

ORIGINAL

HOUSE OF REPRESENTATIVES
COMMONWEALTH OF PENNSYLVANIA
ENVIRONMENTAL RESOURCES AND
ENERGY COMMITTEE

IN RE:

HOUSE BILL 658
TESTIMONY ON RENEWABLE PORTFOLIO STANDARDS

NORTH OFFICE BUILDING
HEARING ROOM 1
HARRISBURG, PENNSYLVANIA

TUESDAY, MAY 25, 2004; 9:00 A.M.

BEFORE:

HON. BILL ADOLPH, CHAIRMAN
HON. CAMILLE GEORGE
HON. SCOTT HUTCHINSON
HON. CHRIS ROSS
HON. DICK STEVENSON
HON. DAYLIN LEACH
HON. CURTIS THOMAS
HON. JOHN T. YUDICHAK
HON. CAROL RUBLEY
HON. TOM CREIGHTON
HON. GIBSON ARMSTRONG
HON. ELLEN BARD
HON. JIM WANSACZ

BRENDA S. HAMILTON, RPR
REPORTER - NOTARY PUBLIC



ARCHIVE REPORTING SERVICE

2336 N. Second Street (717) 234-5922
Harrisburg, PA 17110 FAX (717) 234-6190

T2004-069

I N D E X

1		
2		PAGE
3	REMARKS BY HON. LYNN HERMAN	5
4	REMARKS BY HON PETER DALEY	7
5		
6		
7		
8	WITNESS	PAGE
9	DR. HAROLD SCHOBERT	13
10	ERIC A. THUMMA	22
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

1 CHAIRMAN ADOLPH: Good morning. The
2 hour of 9:00 having arrived, I'd like to call the
3 meeting of the Environmental Resources and Energy
4 Committee, a public hearing on House Bill 658.

5 Before we start the meeting, I'd
6 like the members to my left to identify themselves
7 and the county or the district they represent.
8 Thank you.

9 REPRESENTATIVE YUDICHAK: Thank you,
10 Mr. Chairman. I'm John Yudichak representing
11 Luzerne County.

12 REPRESENTATIVE CREIGHTON: Tom
13 Creighton, northern Lancaster County, 37th District.

14 REPRESENTATIVE ROSS: Chris Ross
15 from Chester County.

16 CHAIRMAN ADOLPH: Bill Adolph, 165th
17 District, Delaware County.

18 REPRESENTATIVE GEORGE: Bud George,
19 74th District, Clearfield.

20 REPRESENTATIVE LEVDANSKY: David
21 Levdansky, Allegheny and Washington Counties.

22 CHAIRMAN ADOLPH: Thank you. As
23 most of the members know, today we're going into
24 session an hour earlier, at ten o'clock, so we're
25 going to get this hearing going on time.

1 I'd like to welcome everyone to this
2 morning's meeting. Today, we'll be conducting a
3 public hearing on House Bill 658. The prime sponsor
4 being Representative Lynn Herman, who is with us
5 today, along with Representative Peter Daley,
6 co-sponsor of this legislation, who is also with us.
7 We'll be hearing from them shortly.

8 I'd also like to welcome Dr. Harold
9 Schobert of Penn State University and Mr. Eric
10 Thumma, okay, who is joined with Ms. Jeanne
11 Dworetzky.

12 MS. DWORETZKY: Yes.

13 CHAIRMAN ADOLPH: How did I do?
14 Correct?

15 MS. DWORETZKY: Very well.

16 CHAIRMAN ADOLPH: All right. From
17 the DEP's Small Business Ombudsman. Okay. Thank
18 you for joining us today.

19 House Bill 658 will create the
20 Pennsylvania Energy Partnership. This partnership
21 will act as an advisory board to the governor
22 focusing on developing clean energy technology.

23 Similar legislation was introduced
24 last session, reported out of this committee, and
25 approved by the full house.

1 Before I turn over the program to
2 our presenters and also to the prime sponsors of
3 this legislation, I'd like to call upon the
4 Democratic Chairman, Representative George, for a
5 few comments. Thank you.

6 REPRESENTATIVE GEORGE: Thank you,
7 Mr. Chairman. I'm here to observe, as all of us
8 are. As the chairman apprised, this has been before
9 this committee.

10 There is no greater or more
11 important time for us to take up the issue of energy
12 than there is right at this moment. I'm told that
13 there should be a revival of the Energy Committee
14 and the Department of -- DEP is insistent that
15 that's what should be. So without further ado,
16 Mr. Chairman, I'll let you take over here.

