the
16 value that they contribute to the communities where
17 they are located.

18 I urge you to take a look at that DVD. It is
19 very well done. And it gives you some interesting
20 insights into the nature of the old oil industry of
21 the state. Thank you very much.

22 CHAIRMAN ADOLPH: Thank you, Steve. I'd like
23 to acknowledge the presence of Representative Yudichak
24 of Luzerne County and Representative Gib Armstrong of
25 Lancaster County and Representative Kate Harper of

1 Montgomery County.

2 As you can see, we have members coming and
3 going at all times. There are various meetings that
4 they have to be at. So presenters, it is not your
5 information that they are not interested in. It is
6 just they have to be at these other meetings.

7 Representative Armstrong has a question for
8 you, Steve.

9 REPRESENTATIVE ARMSTRONG: Thank you, Mr.
10 Chairman. And thank you, Mr. Rhoads. Mr. Rhoads, if
11 you could talk to us in a little bit more detail about
12 the well bonding situation.

13 If you could maybe spell out, give us a
14 specific example or a hypothetical example of what
15 DEP's proposed changes will mean to a family that has
16 a well and how that might impact the community.

17 MR. RHOADS: Well, I did allude to that a
18 little bit when I talked to Representative Causer's
19 district's residents about the problem with ARG.

20 But we did some research into the small
21 producers to see exactly what is going on in general.
22 In the aggregate, the typical small operator oil
23 producer in Northwestern Pennsylvania has about 25
24 wells. Those wells are marginal, very marginal. They
25 produce less than -- on average less than 30 gallons

1 of oil a day.

2 Even in today's inflated prices, you're
3 talking about \$150,000 gross income a year. Under
4 DEP's proposal, \$150,000 would have to be set aside in
5 perpetuity as a prepaid penalty for potential
6 violations of the Oil and Gas Act. We're talking
7 about a whole year's income from one operator for
8 example.

9 How am I going to -- I'm going to have a very
10 difficult time keeping things going economically. So
11 I'm going to be forced to seriously consider
12 abandoning my wells and plugging them which is going
13 to take a significant asset off the table.

14 And once a well is built in the ground and if
15 you have new technology that comes along some day that
16 may help you improve your production, the well is
17 still there. Once you plug and abandon that asset, it
18 is gone forever. You may never get back into that --
19 you may never economically go back into that reserve.
20 So that's the kind of impact we're talking about.

21 It's mostly the larger companies will be able
22 to handle it. The larger independents who are out
23 there working in the gas fields in Pennsylvania will
24 be able to handle bonding. But it is really small
25 independents who are going to have to suffer the

1 biggest impact.

2 REPRESENTATIVE ARMSTRONG: Thank you.

3 CHAIRMAN ADOLPH: Thank you, Steve, for your
4 testimony. Next up is Mr. George Ellis. George is
5 the president of the Pennsylvania Coal Association.
6 Good morning, George.

7 MR. ELLIS: Good morning, Chairman Adolph,
8 Chairman George, members of the committee. Thank you
9 for allowing us this opportunity to provide our
10 perspective on the state energy plan.

11 Due to timing restraints, I'm going to breeze
12 through my testimony and ask that it be included in
13 the record in toto.

14 As the state and country's most affordable,
15 reliable, and abundant fuel source, coal is well
16 positioned to play a significant role in helping to
17 secure our energy future and as our best hedge against
18 dependence on imported energy.

19 We have in terms of an estimated reserve base
20 496 billion tons distributed nationally among 31
21 states with 27 billion tons in Pennsylvania which is
22 basically enough to last at least the next 250 years.

23 We are the fourth largest coal producing
24 state producing about 72 million tons a year with a
25 workforce of almost 7,000 employees. Coal has been

1 and will continue to be a major fuel of choice for the
2 electric generation.

3 50 percent of the nation's electricity is
4 generated by coal. And coal accounts for 56 percent
5 of the total amount of electricity produced in
6 Pennsylvania last year.

7 Simply put, there is no other energy source
8 that produces electricity in such a quantity at such a
9 low cost for many years in the future.

10 In addition, coal is by far the least
11 expensive fossil fuel. Electric generation averaging
12 less than one-third the price of gas -- one-third the
13 price of oil and one-quarter the price of gas.

14 Although coal is well positioned to play a
15 vital role in providing consumers with reliable and
16 competitively priced energy, we do have some problems
17 that could lessen or impede coal uses.

18 In terms of air quality, as I said, coal is a
19 primary source for generating electricity. As you
20 would expect, the steam coal market is by far the
21 largest customer for Pennsylvania coal.

22 About 70 percent of Pennsylvania's annual
23 coal production goes to the electric utility sector.
24 Of the 43 million tons of coal consumed by
25 Pennsylvania's electric utilities last year, 34

1 million tons were mined in Pennsylvania, about 50
2 percent of our total production.

