

R-00973953; R-00973593C0001-C0007
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Environmentalists Statement 2-E

Phila 11/19/97

E. Halber

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

APPLICATION OF PECO ENERGY :
COMPANY FOR APPROVAL OF :
ITS RESTRUCTURING PLAN :

DOCKET NO. R-00973953

KJR

PETITION OF ENRON ENERGY :
SERVICES POWER, INC. FOR :
APPROVAL OF AN ELECTRIC :
COMPETITION AND CUSTOMER :
CHOICE PLAN :

DOCKET NO. P-00971265
(consolidated)

Prepared Testimony and Exhibits of
Bruce Edward Biewald

DOCUMENT
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On Behalf of
The Environmentalists

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EXHIBIT BEB-1, Examples 1,2 and 3

1 **1. QUALIFICATIONS**

2 **Q. State your name, occupation and business address.**

3 A. My name is Bruce Edward Biewald. My address is Synapse Energy Economics,
4 *Inc., 22 Crescent Street, Cambridge, Massachusetts, 01238.*

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

6 A. I am President of Synapse Energy Economics, Inc., a consulting company
7 specializing in economic and policy analysis of electricity restructuring,
8 particularly issues of consumer protection, market power, stranded costs,
9 renewables, efficiency, environmental quality, and nuclear power.

10 **Q. Have you testified earlier in the PECO restructuring proceeding?**

11 A. Yes. My earlier testimony was Environmentalists' Statement No. 3 (June 17,
12 1997) and Environmentalists' Statement 2-S (September 29, 1997). My resume
13 was provided as Exhibit BEB-1 in Environmentalists' Statement No. 3.

14 **Q. What is the purpose of your testimony in this phase of this case?**

15 A. This testimony, on behalf of the parties to this case collectively known as "The
16 Environmentalists", addresses the petition of Enron Energy Services Power
17 Incorporated (Enron) for approval of its electric competition and customer choice
18 plan (the Choice Plan). My testimony should be considered in conjunction with
19 that of Mr. David Schoengold and Mr. Roger Colton, who are also testifying on
20 behalf of the Environmentalists. Mr. Schoengold will provide a general critique
21 of the Choice Plan, and I will present an alternative to Enron's proposal to serve
22 as the default supplier. My proposal is designed to address an unfair competitive
23 advantage that *Enron or PECO Energy Company (PECO)* would gain as a

1 consequence of being allocated all of the default customers in PECO's service
2 territory. Mr. Colton provides the policy rationale and justification for our default
3 supplier proposal.

4 **2. SUMMARY AND RECOMMENDATIONS**

5 **Q. What should be the primary goal of the Commission in this proceeding?**

6 A. While there are many important issues to resolve in the current proceeding, the
7 Commission should keep its sights on the primary goal of the Electricity
8 Generation Customer Choice and Competition Act (the Act):¹ to create a robust,
9 competitive electricity market that provides all customers with meaningful choices
10 of electricity suppliers while maintaining a safe and reliable electric system for all
11 parties.²

12 **Q. Do you think that either Enron's Choice Plan or PECO's Partial Settlement
13 proposal will achieve this goal?**

14 A. No, I do not. Assigning all default customers to a single generation supplier
15 would provide that supplier with a significant competitive advantage over its
16 competitors. A great many of PECO's electricity customers are unlikely to make
17 any choice at all regarding their electricity supplier, for reasons described below.
18 If PECO is designated the default supplier of these customers, then it will be
19 granted a significant market share without incurring the marketing and
20 transaction costs that would be required of competitive utilities. This formidable

¹66 Pa.C.S. §§ 2801 *et seq.*

²See, for example, 66 Pa.C.S. §§ 2802 (3), (12), and (21).

1 *advantage would add to the numerous tangible and intangible competitive*
2 *advantages that are typically enjoyed by incumbent utilities.*

3 Enron's proposal claims to address this anti-competitive problem, but in fact
4 does not. Designating Enron as the default generation supplier would provide
5 Enron (instead of PECO) with an unfair competitive advantage over other
6 generation companies.

7 **Q. What do you recommend as an alternative to the Enron and PECO**
8 **proposals?**

9 A. I recommend that the Commission ensure that no provider is given an unfair
10 advantage by default. In order to avoid market domination, I urge the
11 Commission to establish a mechanism to allocate customers who fail to select a
12 provider among all of the non-PECO competitors. Of course, any such "default"
13 customer would thereafter be free to switch suppliers. I refer to this proposal as
14 the "Better Choice" plan because it will lead to a greater amount of customer
15 choice over the long term than the proposals of either Enron or PECO.

16 **Q. Please summarize your proposal.**

17 A. I recommend that the Commission establish a system for allocating default
18 customers to all generation companies serving PECO's service territory. In this
19 way, no single entity would be afforded this significant competitive advantage,
20 and all generation companies will be able to play a larger role in a more
21 competitive marketplace. *I recommend a two-step process.*

22 ***The initial customer selection process.*** First, electricity customers would be
23 given the option to select alternative generation customers according to the

1 schedule set forth in the Act. PECO would publish the results of the selection
2 process, including the percentage of the generation market that was obtained by
3 each generation company.

4 ***The allocation of default customers.*** Second, if more than 50 percent of
5 customers do not choose to switch to generation suppliers other than PECO,
6 then a second step of the process would be implemented to allocate all of the
7 default customers among the non-incumbent generation companies. All non-
8 incumbent suppliers that were chosen by customers in the initial selection
9 process would be given an opportunity to receive a portion of the default
10 customers. The number of default customers allocated to each non-incumbent
11 generation supplier would be proportional to the market share that supplier
12 achieved in the customer selection process.

13 ***Conditions required to be allocated default customers.*** In order to be eligible
14 to be allocated a percentage of the default customers, each generation company
15 must first agree to provide generation services to those customers under the
16 following conditions:

17 1. The price for the generation services will be no higher than the
18 unbundled generation rate (also known as the "generation credit") that
19 PECO will be allowed to charge.

