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

In the Matter of an Application of CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Minnesota Gas for Authority to Increase Natural Gas Rates in Minnesota	**MPUC Docket No. G-008/GR-13-316** **OAH Docket No. 80-2500-30979**

Direct Testimony and Exhibits

Of

Dylan Sullivan

Natural Resources Defense Council

On Behalf of

Fresh Energy

Izaak Walton League of America – Midwest Office

Natural Resources Defense Council

November 26, 2013

I. INTRODUCTION / SUMMARY

Q: What is your name, address, and position?

A: My name is Dylan Sullivan. My business address is 1314 Second Street, Santa Monica, California 90401. I am employed by the Natural Resources Defense Council ("NRDC") as a Staff Scientist.

Q: Describe your educational background and professional experience.

A: I earned a Bachelor of Arts degree, magna cum laude, in Environmental Geology from the University of Missouri-Columbia in 2004. I was awarded a Master of Science in Civil and Environmental Engineering from Stanford University in June 2008. My Master's degree was energy focused: I graduated from the Civil and Environmental Engineering Department's Atmosphere/Energy program and took classes on economic analysis of natural resources and climate policy, air quality analysis, and energy efficiency and renewable energy technologies and practices. I joined NRDC's Midwest office in June 2008, where I monitored the performance of Midwestern utilities' energy efficiency portfolios, recommended new programs or modifications to existing programs to capture cost-effective energy efficiency, and conducted research and advocacy on changes to the utility business model that ensure utilities and customers can benefit from energy efficiency. In September 2013 I moved to NRDC's Santa Monica office. At NRDC, I have worked on many matters related to utility investment in energy efficiency, including:

- Preparing testimony responding to electric utility energy efficiency programs and portfolios of programs, electric utility resource plans, and electric utility

proposals for energy efficiency cost recovery mechanisms, including decoupling mechanisms, performance incentives, and program cost recovery;

- Participating in groups advising Commonwealth Edison, Ameren Illinois Utilities, American Electric Power-Ohio, Duke Energy-Ohio, Duke Energy Indiana, and FirstEnergy's Ohio operating companies on implementing energy efficiency programs;
- Designing decoupling mechanisms and performance incentives for American Electric Power-Ohio and Duke Energy-Ohio.

My Curriculum Vitae is attached as Exhibit A, FE/IWLA/NRDC Exhibit No. ___.

Q: Have you authored publications in the field of energy efficiency?

A: Yes. In October 2011, I co-wrote a frequently asked questions guide about decoupling that was published in the *Electricity Journal*.[1] I also co-wrote NRDC's recent decoupling fact sheet, which I am attaching to this testimony as Exhibit B, FE/IWLA/NRDC Exhibit No. ___. For the 2012 American Council for an Energy Efficient Economy Summer Study on Efficiency in Buildings, I co-wrote an article[2] that articulated a framework for incorporating behavioral science into utility energy efficiency programs. I am currently researching an article on recent decisions by the Los Angeles Department of Water and Power and Glendale Water and Power to implement revenue decoupling.

Q: Have you previously testified before state utility regulators?

[1] Sullivan, D., Wang, D., Bennett, D., Essential to Energy Efficiency, but Easy to Explain: Frequently Asked Questions about Decoupling, Electricity Journal, 24:8, October 2011.
[2] Sullivan, D., Armel, C., Todd, A., When "Not Losing" is Better than "Winning:" Using Behavioral Science to Drive Customer Investment in Energy Efficiency, Proceedings of the 2012 American Council for an Energy Efficient Economy Summer Study on Energy Efficiency in Buildings, 2012.

A: Yes, on several occasions. I most recently testified on a proposed Combined Heat and Power incentive program before the Illinois Commerce Commission in Docket No. 13-0499. A full list of my testimony experience is included in my Curriculum Vitae.

Q: What is the purpose of your direct testimony in this proceeding?