3 Clearly preservation of this market is
4 essential to the continued economic viability of
5 Pennsylvania coal mines.

6 PCA supported the Pennsylvania law that
7 deregulated the industry because we believed that
8 competition would place a premium on
9 cost-effectiveness and reliability. As generation
10 becomes more and more competitive, the future would
11 belong to the lowest cost fuel which in any scenario
12 would be coal.

13 However, competition depends on a level
14 playing field on which various fuel options can
15 equally compete. Unfortunately, this is not always
16 the case given the -- particularly given the
17 unevenness and uncertainty surrounding air quality
18 regulations.

19 Pennsylvania's air quality standards are more
20 onerous than standards adopted by other states or
21 nationally uniform standards. It can make
22 Pennsylvania coal more expensive to burn because of
23 compliance costs or impossible to burn because of lack
24 of compliance with the tougher rules, thereby
25 destroying coal's competitiveness in the customer

1 choice electricity market.

2 A utility's option to comply with unilateral
3 state regulatory action are to switch fuels, buy
4 compliance coal from out-of-state mines or purchase
5 coal based electricity generated in other states.

6 The consequences of any of these actions is
7 the premature closing of Pennsylvania's coal-fired
8 plants, particularly those older units, and the
9 potential loss of the Pennsylvania coal industry's
10 major customer base.

11 It is therefore essential that, absent a
12 compelling state-specific need, the air quality
13 standards Pennsylvania utilities must meet are the
14 same as or substantially equivalent to federal
15 mandates governing all utilities. Anything less would
16 bias a significant part of the steam coal market
17 against Pennsylvania coal.

18 A case in point is the mercury rule. The
19 uncertainty about mercury emission control technology
20 combined with concerns over the potential for more
21 stringent regulations imposed by the state have left
22 Pennsylvania generators unsure of where to invest for
23 compliance.

24 Under the federal mercury rule, emissions
25 must be reduced by 70 percent nationwide by 2018.

1 Since Pennsylvania coals have a higher mercury
2 content, to meet the federal rule Pennsylvania power
3 plants are required to reduce emissions by 86 percent,
4 requiring a 94 percent removal of mercury in the coal.

5 DEP is considering a regulation that requires
6 a 90 percent reduction in mercury emissions by 2009,
7 assuming the regulation is finalized by 2006.

8 Ironically, it is not the stringency of the rule that
9 is in question but the timing. The timing issue,
10 however, presents a serious risk for continued use of
11 Pennsylvania coal.

12 Pennsylvania coals are high in mercury
13 providing an incentive to utilities to switching to
14 non-Pennsylvania coals or natural gas.

15 Attachment I to my testimony is a chart that
16 provides a statistical distribution of coal mercury
17 content by state for the major producing states.

18 It shows that Pennsylvania coals have the
19 highest mercury concentration in pounds per trillion
20 BTUs of all coals in the eastern United States and
21 twice as much on average as coals produced in West
22 Virginia and Kentucky, our leading competitors.

23 Any attempt by the state to impose its own
24 mercury regulation that accelerates the federal law
25 combined with the expected mercury reductions in SO₂

1 and NOx emissions required under the Clean Air
2 Interstate Rule will force utilities to move towards
3 coals that are lower in mercury and sulfur content.
4 Those coals just happen to be plentifully available in
5 West Virginia, Kentucky, and states in the west. This
6 is not mere conjecture.

7 At the last meeting of Pennsylvania Mercury
8 Rule Workgroup, a number of Pennsylvania utilities
9 acknowledged plans to conduct test burns on powder
10 river based coal, coal essentially produced in
11 Wyoming.

12 To further complicate matters,
13 mercury-specific control technology, particularly its
14 use with high sulfur eastern bituminous coals is still
15 work in progress.

16 Accordingly, PCA makes the following
17 recommendations concerning mercury regulations:

18 One, federal mercury content is a stringent
19 rule for Pennsylvania and very protective of public
20 health.

21 Two, DEP has not made a compelling case for a
22 state regulation. We suggest that Pennsylvania move
23 forward to implement CAMR with interstate trading and
24 continue to promote the development of
25 mercury-specific coal technology.

1 Finally, if DEP continues to pursue a state
2 regulation for mercury, PCA strongly recommends
3 intervention by the state legislature to consider the
4 prudence of unilateral state action.

5 Continuing innovation in technology
6 development is a key to reducing our dependence on
7 foreign sources.

8 Developing the proper suite of technologies
9 will allow the United States and Pennsylvania to fully
10 utilize its largest domestic energy source and put us
11 on the path towards greater energy independence.

