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Docket I-900005

COMMONWEALTH OF PENNSYLVANIA
PUBLIC UTILITY COMMISSION

INVESTIGATION INTO
DEMAND SIDE MANAGEMENT BY
ELECTRIC UTILITIES:
UNIFORM COST RECOVERY MECHANISM

REBUTTAL TESTIMONY OF
PAUL CHERNICK
ON BEHALF OF THE
PENNSYLVANIA ENERGY OFFICE

Resource Insight, Inc.
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1 I. INTRODUCTION

2 Q: Please state your name, occupation, and business address.

3 A: I am Paul L. Chernick. I am President of Resource Insight,
4 Inc., 18 Tremont Street, Suite 1000, Boston, Massachusetts.

5 Q: Are you the same Paul Chernick who filed direct testimony in
6 this proceeding on behalf of the Pennsylvania Energy Office?

7 A: Yes.

8 Q: What is the purpose of this rebuttal testimony?

9 A: In this testimony, I briefly discuss the issues that have
10 taken on greater importance in this case since the time I
11 filed my direct. The major issues include the obligation of
12 utilities to pursue least-cost planning even where DSM cost-
13 recovery issues have not been resolved, the types of
14 programs eligible for special cost recovery, the choice of a
15 specific cost-recovery mechanism design and the rationale
16 for incentives.

17 For the convenience of the Commission, I also provide
18 at the end of my rebuttal testimony a list of the issues
19 before it in this case, and the PEO's proposed resolution of
20 each issue.

1 **II. UTILITY LEAST-COST OBLIGATIONS**

2 Q: What is the obligation of Pennsylvania utilities to pursue
3 least-cost planning even where DSM cost-recovery issues have
4 not been resolved?

5 A: Pennsylvania utilities have an obligation to provide
6 "adequate, efficient, safe, and reasonable" service. 66
7 Pa.C.S.A. §1501. The requirement for "efficient" services
8 is expanded in 66 Pa.C.S.A. §524, which requires electric
9 utilities to integrate all "practical and economical energy
10 conservation" and to develop least-cost plans to meet future
11 customer needs. Least-cost planning requires that each
12 Pennsylvania utility attempt to provide ratepayers with
13 reliable energy services at the lowest possible cost.
14 Demand management is often the lowest-cost option for
15 providing energy services. Hence, each utility is under an
16 obligation to pursue all cost-effective DSM.

17 Since DSM is a fundamental aspect of resource planning
18 and acquisition, utilities cannot legitimately suspend DSM
19 activities pending resolution of cost recovery issues.¹
20 When a utility files a rate case, it places in question all
21 aspects of its cost recovery, from its rate of return to
22 allowances for labor cost increases. Many aspects of its
23 proposal will be challenged by other parties; some may

24 ¹For example, Mr. Hood stated that his companies would not be
25 implementing the DSM programs they had determined to be cost
26 effective, until and unless the Commission approved an acceptable
27 cost-recovery mechanism. See Tr. pages 135-138.

1 propose an overall rate decrease, rather than an increase.
2 Despite these uncertainties about the details of future cost
3 recovery, the utility will normally proceed with its
4 activities, from fuel procurement to distribution
5 maintenance.² The utility is expected to act as if it
6 expected fair and normal treatment by the Commission. The
7 utility does not suspend tree trimming or streetlight
8 replacement when its rates are under review; if it did so,
9 the Commission would probably find the utility to be
10 providing inadequate service, and penalize it in its rate of
11 return or elsewhere.

12 Every electric utility in the Commonwealth of
13 Pennsylvania (and probably the gas utilities, as well) is
14 currently providing inadequate and unnecessarily expensive
15 service to its ratepayers. The Commission should not
16 tolerate any further delay in the vigorous pursuit of DSM
17 savings.

