

2005 OCT 12 PM 1:09

SECRETARY'S BUREAU

PUC LATE-FILED EXHIBITS

Docket No. A-110550 F01 60

Hearing Date (9-26-05) ?

Judge Chestnut

Hearing held in Phila

Exhibit No. TRF stmts. 1 + 1 SR Exhibits LMM 1 + 2

Reporter John Kelly

1. Above exhibit to be supplied to reporter by:

2. Above exhibit to be filed directly with PUC by:

Additional Comments: Please add to exhibit file pre-attached



The Reinvestment Fund
Human Interest Compounded Daily

2005 OCT 12 PM 1:09
SECRETARY'S BUREAU

October 4, 2005

John Kelly
Commonwealth Reporting
700 Lisburn Road
Camp Hill, PA 17011

Subject: Joint Application of PECO Energy Company and Public Service Electric and Gas Company for Approval of the Merger of Public Service Enterprise Group Incorporated with and into Exelon Corporation
Docket No. A-110550 F0160

Dear Mr. Kelly:

Enclosed for filing with the Commission are two copies of the following documents which Administrative Law Judge Chestnut today by Order admitted into the record of the above-cited proceeding:

1. TRF Statement No. 1 - Testimony of Lewis M. Milford (includes Exhibits LMM-1 and LMM-2).
2. TRF Statement No. 1-SR - Surrebuttal Testimony of Lewis M. Milford

Sincerely,

Roger E. Clark, Esq.

direct phone: 215.574.5814
direct fax: 215.574.5914
email: roger.clark@trfund.com

Enclosures: TRF Statement No. 1 - Direct Testimony of Lewis M. Milford (includes Exhibits LMM-1 and LMM-2).
TRF Statement No. 1-SR - Surrebuttal Testimony of Lewis M. Milford

718 Arch Street
Suite 300 North
Philadelphia, PA 19106-1591
tel: 215.574.5800
fax: 215.574.5900
www.trfund.com

2005 SEP 27 PM 1:46
SECRETARY'S BUREAU

**JOINT APPLICATION OF PECO ENERGY :
COMPANY AND PUBLIC SERVICE :
ELECTRIC & GAS COMPANY FOR :
APPROVAL OF THE MERGER OF PUBLIC : DOCKET NO. A-110550F0160
SERVICE ENTERPRISE GROUP, INC., :
WITH AND INTO EXELON CORPORATION :**

There is no anticipated cross examination for Office of Small Business Advocate ("OSBA") witness Brian Kalcic. Pursuant to Prehearing Order No. 7, the following is a list of Mr. Kalcic's testimony and exhibits that are to be admitted by stipulation into the record of this proceeding.

Direct Testimony - OSBA Statement No. 1 – Kalcic except for the following redactions:

Cover Page (re: Issues Addressed).....Strike "Market Monitoring pursuant to 66 Pa. C. S. §2811"
Page 1.....Lines 24 through 31
Page 2.....Lines 17 through 20
Page 14.....Lines 9 through 30
Page 15.....Lines 1 through 28
Page 16.....Lines 1 through 26
Page 17.....Lines 1 through 29
Page 18.....Lines 1 through 5
Referenced Interrogatory Responses.....Strike OSBA-I-16 and OCA-XVIII-7

**DOCUMENT
FOLDER**

Rebuttal Testimony - OSBA Statement No. 2 – Kalcic except for the following redactions:

Cover Page (re: Issues Addressed).....Strike "Market Monitoring pursuant to 66 Pa. C. S. §2811"
Page 1.....Lines 20 through 32

Surrebuttal Testimony - OSBA Statement No. 3 – Kalcic except for the following redactions:

Cover Page (re: Issues Addressed).....Strike "Market Monitoring pursuant to 66 Pa. C.S. §2811"
Page 1.....At Line 13, strike "c) Dr. William H. Hieronymus; d) Mr. Jack Crowley" ending on Line 14
Page 3.....Lines 8 through 20
Page 4.....Lines 1 through 6
Page 14.....Lines 3 through 20
Page 15.....Lines 1 through 19
Page 16.....Lines 1 through 19

Page 17.....Lines 1 through 8
Attachment A.....Strike
Referenced Interrogatory Responses.....Strike OSBA-I-29

Supplemental Testimony - OSBA Statement No. 4 – Kalcic except for the following redactions:

Page 1.....Lines 29 through 35
Page 2.....Lines 1 through 8

RECEIVED
2005 SEP 27 PM 1:47
SECRETARY'S BUREAU

JOINT APPLICATION OF PECO ENERGY :
COMPANY AND PUBLIC SERVICE :
ELECTRIC & GAS COMPANY FOR :
APPROVAL OF THE MERGER OF PUBLIC : DOCKET NO. A-110550F0160
SERVICE ENTERPRISE GROUP, INC., :
WITH AND INTO EXELON CORPORATION :

There is no anticipated cross examination for Office of Small Business Advocate ("OSBA") witness Brian Kalcic. Pursuant to Prehearing Order No. 7, the following is a list of Mr. Kalcic's testimony and exhibits that are to be admitted by stipulation into the record of this proceeding.

Direct Testimony - OSBA Statement No. 1 – Kalcic except for the following redactions:

Cover Page (re: Issues Addressed).....Strike "Market Monitoring pursuant to 66 Pa. C. S. §2811"
Page 1.....Lines 24 through 31
Page 2.....Lines 17 through 20
Page 14.....Lines 9 through 30
Page 15.....Lines 1 through 28
Page 16.....Lines 1 through 26
Page 17.....Lines 1 through 29
Page 18.....Lines 1 through 5
Referenced Interrogatory Responses.....Strike OSBA-I-16 and OCA-XVIII-7

Rebuttal Testimony - OSBA Statement No. 2 – Kalcic except for the following redactions:

Cover Page (re: Issues Addressed).....Strike "Market Monitoring pursuant to 66 Pa. C. S. §2811"
Page 1.....Lines 20 through 32

Surrebuttal Testimony - OSBA Statement No. 3 – Kalcic except for the following redactions:

Cover Page (re: Issues Addressed).....Strike "Market Monitoring pursuant to 66 Pa. C.S. §2811"
Page 1.....At Line 13, strike "c) Dr. William H. Hieronymus; d) Mr. Jack Crowley" ending on Line 14
Page 3.....Lines 8 through 20
Page 4.....Lines 1 through 6
Page 14.....Lines 3 through 20
Page 15.....Lines 1 through 19
Page 16.....Lines 1 through 19

Page 17.....Lines 1 through 8
Attachment A.....Strike
Referenced Interrogatory Responses.....Strike OSBA-I-29

Supplemental Testimony - OSBA Statement No. 4 – Kalcic except for the following redactions:

Page 1.....Lines 29 through 35
Page 2.....Lines 1 through 8

RECEIVED

OCT 12 2005

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

The Reinvestment Fund's Statement No. 1

(Addressing clean energy as an element of affirmative public benefit
and recommending increased funding for clean energy.)

**Before the
Pennsylvania Public Utility Commission**

JOINT APPLICATION OF PECO ENERGY COMPANY AND
PUBLIC SERVICE ELECTRIC AND GAS COMPANY
FOR APPROVAL OF THE MERGER OF
PUBLIC SERVICE ENTERPRISE GROUP INCORPORATED
WITH AND INTO EXELON CORPORATION

Docket No. A-110550 F0160

JAK
Phila

Testimony and Exhibits of

Lewis M. Milford

Clean Energy Group, Inc.
50 State Street
Montpelier, Vermont 05602

SECRETARY'S BUREAU

2005 OCT 12 PM 1:12

11:05:00

June 28, 2005

The Reinvestment Fund's Statement No. 1

Testimony and Exhibits of
Lewis M. Milford

Table of Contents

Part 1. QUALIFICATIONS	1
Part 2. INTRODUCTION	5
Part 3. CLEAN ENERGY AS AN ELEMENT OF AFFIRMATIVE PUBLIC BENEFIT	6
Part 4. THE SUSTAINABLE DEVELOPMENT FUND	14
Part 5. SDF'S PROPOSED REGIONAL FUND	15
Part 6. CONCLUSION AND RECOMMENDATIONS	19
Exhibit LMM-1: Resume of Lewis M. Milford	20
Exhibit LMM-2: TRF Regional Clean Energy Development Fund: A Special Opportunity for Pennsylvania and New Jersey Leadership in Regional Market Development.....	23

1 **Part 1. QUALIFICATIONS**

2 **Q: Please state your name and business address.**

3 A: My name is Lewis M. Milford. My address is Clean Energy Group, 50 State Street,
4 Montpelier, Vermont, 05602.

5 **Q. On whose behalf are you testifying?**

6 A. I am testifying on behalf of The Reinvestment Fund (“TRF”) and its Sustainable
7 Development Fund (“SDF”).

8 **Q. Are you an employee of The Reinvestment Fund?**

9 A. No, but I have been serving as an unpaid member of the board of directors of The
10 Reinvestment Fund since July 2003. The TRF board has no decision-making authority
11 over individual SDF grants, loans or investments.

12 **Q. Please describe your current employment.**

13 A. I am the founder and President of the Clean Energy Group (“CEG”), a non-profit
14 organization whose mission is to increase the use of cleaner energy technologies in the
15 U.S. and abroad through creative financing, business partnerships, public policy and
16 advocacy. CEG is supported by major foundations including The Pew Charitable Trusts,
17 Surdna Foundation, Rockefeller Brothers Fund, Emily Hall Tremain Foundation, The
18 John Merck Fund, the Education Foundation of America and the Energy Foundation.

1 CEG also receives contract support from the U.S. Department of Defense, the U.K.
2 Carbon Trust and others. The address of the CEG website is www.cleangroup.org.

3 I am also the Executive Director of Clean Energy States Alliance (“CESA”).

4 **Q. What is CESA?**

5 A. CESA is a nonprofit organization created and managed by CEG that helps the major state
6 clean energy funds in the U.S. work together to create and expand the markets for clean
7 energy technologies, companies and projects. The address of the CESA website is
8 www.cleanenergystates.org.

9 CESA is engaged in building a new and effective network to support the development of
10 robust clean energy markets. With more than a dozen joint projects underway or under
11 development, CESA is effectively engaged at many stages of state, regional, and national
12 clean energy markets. CESA is working with federal agencies, establishing international
13 networks, promoting innovative industry collaborations and bringing together key clean
14 energy stakeholders to shape more robust markets. CESA is effectively linking clean
15 energy constituents from many arenas, creating an array of connections—connections
16 across political boundaries, across the not-for-profit and industry sectors—that are
17 necessary for clean energy development to thrive.

18 **Q. Who are CESA’s members?**

19 A. CESA’s seventeen members range from public agencies to state governments to nonprofit

1 organizations and other entities that manage public funding in clean energy. CESA's
2 members are:

- 3 • California: California Energy Commission
- 4 • Connecticut: Connecticut Clean Energy Fund
- 5 • Illinois: Illinois Clean Energy Community Foundation
- 6 • Massachusetts: Massachusetts Technology Collaborative's Renewable Energy
7 Trust
- 8 • Minnesota: Xcel Energy Renewable Development Fund
- 9 • New Jersey: New Jersey Clean Energy Program,
- 10 • New York: New York State Energy Research and Development Program; Long
11 Island Power Authority
- 12 • Ohio: Ohio Energy Loan Fund
- 13 • Oregon: Oregon Energy Trust
- 14 • Pennsylvania: Metropolitan Edison Company Sustainable Energy Fund of The
15 Berks County Community Foundation; Pennsylvania Electric Company Sustainable
16 Energy Fund of the Community Foundation for the Alleghenies; Sustainable
17 Development Fund; Sustainable Energy Fund of Central Eastern Pennsylvania; and
18 West Penn Power Sustainable Energy Fund
- 19 • Rhode Island: Rhode Island Renewable Energy Fund
- 20 • Wisconsin: Wisconsin Focus on Energy.