17 CHAIRMAN ADOLPH: Thank you. We'll
18 now turn the microphone over first to Representative
19 Herman and then Representative Daley for brief
20 comments.

21 REPRESENTATIVE HERMAN: I'm State
22 Representative Lynn Herman from Centre County, 77th
23 Legislative District.

24 Chairman Adolph and members of the
25 House Environmental Resources and Energy Committee,

1 thank you very much for scheduling a public hearing
2 on legislation I introduced with my colleague State
3 Representative Peter Daley in the form of House Bill
4 658 which would establish the Pennsylvania Energy
5 Partnership.

6 Last session a bipartisan group of
7 House and Senate members, and Senators, worked with
8 representatives of the coal, electric utility,
9 natural gas, oil, and aggregate industries in
10 Pennsylvania to devise a coordinated proactive
11 response to energy concerns in the Commonwealth.

12 The result is a proposal to create
13 the Pennsylvania Energy Partnership, a
14 public/private steering committee. The Pennsylvania
15 Energy Partnership will advise the governor and the
16 legislature on the development of a long-term energy
17 policy for the Commonwealth and, second, serve as a
18 conduit to channel up research funds for clean fuels
19 technology.

20 That research will be conducted by
21 both nonprofit and business organizations within the
22 Commonwealth and will be coordinated by the Energy
23 Institute at the Pennsylvania State University.

24 I have asked Dr. Harold Schobert,
25 the director of the Energy Institute at Penn State,

1 to appear today before your committee to testify on
2 the value of this legislation.

3 The Pennsylvania Energy Partnership
4 is vitally important to the Commonwealth as it will
5 provide for a long-term strategy and funding for
6 clean fuels research of Pennsylvania's natural
7 resources.

8 Last year's energy crisis in
9 California and the spiking of fuel all over the
10 country have concentrated the public's minds on the
11 impact of energy planning.

12 As you mentioned, Chairman Adolph,
13 this legislation passed your committee in the House
14 of Representatives last session; and I urge this
15 committee again to approve House Bill 658
16 establishing the Pennsylvania Energy Partnership in
17 the Commonwealth and send it to the House floor for
18 full consideration.

19 At this time I'd like to control --
20 turn control of the microphone over to my prime
21 co-sponsor of House Bill 658, State Representative
22 Peter Daley.

23 REPRESENTATIVE DALEY: Thank you,
24 Representative Herman.

25 Chairman George, members of the

1 committee, thank you for having a hearing on House
2 Bill 658 before the Environmental Resources and
3 Energy Committee.

4 Five years ago I -- as chairman of
5 the Coal Caucus, I had made a presentation to the
6 Energy Institute and at that time it was a
7 consortium of West Virginia and Pennsylvania
8 concerns, with West Virginia University and Penn
9 State University, concerning energy in Pennsylvania.
10 And at that time we devised a scheme of creating the
11 Energy Partnership.

12 As we know, for some of us that have
13 long-tooth and have been here for a while, energy
14 concerns in Pennsylvania is very cyclical. You
15 know, under the Casey administration we had the
16 Pennsylvania Energy Development Authority and under
17 the Ridge administration the attention to that had
18 kind of waned.

19 So what we're here today to do is to
20 talk to you about the Energy Partnership in
21 Pennsylvania and something that we believe, and for
22 several years now we've been advocating, the need
23 for this creation of this partnership.

24 Never before have we ever been able
25 to bring today together the coal, the oil, the gas,

1 the biomass people together under one umbrella, if I
2 could say as a term, working together on creating a
3 comprehensive energy policy for Pennsylvania.

4 We all know that more -- now more
5 than ever, like in the late '70s when we had the
6 energy crisis, there's an absolute need for
7 Pennsylvania to move forward regarding energy
8 policies.

9 Pennsylvania has always been a
10 pivotal player in energy creation for the United
11 States. From the discovery of oil at Drake's well
12 in Titusville, Pennsylvania, through the coal
13 production, and through all the -- the oil refining
14 in southeastern Pennsylvania, to the selling of
15 energy to the northeast grid, Pennsylvania has
16 played an active role.

17 But we believe -- and you know --
18 that the legislature has really been sleeping at the
19 switch regarding this issue.