A: The purpose of my testimony is to evaluate the proposal of Centerpoint Energy Resources ("Centerpoint" or "Company") to implement a permanent Revenue Decoupling Rider while at the same time increasing fixed, monthly charges for residential customers. I will testify to:

- The key design features of the Company's proposed Revenue Decoupling Rider, and the reasons why I support approval of the mechanism;
- The inappropriateness of the Company's proposal to nearly double fixed monthly charges for residential customers, including a rebuttal of the testimony of Mr. Russell Feingold. I also recommend that the Commission put little weight on the customer survey results presented by Mr. Paul Gastineau, and I calculate the actual impact of the proposal on customers who use little gas, whether out of poverty, frugality, or previous investments in energy efficiency. I conclude that the Commission should reject the Company's proposed increase in fixed monthly charges.

II. THE COMPANY'S PROPOSED REVENUE DECOUPLING RIDER

Q: Please describe the Company's Revenue Decoupling Rider.

A: The Company's Revenue Decoupling Rider would adjust rates between rate cases to ensure that the Company collects its short-term fixed costs to serve customers in the applicable rate classes, even as sales vary from normal.

Q: Why implement revenue decoupling?

A: Traditionally, and quite rightly, utilities recover costs that are fixed in the short term from consumption (volumetric) charges. When sales fall, utilities may not recover all of their costs that are fixed in the short term, and when sales increase, utilities may collect more than their short-term fixed costs. Motivated by this throughput incentive, utilities may work against energy efficiency despite policies promoting it. Revenue decoupling solves this problem by breaking the link between the utility's revenue and the amount of energy it sells. Combined with other key policies to encourage energy efficiency, such as program cost recovery and performance incentives, decoupling mechanisms can free utilities to help customers save energy whenever it is cheaper than producing and delivering it.

Q: Are decoupling mechanisms for natural gas utilities well-tested?

A: Yes. Twenty-two states – including Minnesota – have implemented revenue decoupling for at least one natural gas utility. A recent comprehensive examination of the performance of these decoupling mechanisms by NRDC consultant Pamela Morgan found that:

- Decoupling rate adjustments are small. For natural gas mechanisms that adjust rates annually (as the Company proposes), they have done so most often been between 2% of base rates, plus and minus;[3]
- Decoupling rate adjustments produce both customer refunds and surcharges, with annually adjusted natural gas mechanisms producing surcharges about two-thirds of the time and refunds to customers one-third of the time.[4]

[3] Morgan, Pamela, A Decade of Decoupling for US Energy Utilities: Rate Impacts, Designs, and Observations, May 2013, at 9.

Years of experience in numerous states show that implementing revenue decoupling eliminates utility disincentives to promote energy efficiency, and allows utilities to focus on providing energy services instead of increasing commodity sales. For example, an independent review of Northwest Natural's decoupling mechanism, commissioned by Oregon regulators, found that the utility, in response to decoupling, shifted marketing resources from image-building advertising to energy efficiency, took a strong public stance in favor of energy efficiency, and changed compensation practices.[5] Personally, I negotiated and helped design two decoupling mechanisms for Ohio electric utilities, and have seen both American Electric Power-Ohio and Duke Energy-Ohio devote increased management attention and ingenuity to energy efficiency post-implementation, and exceed Ohio's energy efficiency targets.

Nationally, revenue decoupling mechanisms are clearly correlated with energy efficiency success. In 2011, 7 of the 10 states that led the nation in per-capita investment in residential natural gas energy efficiency programs had decoupling for at least one utility.[6]

Q: Has the Company had a pilot revenue decoupling mechanism?

A: Yes. As described by Witness Gastineau, the Minnesota Public Utilities Commission approved a three-year pilot partial revenue decoupling mechanism for the Company that ended June 30, 2013.

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[4] Id.

[5] Daniel G. Hansen, Steven D. Braithwait, "A Review of Distribution Margin Normalization as Approved by the Oregon Public Utility Commission for Northwest Natural," Christensen Associates, March 31, 2005, available at: http://www.cee1.org/eval/db_pdf/472.pdf.

[6] The states are: Massachusetts, New Jersey, Utah, Minnesota, Michigan, Oregon, and Rhode Island. From Consortium for Energy Efficiency, Efficiency Program Industry by State and Region Appendices, 2012, March 29, 2013, Table 7, available at: http://library.cee1.org/sites/default/files/library/10535/2012_AIR_Tables_-_All_Tables_FINAL_-_with_erratum_NEW_VERSION.pdf.

