BEFORE THE

PUBLIC SERVICE COMMISSION OF WISCONSIN

JOINT APPLICATION OF WISCONSIN ELECTRIC POWER COMPANY AND WISCONSIN GAS LLC FOR AUTHORITY TO ADJUST ELECTRIC, NATURAL GAS, AND STEAM RATES	)	**DOCKET 5-UR-110**

Direct Testimony of Courtney Lane
On Behalf of Clean Wisconsin

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I. INTRODUCTION AND QUALIFICATIONS

Q Please state your name, title, and employer.

A My name is Courtney Lane. I am a Senior Associate at Synapse Energy Economics ("Synapse"), located at 485 Massachusetts Avenue, Suite 3, Cambridge, MA 02139.

Q Please describe Synapse Energy Economics.

A Synapse is a research and consulting firm specializing in electricity and gas industry regulation, planning, and analysis. Our work covers a range of issues, including economic and technical assessments of demand-side and supply-side energy resources; energy efficiency policies and programs; integrated resource planning; electricity market modeling and assessment; renewable resource technologies and policies; and climate change strategies. Synapse works for a wide range of clients, including attorneys general, offices of consumer advocates, public utility commissions, environmental advocates, the U.S. Environmental Protection Agency, the U.S. Department of Energy, the U.S. Department of Justice, the Federal Trade Commission, and the National Association of Regulatory Utility Commissioners. Synapse has over 40 professional staff with extensive experience in the electricity industry.

Q Please summarize your professional and educational experience.

A I have 18 years of experience in energy policy and regulation. At Synapse, I work on issues related to utility regulatory models, performance incentive mechanisms, and energy efficiency. Prior to working at Synapse, I was employed by National Grid as the Growth Management Lead for New England where I oversaw the development of customer products, services, and business models for Massachusetts and Rhode Island such as performance-based regulation. In previous roles at National Grid, I led the

development of Rhode Island Annual and Three-Year Energy Efficiency Plans, led the facilitation of the Rhode Island Energy Efficiency Collaborative, and worked with key stakeholders on the development of policies and strategies to further promote energy efficiency and demand response in the state. Prior to joining National Grid, I worked on regulatory and state policy issues pertaining to energy conservation, retail competition, net metering, and the Alternative Energy Portfolio Standard for Citizens for Pennsylvania's Future (PennFuture). Prior to that, I worked for Northeast Energy Efficiency Partnerships, Inc. where I promoted energy efficiency throughout the Northeast.

I hold a Master of Arts in Environmental Policy and Planning from Tufts University and a Bachelor of Arts in Environmental Geography from Colgate University. My resume is attached as Ex.-CW-Lane-1.

Q On whose behalf are you testifying in this case?

A I am testifying on behalf of Clean Wisconsin.

Q Have you previously testified in regulatory proceedings in Wisconsin?

A No.

Q Have you previously testified in proceedings before other state commissions or agencies?

A Yes. I have testified before the New Hampshire Public Utilities Commission, the Maryland Public Service Commission, the New Mexico Public Regulation Commission, the Pennsylvania Public Service Commission, the Public Service Commission of the District of Columbia, and the Rhode Island Public Utilities Commission. A list of my previous testimony is included in Ex.-CW-Lane-1.

Q Are you sponsoring any exhibits with your testimony?

A Yes, I am sponsoring the following exhibits:

- Ex.-CW-Lane-1 is my resume.
- Ex.-CW-Lane-2 is American Council for an Energy-Efficient Economy (ACEEE) (2021). *The Cost of Saving Electricity for the Largest U.S. Utilities: Ratepayer-Funded Efficiency Programs in 2018*.
- Ex.-CW-Lane-3 is York, D., Kushler, M., & Witte, P. (2007). *Examining the Peak Demand Impacts of Energy Efficiency: A Review of Program Experience and Industry Practices.* ACEEE.
- Ex.-CW-Lane-4 is Cowart, R. (2001). *Efficient Reliability: The Critical Role of Demand-Side Resources in Power Systems and Markets.* Regulatory Assistance Project, prepared for the National Association of Regulatory Utility Commissioners.
- Ex.-CW-Lane-5 is U.S. Environmental Protection Agency 2011. *Energy Efficiency in Local Government Operations: A Guide to Developing and Implementing Greenhouse Gas Reduction Programs.*
- Ex.-CW-Lane-6 is Quad IV Phase II Memo with Cover Ltr and Request for Comments. DOCKET: 5-FE-104. 07/07/2022.
- Ex.-CW-Lane-7 is Cadmus. 2022. Focus on Energy Calendar Year 2021 Evaluation Report – Volume III Appendices.
- Ex.-CW-Lane-8 is Focus on Energy. Program Descriptions obtained from website.
- Ex.-CW-Lane-9 is Focus on Energy. Income-Qualified Incentive webpage.