20 We know the incredible prices that
21 we're all facing for gasoline today is something we
22 never anticipated. And Pennsylvania is falling far
23 behind the rest of the nation in terms of coming up
24 with a comprehensive energy strategy and plan, and
25 it's time that we move forward into the 21st

1 century.

2 Coal producing states, we're the
3 only one of the coal producing states that does not
4 provide a dedicated revenue base to help fund
5 research for clean coal technology.

6 There's no good reason why we've
7 done this. There's no good reason why we've ignored
8 establishing an energy policy in the Commonwealth of
9 Pennsylvania.

10 We need to do smart planning for
11 tomorrow's energy needs. That's why the Energy
12 Partnership is so crucial. As Representative Herman
13 stated, it's going to help create an energy strategy
14 for Pennsylvania, and it will be an advisory board
15 to the governor, to tell the governor, to advise the
16 governor, to proactively create a state government
17 that's addressing future energy and energy concerns.

18 The purpose of the board will be to
19 oversee the development of long range energy
20 policies that utilize all indigenous energy
21 resources in the Commonwealth of Pennsylvania. That
22 includes fossil fuels, biomass agriculture products,
23 and byproducts of renewable resources such as wind
24 and solar.

25 If you drive the Pennsylvania

1 Turnpike, you'll see the windmills in Somerset
2 County and how they're producing energy now for
3 southwestern Pennsylvania. The PEP Board also will
4 oversee the distribution of research money to clean
5 fuels research and emphasize on applied real-time
6 energy and industry problems.

7 Research funding will be limited to
8 Pennsylvania businesses and institutions. Resources
9 studying bill will be limited to Pennsylvania's
10 indigenous resources. The PEP Board will be
11 comprised of 27 members representing government,
12 private industry, and academia. The governor
13 appoints the 16 private industry members, which must
14 include representatives from the state
15 energy-related industries including coal, natural
16 gas, and oil, among others. The governor's
17 appointees will also include a representative from
18 Penn State University, other than -- and from -- an
19 energy researcher from a university other than Penn
20 State, and an individual representing the group of
21 environmental interests, and a member of organized
22 labor employed by the energy-related industries.
23 The remaining 11 members will be the Secretaries of
24 Environmental Protection, Community Economic
25 Development, Public Welfare, and Agriculture, along

1 with the consumer advocate and chairman of the PUC,
2 the director of PEMA, and members representing each
3 party in both the chambers of the House of
4 Representatives and the Senate.

5 It's very important that you know
6 that members of Pennsylvania energy-related industry
7 groups have participated in the development of this
8 legislation, as well as members of both the parties,
9 as Representative Herman said, in both chambers.

10 The Bill asks for the initial
11 appropriation of \$6 million from the General Fund to
12 be appropriated to the DCED for one fiscal year.

13 We need to know the level of energy
14 production. Make no mistake about that. We need to
15 do a better job of promoting energy conservation.
16 Make no mistake about that. We need to plan for
17 energy emergencies in Pennsylvania.

18 The partnership will accomplish each
19 of these things and more. We would be putting
20 Pennsylvania in place to become a leader in the
21 nation in the next generation of smart energy
22 technologies and education training and
23 retaining the next generation of energy
24 professionals.

25 Thank you Mr. Chairman.

1 CHAIRMAN ADOLPH: Thank you,
2 Representatives.

3 Before we get to our presenters, I'd
4 like to acknowledge the presence of Representatives
5 Leach, Wansacz, Armstrong, Stevenson, Rubley, and
6 Freeman.

7 Okay. In order to be efficient with
8 our time, as a result of announcements that are
9 being made, I'll ask both our guests to make their
10 presentation and then we'll hold the questions until
11 you both make your presentation.

12 Our first presenter will be
13 Dr. Harold Schobert. Dr. Schobert is the Director
14 of the Energy Institute at Penn State University.
15 Good morning.

16 MR. HAROLD SCHOBERT: Good morning.
17 Thank you for the opportunity to be here on behalf
18 of the University and the Energy Institute.

19 I'd like to begin by pointing out
20 that the Commonwealth is rich in two aspects. First
21 of all, rich in terms of the indigenous energy
22 resources that we have, and they include not only
23 the traditional fossil sources but also various
24 forms of renewable energies, including agricultural
25 products, forest products, wind, and solar.