1 **Q. In your work for CESA, have you examined the activities of the individual CESA**
2 **members?**

3 A. Yes, I am familiar with their programs.

4 **Q. Are you familiar with the work of The Reinvestment Fund and its Sustainable**
5 **Development Fund?**

6 A. Yes. I started to work with the staff of the Sustainable Development Fund in 1999 when
7 CEG first began to bring together the state clean energy funds. SDF was active
8 participant in this work from the beginning.

9 In addition, as I mentioned earlier, I have been a TRF board member since July 2003.

10 Robert Sanders, the SDF Fund Manager, has been serving on the CEG board since

11 September 2003. Roger Clark has worked part-time as a consultant to CEG since July,

12 2000. These relationships have strengthened my familiarity with the capabilities and

13 accomplishments of TRF and SDF.

14 **Q. Please describe your background and previous experience.**

15 A. Prior to starting CEG in 1998, I served for ten years as Vice President of the Conservation
16 Law Foundation (“CLF”), a leading New England environmental advocacy organization.

17 As Director of CLF’s Energy Project, I directed the organization’s policy, litigation,

18 negotiations and advocacy in electric power regulatory proceedings at the state, regional

19 and federal levels. I supervised a staff of four attorneys and managed a \$1 million

1 consultant budget. I directed negotiations that led to electric restructuring laws and
2 related agreements in many of the New England states.

3 Prior to my work with CLF, I worked on various environmental issues as an attorney in
4 private practice, for state government, for the federal government and in the nonprofit
5 sector.

6 I received a B.A. degree in Political Science in 1973 from Rutgers College and a J.D.
7 degree in 1976 from Georgetown University Law Center. My resume is provided here as
8 Exhibit LMM-1.

9 **Part 2. INTRODUCTION**

10 **Q. What is the purpose of your testimony today?**

11 A. I will explain why it is appropriate for the Pennsylvania Public Utility Commission
12 (“Commission”) to consider renewable energy, advanced clean energy technologies and
13 energy efficiency as an element of the affirmative public benefit that must be present if the
14 Commission is to approve the proposed merger. These technologies, which I will call
15 “clean energy” for the balance of this testimony, can increase the reliability of power,
16 provide fuel diversity to protect ratepayers from escalating fuel prices, promote economic
17 development by developing Pennsylvania resources, reduce the economic drain of
18 electricity imports and lessen the damaging health and environmental impacts of pollution
19 of our air, water and land. I will recommend that the Commission require increased

1 support of clean energy in its ruling on the proposed merger and I will explain why the
2 Sustainable Development Fund is an effective vehicle for delivering those clean energy
3 measures to the ratepayers of southeastern Pennsylvania.

4 **Q. Do you intend to address whether this proposed merger is in the public interest and**
5 **the many other issues that have been raised by the Applicants and the other parties?**

6 A. No. I will focus my attention only on the issue of clean energy as an appropriate
7 component of the public benefits that must be present for the Commission to approve the
8 proposed merger.

9 **Part 3. CLEAN ENERGY AS AN ELEMENT OF AFFIRMATIVE PUBLIC BENEFIT**

10 **Q. What relevance does clean energy have to the Commission's review of this proposed**
11 **merger?**

12 A. The Pennsylvania Public Utility Code requires the Joint Applicants to obtain a certificate
13 of public convenience from the Commission for the proposed merger. 66 Pa. C.S.
14 §1102(a)(3). This certificate of public convenience can be granted "only if the
15 commission shall find or determine that the granting of such a certificate is necessary or
16 proper for the service, accommodation, convenience, or safety of the public." 66 Pa. C.S.
17 §1103(a).

18 The Pennsylvania courts have interpreted these sections to require that a proposed merger
19 provide affirmative public benefits. See *City of York v. Pa. Public Utility Comm.*, 449 Pa.

1 136, 295 A.2d 825 (1972).¹ I believe that the expanded use of energy efficiency and
2 demand management, renewable energy and advanced clean energy technologies offers the
3 public considerable affirmative benefits in service, accommodation, convenience and safety
4 of their electric utility system.

5 **Q. What are some examples of those benefits to service, accommodation, convenience**
6 **and safety?**

7 A. The benefits of clean energy are many:

- 8 • Energy conservation and load management reduce peak demand and thereby
9 increase the reliability of power by avoiding extreme peak loads that stress the
10 utility grid. The value and cost effectiveness of these strategies are recognized by
11 the large number of utilities and public utility commissions that are actively
12 working to expand energy efficiency and demand response resources.
- 13 • Distributed generation, the deployment of smaller generation, increases the
14 reliability of the power grid by lessening the dependence on a small number of
15 huge generating stations that are far from the load centers.
- 16 • Clean energy projects protect ratepayers from escalating fuel prices by providing
17 fuel diversity and lessening our dependence on natural gas. The March 2004
18 report by the Black & Veatch Corporation entitled *Economic Impact of*
19 *Renewable Energy in Pennsylvania* analyzed the potential impacts to fossil fuel

¹ While having no legal impact on this Pennsylvania proceeding, it is interesting to note that the New Jersey Board of Public Utilities voted unanimously on June 22 to apply the “positive benefit” test to this merger, rather than the “no harm” text. See <http://www.state.nj.us/bpu/home/news.shtml?23-05>.

1 prices and consumption as a result of a 10% renewable portfolio standard in
2 Pennsylvania by consulting recent national and regional studies. According to the
3 report, “[s]trong evidence has been presented by numerous studies that suggest
4 that there are natural gas price impacts as a result of the adoption of renewable
5 energy policies.” While noting that Pennsylvania uses less natural gas for
6 electricity generation than the states in the studies, the report suggests that a 10%
7 RPS in Pennsylvania could result in a 1% reduction in the cost of natural gas,
8 which would result in fuel savings of almost \$140 million per year.² (The full
9 report is available at www.bv.com/energy/eec/studies/PA_RPS_Final_Report.pdf)

- 10 • Clean energy projects promote economic development by developing Pennsylvania
11 resources and providing Pennsylvania jobs. A recent noteworthy example of this is
12 the recent decision by Gamesa, the Spanish wind company, to locate both its North
13 American business headquarters and a blade manufacturing facility in Pennsylvania.
14 The Black & Veatch report cited above noted that compliance with a 10% RPS in
15 Pennsylvania would result in \$10.1 billion additional gross state output over 20
16 years over the *business-as-usual* portfolio, would provide a \$2.8 billion advantage
17 in earnings and would generate about 85,000 more job-years over 20 years than
18 the *business-as-usual* portfolio. Other reports for other states report similar
19 economic benefits.

² The Advanced Energy Portfolio Act of 2004 requires an 18% portfolio with a different set of eligible technologies than the 10% RPS examined in this report. This difference may change the numbers, but it does not change the conclusion of significant positive impact for both this point and the following point.

- 1 • Clean energy projects protect public health by reducing emissions of dangerous
2 pollutants and reduce the environmental impacts of pollution of our air, water and
3 land. The deployment of clean energy technologies will result in reduced air and
4 water pollution, enhancing the region's competitive advantage. By using zero-
5 emission technologies such as solar and wind sources and low-emission, advanced
6 biomass technologies, clean energy projects reduce the emissions of major
7 pollutants including carbon dioxide, nitrogen oxide, sulfur dioxide, and mercury
8 that stem from the current use of fossil fuel energy sources.

- 9 • Clean energy projects strengthen Pennsylvania's Electric Choice initiative. At an
10 event celebrating the fifth anniversary of electric choice, then Chairman Glen R.

11 Thomas stated:

12 As Pennsylvania celebrates five years of national leadership under electric
13 competition, we can also celebrate national leadership when it comes to
14 protecting the environment. Thanks to Electric Choice, Pennsylvanians can
15 choose to light and heat their homes through green power. Nearly 120,000
16 Pennsylvanians have made this choice -- more than any other state. This
17 demand has led to new technologies -- technologies that will enhance our
18 reputation as the leader when it comes to utility competition, and
19 technologies that will bring greater choices and services to Pennsylvania
20 consumers.

21 The press release is available at [http://www.puc.state.pa.us/general/press_releases/
22 press_releases.aspx?ShowPR=751](http://www.puc.state.pa.us/general/press_releases/press_releases.aspx?ShowPR=751).)

23 These benefits are becoming increasingly understood and recognized in Pennsylvania and
24 other states.

1 **Q. What evidence do you see that Pennsylvania public policy is increasingly supportive**
2 **of clean energy?**

3 **A. I would note the following events and actions that indicate a growing support for clean**
4 **energy in Pennsylvania:**

- 5 • The creation of the regional sustainable energy funds in the 1998 settlement
6 agreements of the restructuring proceedings for PECO Energy, Pennsylvania
7 Power & Light, General Public Utilities and West Penn Power.
- 8 • The increase in funding for the regional sustainable energy funds that was provided
9 for in the settlement agreements of the PECO Energy/Unicom merger in 2000 and
10 in the GPU/First Energy merger in 2002.
- 11 • The expanded clean energy funding provided for by the Pennsylvania Department
12 of Environmental Protection under the Energy Harvest Program. The third round
13 of Energy Harvest funding, announced on May 4, 2005, will bring the total Energy
14 Harvest support to \$15 million. See the press release at [www.dep.state.pa.us/
15 newsreleases/default.asp?ID=3427&varQueryType=Detail](http://www.dep.state.pa.us/newsreleases/default.asp?ID=3427&varQueryType=Detail).
- 16 • The rebirth of the Pennsylvania Energy Development Authority and the new
17 funding it is providing for clean energy. On June 23, 2005, PEDA announced the
18 award of \$10 million to 17 different energy projects. In making the
19 announcement, DEP Secretary Kathleen McGinty noted:

20 We, in Pennsylvania, have the ingenuity and resources to develop and
21 deploy new clean energy technology. Our commonwealth is offering
22 significant financial incentives to make energy manufacturing a cornerstone
23 in the state's economic future and ensure that more electricity generation

1 comes from environmentally beneficial sources. PEDA refocuses our
2 priorities on indigenous energy resources by investing in clean, efficient
3 energy made in Pennsylvania.

4 The press release is available at [www.dep.state.pa.us/newsreleases/
5 default.asp?ID=3502](http://www.dep.state.pa.us/newsreleases/default.asp?ID=3502).

- 6 • The enactment of the Advanced Energy Portfolio Standards Act of 2004 is the
7 strongest statement that clean energy is official Pennsylvania public policy. This
8 act requires electric distribution companies and electric generation suppliers to
9 increase the percentage of the total power sold that comes for various clean and
10 alternative energy sources. See [www2.legis.state.pa.us/WU01/LI/BI/BI/
11 2003/0/SB1030P1973.pdf](http://www2.legis.state.pa.us/WU01/LI/BI/BI/2003/0/SB1030P1973.pdf) for the text of Act 213.

12 **Q. Do you see such support for clean energy in other states?**

13 A. Definitely. The state clean energy funds that are CESA's members are evidence of that
14 support. In the last five years, these funds have invested more than \$1.5 billion through
15 grants, rebates, loans and equity investments. In the coming decade, they are expected to
16 invest another \$2.5 billion. These state funds have become major players in promoting
17 and funding clean energy.