12 With enactment of the Advanced Energy
13 Portfolio Standard, incentives are now in place in
14 Pennsylvania to promote coal waste electric
15 generation.

16 We are now offering or suggesting that the
17 legislation consider financial inducements to two
18 other types of technologies.

19 One is the Edge Initiative. On November
20 28th, Governor Rendell unveiled a set of financial and
21 regulatory incentives designed to encourage
22 construction of advanced coal gasification technology
23 like IGCC units. Those incentives are summarized in
24 the second attachment to my testimony.

25 Dubbed the Edge Initiative, it targets 8

1 percent of Pennsylvania's coal fired capacity that
2 comes from power plants that are smaller and older.

3 Those are plants most at risk at being
4 shutdown because of remaining economic value would not
5 justify the cost of installing compliance control
6 technology. We support the Edge proposal as a way to
7 diversify a fuel portfolio and recommends that the
8 legislature review the merits of the incentive.

9 As mentioned previously in my testimony, the
10 CAIR Rule will require further reductions in SO2 and
11 NOx requirements.

12 To promote the use of Pennsylvania coal and
13 encourage utilities to upgrade their existing fleet of
14 coal-fired plants to meet these additional target
15 reductions, we recommend that the committee consider
16 legislation that would provide electric utilities with
17 a \$3 per ton tax credit for each ton of Pennsylvania
18 coal burned by a coal-fired power plant.

19 To qualify, the company claiming the credit
20 must be based in Pennsylvania and a compliant facility
21 that is a clean coal technology must be used in
22 conjunction with the generator. This will also help
23 level the playing field for Pennsylvania coal
24 operators since similar legislation has already been
25 enacted in Virginia, Maryland, and Ohio. Attachment

1 III contains language of this bill. That language was
2 patterned after the Ohio law.

3 PCA has been working with Representatives
4 Stevenson and Surra, respective Republican and
5 Democratic Chairs of the Subcommittee on Mining, in
6 developing amendments to Pennsylvania's statute. And
7 Attachment IV contains a summary of those proposed
8 amendments.

9 The centerpiece of the amendments is a
10 proposal to spur re-mining of abandoned mine land
11 sites by providing a \$2 per ton tax credit for each
12 ton of coal removed from the re-mining areas. We hope
13 to have a bill ready for introduction early next year
14 to bring before this committee.

15 And in the field of mine safety while
16 Pennsylvania's underground coal mines remain among the
17 safest in the country, there is always room for
18 improvement.

19 The three primary stakeholders involved in
20 mine health and safety -- industry, labor and state
21 regulators -- all agree that the Commonwealth's '61
22 mine safety law needs to be amended. The problem,
23 though, is each has its own version of how it should
24 be done.

25 PCA's blueprint would maintain provisions of

1 the state law that are Pennsylvania specific and
2 replace the other provisions with the Federal Part 75
3 standards.

4 DEP recently submitted its proposed rewrite
5 of the safety law in the form of House Bill 2229 and
6 Senate Bill 949 which were introduced by
7 Representative Bastian and Senator Kasunic
8 respectively.

9 We oppose the DEP proposal for a number of
10 reasons. Among other things, it would continue the
11 inconsistencies and duplication between the state and
12 federal program and would broadly expand the authority
13 of the Department to issues in which it lacks
14 expertise and without providing any measure of
15 accountability.

16 We will provide the committee with a more
17 detailed explanation of our objections when our
18 analysis is complete. In the meantime, we have been
19 working with the United Mine Workers to try to reach a
20 consensus on amendments of the safety law.

21 We have adopted a two phase approach to this
22 exercise. First, we initially focused on issues where
23 an agreement between the two parties would be most
24 likely. Once that is completed, we'll deal with other
25 provisions of the law.

1 We recently completed the first phase and
2 have developed consensus amendments on a number of
3 issues. Once our amendments are in bill form, we
4 intend to take the package to Senator Kasunic and
5 Representative Bastian for possible introduction.

6 Just one other note on permitting. Obtaining
7 a coal mine permit in Pennsylvania is an exhausting,
8 costly, and cumbersome process with built-in
9 inefficiencies that can tax the resources of the
10 permittee.

11 The length of time to secure a permit and
12 redundant reporting and permitting requirements are
13 impediments to the start-up of mining operations.

14 Essentially what we have suggested to the
15 department is to take a look at a paperless permit
16 application process in which other states -- Virginia
17 and West Virginia to name a few -- have adopted.

18 It is called an electric permitting and
19 essentially everything is prepared and reviewed
20 online. The only technical requirements are Internet
21 connection, e-mail account, and Internet browser.

22 We had just come from discussions with the
23 department about developing such a program for
24 Pennsylvania. We will keep you abreast of the status
25 of these discussions and may ask for assistance if

1 legislation is determined to be required to institute
2 the program or financial assistance is needed to put
3 the program in place.

