

**BEFORE THE STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE MINNESOTA PUBLIC UTILITIES COMMISSION**

**In the Matter of the Application of CenterPoint
Energy Resource Corp., d/b/a CenterPoint Energy
Minnesota Gas for Authority to Increase Natural
Gas Rates in Minnesota**

)
) **OAH No. 12-2500-20147-2**
) **MPUCDkt. No. G-008/GR-**
) **08-1075**
)
)
)

**Direct Testimony of
J. Richard Hornby
Synapse Energy Economics**

**On Behalf of
Izaak Walton League of America – Midwest Office
Minnesota Center for Environmental Advocacy**

June 26, 2009

1 **I. INTRODUCTION / SUMMARY**

2
3 **Q. PLEASE STATE YOUR NAME, EMPLOYER, AND PRESENT POSITION.**

4 A. My name is J. Richard Hornby. I am a Senior Consultant at Synapse Energy Economics,
5 Inc., 22 Pearl Street, Cambridge, MA 02139.

6 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?**

7 A. I am testifying on behalf of the Izaak Walton League of America (IWLA) and Minnesota
8 Center for Environmental Advocacy (MCEA).

9 **Q. PLEASE DESCRIBE SYNAPSE ENERGY ECONOMICS.**

10 A. Synapse Energy Economics (“Synapse”) is a research and consulting firm specializing in
11 energy and environmental issues, including: electric generation, transmission and
12 distribution system reliability, market power, electricity market prices, stranded costs,
13 efficiency, renewable energy, environmental quality, and nuclear power.

14 **Q. PLEASE SUMMARIZE YOUR WORK EXPERIENCE AND EDUCATIONAL**
15 **BACKGROUND.**

16 A. I am a consultant specializing in planning, market structure, ratemaking, and gas
17 supply/fuel procurement in the electric and gas industries. Over the past twenty years, I
18 have presented expert testimony and provided litigation support on these issues in
19 approximately 100 proceedings in over thirty jurisdictions in the United States and
20 Canada. Over this period, my clients have included staff of public utility commissions,
21 state energy offices, consumer advocate offices and marketers.

22 Prior to joining Synapse in 2006, I was a Principal with CRA International and,
23 prior to that, Tabors Caramanis & Associates. From 1986 to 1998, I worked with the

1 Tellus Institute (formerly Energy Systems Research Group), initially as Manager of the
2 Natural Gas Program and subsequently as Director of their Energy Group. Prior to 1986,
3 I was Assistant Deputy Minister of Energy for the Province of Nova Scotia.

4 I have a Master of Science in Energy Technology and Policy from the
5 Massachusetts Institute of Technology (MIT) and a Bachelor of Industrial Engineering
6 from the Technical University of Nova Scotia, now merged with Dalhousie University. I
7 have attached my resume to this testimony as Hornby Exhibit 1.

8 **Q. PLEASE SUMMARIZE YOUR EXPERIENCE WITH ENERGY EFFICIENCY**
9 **MEASURES AND POLICIES, INCLUDING POLICIES ON RATEMAKING.**

10 A. My experience with energy efficiency measures and policies began over thirty years ago
11 as a project engineer responsible for identifying and pursuing opportunities to reduce
12 energy use in a factory in Nova Scotia. Subsequently, in my graduate program at MIT I
13 took several courses on energy technologies and policies, and prepared a thesis analyzing
14 federal policies to promote investments in energy efficiency. After MIT, I spent several
15 years with the government in Nova Scotia, during which time I administered a provincial
16 program to promote energy conservation in the industrial sector and later included energy
17 conservation in all sectors as part of energy plans developed for the province. More
18 recently, over the past twenty years as a regulatory consultant I have helped review and
19 prepare numerous integrated resource plans in the gas and electric industries.

20 Since 2007 I have completed several projects addressing the alignment of utility
21 financial incentives and rates with the pursuit of energy efficiency. Those projects
22 include testimony in proceedings in North Carolina, South Carolina and Indiana as well

1 as the preparation of a report sponsored by the National Action Plan for Energy
2 Efficiency.