18 **Q. Does the Application filed by the Joint Applicants address clean energy?**

19 A. Not in any explicit detail. Paragraph 27(d) of the Joint Application, entitled *Sharing of*
20 *Best Practices*, only states:

1 The Merger will combine companies with complementary areas of
2 expertise, namely, Exelon's expertise in generation operations and
3 PSEG's expertise in transmission and distribution operations...

4 While clean energy is not addressed in detail in the Exelon witness statements, I would
5 offer that PSEG's expertise in distribution operations includes significant support for
6 energy efficiency and demand management, renewable energy and advanced clean energy
7 technologies.

8 **Q. How much does PSE&G collect for clean energy?**

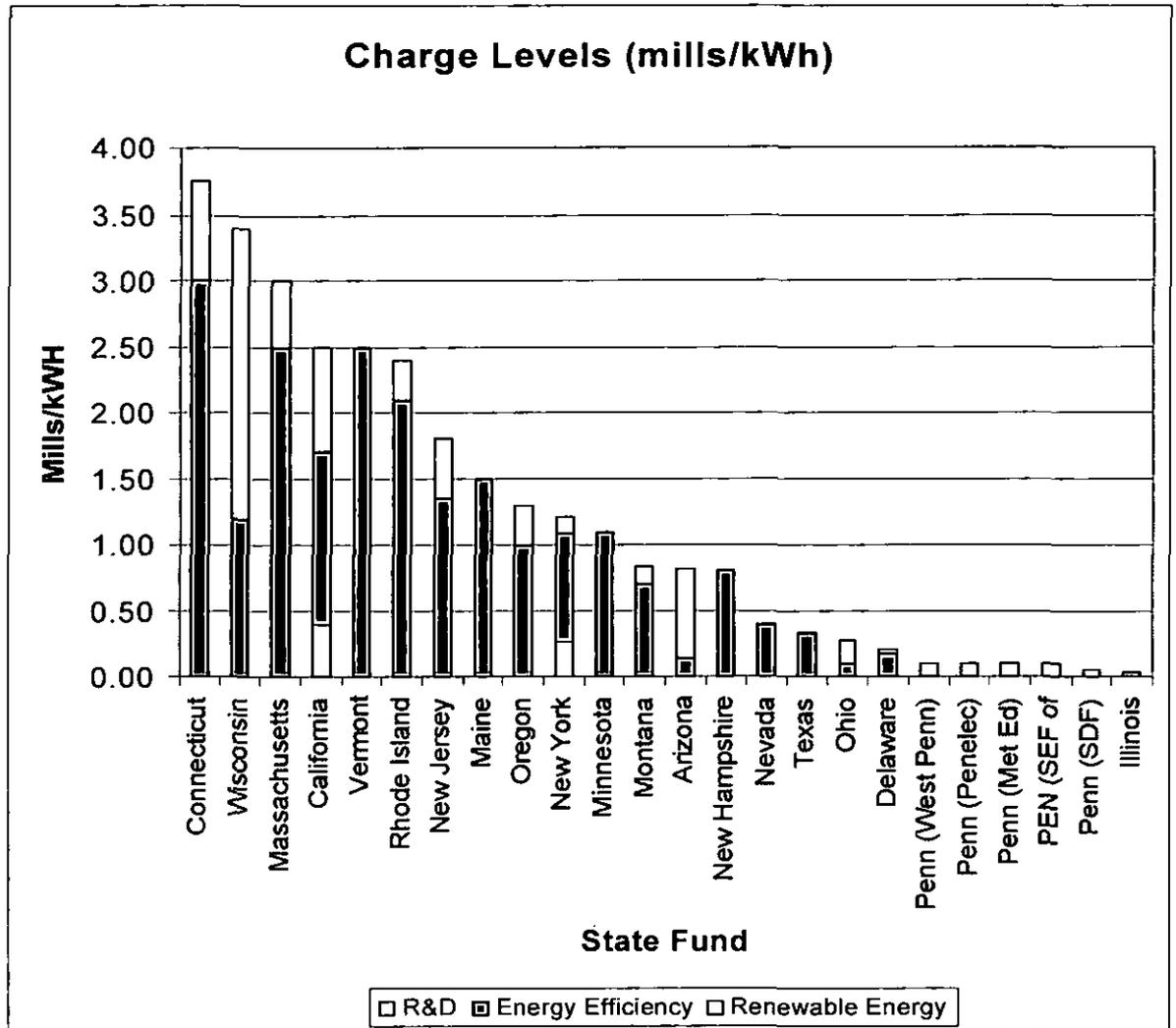
9 A. In 2004, Public Service Electric and Gas Company ("PSE&G"), PSEG's regulated
10 company, collected \$43.4 million from their electric ratepayers for clean energy support
11 through the Societal Benefit Charge.

12 **Q. How much does PECO collect for clean energy?**

13 A. In the 1998 settlement agreement of the PECO restructuring case, PECO agreed to collect
14 and provide SDF with 0.005 cents (1/200th of a cent) per kilowatt-hour. The settlement
15 agreement in the PECO/Unicom merger converted those collections into a lump-sum
16 payment to SDF through December 31, 2006. If the current transmission and distribution
17 tariff remains unchanged, SDF will again begin to receive the quarterly payments in 2007.
18 Using the 1/200th of a cent rate, the effective PECO support for the clean energy work of
19 SDF in 2004, computes to approximately \$1.9 million.³

³ This is based on \$0.0005 times the T&D throughput of 37.7 billion kWh in 2004. This figure obviously does not include the clean energy funding that PECO provided SDF in the settlement agreement of the PECO/Unicom merger, but it is only a statement of future funding levels now in the rate.

- 1 Q. At what rate to other states provide funding for clean energy?
- 2 A. CEG staff prepared a table examining the system benefit charges of the various state clean
- 3 energy funds.⁴ That table is reproduced below:



⁴ The table was developed using data from the American Council for an Energy Efficient Economy. The ACEEE data can be found at http://www.aceee.org/briefs/may1_03.pdf; http://www.aceee.org/briefs/may2_03.pdf; http://www.aceee.org/briefs/may3_03.pdf; and http://www.aceee.org/briefs/may4_03.pdf.

1 **Q. Are you suggesting that PECO increase its funding for clean energy to bring it up to**
2 **the level of PSE&G?**

3 **A.** No, as it is probably unrealistic to think that this merger proceeding is the forum for
4 mandating that size of an increase. Instead, I agree with the TRF proposal that the
5 Commission direct PECO to increase its support for clean energy by \$30 million to be
6 paid in over three years as a condition for the approval of the proposed merger. I discuss
7 the TRF proposal in Part 5 of my testimony.

8 **Part 4. THE SUSTAINABLE DEVELOPMENT FUND**

9 **Q. The settlement agreements in the PECO Energy restructuring case and the**
10 **PECO/Unicom merger created the Sustainable Development Fund and provided it**
11 **with a total of approximately \$32 million for various clean energy initiatives. Do**
12 **you support using SDF as the vehicle for clean energy support in this merger, and if**
13 **so, why?**

14 **A.** Yes I do. SDF is an experienced fund manager and financial intermediary that uses
15 incentive financing for economic and clean energy market development. I have found that
16 SDF is one of the most effective clean energy funds operating today, despite their very
17 modest resources. I believe the reason for this is their keen understanding of the market
18 and the TRF tradition of working closely with private financial interests. SDF's method of
19 operation is to continually leverage their funding with significant amounts of private
20 capital. SDF's experience as a financial intermediary between companies and projects on

1 the one hand, and private and public sources of capital on the other, makes them an
2 effective vehicle to transform the energy market.

3 As for TRF, it is a professional fund manager with a 20-year track record of performance
4 that has demonstrated the ability to effectively leverage resources and relationships. As a
5 lender and equity investor already active in Pennsylvania and New Jersey, TRF has in the
6 place the organizational infrastructure and capacity to deliver solid results. TRF has a
7 strong track record of professional, independent fund management and a well-developed
8 network of relationships with equity and debt financing partners, as well as public
9 development agencies and foundations.

10 **Part 5. SDF'S PROPOSED REGIONAL FUND**

11 **Q. If the Commission were to require increased support for clean energy, how do you**
12 **recommend that support be structured?**

13 A. I endorse TRF's innovative proposal to create a regional fund that would promote clean
14 energy in both the PECO Energy and PSE&G service territories. Such a fund would
15 leverage private investment as well as existing public grant incentives for renewable
16 energy, clean energy technologies, and energy conservation. The new fund would not
17 duplicate what is available in Pennsylvania or New Jersey today, but would leverage new
18 resources and financing capacity in order to accelerate clean energy market development
19 throughout the region. The new fund's investments would create quality jobs across a
20 broad spectrum of employment categories, enhance private capital flow, and lower the

1 operating costs of companies. Instead of New Jersey and Pennsylvania competing for
2 clean energy companies and projects with dueling incentive packages, the new fund would
3 create jointly-governed incentive financing vehicle benefiting the start-up and expansion of
4 *companies in the region. In short, the new fund would be an effective catalyst for*
5 coordinating and rationalizing clean energy resources and policy across state lines. I have
6 attached as Exhibit LMM-2 to my testimony a document that describes this proposed fund
7 in greater detail.

8 **Q. What was your role in preparing the document provided as Exhibit LMM-2?**

9 A. One of CESA's goals from the beginning has been to encourage regional support for clean
10 energy. I worked with SDF staff and others in New Jersey on the broad elements of a
11 *proposed regional fund. The actual document was written by Rob Sanders at TRF but*
12 *with my input and collaboration.*

13 **Q. How and at what levels would this regional fund be capitalized?**

14 A. TRF is proposing \$60 million for the new fund. One-half of this amount would be from
15 PECO for Pennsylvania-based projects and one-half would be from PSE&G for New
16 Jersey-based projects. The \$30 million for Pennsylvania work would be allocated as
17 follows:

- 18 • \$10 million for core lending and investing (energy performance contract lease
19 financing, other credit instruments and equity/near-equity investments in clean
20 energy businesses);

- 1 • \$12 million for wind incentives (wind production incentives, wind price insurance
2 or similar initiatives);
- 3 • \$5 million for solar photovoltaic incentives (residential and commercial
4 installations); and,
- 5 • \$3 million for demonstration grants and public education (including clean energy
6 marketing incentives).

7 **Q. How would this regional fund be governed and managed?**

8 A. Governance of the new regional clean energy development fund would be consistent with
9 the current governance of SDF. The new fund would be guided by a Board of Directors
10 approved by the two utility boards (the Commission and the New Jersey Board of Public
11 Utilities). The Board of Directors would provide input to and oversight of the new fund's
12 activities, and would review and approve the new fund's annual program plan and its
13 annual operating budget. The Board of Directors would also monitor the new fund's
14 program activities and financing transactions for adherence to mission. However, as is the
15 case with SDF, approval of financing transactions would be made by TRF's standing loan
16 and investment committees. The legal and fiduciary responsibility for the new fund would
17 reside with TRF.

18 This governance model has worked well with SDF. The TRF committees are made up of
19 lending professionals who donate their time and who can review proposed transactions
20 without bias. By placing the approval of loans and investments with these TRF

1 committees, SDF's financial decision-making is protected from both real and perceived
2 political pressure to fund particular companies or projects. TRF has used this governance
3 structure since 1985 and it has been part of the SDF bylaws from the beginning of SDF.