4 That concludes my testimony. I thank the
5 committee for this opportunity, and I will answer any
6 questions.

7 CHAIRMAN ADOLPH: Thank you, George. You
8 mentioned in your testimony several surrounding
9 states -- Ohio, Maryland, Virginia -- have some tax
10 incentive programs.

11 Do you have a sense that these tax incentive
12 programs -- are they providing the type of incentives
13 that the coal industry wanted in those states?

14 MR. ELLIS: Yes. In fact, a number of my
15 Western Pennsylvania operators that border the Ohio
16 border have lost contracts with utilities because, you
17 know, Ohio based coal has a \$3 a ton credit. This is
18 a very competitive coal market where a penny or two a
19 ton makes a difference whether or not you get a
20 contract. So yes, we have seen it have that effect.

21 CHAIRMAN ADOLPH: A negative effect?

22 MR. ELLIS: A negative effect, not a positive
23 one.

24 CHAIRMAN ADOLPH: Do any other members have
25 questions of Mr. Ellis? Representative Armstrong.

1 REPRESENTATIVE ARMSTRONG: Thank you, Mr.
2 Chairman. Thank you, Mr. Ellis. If you could expand
3 a little bit on the ePermitting. I understand that
4 you think it's cheaper. How much does -- would that
5 shorten the time line for a company?

6 MR. ELLIS: Let me tell you just our
7 discussions have -- we've just initiated. We have
8 just begun our research on West Virginia and Virginia.

9 The key thing about that isn't so much the
10 time line as it is reducing the volume of paper. Our
11 permits are -- I mean they are thousands of pages.
12 And that's routine for an underground mining permit.

13 We have to submit for example five copies to
14 California, five copies of the permit to the
15 California District Mining Agency. In addition, we're
16 required to submit a copy to the Bureau of Deep Mine
17 Safety.

18 REPRESENTATIVE ARMSTRONG: You mean
19 California, the state?

20 MR. ELLIS: Yeah -- no. I'm sorry. I mean
21 California District Mine. We're regulated by regions
22 by district mining offices, not the regional offices.
23 There's five district offices -- mining offices that
24 govern coal.

25 The California district mining office covers

1 the underground mining. So we have five that goes
2 there, one to Deep Mine Safety. There are parts of
3 the application that go to other divisions like
4 approach.

5 And, you know, once the applications are
6 filed, it is not uncommon for us to get a call from
7 one of the permit reviewers asking us to resubmit
8 something because it was lost or wasn't timely sent
9 from one position to another.

10 So the key is instead of, you know, shuffling
11 all of these papers among agencies, the ePermitting
12 allows you to just do it online. So, you know, it is
13 also because it is a more timely way of conveying
14 information. It saves money too. But it is that
15 overload of paper that can really help.

16 REPRESENTATIVE ARMSTRONG: Now you mentioned
17 there are 7,000 Pennsylvanians employed directly in
18 mining coal.

19 MR. ELLIS: That's correct.

20 REPRESENTATIVE ARMSTRONG: How does that
21 compare to how many Pennsylvanians are employed in
22 coal mines say in --

23 MR. ELLIS: I'm sorry. I'm having difficulty
24 hearing you.

25 REPRESENTATIVE ARMSTRONG: The number of

1 Pennsylvanians currently mining, how does that compare
2 to years gone by? Like say back in the '50s where we
3 have the industrial revolution?

4 MR. ELLIS: In the heyday, maybe over a
5 hundred thousand. The key -- you know, the way we see
6 it, the key to -- I mean you've heard about the
7 natural gas and oil prices here.

8 Coal prices have remained relatively stable
9 over the years. One of the reasons is advancements in
10 technology, not only for production and efficiency but
11 also advancements in mine safety.

12 And like -- just like computers, you know,
13 displaced other coal workers, the more mechanized we
14 get, we get more productive, more efficient, and more
15 safe but we are displacing workers.

16 REPRESENTATIVE ARMSTRONG: Thank you. And
17 last question. Do you have any idea, Mr. Ellis, how
18 many Pennsylvanians are employed in the regulation of
19 the coal mining industry?

20 MR. ELLIS: I can get you that. Although it
21 is kind of an authority issue with my members.
22 Because in the past 20 years, the number of mines that
23 have operated in Pennsylvania have dramatically
24 declined. It is a lot of concentration.

25 However, the staff complement at DEP, the

1 mining program has it. But I can get that for you. I
2 don't have that at the top of my head.

