MINUTES OF MEETING

BOARD OF DIRECTORS

PENNSYLVANIA ENERGY DEVELOPMENT AUTHORITY

December 18, 2009

Board Members Present:

Secretary John Hanger, Chair

Mr. Ray Bologna

Ms. Virginia L. Brown

Mr. Robert B. Miller, Jr. (for Hon. Peter Daley II)

Mr. Romulo Diaz, Jr.

Mr. Tyrone Christy

Hon. Steven Kaplan

Mr. Gibson Armstrong

Ms. Laureen Boles

Ms. Sarah Hetznecker

Mr. Robert Sanders

Mr. Josh Myers (for Hon. John N. Wozniak)

Mr. Jared Grissinger (for Hon. Dennis C. Wolff)

Mr. Steve Drizos (for Hon. George Cornelius)

Hon. Edwin Erickson (via phone)

Ms. Bernie Lynch (via phone)

Mr. Michael Welsh (via phone)

DEP Staff:

Thomas Bell, Executive Director

William Shakely, Esq.

Ms. Angela Rothrock

Ms. Rebecca Campbell

Public Attendees:

Mr. Richard Rosey

Ms. Susan McAleck

Mr. Vidya Patil

Ms. Jeaneen Zappa

Mr. Brian Moyer

Mr. John Nikoloff

Meeting Called to Order

Secretary Hanger called the meeting to order at 10:08 a.m.

A Brief Summary of the Department's Energy Accomplishments in 2009

Secretary Hanger shared a brief summary of DEP's 2009 energy accomplishments. In March 2009, PEDA awarded approximately \$3.8 million in American Recovery and Reinvestment Act of 2009 (ARRA) funding to five projects. In August 2009, PEDA awarded approximately \$20.7 million to 25 energy projects. The Department awarded approximately \$5.3 million in ARRA funding to 12 "mined" 2008 Energy Harvest applicants. \$22 million in ARRA funding was awarded to 99 projects located in 48 counties through the PA Conservation Works! Program.

The Department has also launched the Green Energy Works! ARRA funded programs which have thus far awarded \$12 million to 9 projects through the Combined Heat and Power Program. The projects will total 15 megawatts of new generation. The Green Energy Works! Biogas program is expected to announce awards next week. The Green Energy Works! Solar program has closed its solicitation and is currently in the scoring process. The Green Energy Works! Wind solicitation is accepting applications until December 31, 2009. The Green Energy Works! Revolving Loan Fund program is accepting application through January 6, 2010.

Act 1 funding is being awarded through DEP and the Commonwealth Financing Authority (CFA). The PA Sunshine Program has more than 400 approved solar installers and has reserved funds for more than 800 solar electric projects to date. There are more than 1,300 solar electric and solar hot water projects in various stages of development through the PA Sunshine Program.

The Secretary highlighted several companies that have specifically contributed to job creation in the Commonwealth during 2009. The Hodge Foundry has nearly \$50 million in annual sales, with approximately \$20 million of those sales being made by providing services to the wind industry. Pennsylvania has more than 40 companies that are providing components to the wind industry. Flabeg is a German company that is investing in the Commonwealth with the opening of its solar mirror factory located in Allegheny County. HelioSphera is a Greek company that is investing \$500 million to bring a thin film solar manufacturing facility to the Philadelphia Naval Yard. HelioSphera will be able to produce solar at a cost of \$1/Watt.

The Secretary thanked the Board for all of their contributions to the Department's energy successes in 2009.

Approval of Minutes of October 14, 2009 Meeting

Secretary Hanger called for a motion to approve the Minutes from the October 14, 2009 meeting. Romy Diaz motioned to approve and that motion was seconded by Virginia Brown. The Board voted unanimously to approve the Minutes.

Recommendation of 2009 Duquesne Light Settlement Fund Projects

Bernie Lynch announced her recusal from voting on all project under consideration for approval under the Duquesne Light Settlement Fund solicitation.