20 2. The generation supplier will agree that any of its default customers
21 who elect to switch generation suppliers will not be charged a contract
22 termination fee or other penalty.

23 3. The generation supplier will agree that the energy and capacity they
24 offer to serve default customers meet an environmental baseline
25 comparable to the applicable Pennsylvania environmental regulations.

26 4. The generation supplier will offer a resource mix which includes at
27 least one percent (1.0%) renewable resources and the supplier has a net

1 billing (or "net metering") tariff and other policies to facilitate the
2 interconnection of small-scale, clean and renewable energy generation.

3 5. The generation supplier will inform customers about the fuel mix, air
4 emissions and other wastes (radioactive, solid and liquid) of all of its
5 power sold in Pennsylvania, in a simple, uniform format.

6 6. The generation supplier will contribute one-half percent (0.5%) of its
7 total Pennsylvania power revenues to the Pennsylvania Sustainable
8 Development Fund.

9 7. The generation supplier will provide customers with information
10 regarding the number and percentage of its work force employed in
11 Pennsylvania.
12

13 In sum, my recommendations will reduce the incumbent's otherwise unfair
14 competitive advantage at the critical outset of competition, will allow all
15 generation companies a practical opportunity to serve a larger share of the
16 market, and will provide customers and society with environmental and
17 consumer protection benefits consistent with the Act.

18 **3. OVERVIEW OF ENRON'S PROPOSED CHOICE PLAN**

19 **Q. Please summarize Enron's Choice Plan**

20 **A.** To summarize the portions of the Enron proposal which are relevant to my
21 testimony: The Commission would designate Enron as the provider of last resort
22 (PLR) to supply PECO's default customers, i.e., those customers that do not
23 choose an alternative generation supplier. Enron would enter into a power
24 purchase agreement with PECO to purchase the energy and capacity necessary
25 to serve the default customers.

1 **Q. Is Enron's Choice Plan likely to lead to sufficient competitive alternatives in**
2 **PECO's service territory?**

3 A. Not necessarily. Enron's Choice Plan does provide for a generation "credit" (i.e.,
4 the rate customers will pay for energy and capacity) that is higher in the early
5 years of the Enron plan than in PECO's proposal. This higher credit makes it
6 much more likely that alternative suppliers enter the marketplace. Despite this,
7 many customers might not choose alternative electricity suppliers -- even after
8 they are afforded the opportunity. When telephone customers first had the
9 opportunity to choose among long-distance carriers, the majority did not switch
10 to a new carrier. Electricity customers are likely to follow the same pattern.

11 **Q. Why would so many customers not choose alternative electricity suppliers**
12 **once retail access is allowed?**

13 A. There are many reasons why customers might not choose alternative electricity
14 supplies once retail access is allowed.

15 **Customer Confusion.** It is likely that the confusion now experienced by many
16 customers at the start of the pilot programs may continue. The pilot program
17 advertising offered a bewildering assault, which has done little to help consumers
18 understand their options. In the midst of such cognitive noise, people feel ill-
19 equipped to make an intelligent choice. Frequently they are afraid they will make
20 the wrong choice or are overwhelmed by the hassle of it all.

21 Many consumers may not want to be pioneers in this new age of competition.
22 Having no historical experience in selecting an electric company, they may prefer
23 to wait until there is a body of customer experience to draw on, word-of-mouth

1 recommendations they can tap, or independent *Consumer Reports*-like
2 evaluators that can assist them in making that decision.

3 **Lack of Meaningful Choice.** Medium- and low-volume customers might not be
4 offered alternative electric generation services by many competitors because of
5 the high transaction costs and low profit potential of serving that segment of the
6 market. Medium- and low-volume customers are considered by many to be
7 costly to market and to service. My point is illustrated by an executive vice
8 president of New Energy Ventures, one of the leading new large energy
9 providers based in California, who was recently quoted as saying that NEV would
10 serve residential customers if they were aggregated into buying groups, because
11 they are "very expensive to serve because they are peak customers and what
12 you need to do is serve them in bulk."³

13 **Lack of Useful Information.** Many medium- and low-volume customers might
14 have less information and the less practical ability to effectively shop among
15 competing generation suppliers than high-volume industrial customers.
16 Customers might not be aware of the choices available, or might simply not have
17 the time or resources to evaluate competing proposals. Some customers might
18 not be motivated to actively shop because the size of their bill is not large
19 enough to warrant much attention.

20 **Why Change?** Whether it is brand loyalty, risk aversion or the comfort of the
21 familiar, many customers might not choose alternative electricity suppliers simply
22 out of years of habit with the existing electric company, and/or out of distrust of
23 new, unfamiliar generation companies. The fact that Enron is so interested in

³ *Deregulation Plan: 15% Cut in Power Bills*, Boston Globe, October 30, 1997.

1 acting as the default provider indicates that it believes that (a) the segment of
2 customers who do not choose alternative generation providers could be quite
3 large, and (b) serving this segment of customers (without the associated
4 *marketing costs*) could be quite lucrative.

5 **Q. Why should the Commission be concerned if a large portion of customers**
6 **does not choose alternative generation suppliers?**

7 A. If a large portion of electricity customers do not choose an alternative supplier,
8 and a single default generation supplier immediately serves these customers,
9 then the default generation supplier would be granted an unfair competitive
10 advantage over alternative generation suppliers. Alternative generation
11 companies would essentially be left out of this important share of the market.
12 Consequently, these suppliers will not have as much opportunity to establish and
13 develop their position. This market domination would have a strong chilling
14 effect on potential suppliers, which might reasonably decide against getting into
15 the market.

16 Assigning a single entity the opportunity to serve all default customers essentially
17 institutionalizes a competitive advantage for that entity. Enron itself makes this
18 point in its petition when it states that "[i]n order to achieve real competition,
19 Enron believes that competitive alternatives must be available to customers at
20 every level... and that it should not automatically be assumed that the EDC
21 [electric distribution company] will continue to serve those who do not choose."⁴

⁴ Enron Petition, Pennsylvania Public Utility Commission Docket No. P-00971265, October 7, 1997, page 25.