3 MR. ARMSTRONG: Thank you, Mr. Ellis. Thank
4 you, Mr. Chairman.

5 CHAIRMAN ADOLPH: Thank you, Representative.
6 George, thank you very much for your testimony.

7 MR. ELLIS: Thank you.

8 CHAIRMAN ADOLPH: Our final presenter is Mr.
9 Doug Biden. Mr. Biden is president of the Electric
10 Generation Association of Pennsylvania, a Regional
11 Association of Electric Generating Companies. Good
12 morning, Doug.

13 MR. BIDEN: Good morning, Chairman Adolph,
14 members of the committee and staff. Thank you for
15 inviting the Generation Association to present before
16 the committee this morning.

17 It may surprise the committee that most of my
18 remarks today will focus on natural gas. High prices
19 of this fuel constitute the most difficult and
20 economically threatening issue we face in the energy
21 industry today.

22 And we think it is vitally important to
23 policymakers at all levels to fully understand this
24 problem, its causes, its implications for the economy,
25 and potential solutions going forward.

1 As this committee knows, nearly all power
2 plants built in the United States in the last 10 to 15
3 years have utilized natural gas as their primary fuel.

4 Thus, in recent years and in the near to
5 intermediate future, wholesale power prices will be
6 driven more by natural gas prices than by the
7 availability of electric generation.

8 Average PJM spot market prices rose by more
9 than 35 percent in 2003, 11 percent in 2004, and more
10 than 32 percent for the first 10 months of 2005,
11 mostly due to the rising cost of natural gas.

12 Well before the shocks of Hurricanes Katrina
13 and Rita, we are seeing the results of a growing
14 imbalance between supply and demand for natural gas.

15 While public policies, starting with the
16 Clean Air Act Amendments of 1990, had the effect on
17 encouraging the use of natural gas for power
18 generation and for other uses, other policies made it
19 more difficult to develop new natural gas resources to
20 meet this demand.

21 These policy contradictions were resolved by
22 debilitating rises of natural gas prices that tripled
23 in the last few years. By now, everyone is aware that
24 millions of homeowners will be shocked by the rise in
25 home heating costs this winter.

1 Fewer know of the debilitating effect of the
2 natural gas crises on our industrial economy. The
3 United States now has the highest natural gas prices
4 in the world.

5 Many US industries -- as Gordon alluded to
6 earlier -- use large amounts of gas in their processes
7 and as they find it more difficult to compete with
8 other countries that have cheaper supplies are
9 beginning to move their facilities abroad or shut them
10 down.

11 There is even a new term to apply to this to
12 describe this in energy industry parlance. Something
13 we never heard of before. It is called demand
14 destruction. And you see it in the news releases
15 almost every day. And certainly some of the 185,000
16 manufacturing jobs that were lost in Pennsylvania in
17 just the last five years were due in part -- in large
18 measure I would add -- to rising prices of this fuel.

19 How did we get here? PUC Commissioner Shane
20 in his remarks before this committee pointed out that
21 rising power sector demands for natural gas which
22 usually peaks in the summer can curtail the gas
23 industry's ability to inject gas into storage in
24 preparation for the winter heating season, creating
25 upward pressure on prices.

1 And because power generation demand for
2 natural gas has risen in recent years more than that
3 of any other sector, generators are sometimes
4 implicated in the natural gas prices.

5 So why did the generation industry build more
6 than 200,000 megawatts of gas-fired generating
7 capacity in recent years?

8 The reasons, quite simply, were more
9 stringent emission control requirements to meet
10 stricter air quality standards which themselves were
11 made more stringent during this capacity expansion
12 period.

13 In addition, states, acting individually or
14 as part of regional entities, oftentimes adopt
15 emission requirements that are more stringent than
16 federal standards, creating additional uncertainty and
17 investor preference for gas.

18 Also the potential threat of carbon dioxide
19 controls on coal-fired power plants made investors
20 less willing to invest in baseload coal generation of
21 any kind.

22 And failure to resolve the used nuclear fuel
23 storage issue -- and failure to resolve the used
24 nuclear fuel storage issue meant that nuclear fuel was
25 not an option.

1 Natural gas burns cleaner than any other
2 fossil fuel. It does not create significant sulfur or
3 particulate emissions. Some NOx is produced but that
4 can be controlled by combustion modifications and the
5 use of exhaust treatment. Because of its high
6 hydrogen content, carbon dioxide emissions from
7 natural gas combustion are the lowest of the fossil
8 fuels.

9 All of these factors coupled with lower
10 capacity costs, ease of permitting, shorter
11 construction times, and the need for peaking as
12 opposed to baseload generation, made natural gas fired
13 plants the clear choice of investors prior to the
14 recent price increases.

15 As the multitude of environmental regulations
16 were promulgated over the last decade, some, including
17 EPGA, expressed concern over the power sector's
18 growing demand for natural gas.