1 The other point that we need to
2 recognize is that the Commonwealth is also very rich
3 in a human resource. What I mean by that, as
4 examples, is that Pennsylvania is home to the
5 headquarters of the company that is the largest
6 producer of hydrogen in the world. We are
7 headquarters to the National Energy Technology
8 Laboratory of the Department of Energy, and we have
9 in the Commonwealth what is now clearly recognized
10 as the premier academic resource institute of its
11 kind in the country and one of the leaders in the
12 world.

13 What we believe is the best thing
14 for the Commonwealth of Pennsylvania is to achieve
15 a -- what we call a balanced energy portfolio and
16 what I mean by that is to recognize that every
17 energy resource that we have has certain
18 technological advantages and certain technological
19 disadvantages. It has certain economic benefits and
20 certain economic disincentives and in most cases has
21 some environmental issue and some environmental
22 problems that are associated with it.

23 So what we in Pennsylvania need to
24 do, I believe, is to steer a course among those
25 advantages and incentives and, to the best that we

1 can, minimize the disadvantages and disincentives.

2 We are certainly not here in
3 opposition to the Department of Environmental
4 Protection or the Pennsylvania Energy Development
5 Authority; but it's our experience that those
6 organizations, we believe, are focused on present
7 day deployment of energy technologies.

8 And what we think has to go
9 hand-in-hand with that is innovation in energy
10 technology and development. And the way that we
11 think about that is I would ask you to think in
12 terms of a simple model of a pyramid like we've all
13 seen in -- in geography books in Egypt.

14 The top of the innovation pyramid,
15 as it's called -- and, by the way, the innovation
16 pyramid model is used by companies like DuPont and
17 General Motors that are highly successful in
18 bringing technological innovation to the
19 marketplace.

20 The top of the pyramid represents a
21 very small number of projects that are ready to go
22 right now. And that I think -- and I'm willing to
23 be corrected -- but I think is the focus of the
24 proposed Pennsylvania Energy Development Authority.

25 If we think about a middle level in

1 that pyramid, that represents a much larger number
2 of projects that are still in the pilot or
3 development stage, and industrial experience shows
4 that maybe 20 or 30 percent of those actually
5 eventually make it to the top and become
6 commercialized.

7 And the very base of the pyramid is
8 the basic research endeavor where there may be
9 hundreds, or even thousands, of ideas being tried
10 out, some of which percolate up to the middle and
11 then a few percolate all the way to the top.

12 And just like any real pyramid, if
13 we have the top of the pyramid and not much base to
14 it, the top sooner or later is going to fall off.
15 And, on the other hand, if we build a fabulously
16 successful base and don't concentrate on getting a
17 top put in place, we're never going to have
18 innovative energy technologies to deploy.

19 I'd like to speak now to one
20 practical example, because it's a project that's
21 under development in the Energy Institute. I think
22 everybody in this room has bought gasoline recently
23 and we know how much that hurts. Part of the
24 problem, of course, is the dependence of the United
25 States on imported petroleum.

1 We at Penn State are developing a
2 process currently focused primarily on aviation
3 fuel, but also relating to other refinery products,
4 that would put Pennsylvania coal into Pennsylvania
5 oil refineries.

6 There's still some development work
7 needed to be done, but in the -- in the occurrence
8 of some national tragedy, such as the complete
9 cessation of imports from the Middle East, we could
10 meet tomorrow, literally, with refinery engineers
11 and start planning how to put Pennsylvania coal into
12 Pennsylvania refineries and displace our
13 Commonwealth's dependence on imported petroleum.

14 Now, it is true we could meet
15 tomorrow, but that's because we didn't start working
16 on this yesterday. There has been a long history of
17 the base of the innovation period, understanding the
18 fundamentals, and then the development state in the
19 middle before it's ready to go to the top.

20 Our experience in talking with many
21 industries from around the Commonwealth is that we
22 find that many of our industries in the energy
23 business lack the financial and human capacity to
24 carry out internal research and development and in
25 many cases lack the financial capacity to outsource

1 a research project to an organization such as
2 ourselves.

3 We think that the key to overcoming
4 that hurdle is to provide public financing in the
5 form of public private partnerships.

6 Currently for the Commonwealth of
7 Pennsylvania the leading source of public funds for
8 work in the energy field is the Department of
9 Energy. A problem with the Federal Department of
10 Energy is there is usually a rather onerous
11 cost-share hurdle that many companies simply are not
12 able to meet, and that's where the additional
13 funding from the state would be exceptionally
14 important.

15 On April 4th, 2001 I testified
16 before a hearing similar to this indicating that if
17 the Commonwealth did not get involved in planning
18 the next generation of energy plants, called Vision
19 21, we would lose out to other states.