1 **Q. Does Enron's proposal resolve the anti-competitive problem of assigning**
2 **all of the default customers to PECO?**

3 No. Enron's Choice Plan does not resolve the anti-competitive problem that it
4 identifies. Enron's plan would simply replace one monopoly with another. While
5 Enron is not necessarily likely to enjoy the same level of competitive advantage
6 that PECO is likely to enjoy, assigning to it all of the default customers would
7 provide it with a significant unfair advantage nonetheless.

8 **Q. Is Enron's proposal likely to stimulate any more customer choice than**
9 **PECO's Partial Settlement proposal?**

10 A. Not necessarily. On the one hand, the Choice Plan should stimulate greater
11 customer choice by increasing the generation credit (i.e., payment that
12 customers must make for generation from PECO). A higher, more realistic
13 generation credit is likely to encourage some customers to seek lower-cost
14 alternatives. On the other hand, in the Choice Plan, Enron will offer electricity
15 rates below those offered in the PECO plan -- Enron is offering a 20 percent
16 reduction compared with PECO's 10 percent reduction.

17 Enron's petition notes that its generation credits are slightly lower than the range
18 of market prices recommended by the Pennsylvania Electric Competition
19 Coalition, partly because of the rate reductions offered in the Choice Plan. As
20 long as the generation rates which the default provider offers are lower than the
21 competition's market price for generation, customers will have little incentive to
22 seek lower-cost alternatives. In theory, Enron's proposal could spur greater
23 customer participation in the market than PECO's proposal because of the
24 higher generation credits. However, in practice it may turn out that neither of

1 them spur much customer participation in the market because they both offer
2 generation rates that are lower than the competing market price.

3 **4. ENHANCING COMPETITION WITH THE BETTER CHOICE PLAN**

4 **Q. As an alternative to the Enron Choice Plan, what should the Commission**
5 **do to mitigate against the potential anti-competitive effects created by**
6 **assigning default customers to one company?**

7 A. Enron's proposal demonstrates that PECO's default customers provide
8 generation suppliers with an important opportunity to establish themselves in the
9 generation business and increase their market share. My main point is that the
10 Commission should mitigate the anti-competitive implications of assigning all of
11 the default customers to a single generation supplier. I recommend that the
12 Commission establish a system for allocating the default customers among a
13 number of viable generation companies. This measure will significantly enhance
14 the degree of competition in PECO's service territory.

15 **Q. How do you propose to allocate the default customers to more than one**
16 **generation supplier?**

17 A. Mr. Schoengold, Mr. Colton and I have worked with the Environmentalists to
18 develop the Better Choice Plan as a means to address the anti-competitive
19 problem created by the default customers, by allocating the default customers to
20 more than one generation company. I recommend the Commission require the
21 adoption of the Better Choice Plan as a condition for PECO to secure the
22 principle benefits under the Act, such as stranded investment recovery and
23 securitization.

1 **Q. Please describe your Better Choice proposal.**

2 A. The Better Choice Plan consists of two distinct steps in the process of providing
3 generation companies with access to retail electricity customers in PECO's
4 service territory:

5 ● The first step is the initial customer selection process that will take place
6 in any event as part of introducing direct access to a competitive
7 generation market.

8 ● The second step is the allocation of default customers among those
9 generation companies that are selected in the initial customer selection
10 process.

11 ***The Initial Customer Selection Process***

12 **Q. Please describe the initial customer selection process.**

13 A. In the first step of the Better Choice Plan, electricity customers would be given
14 the option to select alternative generation customers according to the schedule
15 set forth in the Act. The Act spoke of a three-step three year phase-in beginning
16 January 1, 1999, but the PECO partial settlement accelerated this by providing
17 market access to one-third on January 1, 1999, the second third on January 2,
18 1999, and the final third on January 2, 2000. The Environmentalists support this
19 accelerated phase-in schedule as a valid reading of the Act. This selection
20 process would proceed in these two stages, per the Act, with two additional
21 elements.

1 **Q. What is the first element you recommend be added to the selection**
2 **process?**

3 A. The Commission should take certain measures to encourage and facilitate
4 *customer action in selecting among competing generation supplier proposals.* At
5 a minimum, the Commission should ensure that all customers are provided with
6 comprehensive, truthful, timely, and consistent information regarding their
7 choices of electricity suppliers. Accurate and useful customer information is one
8 of the cornerstones necessary for developing a competitive market. If customers
9 are unaware, misinformed or confused about alternative generation companies,
10 then competition will be meaningless for them and the primary objective of the
11 Act will not be achieved. There are many specific measures to insure that the
12 system provides customers with unbiased and effective information. However, a
13 detailed exposition of such measures is beyond the scope of my testimony in this
14 proceeding. If the Commission accepts the Better Choice Plan I recommend it
15 require this issue to be timely addressed.

16
17 **Q. Why is it so important that the Commission encourage customer choice in**
18 **the initial customer selection process?**

19 A. A competitive market will only bring benefits to customers to the extent that they
20 face meaningful choices and they make conscious, informed decisions based on
21 those choices. Informed customer interest and participation in evaluating and
22 choosing among generation companies is essential to ensure that the
23 companies are provided with the incentive to operate efficiently and continually
24 strive to provide customers with quality service at low costs.

1 **Q. Do you believe that measures to facilitate customer involvement in the**
2 **initial customer selection process should only be applied in PECO's**
3 **service territory?**

4 A. No. It will be important to facilitate customer involvement in the selection
5 process in all service territories in Pennsylvania -- regardless of whether the
6 Commission adopts the Better Choice Plan, PECO's plan, Enron's Choice Plan,
7 or any other proposal. As I mentioned above, greater customer involvement will
8 increase competition and provide benefits to all electricity customers. I am
9 advocating in this testimony measures to facilitate informed customer
10 involvement because they represent an important element of the Better Choice
11 Plan.