4 **Q. Is this proposed fund an effective way to support clean energy?**

5 A. Yes. One challenge that the existing Pennsylvania sustainable energy funds face is their
6 small geographic footprint. Obviously, markets for clean energy are not limited to
7 southeastern Pennsylvania. The Delaware Valley provides a larger market for clean
8 energy companies and their products and services. The new fund would serve as a
9 catalyst for developing coordinated regional financing and program initiatives that support
10 the rapid development of clean energy markets in the greater region, and achieving a
11 *greater scale of impact. The new fund will demonstrate how two neighboring states with*
12 *common clean energy goals can create a collaboration that results in new jobs and*
13 *development for both states, as it accelerates clean energy market development*
14 *throughout the region.*

15 The TRF proposal also has the advantage of creating a more consistent set of financing
16 incentives across the region served by these two Exelon companies so that local clean
17 energy companies can respond efficiently to market opportunity and grow. The TRF
18 proposal will extend the grant dollars available in the PECO territory, while it also
19 introduces the capability to provide energy lending and investing in New Jersey, which is
20 not available in effective ways in the PSE&G service territory.

1 **Q. Is the Pennsylvania portion of this proposed fund dependent on receiving approval**
2 **of the New Jersey funding and vice versa?**

3 A; Not at all. The value of the proposed fund is definitely increased if it is supported by both
4 Pennsylvania and New Jersey, but neither is dependent on the other. TRF would
5 effectively utilize and deploy additional funding from Pennsylvania even if New Jersey
6 declined to participate in the proposed fund.

7 **Part 6. CONCLUSION AND RECOMMENDATIONS**

8 **Q. What are your recommendations for the Commission in this case?**

9 A. I recommend that the Commission explicitly include funding support for clean energy as
10 an important element of the public benefit that must be provided by the merger for it to
11 receive a certificate of convenience. I recommend that the Commission condition the
12 certificate of public convenience on a PECO increase in its support for clean energy. I
13 strongly favor SDF as the vehicle for this additional support. I support the TRF's
14 proposal that the fund be initially capitalized with \$30 million under order of this
15 Commission towards the creation of a \$60 million regional clean energy fund.

16 **Q. Does this conclude your testimony?**

17 A Yes.

Exhibit LMM-1

Resume of Lewis M. Milford

A-110550 F0160
9-26-05
JAK
Phila

1
2
3
4
5
6

Lewis M. Milford, Esq.
Clean Energy Group
50 State Street
Montpelier, Vermont 05602
(802) 223-2554
lmilford@cleanegroup.org

7 **EXPERIENCE:**

8 *Clean Energy Group, Montpelier, Vermont*
9 *President, 1998 - Present*

10 Founder and President of Clean Energy Group (CEG), a non-profit organization dedicated
11 to increasing the use of cleaner energy technologies in the United States and abroad.
12 Through creative financing, business partnerships, public policy and advocacy, CEG
13 works to build stronger markets for clean energy.

14 CEG works with public officials from around the U.S. that are responsible for over \$3.5
15 billion in new clean energy funds. This CEG project, which began in 2000 as the Clean
16 Energy Funds Network and became the Clean Energy States Alliance (CESA) in 2002,
17 was developed to help fund officials create and coordinate efforts to expand clean energy
18 markets. CEG also developed and manages the Public Fuel Cell Alliance, a multi-state
19 public network that works to develop effective financial and policy models to expand the
20 markets for fuel cells. CEG works with a variety of financial, policy and other public and
21 private institutions interested in building sustainable energy markets. CEG also partners
22 with public officials in Europe interested in trans-Atlantic efforts to build clean energy
23 markets and funding mechanisms for clean energy.

24 *Conservation Law Foundation of New England, Montpelier, Vermont*
25 *Vice President and Director, Energy Project, 1988--1998*

26 While Vice President and Director of the Energy Project for New England's leading
27 environmental advocacy organization, I was responsible for directing organization's policy,
28 litigation, negotiations and advocacy concerning state and federal regulation of the
29 region's electric power industry. I supervised a staff of four attorneys and a team of

1 independent consultants with a \$750,000 staff and a \$1 million consultant budget, directed
2 negotiations that led to electric restructuring laws and agreements throughout New
3 England. I was a member of the CLF management committee that controlled the
4 organization's budget, policy direction and other environmental litigation and advocacy
5 throughout New England.

6 *Riker, Danzig, Scherer, Hyland & Peretti, Morristown, New Jersey*
7 *Attorney, 1986-1988*

8 Attorney in private practice representing major corporate clients on environmental
9 matters, including permitting, litigation, commercial transactions and land use matters.

10 *Environmental Protection Division, Office of the New York Attorney General, New York City*
11 *Assistant Attorney General, 1984-1985*

12 State environmental prosecutor responsible for Love Canal litigation brought by State of
13 New York to recover over \$100 million in cleanup expenses incurred to address
14 hazardous waste disposal by Hooker Chemical Company. I developed the common law
15 strategy that led to successful recovery of state funds.

16 *Public Interest Law Clinic, Washington College of Law, American University, Washington, D.C.*
17 *Director, 1978-1984*

18 Faculty member and director of law school clinical program teaching various litigation and
19 environmental courses. As attorney for Legal Services Corporation and American Civil
20 Liberties Union Project, I also represented hundreds of thousands of Vietnam veterans
21 exposed to chemical defoliant Agent Orange, and military veterans exposed to nuclear
22 tests to obtain health care and disability benefits for military-related injuries. Brought
23 federal court litigation and testified numerous times before committees of the United
24 States Congress, which led to award of Congressional benefits to veterans for their
25 military related injuries.

26 *Office of the Solicitor, U.S. Department of the Interior, Washington, D.C.*
27 *Attorney-Advisor, 1976-1978*

28 Federal attorney in the office of agency's general counsel responsible for providing legal
29 advice on numerous federal environmental, disclosure, personnel and related matters.

30 **EDUCATION:**

31 Georgetown University Law Center, J.D., 1976

32 Rutgers College, B.A., 1973 (Phi Beta Kappa, Henry Rutgers Scholar)

1 **BAR MEMBERSHIPS:**

2 United States Court of Appeals, First and Second Circuits
3 Federal District Court for Vermont
4 Vermont Supreme Court
5 District of Columbia Court of Appeals

6 **PUBLICATIONS:**

7 *The Wages of War, When America's Soldiers Came Home -- From Valley Forge to*
8 *Vietnam*, (with Richard Severo), Simon & Schuster, 1989. (Winner of American Legion's
9 1990 National Commander's Award)
10 Author of numerous articles on clean energy and environmental affairs in publications
11 including *The New York Times* and *The Boston Globe*

Exhibit LMM-2

A-110550P0160
9-26-05
JAL
PL.L.M

**TRF Regional Clean Energy Development Fund:
A Special Opportunity for Pennsylvania and New Jersey
Leadership in Regional Market Development**

1
2
3

I. Executive Summary

The TRF Sustainable Development Fund is an experienced fund manager and financial intermediary that uses incentive financing for economic and clean energy market development. This proposal describes a new mechanism to leverage additional resources and financing capacity for clean energy development to the benefit of ratepayers in Pennsylvania and New Jersey. This memo also includes a brief overview of the mission and work of The Reinvestment Fund and its Sustainable Development Fund.

The Reinvestment Fund (TRF) is proposing to create an innovative vehicle for lending and investing in clean energy companies and projects in both New Jersey and Pennsylvania. This new regional clean energy development fund would geographically expand to New Jersey the successful approach that the TRF Sustainable Development Fund (SDF) has implemented in the PECO Energy service territory in southeastern Pennsylvania. It would be the first time two states had formally and jointly established a regional development fund to create needed renewable energy generation capacity, invest in clean energy companies, and finance energy conservation and efficiency measures at scale.

The new fund would extend SDF's existing loan, lease and equity products to New Jersey to spur regional economic and energy market development. The majority of the new fund's support for clean energy would be through financing transactions that will provide the new fund with a return on its investment, rather than grants. Capitalized with funds established by order of the New Jersey Board of Public Utilities (NJ BPU) and the Pennsylvania Public Utility Commission (PA PUC), the new fund would leverage private investment as well as existing public grant incentives for renewable energy, clean energy technologies and energy conservation. The new fund would not duplicate what is available in New Jersey or Pennsylvania today, but would leverage new resources and financing capacity in order to accelerate clean energy market development throughout the region. The proposed fund would be managed by TRF with oversight provided by the PA PUC and the NJ BPU. The new fund's investments in clean energy market development would create quality jobs across a broad spectrum of employment categories, enhance private capital flow into the region, and lower the operating costs of companies in both states. Instead of New Jersey and Pennsylvania competing for companies and projects with dueling incentive packages, the new fund would create a jointly-governed incentive financing vehicle benefiting the start-up and expansion of companies in both states. In this way, it is expected that the new fund

34

1 would be an effective catalyst for coordinating and rationalizing clean energy resources and policy
2 across state lines.

3 **II. The Reinvestment Fund (TRF)**

4 The Reinvestment Fund (TRF) (www.trfund.com) is a leading innovator in the financing of
5 neighborhood and economic revitalization. Central to TRF's mission is a commitment to put
6 capital and private initiative to work for the public good. TRF has \$260 million in capital under
7 management from more than 850 investors, who include individuals, religious and civic groups,
8 financial institutions, the public sector and private foundations.

9 TRF makes loans, equity investments, and grants to affordable housing, small business,
10 community services, commercial real estate, workforce development, and clean energy and energy
11 conservation projects. This is frequently done in connection with public and private partnerships
12 that TRF has created to leverage external resources. Additionally, TRF provides high quality
13 research, information and policy ideas to government, nonprofit institutions, and private sector
14 partners.

15 Now in its 20th year, TRF has completed more than 1,500 financing transactions totaling more
16 than \$390 million in cumulative investments, \$66 million of which were closed in FY2004 alone.
17 Headquartered in Philadelphia, TRF's transactions have been located largely in TRF's 21-county
18 primary area in Pennsylvania, New Jersey and Delaware. Over the past five years, TRF's lending
19 and investing activity in New Jersey has totaled more than \$26 million. TRF has an existing
20 infrastructure of staff lenders and equity investors who provide financing in Pennsylvania and New
21 Jersey for residential and commercial real estate transactions, community facilities and small
22 business expansions. TRF is now seeking additional office space in New Brunswick, NJ to better
23 service its existing loan and investment portfolios and to support its anticipated growth.

24 Since 1985, TRF's transactions have:

- 25 • created, renovated, or preserved over 10,200 housing units,
- 26 • created or retained over 25,500 jobs,
- 27 • created, renovated, or preserved over 3.9 million square feet of commercial space,
- 28 • created or preserved more than 12,000 charter school slots,
- 29 • created or preserved over 10,800 child care slots,
- 30 • financed 188 businesses, including 21 woman- and 44 minority-owned businesses,
- 31 • created over 561.8 million kWh of clean renewable energy, and
- 32 • conserved over 4.5 million kWh of energy.

1 TRF has a long history of integrating ideas and information into its lending and investment
2 culture. TRF's policy and social impact work plays an important role in helping to link its
3 economic and community development financing transactions to the growth patterns of business,
4 labor, real estate and clean energy markets.

5 **III. TRF Sustainable Development Fund**

6 As TRF's energy finance arm, the Sustainable Development Fund (SDF) (www.trfund.com/sdf) is
7 a \$32 million fund that uses its capital to make loans, energy performance contract leases, equity
8 investments and grants to commercial real estate projects, community facilities and affordable
9 housing, as well as companies involved in energy conservation and clean and renewable energy.
10 SDF's \$12 million of wind production incentives have leveraged \$220 million of private
11 investment and contributed to Pennsylvania becoming the largest wind energy producer east of
12 the Mississippi River. SDF uses its incentives and flexible financing to support business and
13 community development strategies in collaboration with PECO Energy and the regional economic
14 development agencies.

