

STATE OF OHIO
BEFORE THE PUBLIC UTILITIES COMMISSION

In the Matter of the Long-Term)
Forecast Report of the Cincinnati) Docket No. 95-203-EL-FOR
Gas and Electric Company)

REBUTTAL TESTIMONY OF
PAUL CHERNICK
ON BEHALF OF
CAMPAIGN FOR AN EFFICIENT OHIO

Resource Insight, Inc.

March 6, 1996

TABLE OF CONTENTS

I. Introduction 1

II. Power-supply competition and capacity costs 1

III. Uncertainty and Energy Efficiency 4

IV. Energy Efficiency and Competition 6

V. Re-examining Utility Roles in Energy Efficiency 8

VI. Short-term Proposals 10

1 **I. Introduction**

2 **Q: Are you the same Paul Chernick who filed direct testimony in this case?**

3 A: Yes.

4 **Q: What issues will you address in your rebuttal?**

5 A: I will address five issues raised in the prefiled direct and oral testimony in
6 this case, primarily by Witness Puican.

7 1. Will power-supply competition reduce capacity costs to ratepayers,
8 compared to the costs currently included in screening energy efficiency?

9 2. Does uncertainty in future costs justify suspending energy-efficiency
10 efforts?

11 3. How will current and future energy-efficiency efforts affect the
12 competitiveness of the generation and distribution operations of
13 restructured utilities?

14 4. Should the Commission reopen Case No. 90-723, and if so, for what
15 purpose?

16 5. How should CG&E's energy-efficiency programs be structured in the
17 short term?

18 **II. Power-supply competition and capacity costs**

19 **Q: Do you agree with Witness Puican that under competition, capacity costs
20 will inevitably decline?**

21 A: No. It is difficult to understand why Witness Puican believes that capacity
22 costs will decline, since he does not offer any supporting evidence or

1 rationale, or any estimate of the magnitude or timing of the decline (Tr. III at
2 15).¹

3 In fact, there are a number of factors that could cause avoidable
4 capacity costs to rise in a competitive industry structure, in which generators
5 have no service territory, no captive customers, and no rate regulation.

6 First, competition would make all generation costs avoidable to electric
7 consumers, including costs that are now treated as unavoidable. CG&E
8 currently treats its existing and committed power supply resources as fixed
9 and unavoidable. The projection of avoided costs included no capacity costs
10 for the first three years, and then included only the relatively low costs of the
11 peaking generation Cinergy plans to add. The expensive, high-value baseload
12 coal plants are assumed to be available to CG&E customers at no charge for
13 capital or fixed O&M. Under competition, the owner of Beckford or Zimmer
14 (whether that is CG&E, another Cinergy affiliate, or a separate firm) will not
15 sell firm energy to Cincinnati residents at the cost of fuel; they will insist on
16 a capacity charge.²

17 Second, competition may result in retirement of capacity that regulated
18 utilities would keep running; those retirements would tighten the capacity
19 market and increase prices. In a regulated environment, the utility may keep
20 capacity on-line, even if its operating costs exceed the value of its generation,
21 because deactivation or retirement of the unit would jeopardize cost
22 recovery. ^{of any unrepresented (M).} In a competitive environment, plants that do not produce enough

¹ While his prefiled testimony predicts falling capacity costs, his live testimony ^{on cross-examination} focuses more on uncertainty, as discussed below.

² As noted by Witness Puican, the capacity charge may be rolled into the energy price for billing purposes.

1 revenue to cover operating costs will be retired or mothballed.³ As a result,
2 the market will tighten and price will increase, at least until it reflects the
3 costs of keeping existing capacity in service and re-activating mothballed
4 units.

5 Third, the competitive market for Cinergy's power plants will be much
6 broader than its service territory, reaching from the lower Mississippi to New
7 York, and from Canada to Florida. This broader area may soak up Ohio's
8 current excess of baseload capacity, further increasing the market price of
9 Cinergy's capacity.

10 Fourth, competition will tend to raise the carrying costs of power plants,
11 and hence the price of capacity. Compared to utilities, or to independent
12 power producers selling under long-term contract to utilities, competitive
13 generators will tend to:

- 14 • have a greater percentage of equity;
- 15 • pay higher return on equity because of greater business risk, greater
16 volatility in net income, and the lack of assurance in cost recovery; and
- 17 • income taxes (which are a function of equity return) will be higher.