12 **Q. What is the second element you recommend be added to the selection**
13 **process?**

14 A. PECO would publish the results of the selection process, including the
15 percentage of the generation market that was obtained by each generation
16 company. This information will be necessary to implement the second step of
17 the Better Choice Plan.

18 ***The Allocation of Default Customers Among All Eligible Generation Companies***

19 **Q. Please describe the second step in your Better Choice proposal.**

20 A. It is the second step of the Better Choice Plan that departs significantly from
21 PECO's and Enron's proposals. In the second step, if PECO's market share
22 from (a) explicit customer selection and (b) default the non-choosers to it were to
23 exceed 50% of the customers, the non-choosing customers would be allocated

1 among the various generation suppliers serving the other customers, rather than
2 being assigned to a single default provider.

3 **Q. How do you define default customers?**

4 A. Default or non-choosing customers are defined as those customers who do not
5 make an affirmative choice to purchase electricity from PECO or another
6 generation supplier.

7 In the initial customer selection process, customers would be provided with a
8 ballot with which they could select their generation supplier. All customers who
9 do not check off a particular supplier on the ballot would be considered default
10 customers and would be assigned to a default supplier.

11 **Q. Would customers be able to choose to continue to be served by PECO?**

12 A. Yes. PECO would be included on the ballot as one source for purchasing
13 generation services. PECO would offer generation services for an unbundled
14 generation price equal to the "generation credit" that is unbundled from the total
15 electricity price. The size of the unbundled generation credit will be determined
16 by the Commission in this proceeding. This issue is addressed by David
17 Schoengold in his testimony (see Environmentalists' Statement No. 1-E).

18 **Q. Would calculating the PECO market share threshold of 50% include those**
19 **customers who choose to be serviced by PECO or its affiliated generation**
20 **companies (Horizon Energy and Energy One)?**

21 A. Yes, it would. The objective of the 50 percent threshold is simply to identify the
22 point at which the PECO enterprise is likely to have too large a market share,
23 particularly through taking the default customers. The market share threshold

1 that is used to trigger the default customer allocation process should include
2 those customers who choose to be served by PECO as well as those who are
3 the default customers. The market share threshold of 50% should also include
4 those customers who choose to be served by Horizon and Energy One, because
5 of the firms' close affiliation with PECO. Thus the allocation process is triggered
6 with this equation: PECO + PECO affiliates + defaults => 50% of customers.
7 ("=>" means "equals or is greater than".)

8 **Q. How would the default customers be allocated between electricity**
9 **suppliers?**

10 A. Default customers would be allocated only between those alternative electricity
11 suppliers that were successful in obtaining customers in the initial selection
12 process. Each electricity supplier would be allocated a share of the default
13 customers in proportion to the share of customers it obtained in the initial
14 selection process. In determining these proportional shares, the computation of
15 percentages would exclude both the PECO affiliates and those suppliers which
16 did not choose to participate in the allocation process. A number of numeric
17 examples of various allocations are provided in Exhibit BEB-1.

18 The principal rationale for this allocation approach is that the customers'
19 decisions in the initial selection process provide a tangible indication of general
20 customer preference that should be applied to default customers as well.
21 Further rationales are that this allocation factor is simple, and may be
22 determined mechanically.

23 **Q. Would any of the default customers be allocated to PECO?**

1 A. No. I recommend that PECO not be allocated any of the default customers.
2 PECO should be making the transition toward becoming a local distribution
3 company. The only reason to include PECO on the customer choice ballot in the
4 first place is to give customers the option of remaining with the electricity
5 company that they are most familiar with, or if they explicitly prefer to do so. If
6 PECO wishes to continue to expand its generation business, it should do so
7 through properly isolated generation affiliates. It is important to note that none of
8 the customers who make an affirmative choice of PECO or its affiliates would be
9 denied their choice and reassigned to another supplier. We only propose to
10 assign the non-choosing default customers to the default suppliers.

11 **Q. Would the PECO generation affiliates (Horizon Energy and Energy One) be**
12 **allocated any of the default customers, if it were to obtain customers**
13 **during the initial selection process?**

14 A. I recommend that the PECO generation affiliates should not be allocated any of
15 the default customers, even if they obtain some customers during the initial
16 selection process. The PECO generation affiliates are likely to have some
17 degree of competitive advantage over other generation companies as a result of
18 its affiliation with PECO, regardless of any codes of conduct or affiliate
19 transaction standards that the Commission might implement.

20
21 **Q. Under what circumstances might it be reasonable to allocate some of the**
22 **default customers to PECO generation affiliates (Horizon Energy and**
23 **Energy One)?**

24 A. Only in carefully determined circumstances. There must be in place
25 unassailable firewalls between PECO the distribution company and its

1 generation affiliates in order to protect distribution company ratepayers and
2 competitors against cross-subsidization and other improper monopoly-related
3 behavior. The Commission must issue and enforce safeguards, whether through
4 a Code of Conduct or otherwise, which include stiff sanctions. The enforcement
5 commitment must be meaningful -- specific and supported by fully authorized
6 staff. Unenforced safeguards will not serve as a deterrent against anti-
7 competitive behavior. If, for example, sound functional and accounting
8 separations requirements were in place, and meaningfully enforced with
9 adequate Commission resources before introduction of the statutory first phase
10 of competition, such an default market allocation to the PECO generation
11 affiliates might be reasonable.

12 Experience in other industries demonstrates that in practice it is extremely
13 difficult to create such firewalls and to ensure compliance with them, and that
14 affiliate transaction abuse can remain a significant problem. Therefore, as a
15 working presumption, I do not consider it prudent to allocate PECO affiliates a
16 portion of the default customers.

17 **Q. Once a supplier is allocated a certain share of the default customers, how**
18 **would it be assigned specific default customers?**

19 **A.** The default customers would be allocated separately by residential, commercial
20 and industrial classes. For each of these three customer classes, each
21 generation supplier would be allocated a share of the default customers in that
22 class proportional to the share of customers in that class that the generation
23 *supplier obtained in the initial customer selection process. This is most easily*
24 understood by working through the examples given in BEB-1. I expect that the

1 majority of the default customers will be residential customers, with some
2 commercial customers, and some small industrial customers.