15 Through the knowledge and experience of its staff, SDF provides high quality information and
16 policy ideas to government, major nonprofit institutions and private sector partners. SDF staff
17 serves on the Pennsylvania Energy Advisory Board and has been nominated by Governor Rendell
18 to the Pennsylvania Energy Development Authority. Staff have played leadership roles in the
19 design and implementation of the Advanced Energy Portfolio Standard Act (AEPS),
20 Pennsylvania's recent legislation that establishes minimum amounts of clean electric energy to be
21 sold over the next fifteen years. Staff is also active on the board of directors of the Clean Energy
22 States Alliance, a national association of state clean energy funds working together to accelerate
23 the development of clean energy markets.

24 SDF has built innovative private partnerships to leverage SDF's resources. With Blue Hill
25 Partners, SDF created a special limited partnership (the Pennsylvania Advanced Industrial
26 Technology Fund) to invest in early stage clean energy companies in southeastern Pennsylvania.
27 As a founding member, SDF works closely with the Delaware Valley Green Building Council to
28 incorporate green building practices in area real estate projects.

29 **IV. SDF Performance**

30 The Sustainable Development Fund recently completed its fifth year of financing companies and
31 projects in southeastern Pennsylvania that involve renewable energy, advanced clean energy and
32 energy efficiency technologies. In addition to providing the region with the environmental and
33 economic benefits of clean energy, SDF helps PECO Energy diversify its power generation
34 options, reduce electricity price volatility and facilitate compliance with Pennsylvania's new
35 Advanced Energy Portfolio Standard Act. SDF is also a ready resource for PECO Energy

1 commercial and industrial (C&I) customers who are seeking below-market rate financing for
2 energy efficiency projects and grants for pilot and demonstration projects involving clean energy,
3 load management, distributed generation technologies, etc.

4 As of March 31, 2005, SDF has closed loans and investments totaling \$7,872,500 during the
5 FY03-05 period, with an additional \$2,000,000 approved and expected to close by 6/15/05. A
6 major contributor to these numbers has been the successful introduction of the Energy
7 Performance Contract (EPC) lease financing product for large institutions and C&I customers.
8 Working with established energy services companies (ESCOs), SDF has approved six EPC lease
9 transactions totaling \$5,519,900, of which \$4,477,500 was closed during FY03-05. SDF was
10 then successful in selling \$2.9 million of SDF's booked EPC leases to a regional bank, making
11 these funds available for other projects.

12 SDF is presently in the process of syndicating a \$5.75 million debt financing for a 24 MW wind
13 farm outside Wilkes-Barre, which is expected to close in May, 2005. From FY03-05, SDF
14 executed \$10 million in wind production performance incentive agreements in support of four
15 new Pennsylvania wind farms totaling 155 MW of capacity.

16 In June, 2002, SDF and Blue Hill Partners created the Pennsylvania Advanced Industrial
17 Technology Fund (PA-AIT), a limited partnership that invests in early stage clean energy
18 companies. To date, PA-AIT has made preferred stock investments in three portfolio companies:

- 19 • *Princeton Energy Systems, Inc.* – a specialty energy services company focused on
20 renewable energy and advanced clean energy projects.
- 21 • *Encelium Technologies, Inc.* – a company with proprietary advanced lighting control
22 products.
- 23 • *Connected Energy Corp.* – a company with proprietary hardware and software products
24 for remote management of distributed energy resources.

25 Over this period, the SDF Solar PV Grant Program has committed \$1.76 million to fund 83
26 photovoltaic systems representing 308 kW of new electrical generating capacity. Several PV
27 projects in Philadelphia provided low- and moderate-income families with solar PV and highly
28 energy efficient homes, which, with their greatly reduced electrical bills, give a fuller meaning to
29 what affordable housing can be.

1 V. Proposal

2 The Reinvestment Fund is proposing to create a new regional clean energy development fund to
3 lend and invest in clean energy companies and projects in both New Jersey and Pennsylvania. The
4 new fund would leverage private investment as well as existing public grant incentives for
5 renewable energy, clean energy technologies and energy conservation. This new regional energy
6 development fund would geographically expand to New Jersey the successful approach that the
7 TRF Sustainable Development Fund (SDF) has implemented in the PECO Energy service territory
8 in Pennsylvania. It would be the first time two states had formally and jointly established a
9 regional development fund to create needed renewable energy generation capacity, invest in clean
10 energy companies, and finance energy conservation and efficiency measures at scale. The new
11 fund would be managed by TRF in a business-like and entrepreneurial manner, with oversight
12 provided by the NJ BPU and the PA PUC. The new fund would be guided by a Board of
13 Directors approved by the two utility boards, and would operate as a restricted fund of The
14 Reinvestment Fund.

15 Mission

16 There are three elements to the new fund's mission:

- 17 • To promote the use of renewable energy and clean energy among commercial, industrial,
18 institutional and residential customers. Renewable energy includes energy produced from
19 solar, wind, low-impact hydro, sustainable biomass, ocean power and geothermal. Clean
20 energy refers to advanced technologies (such as fuel cells) which have significantly lower
21 emissions than currently-commercialized technologies.
- 22 • To promote energy conservation and energy efficiency among commercial, industrial,
23 institutional and residential customers.
- 24 • To promote the start-up, attraction, expansion and retention of sustainable energy
25 businesses. Job creation and other local economic development impacts are a key aspect
26 of the mission. A sustainable energy business is a business which designs, develops,
27 manufactures, sells, installs or otherwise derives income from energy conservation, energy
28 efficiency, renewable energy or clean energy.

29 Capitalization

30 It is proposed that the new fund be initially capitalized with \$60 million to be paid in over three
31 years and funded by both New Jersey and Pennsylvania under orders of the NJ BPU and PA PUC
32 in the Exelon-PSEG merger proceeding. We believe this level of capitalization can be deployed
33 efficiently without a significant increase in TRF staffing or overhead. \$40 million would be
34 deployed as loans, leases and investments, \$30 million of which would be deployed in New Jersey

1 to leverage the considerable subsidy and incentive resources already available for New Jersey
 2 clean energy projects. \$10 million would be designated for lending and investing in Pennsylvania
 3 and would expand SDF's existing core lending and investing resources. The remaining \$20
 4 million would be made available as incentive grants in Pennsylvania to help "level the playing
 5 field" in terms of grant resources that are available for clean energy in Pennsylvania and New
 6 Jersey, and to encourage the development of coordinated regional program initiatives that
 7 accelerate clean energy market development benefiting both states. Performance-based grants
 8 and incentives play a key role in supporting the deployment of clean energy technologies and new
 9 commercial products of portfolio companies. It is important to the growth of clean energy
 10 companies and a regional market that companies are supported by comparable public policies and
 11 incentive resources across state lines, regardless of whether they are located in Pennsylvania or
 12 New Jersey.

13 One joint initiative of particular interest is to use a portion of the New Jersey and Pennsylvania
 14 core lending and investing funds to capitalize a new regional Advanced Industrial Technology
 15 Fund that would make equity investments in early stage clean energy companies in both states.
 16 This new equity fund would be modeled after the successful Pennsylvania Advanced Industrial
 17 Technology Fund (PA-AIT) that SDF and Blue Hill Partners created in 2002. PA-AIT's
 18 experience has shown that companies are most likely to consider relocation or expansion in the
 19 region when they are raising early stage capital, and that there is a critical need for active, early-
 20 stage "institutional investors" to provide capital and strategic help to clean energy sector
 21 companies. PA-AIT's early stage investment strategy has proven to be a valuable economic
 22 development tool. Over the past three years, PA-AIT has invested in the expansion of a
 23 Pennsylvania based company (Princeton Energy Systems), invested in a Canadian firm looking to
 24 establish a US headquarters (Encelium Technologies) and invested in a Rochester, NY company
 25 looking to build a business development division in the Northeast (Connected Energy).

26 The proposed allocation of the new fund's capital is summarized as follows:

NJ	PA	TOTAL	FINANCIAL ACTIVITY
\$ 30MM	\$ 10MM	\$ 40MM	Core lending / investing (EPC lease financing & other credit instruments, equity & near-equity investments in clean energy businesses)
\$ -	\$ 12MM	\$ 12MM	Wind incentives (wind production incentives, wind price insurance program) (incentive funding presently available in NJ)
\$ -	\$ 5MM	\$ 5MM	Solar PV incentives (residential & commercial installations combined w/ EE measures) (incentive funding presently available in NJ)
\$ -	\$ 3MM	\$ 3MM	Demonstration grants, public education (including clean energy marketing incentives) (incentive funding presently available in NJ)
\$ 30MM	\$ 30MM	\$ 60MM	Total over 3 years

1 It should be noted that the above allocation between lending and investing activities and grant
2 incentive programs is not set in stone. There may be other considerations and program initiatives
3 that would justify a different allocation.

4 Use of funds

5 The new fund would focus its activities in the following areas:

- 6 • Wind power development.
- 7 • Investments in companies that derive income from energy efficiency and load management
8 products and services, as well as energy efficiency project financing for universities,
9 hospitals, public institutions and other C&I customers.
- 10 • Biomass and other clean energy power projects.
- 11 • Solar PV, both for residential and commercial installations combined with energy
12 efficiency measures.
- 13 • Providing incentive financing for these technologies will leverage substantial private
14 investment in companies and projects, a critical requirement in achieving the goals set
15 forth in Pennsylvania's and New Jersey's AEPS and RPS standards. The new fund's
16 financing activities are also consistent with Exelon's own corporate commitment to
17 reducing greenhouse gas emissions by 8 percent from 2001 levels by the end of 2008
18 through increased reliance on clean energy.

19 Benefits for the region from a targeted investment strategy in clean energy market development

20 The advantages to the region in pursuing a targeted investment strategy in clean energy market
21 development are very significant:

- 22 • *Attraction and development of management and workforce resources.* A robust clean
23 energy sector will create and retain thousands of jobs across the region and across a broad
24 spectrum of employment categories. Already, clean energy companies in Pennsylvania and
25 New Jersey have succeeded in attracting quality management talent out of graduate and
26 undergraduate school, as well as in encouraging experienced management to cross-over
27 from different disciplines. Creating a regional sector will make it easier to attract and
28 retain strong company-building talent in the region.
- 29 • *A magnet for capital.* Investing in clean energy companies, projects and infrastructure in
30 the region enhances capital flow. Later stage venture capital investors will invest in the
31 region to fuel the growth of portfolio companies supported by the new fund. Billions of
32 dollars of institutional project financing will follow from the leveraged financing of the
33 new fund.

- 1 • *Greater efficiency of economic resources.* The development of a strong clean and
2 advanced energy sector will result in a regional economy that has lower costs of doing
3 business and is less sensitive to volatile oil and natural gas prices.
- 4 • *A regional economy that is less sensitive to security risks.* The application of clean energy
5 technologies to regional facilities is likely to increase the reliability of, and in some cases
6 reduce dependence on, a heavily used and congested electricity grid.
- 7 • *A cleaner environment.* The deployment of clean energy technologies will result in
8 reduced air emissions including NO_x, SO_x, CO₂ and other greenhouse gases, enhancing the
9 region's competitive advantage.