3 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

4 A. As a component of its general rate filing Centerpoint Energy (Centerpoint or the
5 Company) proposed a Conservation Enabling Rider (“CE Rider”) on a three year pilot
6 basis. Subsequently, Centerpoint entered a Stipulation regarding the CE Rider and
7 certain other aspects of its rate case filing with IWLA, the Minnesota Center for
8 Environmental Advocacy and the Energy CENTS Coalition.

9 IWLA has retained Synapse to assist in its review of rate decoupling issues. As
10 part of that assignment IWLA asked Synapse to review the Company’s request for a CE
11 Rider as well as the treatment of that issue in the Stipulation. My testimony describes
12 my review of the CE Rider as proposed by the Company and as modified by the
13 Stipulation.

14 **Q. WHAT DATA SOURCES DID YOU RELY UPON TO PREPARE YOUR**
15 **TESTIMONY AND EXHIBITS?**

16 A. My testimony is based upon on the pre-filed Direct Testimony of Company witnesses
17 Gastineau, Baker, Feingold and Hevert as well as to responses to various information
18 requests. It is also informed by the comments filed in the generic proceeding on
19 decoupling, Docket No. E, G -999/CI-08-132, as well as various reports regarding cost
20 recovery frameworks for ratepayer funded efficiency programs.

1 **Purpose of Decoupling Mechanism**

2 **Q. PLEASE SUMMARIZE THE COMPANY'S RATIONALE FOR THE PROPOSED**
3 **CE RIDER.**

4 A. As described by Company witness Gastineau, the CE Rider would decouple the
5 Company's recovery of its distribution service revenue requirements from the volume of
6 gas it sells to small volume firm customer rate classes. The Company's distribution
7 service revenue requirements are distinct from its cost of gas supply, which it passes
8 through to customers on a dollar for dollar basis. In this proceeding the Commission will
9 first determine a reasonable level of distribution service revenue requirements based upon
10 its analyses of the Company's data for a representative year, referred to as the test year.
11 This annual data will include the number of customers, the gas use per customer and the
12 costs of providing distribution service, including a reasonable rate of return on rate base.
13 The test year in this proceeding is 2007 with various adjustments for known changes
14 through December 31, 2009. The Commission will then approve the rates the Company
15 will be allowed to charge for distribution service in order to collect those revenue
16 requirements

1 The Company is operating in an environment of declining use per customer and
2 increased emphasis on energy efficiency. What this means concretely is that, assuming
3 normal weather, the actual annual quantity of gas that a customer will use on average in
4 each year after new distribution rates are set will be less than the test year annual quantity
5 of gas per customer upon which distribution service rates were set. As a result, the actual
6 annual revenues collected by those distribution rates will be less than the annual
7 distribution service revenue requirements the Commission determined to be reasonable
8 for the test year, and the Company will not earn its allowed rate of return.

9 In response to this operating environment, according to Mr. Gastineau, the
10 Company requires a rate mechanism such as the CE Rider in order to "...have a
11 reasonable opportunity to recover its non-gas cost of service inclusive of a fair return".
12 Mr. Gastineau states that the CE Rider would reduce the Company's financial
13 disincentive to promote energy efficiency. The CE rider would accomplish this by
14 adjusting the volumetric delivery service rate for all changes in annual usage relative to
15 the test year, excluding weather. In a year when average annual usage per customer is
16 less than the test year, the CE Rider will ultimately collect an amount of revenue equal to
17 the shortfall in distribution service revenues resulting from that decline relative to test
18 year levels. Conversely, in a year when average annual usage per customer is greater
19 than the test year the CE rider will ultimately refund an amount of revenue equal to the
20 excess of distribution service revenues resulting from that increase relative to test year
21 levels. Mr. Gastineau also notes that the CE Rider was designed to comply with
22 Minnesota Statute Section 216B.2412, Decoupling of Energy Sales from Revenues.