18 Nor is there any rational reason for delay. No utility
19 in Pennsylvania has any particular reason to believe that
20 the Commission will treat it unfairly when it requests cost
21 recovery for DSM-related costs. During the duration of this
22 case, utilities filing rate cases can and should request DSM
23 cost recovery through those cases; those not filing cases
24 can request an accounting order allowing the deferral of DSM

25 ²The exceptions to this rule are rare, and are generally
26 limited to utilities in severe financial distress.

1 costs to a future review and incorporation of prudent and
2 legitimate costs in rates.

3 Q: Is there any particular urgency in the utilities' obligation
4 to pursue DSM?

5 A: Yes. Unlike most supply resource options, many important
6 DSM opportunities will disappear if they are not pursued as
7 soon as they become available. I discussed these "lost-
8 opportunity" resources in my direct testimony. Utilities
9 that delay implementation of DSM programs will lose these
10 opportunities, since they cannot be captured later. Any
11 utility that is willfully refusing to pursue lost-
12 opportunity DSM due to the uncertainties about the details
13 of DSM cost recovery should be held fully liable for the
14 increased supply costs imposed by its failure to act
15 prudently.

16 The same is true for utilities that are committing to
17 new supply resources, such as GPU's purchase from Duquesne,
18 and those that are committing to investments for Clean Air
19 Act compliance. These utilities are about to lose the
20 opportunity to avoid supply costs. Any additional supply
21 costs imposed by the utility's failure to implement DSM due
22 to cost recovery uncertainty should be borne by the
23 utility's shareholders, not ratepayers.

1 **III. COST RECOVERY MECHANISMS**

2 Q: There is some disagreement about which types of programs
3 should be eligible for cost recovery through a special
4 mechanism. How should the Commission resolve this?

5 A: The Commission should establish a special recovery mechanism
6 for energy efficiency programs. No special recovery
7 mechanism is likely to be needed or warranted for
8 promotional programs, load management, supply-side
9 efficiency improvements, or rate design, for reasons
10 discussed at length in my direct. If a utility undertakes
11 rate design or (less likely) supply-side or load management
12 programs that would create some special problem for the
13 utility under traditional ratemaking, the utility can always
14 request special treatment at that time.

15 Q: What is the basic dispute over the form of the cost recovery
16 mechanism for DSM?

17 A: CEEP and the utilities favor an automatic rate adjustment or
18 surcharge mechanism, similar to the ECR. Other parties
19 (particularly OCA) would prefer that the costs be deferred
20 to the next rate case. Both of these mechanisms can allow
21 for prudence reviews, reconciliations, comprehensive cost
22 recovery, capitalization of long-term investments, and most
23 other desired features of a cost-recovery mechanism.

24 Q: What are the basic arguments for the automatic rate
25 adjustment?

1 A: The arguments for the automatic rate adjustment are more
2 properly stated as arguments against the deferral mechanism.
3 Deferrals may encourage utilities to file rate cases more
4 frequently, especially if they are strapped for cash.³
5 Deferrals also shift cost recovery slightly in time, so that
6 some DSM benefits are received prior to customers' beginning
7 to pay for the DSM.

8 Q: What are the basic arguments for the deferral mechanism?

9 A: The central advantage is that it avoids "single-issue"
10 ratemaking. Some of the parties have expressed concern that
11 DSM costs not be viewed in isolation from all of the
12 utility's costs. They do not like the idea that the utility
13 might raise rates to pay for DSM, when it is already over-
14 earning. Distinguishing between new DSM-related costs and
15 reallocated costs (such as transferred staff) can also be
16 difficult.⁴

17 Another advantage of the deferral mechanism is that it
18 allows utilities to proceed in relative confidence before
19 the Commission has completed all DSM reviews and cost-

20 ³The utilities have also argued that deferrals leave cost
21 recovery in doubt (Chamberlin Direct, pp. 14-15). The permanence
22 of cost recovery with surcharges is also usually in doubt, since
23 even incurred costs can be disallowed on prudence grounds by the
24 Commission. Either a deferral or a surcharge mechanism can provide
25 for any desired tradeoff between cost recovery assurance and
26 provision for prudence review.