10 Financing tools

11 Given the proposed new funding, TRF is well-positioned to implement a geographically expanded
12 clean energy lending and investing program that uses the following existing TRF / SDF financing
13 tools:

- 14 • Debt and credit instruments, such as term loans, construction loans, pre-development
15 loans and loan and performance guarantees. SDF has served as a syndicator and agent for
16 other lenders to provide commercial wind farm financing and would continue to do so
17 with the new fund.
- 18 • Energy performance contract (EPC) lease financing that provides flexible below market-
19 rate financing to large institutions, C&I customers and government entities for clean
20 distributed generation and cogeneration projects, as well as energy conservation and
21 efficiency projects. SDF has succeeded in leveraging EPC lease financing with private
22 bank participations on a 3:1 basis (bank:SDF).
- 23 • Equity and near-equity investments (such as preferred stock, subordinated debt, royalty
24 and mezzanine financing).
- 25 • Wind production incentives and other performance-based grants for attracting new
26 investment in emerging and unproven markets, incenting early adopters, and providing
27 matching demonstration grants that support clean energy product roll-outs of portfolio
28 companies.

29 Governance

30 Created with funds established by order of the PA PUC and the NJ BPU, the new fund would be
31 accountable to the two utility boards for the management of these public benefit funds.
32 Governance of the new regional clean energy development fund would be consistent with the
33 current governance of SDF. The new fund would be guided by a Board of Directors approved by
34 the two utility boards, which Board would operate in an advisory capacity to TRF. The Board of

1 Directors would provide input to and oversight of the new fund's activities, and would review and
2 approve the new fund's annual program plan and its annual operating budget. The Board of
3 Directors would also monitor the new fund's program activities and financing transactions for
4 adherence to mission. However, approval of financing transactions would be made by TRF
5 committees, and the legal and fiduciary responsibility for the new fund would reside with TRF.

6 The new fund would operate under the TRF Sustainable Development Fund banner as a restricted
7 fund of The Reinvestment Fund. Activities and accounts of the new fund would be audited and
8 reported separately from TRF's other funds. Financial audits and formal reports on the fund's
9 activities would be filed regularly with the two utility boards.

10 Fund management

11 As fund manager, TRF Sustainable Development Fund would have the following responsibilities:

- 12 • *Development of the annual program plan and annual operating budget.* Prior to the start
13 of each year, TRF will draft an annual program plan to identify the priorities and specific
14 financing products and financial assistance initiatives and programs that the Fund will offer
15 for the following year. This annual program plan, together with a TRF-prepared annual
16 operating budget, will be presented to the Board of Directors of the new fund for review
17 and approval.
- 18 • *Marketing the programs and soliciting applicants.* Upon approval of the annual program
19 plan by the Board, TRF will broadly market the Fund's programs and solicit applicants.
20 TRF will also work with the utilities and others to inform all ratepayers about the Fund's
21 activities.
- 22 • *Reviewing and approving requests for loans and investments.* TRF will review and rule
23 upon all requests for loans and investments. TRF will provide the Board with information
24 for reviewing the adherence to mission of the loans and investments.
- 25 • *Documenting, closing, monitoring and managing all financial assistance.* TRF will
26 prepare necessary legal documentation, close, monitor and manage all financial assistance
27 provided by the new fund to ensure that the fund's financial assistance is properly and
28 effectively deployed.
- 29 • *Reporting.* TRF will prepare regular public reports to the utility boards and the fund's
30 Board of Directors on both financial and program accomplishments and issues facing the
31 new fund, as well as provide annual audited financial statements regarding the activities
32 and accounts of the new fund.

1 VI. Value Proposition of a TRF-Managed Regional Fund

2 TRF is a professional fund manager with a 20-year track record of performance that has
3 demonstrated the ability to effectively leverage its resources and relationships. The new fund's
4 capital would be leveraged with private investment and bank financing as a means of meeting
5 clean energy obligations under New Jersey's RPS and Pennsylvania's AEPS mandates, as well as
6 reliably supporting both states' economic and business development goals – including municipal
7 smart growth strategies. The new fund is expected to be a catalyst for developing coordinated
8 regional financing and program initiatives that support the rapid development of clean energy
9 markets across state lines. The majority of the new fund's activities will be loan and investment
10 transactions where money is repaid to the new fund with a return on investment, not simply
11 granted away. The new fund will leverage new resources and financing capacity to accelerate
12 clean energy market development throughout the region. By doing so, the new fund will help
13 institutionalize the ongoing informal efforts that SDF and NJ BPU have already begun together,
14 such as the intention to jointly fund a coordinated clean energy public education campaign this fall
15 using mass media in New Jersey and Pennsylvania, and the development and deployment of PJM's
16 Generation Attributes Tracking System (GATS), a venture that is likely to need additional credit
17 facilities for GATS' ongoing working capital requirements.

18 As a lender and equity investor already active in Pennsylvania and New Jersey, TRF has in place
19 extensive organizational infrastructure and capacity from which to build. TRF has a clear track
20 record of professional, independent fund management, with experienced standing loan and
21 investment committees. TRF has a well-developed network of relationships in New Jersey and
22 Pennsylvania with equity and debt financing partners, as well as public development agencies and
23 foundations. These relationships are critical in achieving scale of impact through policy/systems
24 development and leverage.

25 VII. Conclusion

26 TRF believes that the time is right to establish a regional energy development fund that will create
27 legislatively mandated renewable energy generation capacity, commercialize advanced clean
28 energy technologies, and finance energy conservation and efficiency measures at scale. The new
29 fund will employ the development finance model that has worked effectively for TRF, one that
30 uses clean energy incentive financing to spur economic and market development, leveraged with
31 private investment. This innovative fund will demonstrate how two states with common clean
32 energy goals can institutionalize a collaboration that results in new jobs and growth for both
33 states, at the same time it accelerates clean energy market development throughout the region.

RECEIVED

OCT 1 2 2005

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

The Reinvestment Fund's Statement No. 1-SR

(Responding to rebuttal testimony of other witnesses
regarding the proposed clean energy initiatives.)

**Before the
Pennsylvania Public Utility Commission**

JOINT APPLICATION OF PECO ENERGY COMPANY AND
PUBLIC SERVICE ELECTRIC AND GAS COMPANY
FOR APPROVAL OF THE MERGER OF
PUBLIC SERVICE ENTERPRISE GROUP INCORPORATED
WITH AND INTO EXELON CORPORATION

Docket No. A-110550 F0160

JAF
PHEL

Surrebuttal Testimony of

Lewis M. Milford

Clean Energy Group, Inc.
50 State Street
Montpelier, Vermont 05602

August 24, 2005

Table of Contents

Part 1. INTRODUCTION	1
Part 2. CLEAN ENERGY IS AN ACCEPTED ELEMENT OF AFFIRMATIVE PUBLIC BENEFIT THAT MUST BE FOUND FOR THIS PROPOSED MERGER TO BE APPROVED	1
Part 3. THE AEPS DOES NOT PREEMPT ALL OTHER CLEAN ENERGY INITIATIVES OR ACTIVITIES	4
Part 4. THE TRF PROPOSAL FOR A REGIONAL CLEAN ENERGY FUND.....	9
Part 5. THE COST ISSUES OF THE CLEAN ENERGY PROPOSALS	12
Part 6. THE COMMISSIONERS' DIRECTED QUESTIONS.....	15
Part 7. CONCLUSION AND RECOMMENDATIONS	18

1 **PART 1. INTRODUCTION**

2 **Q: Please state your name and business address.**

3 A: My name is Lewis M. Milford. My address is Clean Energy Group, 50 State Street,
4 Montpelier, Vermont, 05602.

5 **Q. Have you previously presented testimony in this proceeding?**

6 A. Yes. I submitted direct testimony (TRF Statement No. 1) on behalf of The Reinvestment
7 Fund (“TRF”) and its’ Sustainable Development Fund (“SDF”).

8 **Q. What is the purpose of your surrebuttal testimony?**

9 A. I will respond to several of the statements contained in the rebuttal testimony of Denis
10 O’Brien (PECO Statement No. 1-R) and Brian Crowe (PECO Statement No. 7-R). I will
11 also respond to certain portions of the rebuttal testimony of Brian Kalcic (OSBA
12 Statement No. 2).

13 **PART 2. CLEAN ENERGY IS AN ACCEPTED ELEMENT OF AFFIRMATIVE**
14 **PUBLIC BENEFIT THAT MUST BE FOUND FOR THIS PROPOSED**
15 **MERGER TO BE APPROVED**

16 **Q. What did Mr. O’Brien and Mr. Crowe state regarding the relevance of clean energy**
17 **issues to the merger proceeding and how do you respond to their statements?**

18 A. Mr. O’Brien and Mr. Crowe both assert that the clean energy proposals advanced by TRF
19 and the other intervenors are not relevant to this merger proceeding. Mr. O’Brien, in his
20 rebuttal testimony, states “ ... there is no reasonable nexus between these proposals [for

1 renewable energy and energy efficiency support] and this merger proceeding.” (PECO
2 Statement No. 1-R, page 18, lines 15-16). Mr. Crowe, in his rebuttal testimony, states:
3 “The recommendations proposed by the Intervenors concern energy and environmental
4 policy initiatives that bear no relationship to the proposed merger. They are therefore
5 outside the scope of this proceeding.” (PECO Statement No. 7-R, page 3, lines 8-10).

6 I very much disagree with both Mr. O’Brien and Mr. Crowe on this point. Part 3 of my
7 direct testimony addressed this issue in considerable detail. (TRF Statement No. 1, page
8 6, line 9 to page 11, line 11). I established how clean energy benefits utility service,
9 accommodation, convenience and safety and how Pennsylvania public policy is
10 supportive of clean energy. Notably, neither Mr. O’Brien nor Mr. Crowe presented any
11 substantive arguments to refute any of my points nor offered any policy or legal rationale
12 for their position other than their claim that the Alternative Energy Portfolio Standards
13 Act of 2004 eliminates clean energy issues from consideration in all Commission
14 proceedings other than the RPS implementation proceeding. I address this point in the
15 following section of this testimony.

16 **Q. Stating there is no reasonable nexus between clean energy and the merger, Mr.**
17 **O’Brien adds “I am advised that, largely for this reason, similar requests were**
18 **denied in the FirstEnergy/GPU merger case.” (PECO Statement No. 1-R, page 18,**
19 **lines 16-17). Is he correct?**

20 **A.** No, In fact, the final outcome of that proceeding shows that the Commission found just
21 the opposite. The Commission issued two Orders in the FirstEnergy/GPU merger case.

1 In the Order that addressed the new rates for the merged companies, the settlement
2 agreement approved by the Commission contained several clean energy provisions that
3 were noted in the Commission's press release (available at [www.puc.state.pa.us/
4 general/press_releases/press_releases.aspx?ShowPR=657](http://www.puc.state.pa.us/general/press_releases/press_releases.aspx?ShowPR=657)):

5 Several settlement provisions promote energy conservation and the
6 development of renewable energy. GPU will implement a broader
7 demand side response program to help reduce electricity
8 consumption during periods of extremely high demand. The
9 program will include time of use metering and appliance control
10 technologies.

11 Once GPU and FirstEnergy finalize their merger, FirstEnergy will
12 deposit \$2.5 million each into the sustainable energy funds of GPU
13 subsidiaries Met-Ed and Penelec. FirstEnergy will also spend an
14 additional \$10 million on renewable energy projects in the GPU
15 and Penn Power territories.