19 However, representatives of the natural gas
20 industry who were lobbying in favor of tighter NOx
21 controls on the power plants assured regulators that
22 supplies would be adequate and prices moderate into
23 the foreseeable future. Obviously, reality turned out
24 to be quite different.

25 Gas production in the US now appears to be in

1 permanent decline. Imports from Canada are expected
2 to decline as well as that country uses more of its
3 own natural gas resources to meet its commitments
4 under the Kyoto protocol. Imports of liquefied
5 natural gas currently provide only 3 percent of the US
6 supply.

7 So the US is essentially on its own for the
8 time being to address this problem. The natural gas
9 chickens have come home to roost, and we are paying a
10 dear price for it.

11 Now next I'll address some of the factors
12 that could influence at least the power sector's
13 demand for this fuel over the next at least for the
14 intermediate future emphasize mostly environmental
15 issues.

16 When the Clear Skies legislative initiatives
17 failed to get out of committee in the US Senate, EPA
18 promulgated the Clear Air Interstate Rule, Clear Air
19 Mercury Rule, and the Clean Air Visibility Rule
20 earlier this year.

21 These are significant and tough new
22 regulations imposed on our industry that we stand
23 ready to implement.

24 CAIR requires an additional 65 percent
25 reduction in sulfur dioxide emissions, and

1 approximately a 70 percent reduction in NOx emissions
2 in two phases with phase 1 in 2010 and phase 2 in
3 2015.

4 Nationwide, CAMR requires a 20 percent
5 reduction in mercury emissions by 2010 and 70 percent
6 by 2018.

7 For Pennsylvania, however, CAMR requires a 64
8 percent reduction in mercury emissions by 2010 and 86
9 percent by 2018. Achieving these emission reductions
10 already will be challenging, particularly the mercury
11 reduction requirements, as they are steeper for
12 Pennsylvania under CAMR than for any other state.

13 However, the federal rules employing a cap
14 and trade program similar to the successful acid rain
15 program gives individual power plants the flexibility
16 to adopt new technology as it becomes available and
17 determine the best way to meet new emission limits in
18 the most cost-effective way possible.

19 It also sets a timetable that will minimize
20 the forced retirement of coal-fired power plants
21 allowing the orderly replacement of those units that
22 are retired and, most importantly, not unnecessarily
23 accelerate the economically destructive use of scarce
24 natural gas as a replacement fuel for coal.

25 Unfortunately, before we even know the energy

1 market price impacts of CAIR and CAMR, some states
2 including Pennsylvania have already announced
3 intentions to adopt their own mercury rules. And the
4 Northeast Ozone Transport Commission, of which
5 Pennsylvania is a member, has announced its intention
6 to develop a multi-pollutant model rule next year
7 called CAIR Plus that will require power plant
8 emission reductions way beyond CAIR and on a faster
9 timetable.

10 We believe both of those potential
11 developments would constitute unwise public policy for
12 Pennsylvania as both would contribute to more
13 retirement of coal-fired power plants and greater use
14 of scarce natural gas by the power sector at the worse
15 possible time.

16 EPGA and some of its members have been
17 participating as Georgia's members have in the
18 Department of Environmental Protection mercury
19 stakeholder meetings. To date, we have heard no
20 compelling evidence presented as to why the
21 Commonwealth should adopt its own mercury rule.

22 Regarding CAIR Plus, we believe the electric
23 power sector is doing more than its fair share under
24 CAIR to assist states in meeting both the new ozone
25 and particulate standards.

1 Regarding nuclear power, nuclear generation
2 now accounts for approximately 36 percent of our
3 state's electricity needs. Many of the state's
4 reactors are filing for renewal of their current
5 operating license for an additional 20 years.

6 And I would just like to say this. From both
7 a capacity, reliability, and from an environmental
8 perspective, we cannot continue to burn coal in this
9 state to the extent that we are presently and have any
10 hope of meeting ambient air quality standards without
11 all five of those nuclear power plants continuing to
12 run.

13 So we need to make sure that those license
14 renewals in fact take place. Because we really need
15 all five of those nuclear power plants. And we hope
16 that one day we can build new nuclear generation
17 technology, if not in Pennsylvania somewhere in PJM.

18 I'm going to skip the next three sections of
19 my testimony in the interest of time -- you've heard
20 about those issues from earlier presenters in earlier
21 hearings -- and I'll go right to the recommendations
22 and start with the mercury issue.

23 Regarding the development of the Pennsylvania
24 mercury rule, since we're still participating in the
25 stakeholder process and do not know at this point what

1 the Pennsylvania rule might look like, it may be
2 inappropriate to request any immediate action by this
3 committee relative to that initiative.

4 However, we do welcome your involvement and
5 believe that you should play a key oversight role in
6 this process.

7 If Pennsylvania is to adopt its own mercury
8 rule, we believe that the General Assembly should be
9 fully involved in the process up front.