20 This is one case where I'm sorry to
21 admit that I was right. Pennsylvania has already
22 lost the race. Those plants are being -- are on the
23 drawing boards and being constructed currently in
24 the state of North Dakota.

25 Why we advocate the Energy Institute

1 as the prime focus for the proposed Pennsylvania
2 Energy Partnership is several reasons. First of
3 all, Penn State is the land grant university of the
4 Commonwealth of Pennsylvania, and so we are in a
5 position, we are set up to provide service to the
6 industries of the Commonwealth.

7 Secondly, we have no vested
8 interest. We are not in the coal business, or the
9 oil business, or the biomass business, and,
10 furthermore, we're not in the regulatory business
11 either. So we have no axe to grind either way.

12 Third, we already have a successful
13 history of setting up public/private partnerships --
14 and I'll give you some more details on that -- which
15 are primarily through the federal government. Up to
16 now the Federal Department of Energy has entrusted
17 the Energy Institute with \$10 million in federal
18 funds, to be the wise steward of those funds, to
19 pull together energy companies and universities for
20 energy development. There's another 16 million on
21 top of that pledged to us through the existing
22 contracts. And I'm proud to say that the state of
23 New York is funding the Energy Institute at a level
24 of about \$330,000.

25 We have successfully involved 208

1 companies in those public/private partnerships of
2 which 59 are from the Commonwealth of Pennsylvania.
3 We have also successfully involved 17 other
4 universities, which means that our -- we would plan
5 to involve the other universities of the
6 Commonwealth.

7 The fourth reason that we are very
8 successful at leveraging the public resources that
9 we have. Our nearest competitor, in both size and
10 geography, is the Center for Applied Energy Research
11 at the University of Kentucky.

12 They boast about the fact that, when
13 they have a good year, they bring in one dollar of
14 external funds for every dollar that is provided by
15 the Commonwealth of Kentucky.

16 At the Energy Institute, ladies and
17 gentlemen, when we have a good year, every dollar
18 that comes to us from Harrisburg we turn into a
19 twenty dollar bill. And so it would be nice if our
20 state treasurer could do that. We wouldn't have
21 perhaps so many problems.

22 Most of our competitor states,
23 Kentucky, Ohio, Illinois, fund state research at
24 approximately \$3 million a year for coal alone. And
25 so for a comprehensive energy program that includes

1 fossils and renewables I think that the level of
2 funding indicated in House Bill 658 is not out of
3 line.

4 So, in conclusion, what I would say
5 is that we have resources in Pennsylvania in terms
6 of the energy resource. We have the way to use them
7 in terms of the human resource and the organization.
8 And all we need to do -- is your help to put those
9 in place.

10 So I thank you, Mr. Chairman and
11 ladies and gentlemen of the committee.

12 I would close by saying that anyone
13 on the committee or the committee as a whole is
14 welcome at any time at the Energy Institute to see
15 more about what we're doing. Thank you.

16 CHAIRMAN ADOLPH: Thank you,
17 Dr. Schobert.

18 I'd also like to acknowledge the
19 presence of Representative Thomas and Representative
20 Bard.

21 Our next presenter is Eric Thumma.
22 Eric is the director of the Bureau of Energy,
23 Innovations and Technology Development at the
24 Department of Environmental Protection.

25 Good morning, Eric.

1 MR. ERIC THUMMA: Thank you,
2 Mr. Chairman.

3 Mr. Chairman and members of the
4 committee. Thank you for the opportunity to testify
5 before you today on House Bill 658. My name Eric
6 Thumma. I'm the Director of DEP's Bureau of Energy,
7 Innovations, and Technology Development. I am
8 joined today, on my right, by Jean Dworetzky, DEP's
9 Small Business Ombudsman. Together, we are the
10 interim Executive Directors of the Pennsylvania
11 Energy Development Authority.

12 Let me begin by stating that we
13 agree with the declaration set forth in the
14 beginning of this bill. Promoting Pennsylvania's
15 indigenous energy resources is a critical mission
16 for the Commonwealth, and the state's institutions
17 of higher learning can, and are, playing an
18 important role in achieving this mission. Governor
19 Rendell and Secretary McGinty have launched a number
20 of initiatives, including reauthorizing the
21 Pennsylvania Energy Development Authority, PEDA, and
22 creating a new Office of Energy and Technology
23 Development at DEP, that provide vehicles for
24 carrying out the objectives of House Bill 658. By
25 accomplishing the mission envisioned by the bill's

1 sponsors.