16 Both in its final Order and in this press release, the Commission validated the view that
17 clean energy activities and funding are relevant and integral to finding the affirmative
18 public benefits that must be present if the Commission is to approve a merger.

19 **Q. Please summarize why you believe that the issue of clean energy bears a direct
20 relationship to this proceeding?**

21 **A.** In my Direct Testimony, I reviewed the actions of the Commission and the General
22 Assembly that indicate that both regard clean energy as an important element of electric
23 utility operations. With respect to the issue of affirmative public benefit, the Commission
24 has cited clean energy measures as examples of affirmative public benefit that can
25 support a merger approval in both the PECO/Unicom and the First Energy/GPU merger
26 cases.

1 Advancement of clean energy is one aspect of public benefit that can be, and has been
2 used, to support a merger approval. Stating that clean energy has no relationship to this
3 merger is like saying that rate relief or job development or community giving has no
4 relationship to the merger. Whether this merger will benefit or hinder clean energy use
5 by the state's citizens is certainly an issue relevant to the public benefit merits of the
6 proposed merger.

7 **PART 3. THE ADVANCED ENERGY PORTFOLIO STANDARDS ACT OF 2004**
8 **DOES NOT PREEMPT ALL OTHER CLEAN ENERGY INITIATIVES OR**
9 **ACTIVITIES**

10 **Q. What do Mr. O'Brien and Mr. Crowe see as the effect of the Alternative Energy**
11 **Portfolio Standards Act of 2004 ("AEPS") on clean energy-related issues in this**
12 **merger proceeding?**

13 **A.** Both witnesses assert that AEPS has in effect preempted all clean energy issues from all
14 Commission proceedings except the AEPS implementation dockets.

15 Mr. O'Brien states: "... issues concerning the development of renewable energy sources,
16 net metering and interconnection rules, and demand-side response and energy-efficiency
17 programs are all being addressed by the Commission at Docket No. M-00051865 as part
18 of its implementation of the Alternative Energy Portfolio Standards Act of 2004." (PECO
19 Statement No. 1-R, page 11, lines 17-21). The PECO testimony characterizes the clean
20 energy proposals as an attempt by the intervenors "to circumvent other ongoing
21 Commission proceedings." (PECO Statement No. 1-R, page 11, lines 12-13).

1 Mr. Crowe states: "... some of the witnesses have set forth specific proposals detailing
2 how PECO should promote and support the development of specific renewable energy
3 and energy efficiency programs. However, these issues are already being considered in
4 ongoing proceedings before the PUC in the Alternative Energy Portfolio Standard
5 ("AEPS") Implementation Proceeding, which is designed to implement the Alternative
6 Energy Portfolio Standards Act of 2004..." (PECO Statement No. 7-R, page 3, lines 10-
7 15). He goes on further to claim that "[a]ddressing the intervenors' proposals in this
8 merger proceeding, rather than in the appropriate and legislatively-mandated forum,
9 would interfere with the Commission's generic development of the AEPS rules and
10 regulations directed by the Act" (PECO Statement 7-R, page 3, lines 19-22).

11 **Q. What is Mr. Kalcic's position on this issue?**

12 A. Mr. Kalcic makes a similar argument about the AEPS, objecting to any suggestion that
13 PECO should do anything more than comply with AEPS. He objects to a "separate
14 standard" for PECO (OSBA Statement No. 2, page 9, lines 30-31). He also objects to
15 any acceleration in the timetable for compliance with the AEPS before the end of 2010.
16 (OSBA Statement No. 2, page 10, lines 3-5).

17 **Q. What is your view about the impact of AEPS on the issues in this proceeding?**

18 A. I do not agree that AEPS preempts any and all consideration of clean energy issues by the
19 Commission in this proceeding. The AEPS represents a limited command-and-control
20 approach that addresses utility supply obligations. It mandates results (*i.e.* a percentage
21 of supply from two different categories of resources) but it is silent on how these results

1 are to be accomplished. There is nothing in the wording of the Act to indicate that it was
2 meant to serve as the exclusive vehicle for increasing Pennsylvania's use of renewable
3 and clean energy resources. I find nothing in the AEPS that prevents other
4 complementary and supplemental approaches to build clean energy market activity.
5 Compliance with the AEPS will require clean energy resources to be financed and built
6 in some fashion. I would also note that the AEPS was never intended to establish the
7 maximum amount of alternative energy sources (*i.e.*, a ceiling) that load serving entities
8 should provide, but rather it sets a floor.

9 In summary, creating a merger approval condition that facilitates investments in
10 development of clean energy is not in conflict with the goals of the AEPS and would not
11 interfere with the generic AEPS proceeding that is determining the administrative rules
12 and framework for implementing that program.

13 As to Mr. Kalcic's objection to any acceleration of the Company's clean energy support
14 before the end of 2010, I believe it would be unreasonable for a utility to wait until the
15 effective date of its AEPS mandate before it starts to add the necessary resources to its
16 portfolio. The Act itself supports the banking of credits, recognizing that the last-minute
17 approach could be very costly to the companies and the ratepayers.

18 **Q. Mr. Kalcic makes the point that the AEPS legislation did not require a regional**
19 **clean energy fund. What is your response?**

1 A. The AEPS does use the Pennsylvania sustainable energy funds as the vehicle for the
2 Alternative Compliance Payments, so in a sense the Pennsylvania part of the TRF
3 proposal is required. But as I said in an earlier answer, the AEPS give very little
4 guidance on the mechanics of satisfying the portfolio standards. The important question
5 for the Commission is not whether the AEPS requires a regional clean energy fund, but
6 whether the TRF proposal for a regional clean energy fund is an effective tool to help
7 achieve the level of clean energy development that is needed to comply with the AEPS.

8 I consider the TRF proposal and the AEPS to be complementary, a conclusion reached by
9 many other states that use the combination of a portfolio standard and a clean energy
10 fund to increase clean energy resources (e.g., New Jersey, New York, Massachusetts,
11 California, etc).

12 A strong regional fund, with its ability to leverage private capital for clean energy
13 projects and companies, also has the ability to reduce ratepayer costs for compliance with
14 AEPS. For example, the wind energy production incentives provided by SDF to the four
15 wind farms operating today in Pennsylvania (Somerset, Mill Run, Waymart and
16 Meyersdale) totaled \$7.75 million, but the total project costs of these four wind farms
17 was over \$140 million. If PECO were to follow its traditional generation ownership
18 model, PECO (and its customers) would have had to spend 18 times (\$140 million ÷
19 \$7.75 million) as much as SDF did to achieve the same result. A clean energy fund could
20 be effectively used to leverage private investment in generation resources to meet the
21 AEPS, with resulting savings to PECO's customers.

1 **Q. Mr. Crowe also states that “accepting the Intervenor’s proposals to promote certain**
2 **types of alternative energy sources (such as demand side response programs) would**
3 **result in the subsidization of those types of alternative energy programs, while**
4 **placing those who would seek to develop other forms of alternative energy (such as**
5 **waste coal) at a competitive disadvantage.” He adds that this result would be**
6 **“contrary to the interest of Act 213.” (PECO Statement No. 7-R, page 3, line. 22 to**
7 **page 4, line 4). Do you agree with this statement?**

8 **A. No. Subsidization of certain technologies in the name of the public interest is at the core**
9 **of the AEPS. The essence of the statute is that there are certain power technologies and**
10 **resources that the public interest requires to receive some subsidization because of their**
11 **environmental and public values. The AEPS creates two tiers of technologies, but does**
12 **not mandate that energy technologies within each tier be developed in equal number and**
13 **to the same degree.**

14 **Q. If PECO simply satisfies the legal mandates of AEPS, would that constitute**
15 **“affirmative public benefit” with respect to clean energy to support the merger?**

16 **A. I do not believe it would. PECO is required to comply with the AEPS, merger or no**
17 **merger. The concept of “affirmative” benefit contains the idea of a benefit that would**
18 **accrue from the merger that would not otherwise be present. If all PECO does is comply**
19 **with AEPS, PECO cannot claim that as an affirmative public benefit to support the**
20 **merger.**

PART 4. THE TRF PROPOSAL FOR A REGIONAL CLEAN ENERGY FUND

1 **Q. Mr. Crowe states that the TRF proposal for a regional clean energy fund is**
2 **“unnecessary.” (PECO Statement No. 7-R, page 9, line 19). He goes on to state that**
3 **“[f]unding for energy efficiency and other renewable programs in New Jersey is**
4 **already accomplished through the Clean Energy Program” and that “...in**
5 **Pennsylvania, SDF provides funding for similar programs.” (PECO Statement No.**
6 **7-R, page 9, lines 19-22). What is your response?**

7 **A. I disagree with Mr. Crowe’s dismissal of the need for a regional clean energy fund. As I**
8 **explained in my direct testimony and in Exhibit LMM-2, the proposed TRF Regional**
9 **Clean Energy Development Fund is needed in both jurisdictions. In Pennsylvania, the**
10 **\$30 million that is requested from PECO would be used as I indicated on the table on**
11 **page 28 of Exhibit LMM-2. It will allow SDF to continue its incentives for wind and**
12 **solar energy, to expand its lending and investing activities, and to provide additional**
13 **grants for public education and demonstration projects.**

14 **SDF is supporting these initiatives now, but will not be able to for much longer. The**
15 **wind and solar grant programs will soon be fully committed and will be closed unless**
16 **more funding is made available. The same is true of the public education program that**
17 **will be closed for lack of additional resources in about one year. The capital that SDF**
18 **has available for loans and investments will likewise soon be fully committed and**
19 **deployed. SDF’s ability to continue these programs will soon end, under the resources**
20 **currently available. While Mr. Crowe’s statement about SDF is currently true, SDF will**
21

1 soon be facing serious constraints on the programs and activities it can financially
2 support.

3 As for New Jersey, if TRF receives any funding from the New Jersey merger proceeding,
4 the money will be used to bring commercial lending and investing products to New
5 Jersey. That state's clean energy program today is unable to invest in clean energy
6 companies and it has no effective ability to offer commercial lending, as shown by the
7 paucity of loans that have been closed. The regional fund proposal would strengthen the
8 New Jersey program considerably.

9 **Q. On page 9, line 19 of his testimony, Mr. Crowe states that the TRF proposal for a
10 regional fund is "impractical." Please respond?**

11 **A.** I disagree. It is difficult to understand what the basis for Mr. Crowe's opinion is as he
12 provides no explanation as to why he thinks a regional fund would be impractical. If he
13 is referring to the issue of effective governance of the new regional clean energy
14 development fund, I believe his concern is misplaced. The proposed governance
15 structure is contained in my direct testimony (TRF Statement No. 1, Exhibit LMM-2,
16 page 30, line 29 to page 31, line 32). TRF proposes that the regional fund would be
17 consistent with the current governance of SDF. The new fund would be guided by a
18 Board of Directors approved by the two utility boards (the Commission and the New
19 Jersey Board of Public Utilities). The Board of Directors would provide input to and
20 oversight of the new fund's activities, and would review and approve the new fund's
21 annual program plan and its annual operating budget. The Board of Directors would also

1 monitor the new fund's program activities and financing transactions for adherence to
2 mission. However, as is the case with SDF, approval of financing transactions would be
3 made by TRF's standing loan and investment committees. The legal and fiduciary
4 responsibility for the new fund would reside with TRF. This structure has worked very
5 well for TRF for 20 years and for SDF for five years, and there is no reason to believe
6 that it will not work for the proposed regional clean energy fund.