Q: How would the proposed Revenue Decoupling Rider differ from the pilot mechanism?

A: Under the Revenue Decoupling Rider:

- Actual non-gas revenues would be compared to allowed non-gas revenues within a rate class to determine whether there was under/over recovery, instead of using weather-adjusted non-gas revenues;
- The allowed non-gas revenues to which actual revenues would be compared would only be able to increase based on a change in the number of customers in a rate class, instead of being allowed to increase or decrease;
- The cap on surcharges would change to 5% of the total volumetric charge for each rate class, from the 3% cap used in the pilot.

Q: In your opinion, are these changes reasonable?

A: In my opinion, they are. Comparing authorized to actual revenues instead of weather-adjusted revenues would simplify the mechanism and better tie customer refunds or surcharges to the Company's actual financial situation. Allowing authorized revenues to increase and not decrease recognizes that, in the short term at least, it is unlikely that the utility's costs would decrease if customers disconnected from its system. As for the cap, the Company's modeling shows that a 3% cap would have been reached had the mechanism been operating in 2012. The cap is there to prevent non-routine events from generating very large rate impacts, and to ensure that a decoupling mechanism does not substitute for a rate case if the Company has experienced a dramatic change in costs. If a 3% cap would have been reached in a more or less normal year, that is an indication the cap is too low.

Q: What do you conclude about the Company's proposed Revenue Decoupling Rider?

A: The Commission should approve the rider. The Company has performed well in delivering energy efficiency services to its customers, and approving the rider would allow the Company to continue this progress while being assured of its ability to recover its costs of service. Moreover, approving the Revenue Decoupling Rider would allow the Commission to keep the conservation signal embedded in the current rate design, thus avoiding a pernicious increase in fixed, monthly charges for residential customers.

III. THE COMPANY'S PROPOSAL TO ALMOST DOUBLE FIXED, MONTHLY CHARGES FOR RESIDENTIAL CUSTOMERS

Q: Please describe the Company's proposed changes in rate design for residential customers.

A: The Company proposes to raise the monthly basic charge from the current $8.00 per-month to $15.00 per-month, and reduce delivery charges from around 16 cents per therm to around 12 cents per therm.[7]

Q: That sounds like a significant change from the current rate design. How does the Company support its proposal?

A: Centerpoint's witnesses support this proposal with several arguments:

- Customers care about their total bill at the end of the month, as opposed to the components of that bill, and as a result the change will not produce "rate shock" for the average customer; [8, 9]
- The design will more properly align rates with the costs of providing service to residential class customers, because more fixed costs will be collected in fixed charges;[10]

[7] Drews Direct at 8, Table 3
[8] Gastineau Direct at 19
[9] Drews Direct at 12

- The proposed increase in fixed monthly charge will yield a rate structure that sends a more appropriate, economically efficient price signal to customers than the current rate structure;[11]
- Approaches like revenue decoupling and rate designs that feature a single, fixed monthly charge are increasingly used by regulators to address challenges in the natural gas utilities industry;[12]
- Centerpoint's current fixed charges are low compared to other natural gas utilities,[13] including other local distribution utilities ("LDCs") owned by Centerpoint;[14]
- Centerpoint's current fixed charges do not encourage conservation, just replacement of natural gas with other fuels.[15]

I will address these arguments, but first, I want to discuss why this proposal is unnecessary.

Q: Why, in your opinion, is this proposal unnecessary?

A: The Company's proposal to almost double fixed monthly charges for residential customers is unnecessary because – if the Commission approves the Company's proposed revenue decoupling mechanism, as I believe it should – the Company will be assured collection of its fixed costs of providing service, even as usage fluctuates. That is the primary motivation for proposing such an increase in fixed, monthly charges, but

[10] Drews Direct at 16
[11] Drews Direct at 18.
[12] Feingold Direct at 8
[13] Feingold Direct, Schedule 4 at 1
[14] Drews Direct at 14, Table 5
[15] Drews Direct at 19

decoupling provides the same assurance of fixed cost recovery with none of the downsides of increasing fixed monthly customer charges.