3 *The specific customers could then be allocated to the alternative suppliers on a*
4 *random basis. A random allocation avoids the appearance of unfairness of*
5 *some generation companies receiving more-desirable or less-desirable default*
6 *customers because of their location on the distribution grid or load*
7 *characteristics.*

8 The process of allocating the default customers to the various alternative
9 suppliers would be performed by PECO in a process subject to oversight by the
10 Commission and inspection by the alternative suppliers. This would take place
11 months before the onset of competition (January 1).

12 **Q. Would all generation suppliers that obtain customers in the initial selection**
13 **process be required to pick up default customers through the allocation**
14 **process that you propose?**

15 A. No. Supplier participation in the process would be entirely voluntary. Each
16 generation supplier that obtained customers in the initial selection process would
17 be given the option to be allocated default customers. I expect that every, or
18 almost every, supplier would welcome an allocation of default customers
19 because the supplier's market share would be increased without incurring
20 marketing costs.

21 Some suppliers might not participate because the Plan requires a "quid" for the
22 "quo". In exchange for the private benefit -- avoiding marketing costs to increase
23 customer base -- the supplier must help the Commission advance certain public

1 interest objectives. (I discuss this just below.) Those generation suppliers that
2 decline to meet the Plan's public benefit conditions would simply not be allocated
3 any of the default customers. Consistently, the market shares of those non-
4 participating suppliers would be ignored in calculating the proportional allocation
5 shares of the alternative suppliers that do choose to participate in the Plan.

6 Further, if a generation company that obtains customers in the initial selection
7 process subsequently declines to serve its default customers or fails to comply
8 with the Plan's minimum conditions, the default customers that would have been
9 allocated to that company would then be allocated to the other eligible
10 generation companies, based on their proportional shares of the market after the
11 initial selection process. (In determining these revised proportional shares, the
12 computation of percentages would also exclude PECO and its affiliates and
13 those suppliers which had declined to participate in the allocation process.)

14 ***Conditions That Must Be Met In Order To Be Allocated Default Customers***

15 **Q. What are the conditions a supplier must meet in order to be allocated a**
16 **share of the default customers?**

17 **A.** In order to be eligible to receive a percentage of the default customers, each
18 generation company must first agree to provide generation services to the
19 default customers under the following conditions:

- 20 1. The price for the generation services will be no higher than the unbundled
21 generation rate (also known as the "generation credit") that PECO will be
22 allowed to charge. This provision is necessary to ensure that default
23 customers will not have their prices increased as a result of being
24 allocated to an alternative supplier.

- 1 2. The generation supplier will agree that any of its default customers who
2 elect to switch generation suppliers will not be charged a contract
3 termination fee or other penalty. Customers who are assigned to a default
4 supplier should be able to make an affirmative choice to switch to another
5 supplier, even to PECO, without penalty.
- 6 3. The generation supplier will agree that the energy and capacity it offers to
7 serve default customers meet an environmental baseline comparable to
8 the applicable Pennsylvania environmental regulations. This helps create
9 a level geographic playing field for suppliers.
- 10 4. The generation supplier will offer a resource mix which includes at least
11 one percent (1.0%) renewable resources, and the supplier employs a net
12 billing, or net metering, tariff and other policies to facilitate the
13 interconnection of small-scale, clean and renewable energy generation.
14 For the purpose of this condition, renewable resources would not include
15 electricity generated by the combustion of solid waste. Generation
16 suppliers would be able to use purchases of renewable energy to qualify
17 for this condition.
- 18 5. The generation supplier will inform customers about the fuel mix, air
19 emissions and other wastes (radioactive, solid and liquid) of all of its
20 power sold in Pennsylvania, in a simple, uniform format. This information
21 is important to ensure effective competition by providing customers with
22 relevant facts that may influence their choice of electricity supplier.⁵ It is
23 also necessary to prevent misleading or confusing claims about
24 environmental impacts or green power services.
- 25 6. The generation supplier will contribute 0.5 percent of its total
26 Pennsylvania power revenues to the Pennsylvania Sustainable
27 Development Fund. The rationale and proposed design of this Fund is
28 addressed in David Schoengold's testimony (Environmentalists'
29 Statements 1-S and 1-E).
- 30 7. The generation supplier will provide customers with information regarding
31 the number and percentage of its work force that is employed in

⁵ The National Association of Regulatory Utility Commissioners (NARUC) recognizes the importance of the role of customer information in encouraging an effective, competitive generation market. In a recent resolution NARUC found that "clear and uniform disclosure will promote efficiency through informed product comparisons; and informed customer choice cannot occur in a retail electricity market without full disclosure of all relevant and important facts." NARUC went on to resolve that it supports "initiatives leading to minimum, enforceable, uniform standards for the form and content of disclosure and labeling that would allow retail and wholesale consumers easily to compare price, price variability, resource mix, and environmental characteristics of their electricity purchases." (NARUC, *Resolution in Support of "Right-to-Know" and Product Labeling Standards for Retail Marketing of Electricity*, the 108th Annual NARUC Convention in San Francisco.)

1 Pennsylvania. This provision is consistent with the Act's recognition that
2 during this transition to a competitive electric market, the Commonwealth
3 has a stake in protecting jobs,⁶ promoting an experienced and expert work
4 force⁷ and being sensitive to changes that might otherwise entail the
5 closure of facilities or reductions in employee levels.⁸

6 **Q. Why should a supplier be required to meet the conditions outlined above?**

7 A. The default customers represent an opportunity for a generation company to
8 increase market share, enhance its name recognition, increase its profits through
9 increased sales, diversify its customer base, improve its customers' load factor,
10 and reduce operating risks through diversification -- all for little or no marketing
11 and transaction costs to obtain those customers. (See Mr. Colton's testimony on
12 the substantial marketing cost avoidance.) In the newly restructured electricity
13 industry, the primary competitive strategy will be to increase market share. I
14 expect that many generation companies will be very interested in serving these
15 default customers. Enron's petition in this docket is compelling evidence of this
16 interest.