7 **Q. Do the PECO witnesses offer any challenge to your direct testimony regarding why**
8 **the proposed regional fund would be an effective way to support clean energy?**

9 A. No. In my direct testimony, I offer several reasons why the proposed regional fund will
10 be an effective engine for clean energy support. (See TRF Statement No. 1, page 18,
11 lines 4-20). Notably, none of these reasons or the basis for my opinion was challenged
12 by the PECO witnesses. The TRF proposal would provide significant public benefits -
13 both to the region and to Exelon - from the regional fund's ability to create a more
14 consistent and effective set of financing incentives across the region served by these two
15 Exelon companies if the merger is approved. Local clean energy companies on both
16 sides of the Delaware River could respond efficiently to market opportunity and grow.
17 The TRF proposal will increase and extend the limited, remaining grant dollars available
18 in the PECO territory, while it also introduces a new capability to provide energy lending
19 and investing in New Jersey, which is not available in effective ways in the PSE&G
20 service territory.

PART 5. THE COST ISSUES OF THE CLEAN ENERGY PROPOSALS

2 **Q. Please respond to the criticisms of Mr. O'Brien and Mr. Crowe regarding the**
3 **magnitude of the clean energy proposals?**

4 A. Mr. O'Brien states that "[t]hree parties -- the DEP, PennFuture and The Reinvestment
5 Fund -- would have PECO spend the truly astounding sum of \$473.5 million on various
6 environmental and energy efficiency causes..." (PECO Statement No. 1-R, page 18, lines
7 10-12). Mr. Crowe provides a table listing the clean energy proposals of four witnesses
8 that total \$503.5 million. (PECO Statement No. 7-R, page 6). Both witnesses view the
9 funding level of the clean energy proposals of the intervenors as "unrealistic." I disagree
10 with their statements for several reasons.

11 First, my testimony calls for PECO to contribute only \$30 million for clean energy, not
12 \$473.5 million or \$503.5 million. Second, Mr. Crowe's table includes the TRF request of
13 \$30 million from PSE&G, but this is not a funding amount that is at stake or being
14 considered by the Commission in this merger proceeding. Third, both witnesses simply
15 added up the clean energy recommendations of these three parties, even though many of
16 the recommendations overlap and are for the same initiatives such as wind, solar and
17 public education. It is disingenuous for the PECO witnesses to artificially inflate the
18 various requests and then to call it too large.

19 Finally, I think it is important to look at the magnitude of the clean energy proposals in
20 the context of the overall size of the company that will be created if this merger is
21 approved. The Merger Fact Sheet prepared by Exelon and PSE&G (available at

1 [http://www.exeloncorp.com/NR/rdonlyres/914F612F-7087-4A5F-8734-](http://www.exeloncorp.com/NR/rdonlyres/914F612F-7087-4A5F-8734-EDD12BD2E7AE/0/mergerfactsheet.pdf)
2 [EDD12BD2E7AE/0/mergerfactsheet.pdf](http://www.exeloncorp.com/NR/rdonlyres/914F612F-7087-4A5F-8734-EDD12BD2E7AE/0/mergerfactsheet.pdf)) shows that the merged company will have \$79
3 billion in assets and annual revenues of \$29 billion. Compared to these numbers, the
4 TRF proposal for \$30 million is hardly a “truly astounding sum.”

5 **Q. Please respond to Mr. Crowe’s statements about the funding of the clean energy**
6 **proposal?**

7 A. Mr. Crowe states that the clean energy proposals “... compel PECO into spending
8 hundreds of millions of dollars outside the context of the AEPS proceeding without the
9 benefit of an identified source for funding other than PECO [and] would not only be
10 fundamentally unfair to PECO, but also provide a disincentive for other utilities within
11 the Commonwealth to proposed mergers in the future.” (PECO Statement No. 7-R, pages
12 5-9).

13 The Commission in its final order in this proceeding will determine whether and how the
14 costs of the Pennsylvania portion of the proposed regional fund are to be recovered by
15 PECO. Mr. Crowe’s point about the creation of a disincentive to utility mergers is really
16 an attack on the statutory requirement that the approval of a utility merger requires the
17 finding of an affirmative public benefit such as rate relief, office staffing, clean energy
18 investment commitments, or other means. Mr. Crowe could have just as easily charged
19 that these other examples of affirmative public benefit were disincentives to mergers.

1 **Q. How do you respond to Mr. Crowe's statement that "PECO's obligation to fund**
2 **SDF was completely satisfied through a lump-sum payment that PECO made to**
3 **SDF as part of the PECO-Unicom Merger Settlement Agreement" (page 8, lines 20-**
4 **22).**

5 A. Mr. Crowe was responding to a statement that I made in my direct testimony that "[i]f the
6 current transmission and distribution tariff remains unchanged, SDF will again begin to
7 receive the quarterly payments in 2007." (TRF Statement No. 1, page 12, lines 16-18). I
8 believe my interpretation is correct and Mr. Crowe's is incorrect, but this is an issue of
9 legal interpretation of the settlement agreement provisions that should be addressed by
10 the lawyers in their briefs, not by the opinions of the witnesses.

11 **Q. Mr. Crowe states that "PECO would not necessarily be opposed to the development**
12 **of a similar societal benefits charge in Pennsylvania, but the imposition of such a**
13 **charge and its associated costs and benefits should be properly considered in the**
14 **context of a state-wide program, as in New Jersey, or in the context of an individual**
15 **electric distribution company's AEPS funding mechanism." (PECO Statement No.**
16 **7-R, page 8, lines 7-12). Please respond.**

17 A. I believe that Pennsylvania would be well served by adopting a societal benefits charge
18 similar to that in New Jersey. However, establishing such a state-wide mechanism is
19 beyond the scope of this proceeding. At the same time, the possibility of a system
20 benefits charge at some point in the future should not be used as an excuse to deny
21 support for clean energy in this proceeding.

1 **PART 6. THE COMMISSIONERS' DIRECTED QUESTIONS**

2 **Q. The first of the Commissioner's directed questions that the Commission's Secretary**
3 **distributed to the parties on July 15, 2005 asks:**

4 **1. Neighboring states have availed themselves of**
5 **opportunities to enhance their economic competitiveness**
6 **through access to economical energy resources. What**
7 **opportunities exist from this proposed merger in terms of**
8 **economic development for Pennsylvania? Specifically, does**
9 **this proposed merger present us with an opportunity to**
10 **strengthen the State's ability to remain competitive during**
11 **periods of economic recession and volatile energy pricing?**

12 **How would you answer that question?**

13 A. I believe that embracing the TRF recommendation for establishment of a regional fund to
14 promote clean energy in both the PECO Energy and PSE&G service territories, as a
15 condition of approval of the merger, is perhaps the best available opportunity to meet the
16 Commission's inquiry here. Such a fund would effectively leverage private investment
17 as well as existing public grant incentives for development of economically competitive
18 renewable energy projects and companies. It also would help to diversify Pennsylvania's
19 energy portfolio with electricity that would serve as a hedge against volatile fossil fuel
20 prices.

21 In my direct testimony, I discussed how renewable energy and energy conservation and
22 efficiency are important tools to protect our region from volatile energy prices. This
23 region will become more secure from both volatile energy prices and the steadily
24 increasing fossil fuel prices if it adopts a more proactive set of tools and strategies to
25 expand our use of renewable energy and to increase our energy efficiency. The SDF

1 regional fund is a very important element of the answer to the Commissioners' first
2 question.

3 **Q. The second of the Commissioner's directed questions that the Commission's**
4 **Secretary distributed to the parties on July 15, 2005 asks:**

5 **2. The innovative and controversial nuclear "virtual**
6 **divestiture" component of the FERC decision appears to**
7 **present intriguing opportunities for the Commonwealth. Does**
8 **the proposed merger present this Commission with an**
9 **opportunity to create an additional economic development**
10 **program designed to improve Pennsylvania's business climate**
11 **by creating strategic partnerships with the public and private**
12 **sector that support product development and the use of**
13 **energy-efficient technologies?**

14 **How would you answer that question?**

15 A. I have no position on the proposed virtual divestiture of nuclear generation. However, I
16 strongly believe that the proposed merger indeed presents a unique opportunity to create
17 additional economic development in the state and region through creation of strategic
18 partnerships to support clean energy technologies and markets. In fact, the TRF regional
19 fund recommendation is designed just for that purpose. And there is ample current
20 evidence to indicate that such a fund will deliver such strategic partnerships and
21 additional economic development. SDF has clearly worked effectively to create strategic
22 partnership with the public and private sector to support clean energy product
23 development and the use of energy-efficient technologies.

24 There are two categories of SDF activity that represent strong examples of just this type
25 of creative and effective economic development activity that the Commission appears

1 interested in further encouraging and realizing as one result of the merger. The first
2 category fostering strategic collaboration between the private and public sector is the
3 Pennsylvania Advanced Industrial Technology Fund (“PA-AIT”) that SDF created in
4 partnership with Blue Hill Partners to make equity investments in companies doing clean
5 energy work. The three companies that have been funded in the first round are:

- 6 • *Princeton Energy Systems* – an early stage PV systems/energy efficiency
7 integrator for commercial installations;
- 8 • *Encelium Technologies, Inc.* - early stage company with an advanced lighting
9 control and energy management product; and,
- 10 • *Connected Energy Corp.* – a company developing a web-based equipment and
11 energy management product that networks and monitors distributed
12 generation assets and load-bearing equipment.

13 With PA-AIT, SDF has used its resources to leverage private capital and to focus both on
14 companies developing and marketing new clean energy technologies. And this support is
15 in the form of equity investment in companies, not grants, so SDF expects to earn a
16 return on its investment dollars. SDF and Blue Hill Partners are working to develop a
17 second round of PA-AIT projects.

18 The second SDF initiative, relevant to the Commission’s interest in strategic
19 partnerships, provides lease financing for energy service company efficiency projects. In
20 the case of two of these projects, SDF was successful in bringing private banks in to
21 cover 75% of the project costs, freeing the SDF capital to be redeployed in new projects.

1 In addition to leveraging private capital, the SDF financing is in the form of low-interest
2 financing, not grants, so the model is sustainable if brought to the appropriate scale.

3 The number of projects in both of these initiative categories is modest because SDF's
4 resources are modest. Additional funding, as is proposed in the regional clean energy
5 fund, would allow SDF to expand this work and to create additional financial tools to
6 support energy product development and the use of energy-efficient technologies in
7 partnership with the private sector.

8 **PART 7. CONCLUSION AND RECOMMENDATIONS**

9 **Q. Has the testimony by PECO's witnesses caused you to revise or rethink the value**
10 **your recommendations for the Commission in this case?**

11 A. No. In fact, the rebuttal testimony by Mr. O'Brien, Mr. Crowe and Mr. Kalcic did not
12 address or challenge the substantive merits of my clean energy fund recommendation, but
13 simply named clean energy issues irrelevant to the merger proceeding. However, for all
14 of the un-refuted reasons I gave in my Direct Testimony, the issues raised in the TRF
15 proposal for a regional clean energy development fund are germane to the merger
16 proceeding and represent an opportunity to ensure that the merger provides affirmative
17 public benefits. I continue to recommend that the Commission explicitly include funding
18 support for clean energy as an important element of the public benefit that must be
19 provided by the merger for it to receive a certificate of convenience. I strongly favor
20 SDF as the vehicle for this additional support. I support the TRF's proposal that the fund

1 be initially capitalized with \$30 million under order of this Commission towards the
2 creation of a \$60 million regional clean energy fund.

3 **Q. Does this conclude your surrebuttal testimony?**

4 **A Yes.**