Q: What would those downsides be?

A: The significant increase in fixed monthly charges proposed would reduce the benefits to customers of energy efficiency, thus increasing the barriers to investment, and would be inequitable. Increasing fixed monthly charges would deaden the conservation signal embedded in current rates, reducing the marginal propensity of customers to invest in energy-saving measures. Payback for a representative energy efficiency retrofit that reduces gas use would increase by 10%, compared to a rate design that merely increases current rates by 19.1% to meet Centerpoint's revenue targets.[16] Increasing fixed, monthly charges would also penalize (as shown below) those customers that use the smallest quantities of natural gas, whether out of choice, poverty, or previous investments in energy efficiency.

Q: Witness Drews argues that the Company's proposed $15.00 monthly fixed charge will not cause "rate shock." Do you agree?

A: I disagree. The Company's proposal will in fact raise bills for a large number of customers. I determined this by analyzing the distribution of residential customer gas usage over the year that ended in March 2013, a year with near-normal weather, according to the Company. The Company provided this information in response to data requests served in this matter, and I am attaching an excerpt of that data as Exhibit C, FE/IWLA/NRDC Exhibit No. ___. The data the Company provided grouped customers according to their annual gas usage in 100-therm intervals, from zero therms per-year to

[16] The total gas rate per therm would fall from $.70888/therm to $.63649/therm, a decrease of 10.2%, assuming gas commodity prices stay at $.50706/therm.

more than 2,500 therms per-year. I estimated average consumption in each interval by dividing the total billed therms in each 100-therm consumption group by the number of customers. To determine the average gas distribution bill within each consumption interval, I then applied the Company's current monthly and volumetric charges, both increased by 19.1% to produce the overall increase in residential test-year operating revenue proposed by the Company, and the proposed charges. [17] I am attaching this analysis to my testimony as Exhibit D, FE/IWLA/NRDC Exhibit No. ___.

Q: What did you find?

A: The Company's proposed rate design would:

- Increase distribution bills for around 50% of customers;
- Increase by between $35 and $65 the annual distribution bill of those 10% of customers who use the least natural gas, out of choice, poverty, or previous investments in efficiency;
- Provide a windfall, of between $50 and $220 annually to those 10% of customers who use the most natural gas.

Q: Please summarize the customer survey presented by Witness Gastineau.

A: The Company contracted a customer research firm to understand customers' likely reaction to the Company's proposal to increase fixed, monthly charges. The firm asked customers:

- Whether the components of their natural gas bill or the total amount of their bill is most important;

[17] Troxle Direct, Schedule 2 at 5, Cell C23/Cell C14

- How they would find a proposal that raises the fixed and lowers the variable portion of their bill such that their typical bill over the course of the year would remain the same;
- Whether they would use more, the same amount, or less natural gas under the proposed rate structure.[18]

Q: In your opinion, how should the Commission weigh the results of the customer survey presented by Witness Gastineau?

A: The Commission should disregard the survey. First, some of the questions are based on dubious social science: for example, customers do not do a good job of predicting their own future behavior, and so it is unreasonable to ask them whether they would use the same amount of gas under a restructured rate design. Even more important, half of the Company's customers would in fact not face the same total bill under the Company's proposed design, rendering the survey results irrelevant to an evaluation of that proposal.

Q: How should the Commission weigh Witness Drews' argument that customers are accustomed to paying fixed monthly charges in other domains, such as cell phone service and cable and satellite television?[19]

A: The Commission should reject this argument entirely. The supposed "fixed" charges for these services are often actually volumetric, they are just demand-based instead of usage-based, like text messaging or cell phone minute bundles or channel packages. Moreover, usage in these other domains does not have the profound impact on the health and welfare of current and future generations that usage of fossil fuels does.