27 ⁴Other features advanced as benefits of the deferral
28 mechanism, such as the ability to allocation costs to rate cases,
29 or the avoidance of a separate DSM bill item, can be achieved with
30 either deferral or rate adjustments.

1 recovery decisions. With deferral, utilities that believe
2 they can justify the prudence of their actions should be
3 willing to invest in DSM without knowing exactly when the
4 Commission will approve cost recovery, the form of the
5 recovery, or the changes in program designs that may be
6 required.

7 Q: Which basic mechanism is preferable for DSM cost recovery?

8 A: There is no single superior mechanism. Either mechanism can
9 be acceptable, if combined with

- 10 • adequate prudence review,
- 11 • monitoring and evaluation,
- 12 • capitalization of investments,
- 13 • class-specific cost allocations,
- 14 • recovery of unanticipated program costs,
- 15 • allowance for interest credits for deferred
16 recovery, and
- 17 • avoidance of a DSM line item on the customer's
18 bill.

19 The parties' criticisms of one another's basic proposals
20 amount to "praising with faint damns." The utilities can
21 only really argue that deferral is a problem for cash-short
22 utilities that are not planning to file rate cases. This is
23 obviously a rather limited special case.

24 The critics have a valid argument that reallocations of
25 utility resources are difficult to track in special
26 adjustments; however, this simply argues that utility labor

1 and overheads should be excluded from the adjustment or
2 should be subject to stricter scrutiny. The bulk of the
3 direct program cost in serious DSM programs are for DSM-
4 specific equipment, contractors, and incentives, which are
5 easily distinguished from other utility operations.

6 The critics' argument about the over-earning issue is
7 not valid; if the utility is allowed to over-earn in the
8 absence of DSM, it is not realistic to suppose that the DSM
9 process should be used to force it to reduce its earnings.
10 See pages 35-37 of my direct.

11 Q: What mechanism would you suggest the Commission adopt at
12 this time?

13 A: I believe that the basic choice of mechanism should be
14 determined for each individual utility. As I noted in my
15 direct, no one mechanism will be preferable for all
16 situations.

17 In particular, the Commission should allow all
18 utilities to start deferring costs today, without specifying
19 whether the costs will eventually be recovered through base
20 rates or through a surcharge. Those utilities that do not
21 need to file frequent rate cases, or are otherwise
22 financially stressed, can petition the Commission for an

1 interim adjustment.⁵ For other utilities, the DSM costs
2 could simply be deferred to the next rate case.

3 Q: Are there hybrids of the two cost recovery approaches that
4 may be appealing?

5 A: Yes. The adjustment clause approach is most applicable to
6 the direct costs of DSM, which are easily computed and
7 verified. Lost revenues and incentives should not be
8 finalized until reasonable monitoring and evaluation results
9 are available. Thus, a rate adjustment to cover direct
10 program costs could be combined with deferral of recovery of
11 lost revenue and incentives.

12 The lost revenue issue can also be dealt with through
13 the revenue adjustment mechanisms (RAMs), which are
14 discussed in Attachment 2 to my supplemental direct
15 testimony. These are inherently deferral mechanisms. The
16 Commission should encourage utilities to negotiate RAMs with
17 other interested parties, for review by the Commission.

18 ⁵Because the automatic rate adjustment mechanism is a
19 departure from standard practice, the utility proposing it would
20 have the burden of showing it to be necessary and appropriate.
21 Absent such a showing, the PEO supports the use of the deferral
22 mechanism.