18 Fifth, while the avoided capacity costs used in screening energy
19 efficiency are limited to the marginal cost of new capacity (at the utility's
20 low financing cost), even in a capacity shortage, capacity prices can rise
21 much higher in the competitive market.

³ In this context, "operating costs" including additional capital requirements, such as for emissions control equipment. Competitive generators are more likely to shut down old coal plants facing expensive environmental requirements than are regulated utilities.

1 **Q: Does Mr. Puican offer any explanation for his opinion that the current**
2 **capacity market is not a reliable indication of capacity costs in a**
3 **competitive environment?**

4 A: Mr. Puican contends that current IPP contract prices are artificially high
5 because they compete against the utility's embedded cost. He argues that
6 when they no longer have this "regulatory protection," IPP prices will fall
7 (Tr. III at 13-15).

8 **Q: Do you agree?**

9 A: No. IPPs currently compete with other IPPs and with utilities trying to sell
10 their surplus capacity at market prices, not with utility's embedded cost. If
11 anything, regulatory protection results in lower IPP prices. The low risk of
12 long-term contracts with regulated utilities gives IPPs access to relatively
13 low-cost long-term financing. Financing is likely to be much more expensive
14 for generators selling into the spot market, under short-term contracts, and/or
15 to ultimate consumers, who may switch suppliers or otherwise cease to be
16 customers.

17 **III. Uncertainty and Energy Efficiency**

18 **Q: What importance does Witness Puican's oral testimony attribute to the**
19 **uncertainty in future capacity price?**

20 A: He says that uncertainty about the effect of competition is "the common
21 thread through my testimony as to why you can't rely on those [avoided
22 capacity cost] estimates" (Tr. III at 15). He then recommends freezing or
23 reducing energy-efficiency programs, and abandoning all regulatory guidance
24 to CG&E (including the TRC test), due to that uncertainty.

1 **Q: Is the uncertainty identified by Witness Puican fundamentally different**
2 **from the uncertainties the Commission has dealt with in the past?**

3 A: No. Uncertainty is not new to electric utility planning, or to energy
4 efficiency. Utilities have always made investment decisions despite such
5 uncertainty in load forecasts, power-plant construction times and
6 construction costs, fuel prices, interest rates, and many other factors. One of
7 the motivations for instituting IRP nationally was concern that uncertainty
8 and risk be properly considered by utilities and their regulators.

9 **Q: Would restricting energy-efficiency activities avoid decisions and reduce**
10 **uncertainty?**

11 A: No. Restricting energy-efficiency efforts is a decision, and exposes CG&E
12 customers to additional uncertainty. Failing to capture efficiency
13 opportunities today is a decision to commit the electricity consumers of
14 southwestern Ohio to higher electric bills for decades to come.⁴ Every
15 inefficient building built, every inefficient air conditioner or motor installed,
16 and every inefficient and oversized chiller overhauled will increase the
17 volatility of the costs of living and doing business in the Cincinnati area; this
18 increased uncertainty would persist long into the anticipated period of bulk-
19 power competition. *Moreover*

20 **Q: How should CG&E use energy efficiency to respond to the uncertainty**
21 **created by restructuring of the electric industry?**

22 A: The normal response to uncertainty is to hedge risks, purchase insurance, and
23 lock in reasonable prices and avoid disastrous swings in cost. Increasing

⁴ Many of CG&E's proposed programs, especially in the commercial and industrial area, would be cost-effective with significantly lower avoided generation capacity costs.

1 energy efficiency has exactly this effect; once the investment has been made,
2 the costs of efficiency are subject to little if any variability. If the
3 Commission is ^{very} as concerned as ~~is~~ Witness Puican ^{is} about the uncertainty in
4 costs in the restructured industry, it should encourage CG&E to increase its
5 energy-efficiency efforts, not curtail them.

6 IV. Energy Efficiency and Competition

7 **Q: What is Staff's concern about energy efficiency and competition?**

8 A: Staff seems to be concerned that energy efficiency will increase rates and
9 reduce CG&E's competitiveness in a restructured industry.