Mr. Bell reviewed that the Duquesne Light settlement fund originally provided \$1.5 million annually for PEDA to award to eligible projects. During the August 2009 meeting, the Board approved only 1 project to use those funds. As a result, a 4 week solicitation for additional projects was held. A total of 16 applications were received. Mr. Bell stated that he'd like to recommend 6 projects for the Board's approval. Mr. Bell provided a presentation providing details of all recommended projects. Projects were presented and organized by their proposed funding sources as follows¹:

Growing Greener II Projects:

Thar Geothermal Inc. - \$249,902 Western Pennsylvania School for Blind Children - \$250,000 Axion Power International Inc. - \$ 248,650 School District of Pittsburgh - \$250,000 Community College of Allegheny County - \$250,000 County of Allegheny, Dept. of Public Works- \$250,000

Romy Diaz asked for clarification on the job creation numbers presented on the Thar Geothermal Inc. slide versus the information provided in the Board's packet. Mr. Bell explained that there is potential for the project to create 115 jobs through all three phases of the company's demonstration project. However, the specific phase being recommended for funding here would create only 4 full-time jobs.

Romy Diaz asked if the PEDA staff could please provide the number of construction jobs created by the Western Pennsylvania School for Blind Children project. Mr. Bell agreed that the PEDA staff would obtain those numbers.

Ty Christy asked if the Department would encourage the School District of Pittsburgh to use Appalachian Lighting Systems, a local LED lighting manufacturer, for their project. Secretary Hanger explained that the Department would respect the school's procurement process. Ty Christy clarified that he would like to recommend that the school district include the company in any RFP processes that might become available as a result of the project.

Secretary Kaplan expressed his curiosity about the use of CO_2 as a refrigerant for the Thar Geothermal projects as opposed to traditional refrigerants. Secretary Hanger explained that the use of CO_2 is an innovative and cleaner coolant. He also stated that this could create a new market for CO_2 , which currently has limited marketable uses. Romy Diaz asked if Secretary Hanger has a sense of the quantities of CO_2 that could potentially be used by this type of technology. Secretary Hanger responded that at this point it's too early to make that determination for this technology.

Secretary Hanger asked the Board if there were any additional questions about the recommended projects. There were none.

¹ Details on all projects follow on the "2009 Duquesne Light Settlement Fund Project List."

Secretary Hanger asked for a motion to approve the 2009 Duquesne Light Settlement Fund recommended projects. Steve Drizos made the motion, and Secretary Kaplan seconded his motion. There was no discussion. The Board voted to unanimously award the recommended projects Duquesne Light Settlement funding.

Discussion of 2010 PEDA Plans

Mr. Bell stated that the next Board meeting will be held in March 2010. At that time, Mr. Bell will be asking the Board to discuss recommended improvements to the PEDA guidelines and scoring process for the 2010 solicitation. Mr. Bell reminded the Board that 2010 PEDA will be awarding the remaining amounts of Growing Greener II and Duquesne Light Settlement funds. Mr. Bell thanked the Board's technical committee for their assistance with the 2009 process.

Secretary Hanger asked the Board if there were any questions about PEDA's plans for 2010. There were none.

Administrative Matters

Secretary Hanger announced that the next Board meeting will be held March 2010. The Board will receive notice of the exact meeting date soon.

Ty Christy requested that Mr. Bell provide a detailed summary of PEDA's accomplishments. Mr. Bell agreed that he would share a list of energy accomplishments with all of the Board members.

Public Comment

Secretary Hanger called for public comment. There were no comments.

Meeting Adjourned

Secretary Hanger called for a motion to adjourn the meetin made the motion and Ray Bologna seconded the motion. A meeting was adjourned.	.
Secretary	Date

2009 PEDA Duquesne Light Settlement Fund Project List

Grantee/Project	Project Type	County	Amount
Thar Geothermal Inc.			
Installation of a 20 ton air conditioning			
system as the second step of a 3 part			
development process	Geothermal	Allegheny	\$249,902
Western Pennsylvania School for Blind			
Children			
Replacement of 357 windows and upgrade			
HVAC system to a chilled water cooling	Energy		
system	Efficiency	Allegheny	\$250,000
Axion Power International Inc.			
Completion of a 500 kW battery storage			
system and a power conditioning/ load	Battery		\$248,650
leveling system.	Storage	Lawrence	
School District of Pittsburgh			
Replacement of exterior building and			
parking lot lights at 10 schools with High	Energy		
Intensity Discharge LED lights	Efficiency	Allegheny	\$250,000
Community College of Allegheny			
County			
Replacement of existing outdoor lights			
with LED lighting at 4 campuses and 2	Energy		
educational centers	Efficiency	Allegheny	\$250,000
County of Allegheny, Dept. of Public			
Works			
Deployment of the first large scale (100			
ton) geothermal cooling system using			
carbon dioxide at a county owned nursing	Energy		
center	Efficiency	Allegheny	\$250,000