2 Pennsylvania has a proud heritage in
3 energy development, from the first oil well in
4 Titusville, to the first nuclear power plant in
5 Shippingport, to the first commercial-scale wind
6 farm east of the Mississippi River in Somerset, our
7 state has proven to be a leader in energy
8 development and deployment.

9 Today, however, like most of the
10 United States, Pennsylvania has become dependent on
11 foreign sources to supply its energy needs -- be it
12 Middle Eastern petroleum or natural gas -- gas
13 from Canada and Mexico -- the Commonwealth exports
14 approximately \$20 billion annually, nearly the size
15 of the state's budget, to other nations and states
16 who import energy resources. As the sponsors of
17 House Bill 658 point out, the time has come for
18 Pennsylvania to move towards a future of energy
19 independence.

20 As such, Governor Rendell made the
21 promotion of indigenous advanced energy resources a
22 focal point of his administration. Since taking
23 office, Governor Rendell and DEP Secretary Kathleen
24 McGinty have adopted a number of significant
25 initiatives to encourage an independent energy

1 future for Pennsylvania. Almost immediately,
2 Secretary McGinty reorganized DEP to include a new
3 Office of Energy and Technology Development,
4 providing the Commonwealth with its first energy
5 office since 1995.

6 Shortly thereafter, she launched the
7 Energy Harvest grant program. This \$5 million
8 program is the largest single year state grant
9 investment in advanced energy projects. Energy
10 Harvest's first round attracted 139 applications,
11 seeking \$45 million matched by another \$96 million
12 in public and private sources. As a result of the
13 tremendous interest in this program and the desire
14 to further enhance the available resources for
15 indigenous advanced energy projects, Governor
16 Rendell proposed increasing Energy Harvest to \$20
17 million a year for four years as part of Growing
18 Greener II.

19 Other major energy initiatives
20 launched by Governor Rendell include increasing the
21 state's purchase of green electricity from 5 percent
22 to 10 percent beginning July 1, with a commitment to
23 increase that amount to 20 percent in the future.
24 Governor Rendell has also endorsed legislation to
25 create a sales tax holiday for Energy Star

1 appliances and an Advanced Energy Portfolio Standard
2 which would require 10 percent of the electricity
3 sold in Pennsylvania to be generated from renewable
4 energy sources such as wind and solar and other
5 environmentally beneficial sources like waste coal
6 with ten years.

7 The most relevant initiative for our
8 discussion today was the Governor's decision to
9 revitalize the dormant Pennsylvania Energy
10 Development Authority and transfer its
11 responsibilities from the Department of Community
12 and Economic Development to DEP. The Governor did
13 so by Executive Order on April 8 of this year. The
14 reauthorization of PEDA signifies the
15 Administration's commitment to financing both large-
16 and small-scale advanced indigenous energy projects.
17 This can be done through the \$300 million in
18 non-revenue bonding authority that PEDA possesses.
19 Additionally, should PEDA receive an appropriation,
20 it will also be able to provide loans, loan
21 guarantees and grants to qualifying projects.

22 The energy sector presents an
23 extraordinary set of opportunities for the
24 Commonwealth in terms of economic development,
25 energy security and the creation of high-paying jobs

1 to keep our young people from leaving the state. We
2 believe PEDDA is one of the Commonwealth's best tools
3 for taking advantage of those opportunities right
4 now. Inquiries about PEDDA finance -- we have
5 already received many inquiries about PEDDA financing
6 for a wide variety of potential projects.

7 PEDDA, in conjunction with the
8 Pennsylvania Economic Development Financing
9 Authority, could help finance a number of vital
10 projects through PEDDA's bond mechanism. Some of
11 these projects could be: advanced clean coal
12 gasification to provide electricity and possibly
13 liquid fuels to sustain our economy and ensure the
14 livelihood of Pennsylvania's coal miners and mining
15 communities; commercial-scale wind farms which will
16 provide emission-free electricity to the grid and
17 lease payments and property taxes to rural
18 landowners, including farmers, and local
19 governments; and ethanol and bio-diesel projects for
20 clean domestically-produced motor fuels that will
21 also provide an outlet for our farmer's agricultural
22 products.

23 These are just some of the types of
24 projects that could be financed through PEDDA --
25 projects that will not only help us to assure an