10 There should be full evidentiary hearings
11 with the costs and benefits of a Pennsylvania only
12 rule versus a federal rule fully explored before a
13 rule is developed.

14 This matter involves energy, environmental,
15 and economic issues far too complex and important to
16 the welfare of this state to be left to a petition
17 process before the Environmental Quality Board with
18 input from the General Assembly relegated to the back
19 end of the regulatory review process.

20 Regarding the CAIR Plus proposal, my primary
21 purpose in raising this issue was to alert the
22 committee to this development before it becomes a
23 regulatory initiative next year.

24 Finally, EPGA participated in Representative
25 Bard's Energy Process Task Force three years ago that

1 resulted in a number of recommendations, one of which
2 was to grant tax credits for investment in coal-fired
3 power plant emission controls.

4 Accordingly, we recommend it for committee
5 consideration as a possible amendment to House Bill
6 1964 introduced in the current term.

7 With regard to the captive energy price
8 situation, we're facing a very difficult situation
9 that does not lend itself to quick fixes or short-term
10 legislative solutions.

11 Rather, it is important to recognize that
12 electric generators, because they are one of the most
13 capital-intensive industries in the nation, need a
14 more stable and predictable environment in which
15 investment decisions are made, including environmental
16 decisions.

17 We're hopeful as more and more policymakers
18 understand the link between generator's decisions,
19 particularly regarding increased use of scarce natural
20 gas, and the overall health of the economy, that they
21 will come to understand the need for a more reasoned,
22 predictable, and holistic approach to regulating power
23 plant emissions, such as that inherent in the current
24 federal proposals, going forward.

25 In closing, EPGA would like to say that while

1 we have serious concerns about some policies currently
2 being pursued in Pennsylvania, we appreciate the
3 administration and the General Assembly's oft-stated
4 commitments to supporting Pennsylvania energy sources
5 and fuel diversity in our energy units. And we are
6 committed to advancing policies which will do just
7 that. Thank you.

8 CHAIRMAN ADOLPH: Thank you, Mr. Biden, and
9 thank you for those recommendations. This committee
10 is certainly well-informed about what is going on at
11 the hearings and the stakeholders meeting that is
12 going on at the present time. And we're paying very
13 close attention to them. If we feel that we need to
14 hold hearings through this committee, we certainly
15 will do that.

16 Okay. I think it is important that the
17 industry not only educate and inform the legislators
18 but I think it is also important that the industry
19 inform the public of the difference between what DEP
20 is trying to do with their own Pennsylvania regulation
21 and what the federal regulation is.

22 It always seems that the legislature is
23 always against something instead of being for
24 something. And I think the industry would help itself
25 and would help the General Assembly and the public by

1 just informing the public whether it is through press
2 releases or letters to editors throughout the
3 Commonwealth. Because after all, energy is so
4 important in everybody's lives. We kind of forget
5 what you folks produce which is energy.

6 Everybody takes for granted that we are going
7 to switch on that light and the light is going to go
8 on. But everybody forgets what it takes to do that.
9 And not -- I didn't -- I'm guessing maybe you don't
10 know.

11 But the difference between the federal
12 regulations and the Pennsylvania regulations, you talk
13 about loss of jobs and possible loss of jobs. I'd
14 like to find out also what it would cost you in
15 dollars, the investment between the two. And maybe
16 this is what is being discussed over in the
17 stakeholder meetings.

18 But I don't need you to, you know, give me
19 that answer right now, Mr. Biden or anybody else. But
20 I think this committee would like to know, you know,
21 what it would cost your industry, the difference
22 between the Pennsylvania -- proposed Pennsylvania
23 regulation and the current federal regulation.

24 MR. BIDEN: There is one aspect of that
25 that -- it's difficult now that we're not a diversely

1 integrated monopoly. And most of my members are
2 merchant generators. Even though you see names among
3 my members that sound familiar to you, my members are
4 all merchant generators even though some of them have
5 corporate cousins that are utilities. We are not
6 utilities.

7 And oftentimes people quote costs that this
8 is only going to cost the rate payer a certain amount
9 of money. That is almost an irrelevant statement in
10 the market in which we compete.

11 The way the impact is felt in today's market
12 is if we have to meet more stringent requirements in
13 the PAM market which is the largest or arguably the
14 most competitive power market in the world, what we do
15 is we simply lose market share to other generators in
16 other states that don't have to meet those.

17 So we can't make that argument that rate
18 payers necessarily in Pennsylvania would automatically
19 see that rate increase. What we're doing is we're
20 shifting generation to other areas. And with that
21 we're shifting generation output, we're shifting jobs,
22 and we're shifting emissions.