[18] Drews Direct, Schedule 4 at 2.
[19] Drews Direct at 12

Q: Witness Drews argues that Centerpoint's proposal to increase fixed, monthly charges will send a more economically efficient price signal to small volume gas customers than the current rate design. Do you agree? [20]

A: No. Mr. Drews is arguing that customers are consuming *less* gas than is socially optimal because of current rate structure that collects fixed costs in variable charges. If the rate structure were indeed encouraging customers to use too little gas, we would be seeing customers making lots of un-economic investments in energy efficiency. Instead, we see customers having difficulty making even very cost-effective energy efficiency investments.[21] Second, the important question in public policy is usually "*as compared to what?"* The fuels that natural gas competes with also have rate structures that collect costs that are fixed in the short term in variable charges. Xcel Energy Minnesota's current monthly charges for residential customers are $7.11 and $9.11 for electric heating customers, for example. Minnesota policymakers have chosen – in my opinion, correctly – to send customers of both electric and natural gas a price signal that encourages energy efficiency by rewarding them for each unit of energy they do not consume.

Q: How do you respond to Witness Drews' argument that the "variable price should not contain any fixed costs because they do not vary with the amount of gas consumed," and the general argument that many distribution costs are fixed and so should be collected in fixed, monthly charges.[22]

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[20] Drews Direct at 18.
[21] See, for example, McKinsey Global Energy and Materials, Unlocking Efficiency in the US Economy, July 2009 at ES-6, available at: http://www.mckinsey.com/client_service/electric_power_and_natural_gas/latest_thinking/unlocking_energy_efficiency_in_the_us_economy.
[22] Drews Direct at 16.

A: In my opinion, Mr. Drews places too much faith in the Class Cost of Service Study, which is a broad analysis. The analysis does not attempt to differentiate between residential customers that may, in fact, have different costs to serve. Customers who live in multifamily buildings may use natural gas for cooking and water heating, but not heating, and thus have both lower costs to serve and options to disconnect from the gas system in the future. Customers who live in duplexes or triplexes may have service lines in a common trench. Customers living in dense urban areas may be served with fewer feet of pipe than customers in suburban areas. But the Company does not even know how many duplexes, triplexes, or multi-family dwelling units it serves, much less reflect these facts in its cost of service. This is evidenced by the Company's response to data requests served in this matter, which I am attaching to my testimony as Exhibit E, FE/IWLA/NRDC Exhibit No. ___.

Q: Witness Feingold testifies that approaches like revenue decoupling and rate designs that feature increased, fixed monthly charge are increasingly used by regulators to address challenges in the natural gas utilities industry. How do you respond to his testimony?

A: Mr. Feingold inappropriately commingles utilities and states that have implemented revenue decoupling for gas utilities with utilities and states that have implemented rate designs that feature an increased, fixed monthly charge. While I concede that fixed charges nationally have been on an upward trend, as Feingold testifies, only five states have approved "SFV rate design," which places all costs determined to be fixed into a monthly charge.[23]

[23] Feingold Direct at 24.

In my opinion, revenue decoupling and increasing fixed, monthly charges are best seen as substitutes, not complements. Both revenue decoupling and rate designs that feature increased fixed charges assure a utility that it will collect its costs of maintaining distribution infrastructure, even as per-customer usage declines because of customer preferences, governmental codes and standards, and the utility's own efforts to encourage efficiency. But while the two approaches have the same benefit for the utility – assured cost recovery – they have very different impacts on customers. Revenue decoupling allows utilities to maintain rate structures that encourage conservation by pairing a low month charge with higher volumetric charges, while rate designs that feature increased fixed charges send an "all you can eat" price signal to customers and change the rate structure in a manner that *decreases* incentives for conservation. It is thus misleading to lump the two together when describing the progress of revenue decoupling, as Feingold does on his map.[24]

Q: Do you provide the Commission with information on which states have adopted revenue decoupling for at least one natural gas utility?

A: Yes. At last count, 22 states have implemented revenue decoupling for nearly 60 natural gas utilities (Feingold's analysis omits Liberty Gas in Georgia). I am attaching a map of the states that have implemented revenue decoupling for at least one natural gas utility to my testimony as Exhibit F, FE/IWLA/NRDC Exhibit No. ___. I reviewed the tariffs of these decoupled utilities, and compiled the fixed monthly residential customer charge for each utility. The most typical (i.e., median) customer charge of the group of decoupled utilities is $10.80, closer to Centerpoint's current $8 customer charge than the proposed

[24] Feingold Direct, Schedule 3

$15 customer charge. Only 12 of the 55 decoupled natural gas utilities for which I was able to determine the residential customer charge have fixed monthly charges equal to or higher than Centerpoint's proposed $15 customer charge. The table of decoupled utilities and their fixed monthly customer charges is attached to my testimony as Exhibit G, FE/IWLA/NRDC Exhibit No. ___.