1 **Q. PLEASE COMMENT ON THE COMPANY'S RATIONALE FOR A CE RIDER.**

2 A. As indicated in the Direct Testimony of Mr. Gastineau and other Company witnesses, the
3 Company's primary objective is to have rates which provide it a reasonable opportunity
4 to recover its non-gas cost of service inclusive of a fair return. The Company is
5 proposing establishment of a CE Rider to help accomplish that objective. Thus, first and
6 foremost, the Company is proposing the CE Rider as a rate mechanism to help stabilize
7 its distribution service revenues and earnings. There are a range of other revenue
8 stabilization approaches the Company could have chosen to achieve this objective,
9 including more frequent rate cases, large increases in fixed monthly customer charges,
10 declining block structures for volumetric delivery charges, return stabilization
11 adjustments or some combination of these.

12 The advantage of the CE Rider relative these other rate stabilization approaches is
13 that it not only enables the Company to stabilize its earnings, but it is also attractive from
14 an energy and environmental policy perspective. In contrast, rate stabilization
15 approaches that involve large increases in fixed monthly customer charges and/ or
16 declining block structures for volumetric delivery charges reduce the price signal seen by
17 customers and are therefore less attractive from an energy and environmental policy
18 perspective.

1 **Q AS PROPOSED THE CE RIDER WILL NOT BE LIMITED TO REDUCTIONS**
2 **FROM THE COMPANY’S ENERGY EFFICIENCY PROGRAMS. IS THAT A**
3 **REASONABLE APPROACH?**

4 A. Yes. The parties to the Stipulation have agreed to a CE Rider that will adjust the
5 Company’s volumetric delivery service rate for changes in annual usage relative to the
6 test year, except for changes due to weather. As a result, the proposed CE Rider will not
7 be limited to changes in usage due solely to reductions from the Company’s energy
8 efficiency programs. This is a reasonable approach to test on a pilot basis, given that the
9 pilot will last no longer than three years and will operate subject to a rate cap.

10 From an energy and environmental policy perspective there are several
11 advantages to a CE Rider that adjusts the volumetric delivery service rate for all changes
12 in annual usage relative to the test year, excluding weather. First, this approach reduces
13 the adverse impact of improvements in customer energy efficiency on the Company’s
14 distribution service revenues and earnings regardless of the cause of those improvements,
15 e.g., price elasticity, market transformation initiatives or implementation of efficiency
16 measures under on-site efficiency programs. This is beneficial because a significant
17 portion of improvements in efficiency are driven by initiatives other than efficiency
18 programs, such as improvements in building codes and appliance standards and changes
19 in rate design. In order for the Company to be an enthusiastic supporter of all efficiency
20 related initiatives it is important that it be indifferent to reductions in usage resulting from
21 all types of initiatives. Second, this approach should impose less administrative burden

1 because it does not require detailed analyses to distinguish reductions attributable to
2 Company efficiency programs from reductions attributable to other factors.

3 **Q PLEASE EXPAND UPON THE MERITS OF IMPLEMENTING A**
4 **DECOUPLING MECHANISM SUCH AS THE CE RIDER IN MINNESOTA.**

5 A. Centerpoint, and other Minnesota utilities, are operating under a policy framework which
6 imposes statutory goals for energy efficiency reductions. The Company is proposing the
7 CE Rider as a rate mechanism to help it stabilize earnings while operating within that
8 policy framework.

9 Clearly there are other possible approaches to revenue stabilization and to
10 decoupling. Some parties might propose a more narrow rate adjustment mechanism. For
11 example, one very narrow mechanism would be to limit rate adjustments to reductions in
12 annual usage attributable to the Company's energy efficiency programs that are
13 incremental to the levels of reductions it has been achieving in the absence of the
14 mechanism. In fact, in 2007 I suggested this type of narrow approach in proceedings in
15 Massachusetts¹ and Washington². However, through my subsequent work on these issues
16 I have come to appreciate the fact that a narrow approach, particularly in a state with
17 aggressive energy efficiency goals such as Minnesota, does not adequately address the
18 need of utilities for a reasonable opportunity to recover their distribution service costs
19 and earn their allowed return. Utilities in states like Minnesota are now operating under a

¹ Massachusetts Department of Public Utilities, Docket 07-50 September 2007.

² Washington Utilities & Transportation Commission, Docket Nos. UE-070804 and UG-070805, October 2007.

1 substantially different policy environment and they need rate mechanisms consistent with
2 that new operating environment if they are to embrace it enthusiastically.