10 **Q: Is this a valid concern?**

11 A: No. Staff's testimony does not clearly differentiate the role of the regulated
12 monopoly distribution utility from that of the competitive generating
13 companies. The costs of energy efficiency should be recovered through the
14 distribution company, which will face no more competition in a restructured
15 environment than it does today. The generation companies will bear no
16 energy-efficiency costs (unless they choose to bundle efficiency with their
17 services to increase their competitiveness), and will not be significantly
18 affected by efficiency.

19 **Q: Why doesn't efficiency impair the competitiveness of the distribution
20 utility?**

21 A: As is true today, distribution utilities will compete only against fuel-
22 switching (which is not an issue for CG&E, which also sells gas), self-
23 generation, and relocation. The latter two options are likely to be less
24 important in a restructured industry, since customers will be able to buy

1 least-cost generation from a wide regional market, and will therefore not be
2 tempted to self-generate or ^{relocate} ~~move~~ for lower generation costs.

3 As I discussed in §III of my direct testimony, energy efficiency will
4 reduce customer costs and make the CG&E service territory more attractive,
5 not less. Industrial customers, who might be most tempted to relocate for
6 small changes in rates,⁵ can be retained by targeted efficiency and cost
7 allocation.

8 **Q: Why doesn't efficiency affect the competitiveness of the generation**
9 **companies?**

10 A: The companies that eventually come to own Cinergy's existing generation
11 assets will be selling into a regional market, not specifically to CG&E's
12 ratepayers. To the extent that load in the Cincinnati area is lower, all
13 generation companies in a very large region will face a slightly lower total
14 demand. The Cinergy successors will not be disadvantaged compared to the
15 competition; energy efficiency in CG&E's territory will only minimally
16 decrease the regional market-clearing price.

17 **Q: Witness Puican expresses some concern that deferrals of DSM costs will**
18 **have an adverse effect on the competitive position of utility in a**
19 **restructured industry (Tr. II at 58-62). Is this a valid concern?**

20 A: No. The generating companies, operating in the competitive market, should
21 not bear the costs of the deferrals, which are associated with serving the
22 energy-service needs CG&E's ratepayers, not its power plants. The
23 distribution utility will not face increased competition. Witness Puican's

⁵ Even for large industrial customers, distribution utility rates are unlikely to be a critical factor in selecting a location.

1 statement that "adding to deferrals by spending in excess of \$4.8 million will
2 only increase any potential stranded asset exposure" (Prefiled at 9) is simply
3 wrong. Only generation assets are vulnerable to stranding in any currently-
4 contemplated restructuring; ^{since dist utility will continue...} DSM deferrals, as part of the distribution utility's
5 costs, will not be stranded.

6 In any case, Witness Puican testifies that CG&E's deferrals are small.

7 **Q: If the deferrals were expected to grow to a level that caused concern, how**
8 **should the Commission deal with that concern?**

9 A: The solution is to allow current cost recovery for energy-efficiency
10 expenditures, including the class cost allocations I discussed in my direct
11 testimony. Even with a larger efficiency program, current recovery would be
12 quite small relative to CG&E's total revenues.

13 **V. Re-examining Utility Roles in Energy Efficiency**

14 **Q: Should the Commission open a proceeding to re-examine issues related to**
15 **utility efforts in improving end-use efficiency, and if so, for what**
16 **purpose?**

17 A: I do believe that the Commission should provide generic guidance to the
18 utilities on their continuing (and expanding) role in reducing customer costs
19 in a restructured environment. Staff is not unique in its confusion about the
20 roles of distribution utilities and generating companies, and the effects of
21 efficiency and competition on each entity. Nationwide, utilities have been
22 reluctant to continue DSM efforts until issues of responsibility and cost
23 recovery are resolved.

1 The guidance could come in this docket, based on the discussion in my
2 direct testimony. ^{covers the issue in guidance} Alternatively, the Commission might open a generic
3 proceeding on the role of the distribution utilities in promoting energy
4 efficiency in the T&D system and in customer end uses, and in distributed
5 generation. As noted in my direct testimony, some of the details about the
6 funding, planning, regulation, and implementation of energy efficiency and
7 distributed generation must be determined after the Commission outlines the
8 new industry structure. Hence, the planning proceeding must be coordinated
9 with the restructuring proceeding.