17 Consequently, I believe that the generation companies should provide something
18 to customers in return for this desirable marketing opportunity. I expect that the
19 conditions listed above are relatively modest compared with the low-cost
20 marketing opportunities associated with serving the default customers, and that
21 most, if not all, generation companies would be willing to meet these conditions
22 in order to obtain those opportunities. In any event, participation in the allocation
23 process is their free choice.

⁶e.g. § 2802 (7).

⁷e.g. § 2802 (11).

⁸e.g. § 2802 (18).

1 ***The Threshold For Allocating Default Customers***

2 **Q. What if it turns out that PECO's market share is less than 50 percent (i.e.**
3 **more than half of PECO's customers explicitly choose a non-PECO**
4 **alternative generation supplier once they are allowed retail access)?**
5 **Would you still propose to allocate the default customers among the**
6 **alternative suppliers?**

7 **A. No.** If it turns out that more than 50 percent of PECO's customers choose an
8 alternative electricity supplier(s), I do not recommend the allocation of the default
9 customers.

10 In this way, my proposal does not require that the Commission be convinced
11 *now that the majority of electricity customers in mid-1998, or later, will fail to*
12 *explicitly choose a generation supplier.* If it turns out that I am wrong, the default
13 customer allocation process will not be applied and no effort lost. If I am correct
14 about customers not choosing alternative suppliers, then the need for the default
15 customer allocation process will be obvious and the Better Choice Plan will be in
16 place to help achieve the Act's goal of creating a truly competitive electricity
17 market in Pennsylvania.

18 **Q. Why have you chosen a PECO market share threshold of 50 percent for**
19 **implementing your recommendation to allocate default customers?**

20 **A.** It is useful to have some reasonable threshold that indicates the extent to which
21 PECO has an unfair competitive advantage as a result of being allocated all of
22 the default customers. The objective of the threshold is to provide an indication
23 of when PECO as the default supplier would have too large a share of the
24 market, i.e., that it would hold a dominant position in the market. I believe that

1 50 percent is a rough, simple threshold that will be reasonable, easy for the
2 Commission to apply and easy for the public and the parties to understand.

3 **Q. Please elaborate. In a competitive environment what would be the ideal**
4 **number of customers that are provided generation services by PECO?**

5 A. Ideally, PECO should not be providing any customers with generation services
6 once retail competition is fully established. PECO should make the transition
7 into a local distribution company. It appears this LDC status is what is envisioned
8 in the PECO partial settlement. The only need for PECO to provide generation
9 services to customers over the long-term would be as the Provider of Last
10 Resort, as described further below in my testimony. If PECO wants to operate in
11 the generation market, it should do so through its generation affiliates. As long
12 as PECO (in its capacity as the distribution company) is providing generation
13 services to customers (other than provider of last resort), it is limiting the
14 opportunities for competitive generation companies to serve those customers,
15 and it is therefore hindering the development of competition in its service
16 territory.

17 **Q. Why do you believe that the threshold should be a market share of 50**
18 **percent?**

19 A. There are many factors that should be taken into account in assessing whether
20 any one entity has a dominant position in the market. Economic theory suggests
21 that in order for a workably competitive market there needs to be, among other
22 factors, a large number of firms competing in each market. However, there is no
23 simple formula for determining what that number should be. It would depend
24 upon many other factors that are unique to each market -- the market share of
25 each firm, the ease of entry and exit in the market, the potential for any one firm

1 to influence the market price, the potential for firms to collude, the potential for
2 firms to use affiliate transactions to their competitive advantage, and more.

3 Nevertheless, numerical indications of market power can sometimes be used to
4 provide approximate indications of whether a particular market is too highly
5 concentrated among too few firms. One of the commonly used numerical
6 indicators of market concentration is the Hirfindahl-Hirschmann Index (HHI). The
7 HHI is used by the U.S. Department of Justice (DOJ) in reviewing market power
8 issues in the context of mergers. The Federal Energy Regulatory Commission
9 (FERC) also uses the HHI as a guideline in evaluating market power in the
10 context of mergers between electric companies.

11 **Q. Please briefly describe how the HHI is calculated and applied.**

12 A. The HHI is defined as the sum of the squares of the market share of each firm
13 operating in a particular market. For example, a market with four firms each with
14 25 percent of the market would have an HHI of 2,500. A high HHI implies a high
15 concentration in the marketplace. The squaring of the market shares of each
16 firm ascribes more weight to the larger firms, which leads to a higher HHI. A
17 market with only one firm with a 100 percent market share would result in an HHI
18 of 10,000, which is the highest possible HHI result.

19 There is some debate about what level of HHI indicates that a market is overly
20 concentrated. According to the DOJ guidelines, a market is deemed to be
21 "unconcentrated" if the HHI is less than 1,000; "moderately concentrated" if the

1 HHI lies between 1,000 and 1,800; and "highly concentrated" if the HHI is greater
2 than 1,800.⁹

3 Dr. Paul Joskow, in advising FERC on determining whether market-based pricing
4 can be applied in certain wholesale generation markets, recommended the
5 following guidelines:¹⁰

- 6 1. A *market* should be considered "low risk" (i.e., collective market power
7 would not be a problem) if the HHI is less than or equal to 2,500.
- 8 2. An *individual firm* should be considered at low risk of possessing market
9 dominance if it has less than or equal to 20 percent of market share,
10 regardless of the HHI for the market.
- 11 3. An *individual firm* should be considered at low risk of possessing market
12 dominance if it has less than or equal to 35 percent of market share, and
13 the HHI for the relevant market is less than or equal to 2,500.

14 Dr. Joskow's guidelines account for both the concentration of the entire market
15 and the concentration of a particular firm of interest. It is important to note that
16 Dr. Joskow's guidelines were developed for wholesale electricity markets, and
17 not the retail electricity market that we are discussing in this proceeding.
18 Guidelines for retail markets might require some different considerations. Also, I
19 am not presenting Dr. Joskow's guidelines here to support them or advocate that
20 they be adopted. I am simply presenting them as an industry standard that can
21 shed light on the market dominance issue created by assigning default
22 customers to a single entity.