3 **Q. PLEASE COMMENT ON THE OTHER IMPORTANT CHANGES THE**
4 **PARTIES HAVE AGREED TO UNDER THE STIPULATION.**

5 A. The CE Rider under the Stipulation differs in several respects from the proposal
6 originally filed by Centerpoint. First, the CE rider will not reflect changes in annual
7 usage due to weather. This exclusion will limit the reduction in the Company's financial
8 risk as well as the size of potential rate adjustments under the CE Rider. Second, the CE
9 Rider will be subject to a cap. This will limit the maximum possible rate adjustment
10 under the CE Rider during the pilot. Third, the performance of CE Rider will be subject
11 to a comprehensive evaluation each year as well as the end of the three year pilot.

12 **Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?**

13 A. Yes.

James Richard Hornby

Senior Consultant
Synapse Energy Economics, Inc.
22 Pearl Street, Cambridge, MA 02139
(617) 661-3248 ext. 243 • fax: (617) 661-0599
www.synapse-energy.com
rhornby@synapse-energy.com

PROFESSIONAL EXPERIENCE

Synapse Energy Economics, Inc., Cambridge, MA. *Senior Consultant*, 2006 to present.
Analysis and expert testimony regarding planning, market structure, ratemaking and contracting issues in the electricity and natural gas industries.

Charles River Associates (formerly Tabors Caramanis & Associates), Cambridge, MA.
Principal, 2004-2006.

Senior Consultant, 1998-2004.

Provided expert testimony and litigation support in several energy contract price arbitration proceedings, as well as in electric and gas utility ratemaking proceedings in Ontario, New York, Nova Scotia and New Jersey. Managed a major productivity improvement and planning project for two electric distribution companies within the Abu Dhabi Water and Electricity Authority. Analyzed a range of market structure and contracting issues in wholesale electricity markets.

Tellus Institute, Boston, MA.

Vice President and Director of Energy Group, 1997–1998.

Presented expert testimony on rates for unbundled retail services in restructured retail markets and analyzed the options for purchasing electricity and gas in those markets.

Manager of Natural Gas Program, 1986–1997.

Prepared testimony and reports on a range of gas industry issues including market structure, unbundled services, ratemaking, strategic planning, market analyses, and supply planning.

Nova Scotia Department of Mines and Energy, Halifax, Canada; 1981–1986

Member, Canada-Nova Scotia Offshore Oil and Gas Board, 1983–1986

Member of a federal-provincial board responsible for regulating petroleum industry exploration and development activity offshore Nova Scotia.

Assistant Deputy Minister of Energy 1983–1986

Responsible for analysis and implementation of provincial energy policies and programs, as well as for Energy Division budget and staff. Directed preparation of comprehensive energy plan emphasizing energy efficiency and use of provincial energy resources. Senior technical advisor on provincial team responsible for negotiating and implementing a federal/provincial fiscal, regulatory, and legislative regime to govern offshore oil and gas. Directed analyses of proposals to develop and market natural gas, coal, and tidal power resources. Also served as Director of Energy Resources (1982-1983) and Assistant to the Deputy Minister (1981-1982).

Nova Scotia Research Foundation, Dartmouth, Canada, Consultant, 1978–1981
Edited Nova Scotia's first comprehensive energy plan. Administered government-funded industrial energy conservation program—audits, feasibility studies, and investment grants.

Canadian Keyes Fibre, Hantsport, Canada, Project Engineer, 1975–1977

Imperial Group Limited, Bristol, England, Management Consultant, 1973–1975

EDUCATION

M.S., Technology and Policy (Energy), Massachusetts Institute of Technology, 1979.
Thesis: "An Assessment of Government Policies to Promote Investments in Energy Conserving Technologies"

B.Eng. Industrial Engineering (with Distinction), Dalhousie University, Canada, 1973

EXPERT TESTIMONY AND LITIGATION SUPPORT (1987 to present)

Provided expert testimony and/or litigation support on planning, market structure, ratemaking and gas supply/fuel procurement in the electric and gas industries in approximately 100 proceedings in over thirty jurisdictions in the United States and Canada. List of proceedings available upon request.