10 Witness Puican's suggestion to reopen Case No. 90-723 seems to be a
11 reasonable avenue to address these issues.

12 **Q: Should the Commission reopen Case No. 90-723 specifically to address**
13 **the issues raised by Witness Puican?**

14 **A:** No. The cost-recovery issues raised by Witness Puican can generally be
15 included in the generic investigation; his specific goals for a reopened Case
16 No. 90-723 should not be adopted by the Commission.

17 His suggested role for reopening Case No. 90-723 is to
18 "consider...whether to modify or even discontinue the current deferral
19 mechanism for DSM-related costs" (prefiled direct at 10). His goal seems to
20 be imposition of additional arbitrary restrictions (such as imposition of the
21 RUC test) on recovery of DSM costs. If any modification is made to the
22 deferral mechanism, it should be replaced by a current recovery mechanism,
23 not burdened by additional restrictions.

1 VI. Short-term Proposals

2 **Q: What are Witness Puican's short-term DSM proposals?**

3 A: He proposes that:

4 1. No deferral of lost revenues be allowed for programs that fail his
5 arbitrary RUC test.

6 2. No deferral of shared savings be allowed.

7 3. All prior program approval, and all guidance on the use of cost-benefit
8 tests, be suspended.

9 4. DSM spending be capped at \$4.5 million.

10 5. Allow CG&E to use "any of the \$4.8 million [currently in rates] not
11 spent in any given year...to offset existing DSM deferrals" (direct at 9).

12 **Q: What basis does he offer for these proposals?**

13 A: Very little. Staff has not justified the RUC test, or even vigorously supported
14 it in this proceeding. Witness Puican's entire explanation of his opposition to
15 shared savings is that "I no longer believe those savings estimates are reliable
16 and I no longer believe shared savings are appropriate for future deferrals."
17 (Prefiled Direct at 10). I have previously explained that Witness Puican was
18 incorrect in assuming that DSM deferrals may become stranded costs.

19 **Q: What effects would these provisions have?**

20 A: The Company would be required to cut current spending by about 50%. The
21 inability to defer lost revenues would probably result in the termination of all
22 the residential efficiency programs, including the low-income program.
23 which would result in CG&E shutting down these programs. The increased
24 uncertainty due to suspension of prior review and guidance would further
25 discourage CG&E from pursuing energy efficiency. Of the \$4.8 million that

1 CG&E is required to spend on residential programs under the settlement in
2 xx, the Company would be required to divert \$300,000, and could divert the
3 entire \$4.8 million, to reducing existing deferrals. Witness Puican's proposal
4 would likely result in gutting CG&E's already modest efficiency programs.

5 **Q: What spending and cost-recovery rules would be more appropriate, until**
6 **the next review of CG&E's programs, or completion of a case on energy**
7 **efficiency in a restructured industry?**

8 **A:** I suggest that the Commission set the following guidelines:

9 1. Since residential ratepayers are currently paying \$4.8 million annually
10 for efficiency programs through rates, the settlement requires CG&E to
11 spend that amount on residential efficiency, and cost-effective
12 residential efficiency programs have been identified, CG&E should
13 spend the full \$4.8 million on residential programs.

14 2. In addition, CG&E should pursue all cost-effective commercial and
15 industrial efficiency, concentrating on such lost-opportunity programs
16 as the Custom HVAC programs.⁶

17 3. Deferral of lost revenues and shared savings should be allowed for all
18 programs that pass the TRC test. This category would include the low-
19 income program, which apparently passes the TRC once overhead costs
20 are shared with the electric-home audit program.⁷

⁶ Those programs score very high on both the TRC and RUC tests.

⁷ The low-income program has benefits beyond those included in the CG&E and Staff TRC tests, and should be continued even if those benefit:cost ratios are slightly below 1.0. Witness Puican apparently agrees that the low-income program is valuable, since he testified that "I don't know why a company would intentionally thwart the Commission's desires in that area [by defunding the low-income program], it's beyond me." (Tr. II at 98)

1 4. The TRC should continue to be the primary basis for program selection.

2 **Q:** Does this conclude your rebuttal?

3 **A:** Yes.