⁹ For the purpose of reference, a market with ten identically sized firms will have an HHI of 1,000, while a market with five identically sized firms will have an HHI of 2,000. For a given number of firms in a market, the HHI assumes its lowest value when the firms have identical market shares, and increases as the market shares of individual firms increase.

¹⁰ Joskow, *Horizontal Market Power in Wholesale Power Markets*, August 1995.

1 **Q. What would the HHI analysis indicate about your proposed 50 percent**
2 **threshold for determining whether to allocate default customers to a**
3 **number of generation companies?**

4 A. It is not possible to calculate an HHI in the abstract, without knowing how many
5 firms will compete and what their market share will be. However, it is possible to
6 make various hypothetical calculations that illustrate the implications of the 50
7 percent threshold.

8 For example, if PECO had a 50 percent market share of the retail generation
9 market in its service territory and there were five other competitors with equal
10 shares in the market, the HHI would be 3,000. According to either the DOJ or
11 Dr. Joskow's guidelines, this result indicates that there would be excessive
12 concentration in the market and that PECO would possess market dominance. In
13 fact, even under the best of circumstances, if there were a very large number of
14 firms operating in PECO's service territory, if PECO had 50 percent or more of
15 the market share, then the lowest that the HHI could possibly be would be 2,500.
16 Again, this would imply that PECO would possess market dominance.

17 Furthermore, Dr. Joskow's guidelines suggest that it is important to consider the
18 size of market shares of individual firms, as well as the HHI for the entire
19 industry. His guidelines suggest that if PECO were to have as much as 50
20 percent of the retail generation market, then it would possess market dominance,
21 regardless of how low the HHI index was.

22 This simple application of the HHI demonstrates that my threshold of 50 percent
23 is actually quite conservative, and that PECO might possess market dominance
24 even before this threshold is reached.

1 **Q. Do you recommend that the Commission conduct a study of market power,**
2 **including an HHI analysis, to determine whether to allocate the default**
3 **customers to alternative generation providers?**

4 A. No, I do not. I am discussing the HHI analysis here simply to provide a rough
5 illustration of what my 50 percent threshold implies about market dominance.
6 The HHI only provides a very rough, initial indication of market power. A
7 thorough market power analysis would require a more detailed study of the retail
8 generation market in PECO's service territory.

9 It is important to remember that the 50% figure acts merely as a trigger for a
10 process; it does not require the Commission to undertake an antitrust-type
11 remedy. For the purposes of implementing the Better Choice Plan, the
12 Commission does not need to conduct a detailed market power analysis. All the
13 Commission needs to know is that point beyond which PECO would possess an
14 unacceptable dominant market position as a consequence of the default
15 customers. I believe that a 50 percent market share represents a clear,
16 unquestionable position of market dominance that can be used by the
17 Commission to trigger the Better Choice Plan's allocation process.

18 **Q. Are you aware of any other situations where a 50 percent market share was**
19 **used to indicate market dominance of one firm.**

20 A. Yes. When the Bell system was broken up and competition was introduced into
21 the long-distance telephone market, the FCC used a 50 percent threshold to
22 determine the duration of its continued regulatory authority over AT&T as the
23 dominant long-distance carrier. It was AT&T, the former long-distance operation
24 of the Bell system, which emerged as the incumbent long-distance carrier as a
25 result of divestiture.

1 ***Other Implementation Issues***

2 **Q. Will customers who are allocated to alternative generation suppliers have**
3 **the option of switching to other generation companies?**

4 A. Yes. Any default customer who has been allocated to a generation supplier will
5 always have the option to switch to any generation supplier of his or her choice.
6 And any other supplier will be free to compete for that customer's business. My
7 proposal is not meant to limit customer options in any way -- it is meant to
8 increase them.

9 However, I expect that most default customers are unlikely to switch from the
10 generation supplier to which they are allocated, because they will have already
11 demonstrated a lack of interest by failing to choose an alternative in the first
12 place. If the very act of being allocated to a new supplier catches a customer's
13 interest and encourages him or her to choose an alternative provider, then I
14 would consider that a positive outcome -- increased customer awareness and
15 increased competition among suppliers.

16 **Q. Under the Better Choice Plan, would the generation companies that are**
17 **allocated the default customers serve as the Provider of Last Resort?**

18 A. No. The Provider of Last Resort and the default supplier are two fundamentally
19 different concepts. I try not to confuse them. PECO and Enron have both
20 proposed that one generation company act as both the default supplier and the
21 Provider of Last Resort. In my view these two functions do not have to be
22 served by the same entity.

1 **Q. Please describe the difference between the default suppliers and the**
2 **Provider of Last Resort.**

3 A. The Provider of Last Resort is an entity that is assigned the responsibility of
4 ensuring that all electricity customers will have access to a reliable supply of
5 electricity at reasonable prices, terms and conditions. The Act notes that
6 electricity is a necessary commodity for many customers, and no citizen should
7 be denied access to this important service.¹¹ However, in a deregulated
8 generation market, generation companies do not have a responsibility to serve
9 any and all customers the way that vertically integrated utilities do.

10 Consequently, some customers may find that they cannot obtain generation
11 services, either because (a) they are simply denied service by the generator of
12 their choice for any number of reasons (e.g. the generator does not have
13 sufficient generation capacity), (b) they are not marketed to by generation
14 companies because they are perceived as offering low profits or high risks, (c)
15 their generation company goes bankrupt on short notice, or (d) they are subject
16 to other reasons that are difficult to anticipate until the competitive electricity
17 market is up and operating. A Provider of Last Resort would be required to
18 serve these customers if the need arose.

19 A default supplier, on the other hand, is one that serves those customers who
20 have not pro-actively chosen an alternative generation supplier. A default
21 supplier serves those customers who have had a choice of generation options,
22 but (for whatever reason) have not chosen any of them. A Provider of Last
23 Resort serves those customers who (for whatever reason) do not have a choice
24 of generation suppliers.