1 IV. INCENTIVES

2 Q: What is the rationale for explicit incentives to utilities
3 for DSM achievements?

4 A: As I discussed in my direct, energy efficiency programs must
5 overcome long-standing utility traditions, institutional
6 inertia, habits and resistance. Utility management is
7 accustomed to selling more kWhs and building more power
8 plants. Managers understand the activities required by the
9 sell/build process; they haven chosen to work in utility
10 management to pursue those activities, and presumably enjoy
11 them; they are accustomed to defining their success with
12 reference to their effects on selling and building; and they
13 know how to measure success in selling and building. They
14 are apt to be less comfortable with the process of planning,
15 financing, managing and measuring energy efficiency.
16 Without some impetus to change their approach, managers are
17 likely to continue with business as usual.⁶

18 Q: The utilities have argued that incentives are necessary to
19 balance the risks of DSM and to compensate shareholders for
20 lost return on avoided supply-side investments. Is this
21 position justified?

22 A: No. While utilities may perceive some regulatory risks from
23 DSM, those risks are smaller than those imposed by supply

24 ⁶As I noted in my direct testimony, incentives are justified
25 for a limited period until these "cultural" barriers are overcome.
26 Once the experience with DSM has grown, the need for incentives
27 fades.

1 investments. DSM programs are smaller, more diversified,
2 provide continuing feedback on their viability and success
3 (in the presence of monitoring and evaluation), and provide
4 benefits even if the program is canceled prematurely. It is
5 difficult to imagine an efficiency program that could expose
6 a utility to the multi-hundred-million-dollar write-offs
7 experienced with supply. Across the country, utilities have
8 rarely had DSM programs costs disallowed, except as a
9 punishment for not being more vigorous in pursuing DSM.

10 The argument that shareholders lose value by not having
11 the opportunity to invest in new generation was refuted
12 convincingly by Mr. Kihm's direct testimony. Unless the
13 allowed return on equity is substantially higher than the
14 real market cost of equity, existing shareholders do not
15 benefit from the issuance of new stock to finance new
16 construction projects. In any case, construction imposes
17 costs on shareholders. One frequent observation of rating
18 and investment advisory agencies on electric utilities is
19 that utilities with small construction obligations are safer
20 and more valuable investments than those involved in major
21 generation projects. The end of major construction
22 obligations is generally seen as a positive sign.⁷

23 ⁷Where cost recovery is deferred, capitalization and inclusion
24 of DSM program costs in rate base provides a utility with the
25 opportunity to earn a rate of return on these investments, just as
26 it does for supply-side investments. Compared to generation
27 investments, DSM investments generally impose little risk to
28 utilities.

1 Incentives are very helpful in breaking habits and
2 institutional rigidities, some of which are the results of
3 decades of regulatory practice. Incentives are not
4 necessary to compensate shareholders for costs or risks
5 associated with DSM.

6 Q: Mr. Miller, on behalf of Philadelphia Electric, argued that
7 positive incentives for DSM achievements are useful, but
8 that negative incentives or penalties for inadequate DSM
9 performance would produce only compliance, not innovation.
10 See Tr. pages 474, 475, 481. He concluded that the
11 Commission should not impose DSM-related penalties. Is this
12 position reasonable?

13 A: Only in part. Penalties for failing to reach a
14 predetermined specific threshold level may not directly
15 encourage efforts much above that threshold. However, the
16 threat of penalties may encourage utilities to find
17 innovative ways to meet the threshold, potentially producing
18 improved program designs for more aggressive efforts in the
19 future. In addition, not every penalty scheme requires the
20 use of predetermined thresholds. If the Commission gives
21 the utilities clear guidance as to the criteria it will use
22 in applying statutory performance factors (66 Pa.C.S.A.
23 §523), they may be quite effective in promoting innovation.
24 Knowing that they may be penalized after the fact for
25 failing to convince the Commission that they have explored
26 all DSM option, captured all lost opportunities, avoided

1 cream skimming, sufficiently served hard-to-reach customer
2 groups, or promoted DSM vigorously enough to avoid supply
3 additions, utilities would have every incentive to
4 demonstrate that they are leading the nation in DSM program
5 design and implementation, both in quantity and in quality.