Q: Does Witness Feingold consider revenue decoupling and rate designs that feature increased fixed charges together when describing "industry-wide activities related to revenue decoupling?"

A: Yes. Mr. Feingold inappropriately invokes NRDC-trade association joint statements that only support revenue decoupling to support Centerpoint's proposal.[25]

Q: Do you have examples?

A: I have several:

- The Joint Statement of the American Gas Association ("AGA") and the NRDC submitted to the National Association of Regulatory Utility Commissioners ("NARUC"), July 2004, referenced on page 27 of Feingold's testimony, states:

  > "… NRDC and AGA join in supporting mechanisms that use automatic rate true-ups to ensure that a utility's opportunity to recover authorized fixed costs is not held hostage to fluctuations in retail gas sales"

- The Joint Statement of the Edison Electric Institute and the NRDC submitted to NARUC on November 18, 2003, referenced on page 27 of Feingold's testimony, states:

[25] Feingold Direct at 24.

"to eliminate a powerful disincentive for energy efficiency and distributed-resource investment, we both support the use of modest, regular true-ups in rates to ensure that any fixed costs recovered in kilowatt-hour charges are not held hostage to sales volumes. EEI [and only EEI] believes regulators should explore new rate designs for collection of the fixed costs of investments."

- The Second Joint Statement of the AGA and NRDC, May 2008, referenced on page 29 of Mr. Feingold's testimony, states:

"AGA and the NRDC again urge state public utility commissions and officials responsible for publicly-owned natural gas distribution systems to actively support natural gas utilities' energy efficiency proposals that use automatic rate true-ups to ensure a utility's opportunity to recover its authorized fixed costs.

These joint statements show that NRDC and leading industry trade associations join *only* in support of revenue decoupling as a solution to the throughput and investment-related business challenges Feingold describes.

Q: Witness Drews states that Centerpoint's proposed $15 monthly customer charge would collect a relatively low percentage of residential non-gas revenues, compared to the monthly customer charges for other Centerpoint utilities.[26] How much weight should the Commission place on this comparison?

A: Very little. The customer charges of the other Centerpoint utilities reflect, in my opinion, the different policy choices (and climates) of these other jurisdictions. Minnesota has

[26] Drews Direct at 14.

made strong commitments to energy efficiency, and has historically implemented rate structures that create incentives for conservation. The states of Arkansas, Texas, Louisiana, Mississippi, and Oklahoma have made very different policy choices. Based on 2011 spending data from the Consortium for Energy Efficiency, Minnesota's gas utilities invested two times more in residential energy efficiency programs per-capita than these other states.[27]

Q: In your opinion, how should the Commission respond to Centerpoint's proposal to almost double fixed, monthly charges for residential customers?

A: The Commission should reject Centerpoint's proposal to increase fixed, monthly charges. The Commission should only implement a rate design "regime change" if it has good evidence that there is something fundamentally wrong with the way that it now apportions costs. In my opinion, Centerpoint has not presented such evidence. Rather, this Commission should leave in place a rate structure that encourages conservation. Implementing revenue decoupling would allow Centerpoint to collect its fixed costs of providing service, no less and no more, while maintaining the current rate structure's incentives to conserve.

IV. CONCLUSION

Q: Does this conclude your testimony?

A: Yes.

[27] Spending data from Consortium for Energy Efficiency, Efficiency Program Industry by State and Region Appendices, 2012, March 29, 2013, Table 7, available at: http://library.cee1.org/sites/default/files/library/10535/2012_AIR_Tables_-_All_Tables_FINAL_-_with_erratum_NEW_VERSION.pdf. Population estimates as of July 1, 2011 from United States Census, Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2011 (NST-EST2011-01), available at: http://www.census.gov/popest/data/state/totals/2011/tables/NST-EST2011-01.xls.