23 So in the case of mercury, no argument can be
24 made that there isn't a net environmental benefit for
25 Pennsylvania. Because in shifting emissions --

1 because mercury is a long term transport issue -- you
2 may in fact be increasing mercury deposition in
3 Pennsylvania.

4 But do you see the complexity of the issue
5 inherent in what I just said and how difficult that is
6 to convey that in an outbed piece? And we produce an
7 outbed piece as I'm sure you're aware. And I think
8 only three or four papers in the state will even print
9 it because it disagreed with their editorial
10 philosophy.

11 So I agree we need to do more in that area.
12 And I think you face that in your own area where the
13 local papers simply refuse to print things that we
14 send them.

15 CHAIRMAN ADOLPH: I think the complexity of
16 the issue has a lot to do with it. We're just trying
17 to grasp the difference between the Pennsylvania
18 proposed regulation and the federal. For laypeople,
19 it is almost impossible to understand.

20 And we just hear, you know, sometimes drastic
21 statements made by both sides, you know. And we're
22 trying to get as much information as possible.
23 Everybody wants clean air. Everybody wants clean
24 water. Nobody wants mercury emissions in their daily
25 food or whatever.

1 But we're trying to get this information and
2 to understand. This is very complex. And I really
3 appreciate your testimony and your recommendations.
4 But we will continue to stay on top of it as much as
5 we can. Representative Armstrong, do you have a
6 question for Mr. Biden?

7 REPRESENTATIVE ARMSTRONG: Yes, Mr. Chairman.
8 If you would just explain briefly, Mr. Biden, the
9 impact to the consumer what this means in terms of
10 prices if these CAIR Plus regulations are enacted.

11 MR. BIDEN: The CAIR Plus regulations, first
12 of all the Ozone Transport Commission originally
13 discussed tighter emissions control. And they covered
14 sulfur dioxide.

15 They also included a mercury element.
16 Although I'm not sure that is going to be included or
17 not. And they were roughly 25 to 30 percent more
18 stringent than interstate law.

19 Now back in September when Secretary McGinty
20 announced that she was in favor of CAIR Plus, at that
21 particular time they decided that they would not yet
22 endorse any specific number. But those are the only
23 numbers that they have at least agreed to in
24 principal.

25 If those numbers were to come to pass, they

1 would virtually eliminate any trading of sulfur
2 dioxide and would be so stringent that many of the
3 requirements that we have in Pennsylvania could not
4 even burn Pennsylvania coal with scrubbers installed.
5 So the additional cost, we don't have the cost of
6 that. We're in the process of doing that now.

7 But it would result in the retirement of
8 significant additional blocks of coal-fired power
9 plants. So these additional costs would not just be
10 in additional operating costs of coal-fired power
11 plants but additional burning of natural gas to make
12 up for the retirement of those coal burning fire
13 plants. Now to give you a number, I don't have that
14 just yet but I expect to within the next month or two.

15 REPRESENTATIVE ARMSTRONG: Could you hazard a
16 guess, a ballpark figure of a 30 percent increase, a
17 rough idea?

18 MR. BIDEN: Again, we're operating in a
19 competitive market that right now is long on
20 generating assets with the tremendous expansion of the
21 PJM market. Going in to this last summer, PJM was
22 10,000 megawatts along in relation to its capacity
23 requirements.

24 So a lot of these plants will not be able to
25 justify for their shareholders the installation of

1 this pollution control equipment.

2 Because some of the largest and lowest cost
3 coal-fired power plants are now in PJM in the midwest.
4 And some of those are in states that still regulate
5 generation, and their regulatory commissions are
6 allowing them to pass on the cost of their investment
7 of pollution control. We don't have that here in
8 Pennsylvania.

9 So where it is going to be felt is in the
10 retirement of coal-fired power plants and the increase
11 at least in the eastern part of PJM, an increase in
12 utilization of those natural gas markets. So we don't
13 have the means at this point in time to accurately
14 predict that. We're trying to.

15 REPRESENTATIVE ARMSTRONG: Thank you. Thank
16 you, Mr. Chairman.

17 CHAIRMAN ADOLPH: Thank you, Representative.
18 I'd like to thank all of the presenters today for
19 their very informative presentation. And I appreciate
20 the time that you took with the committee.

21 I want to inform you that this committee will
22 be holding the next energy policy meeting I believe
23 January 24th. I will be sending out information to
24 everyone.

25 Thank you everybody for participating. And

1 without further ado, this meeting is adjourned. Thank
2 you.

3 (The hearing concluded at 10:49 a.m.)

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1 I hereby certify that the proceedings and
2 evidence are contained fully and accurately in the
3 notes taken by me in the proceedings of the above
4 cause and that this copy is a correct transcript of
5 the same.

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Sherri A. Reitano
Notary Public

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