6 Penalties may also be very important in jump-starting a
7 stalled utility effort. A utility with little interest,
8 staffing or expertise in efficiency efforts may not perceive
9 any opportunity to achieve a reward for performance above
10 (for example) regional median levels. The positive
11 incentive may not motivate any action. A penalty for
12 inadequate DSM activity may get the utility started, forcing
13 it to set up a DSM group, attracting management resources,
14 and creating relationships between the utility, trade
15 allies, contractors, and consultants. The institutional
16 structures created to avoid a penalty may then be applied to
17 earning the reward.⁸

18 Hence, while an incentive mechanism should emphasize
19 rewards for outstanding performance, it should also
20 incorporate penalties for inadequate or counterproductive
21 actions. The most effective penalties are probably
22 reductions in the allowed return on equity (due to the high
23 visibility of this ratemaking factor) and disallowances of

24 ⁸This general pattern has been followed by some utilities that
25 were penalized for inadequate DSM efforts but then went on to earn
26 incentives and/or become industry leaders, such as Western
27 Massachusetts Electric Company and Boston Edison.

1 supply costs, such as fuel, purchases, new T&D, new
2 generation, and existing generation that could have been
3 mothballed or sold.

4 **V. ISSUES BEFORE THE COMMISSION**

5 Q: How have you summarized the issues before the Commission in
6 this case?

7 A: I have prepared the attached Table R-1. I have included
8 only the more significant issues. A number of minor or
9 peripheral points have also been raised; in most cases, the
10 disposition of these secondary issues will flow naturally
11 from the Commission's decisions on the central issues. For
12 example, if the Commission determines that utilities should
13 be allowed an interest credit on under-collections or
14 deferrals, to compensate the shareholders for the full cost
15 of DSM, it follows logically that the interest rate to be
16 imputed should reflect the utility's cost of capital.

17 Q: Does this conclude your testimony?

18 A: Yes.

TABLE R-1: ISSUES BEFORE THE COMMISSION

<u>ISSUE</u>	<u>PEO POSITION</u>
A. GENERAL ISSUES	
A.1. Which costs should be included in special DSM cost recovery?	End-use conservation programs, not supply efficiency, promotion, load management, or rate design.
A.2. What mechanism should be employed?	A combination of deferral and rate adjustments, depending on the situation of the particular utility.
A.3. Allow interest on both under-and over-collections?	Yes.
A.4. What opportunity should be available for public review and comment on DSM and cost recovery plans?	Ample time should be allowed for discovery, testimony, and briefing on DSM program scope, design and content, and on cost recovery computations.
A.5. Should the DSM program costs appear as a separate item on customer bills?	No.
A.6. How should costs be allocated to rate classes?	By participating rate classes.
B. DIRECT COSTS	
B.1. Should costs be capped at or near original program budgets?	No.
B.2. How should costs be collected?	Amortize over measure life, unless compelling reason to contrary.

TABLE R-1: ISSUES BEFORE THE COMMISSION
(Continued)

<u>ISSUE</u>	<u>PEO POSITION</u>
C. LOST REVENUES	
C.1. Should lost revenue be recovered?	Yes.
C.2. Should lost revenues from avoided new loads be recovered?	Yes.
C.3. What adjustments should be made to lost revenues?	Off-system sales, power purchases, avoided T&D
C.4. Should lost revenues be capped based on sales or phased out?	No.
C.5. What is the role of monitoring and evaluation?	Lost revenue recovery should be reconciled on the best retrospective estimates of revenues actually lost.
D. INCENTIVES	
D.1. Should utilities be rewarded for DSM achievements?	Yes, at least initially.
D.2. Should rewards start only after a threshold is surpassed?	Yes. Rewards should only be earned for achievements above the threshold.
D.3. How should the level of rewards be determined?	The rewards should be designed to provide a substantial increase (0.3%-1%) in ROE.
D.4. Exclude off-peak benefits?	No.
D.5. Should incentives include penalties?	Yes.
D.6. What is the role of monitoring and evaluation?	Incentives should be reconciled on the best retrospective estimates of benefits actually produced.