¹¹ 66 Pa.C.S. §§ 2802(9) and 2802(12).

1 **Q. Are you suggesting that consumer protections or standards do not apply to**
2 **suppliers?**

3 A. Not at all. On a generic basis, the Commission is evaluating a host of consumer
4 protection issues, standards and guidelines, including the supplier licensing
5 requirements, the Code of Conduct and other rules of the road. The
6 Environmentalists have taken the consistent position that such consumer
7 protections are necessary and that the Commission must play a role through
8 them in the developing market.

9 **Q. Why is the distinction between default supplier and Provider of Last Resort**
10 **so important in understanding the Better Choice Plan?**

11 A. Some generation companies may not wish to act as the Provider of Last Resort.
12 This role may require additional costs and additional risks, may require
13 substantially greater reliability planning, or may require services that are not a
14 part of the generation company's core business. A generation company that
15 acts as the Provider of Last Resort may be less competitive than those which are
16 free of this responsibility. The Act requires the Commission to establish a
17 funding mechanism to support the Provider of Last Resort, but such funding may
18 not be sufficient to overcome the objections that some competitive generation
19 companies might have to this responsibility.¹²

20 The Better Choice Plan makes a distinction between the default supplier and the
21 Provider of Last Resort in order to create the opportunity for all generation
22 companies to act as a default supplier without the obstacle of having to serve as
23 the Provider of Last Resort. As described throughout my testimony, there are
24 many benefits to having a number of generation companies act as default

¹² 66 Pa.C.S. § 2802(17).

1 suppliers. In contrast, it is more practical, efficient and simple to have a single
2 entity act as the Provider of Last Resort.

3 **Q. Whom do you recommend act as the Provider of Last Resort?**

4 A. I recommend that PECO act as the Provider of Last Resort. As the monopoly
5 transmission and distribution company, PECO will be regulated by the
6 Commission, and can be required to provide those services that may not be
7 provided by the competitive market. In addition, because PECO will already be
8 required to provide access to transmission and distribution services to all
9 customers in its service territory, it is not a great leap for it to provide access to
10 some form of generation service as the Provider of Last Resort. The Act
11 requires that PECO should be the Provider of Last Resort in its service territory,
12 "unless another Provider of Last Resort is approved by the Commission."¹³ At
13 this time, I am not aware of any entity that could serve as the Provider of Last
14 Resort any more effectively or efficiently than PECO.

15 ***Timing: The ability to implement over a period of months***

16 **Q. Must the Commission identify and resolve all specific logistics entailed in**
17 **the Better Choice Plan before its December 11 deadline it faces for**
18 **issuance of an order in this proceeding?**

19 A. No. Given the January 1 and 2, 1999, commencement dates for competition, the
20 Commission has several months in which to address those logistics. At this
21 point I would urge the Commission to adopt the broad outlines of the Better
22 Choice Plan — order the parties to work toward the result the Commission

¹³ 66 Pa.C.S. § 2802(16).

1 seeks, articulate the objectives, and adopt the general principles and
2 requirements stated in the Environmentalists' testimony. The parties would be
3 required to work closely with the Commission's designee(s) in following a work
4 plan that would generate a mid-year customer balloting, with allocations of
5 default customers, if the trigger is met, by September 1, 1998. This would give
6 the allocated suppliers three months in which to complete all arrangements to
7 meet the energy needs of these customers.

8 **5. CONCLUSION**

9 **Q. Is your Better Choice Plan a substitute for other environmental policies?**

10 A. No, it is not. The Better Choice Plan can provide substantial environmental and
11 consumer protection benefits, but it is not a substitute for an integrated policy to
12 protect and enhance the environment. Restructuring of the electricity industry
13 can and should be implemented in a way that improves environmental quality for
14 Pennsylvanians. The Environmentalists' other environmental recommendations
15 are contained in David Schoengold's testimony.

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

17 A. Yes it does.

18 D:\WPdocs\Restructuring\PECO cases\0biewa-1.wpd

Example 1: PECO's Share Does Not Exceed the Threshold			
	Share of the Market After the Initial Customer Selection Process	Share of the Non- PECO Supplier Market	Share of the Market After the Default Customer Allocation
PECO	10%	0%	40%
Horizon	5%	0%	5%
Energy One	0%	0%	0%
Supplier A	25%	45%	25%
Supplier B	15%	27%	15%
Supplier C	10%	18%	10%
Supplier D	5%	9%	5%
Default (no choice)	30%	0%	0%
Total	100%	100%	100%
Sum of PECO, its affiliates and Default	45%	0%	45%
Sum of Non-PECO Suppliers	55%	100%	55%

Example 2: PECO's Share Exceeds the Threshold -- Few Default Customers			
	Share of the Market After the Initial Customer Selection Process	Share of the Non- PECO Supplier Market	Share of the Market After the Default Customer Allocation
PECO	20%	0%	20%
Horizon	10%	0%	10%
Energy One	5%	0%	5%
Supplier A	15%	43%	28%
Supplier B	10%	29%	19%
Supplier C	5%	14%	9%
Supplier D	5%	14%	9%
Default (no choice)	30%	0%	0%
Total	100%	100%	100%
Sum of PECO, its affiliates and Default	65%	0%	35%
Sum of Non-PECO Suppliers	35%	100%	65%

Example 3: PECO's Share Exceeds the Threshold -- Many Default Customers			
	Share of the Market After the Initial Customer Selection Process	Share of the Non- PECO Supplier Market	Share of the Market After the Default Customer Allocation
PECO	5%	0%	5%
Horizon	0%	0%	0%
Energy One	0%	0%	0%
Supplier A	15%	43%	41%
Supplier B	10%	29%	27%
Supplier C	5%	14%	14%
Supplier D	5%	14%	14%
Default (no choice)	60%	0%	0%
Total	100%	100%	100%
Sum of PECO, its affiliates and Default	65%	0%	5%
Sum of Non-PECO Suppliers	35%	100%	95%