- Ex.-CW-Lane-10 is Focus on Energy. Rural Industrial Offerings webpage.
- Ex.-CW-Lane-11 is Focus on Energy. Evaluation Dashboard Energy Savings by Year.
- Ex.-CW-Lane-12 is Berg, W., E. Cooper, and M. DiMascio. 2022. *State Energy Efficiency Scorecard: 2021 Progress Report*. Washington, DC: ACEEE.
- Ex.-CW-Lane-13 is Memorandum re: Wisconsin Power and Light Company (6680) Conservation Activities and Voluntary Utility Programs for 2023. Docket No. 6680-EE-2023.
- Ex.-CW-Lane-14 is Final Decision re: Wisconsin Electric Power Company (6630) and Wisconsin Gas LLC (6650) Conservation Activities and Voluntary Utility Programs for 2023. Docket No. 5-EE-2023.
- Ex.-CW-Lane-15 is Memorandum re: Northern States Power Company (4220) Conservation Activities and Voluntary Utility Programs for 2023. Docket No. 4420-EE-2023.
- Ex.-CW-Lane-16 is Public Service Commission Staff. 2022. Quadrennial Planning Process IV – Phase I Memorandum. 5-FE-104.
- Ex.-CW-Lane-17 is Final Decision re: Wisconsin Electric Power Company (6630) and Wisconsin Gas LLC (6650) Conservation Activities and Voluntary Utility Programs for 2022. Docket No. 5-EE-2022.
- Ex.-CW-Lane-18 is Memorandum re: Wisconsin Electric Power Company (6630) and Wisconsin Gas LLC (6650) Conservation Activities and Voluntary Utility Programs for 2022 of the Public Service Commission of Wisconsin. Docket 5-EE-2022.

- Ex.-CW-Lane-19 is Memorandum re: Wisconsin Electric Power Company (6630) and Wisconsin Gas LLC (6650) Conservation Activities and Voluntary Utility Programs for 2023. Docket 5-EE-2023.
- Ex.-CW-Lane-20 is We Energies 2021 Wisconsin Utility Energy Efficiency Customer Service Conservation Report for January 1 – December 31, 2021. Docket No. 5-EE-2021.
- Ex.-CW-Lane-21 is Synapse Workbook summarizing Berg, W., S. Vaidyanathan, B. Jennings, E. Cooper, C. Perry, M. DiMascio, and J. Singletary. 2020. The 2020 State Energy Efficiency Scorecard. Washington, DC: ACEEE.
- Ex.-CW-Lane-22 is The Cadmus Group. 2021. *2021 Focus on Energy: Energy Efficiency Potential Study Report*. Prepared for the Public Service Commission of Wisconsin.
- Ex.-CW-Lane-23 is Public Service Commission of Wisconsin. June 6, 2018. Quadrennial Planning Process III. Order PSC Docket 5-FE-101, REF#: 343909.
- Ex.-CW-Lane-24 is Takahashi, Kenji et al. 2021. *Missed Opportunities – the Impacts of Recent Policies on Energy Efficiency Programs in Midwestern States.* Synapse Energy Economics for Midwest Energy Efficiency Alliance.
- Ex.-CW-Lane-25 is Lazar, J. (2016). *Electricity Regulation in the US: A Guide. Second Edition*. The Regulatory Assistance Project.
- Ex.-CW-Lane-26 is York, D., and Kushler, M. (2011). *The Old Model Isn't Working: Creating the Energy Utility for the 21st Century*. ACEEE.

- Ex.-CW-Lane-27 is Cleveland, M., Dunning, L., and Heibel, J. (2019). *State Policies for Utility Investment in Energy Efficiency*. National Conference of State Legislatures.
- Ex.-CW-Lane-28 is Nowak, S., B. Baatz, A. Gilleo, M. Kushler, M. Molina, and D. York. (2015). *Beyond Carrots for Utilities: A National Review of Performance Incentives for Energy Efficiency*. ACEEE.
- Ex.-CW-Lane-29 is ACEEE. (2019). *A Models Comparison in Pennsylvania*. Submitted to the Pennsylvania Public Utilities Commission.
- Ex.-CW-Lane-30 is Whited, M., and Roberto, C. (2019). *Multi-Year Rate Plans: Core Elements and Case Studies*. Prepared from Maryland PC51 and Case 9618 by Synapse Energy Economics, Inc.
- Ex.-CW-Lane-31 is Workshop Agenda for Docket No. 5-EI-158, August 16, 2022.
- Ex.-CW-Lane-32 is Memorandum re: Roadmap to Zero Carbon Investigation Docket 5-EI-158. August 11, 2021.
- Ex.-CW-Lane-33 is Comments of the Wisconsin Utilities Association, Inc, in Docket No.5-EI-158.
- Ex.-CW-Lane-34 is Memorandum re: Contract for Services Between SEERA and Program Administrator–Amendment 1 in Docket No. 19501-FE-123.
- Ex.-CW-Lane-35 is NHSaves Energy Efficiency Programs. NHPUC Docket 16No. DE 20-092. Settlement -Attachment A.
- Ex.-CW-Lane-36 is WEPCO Response 2-CW-5(b).
- Ex.-CW-Lane-37 is WEPCO Response 2-CW-6.

Q What is the purpose of your testimony?

A Synapse was retained by Clean Wisconsin to review the application of Wisconsin Electric Power Company ("Wisconsin Electric") for authority to adjust electric rates for its operating utility, Wisconsin Electric Power Company ("WEPCO Electric" or "Company") and to provide recommendations for a pilot performance incentive mechanism to support additional funding for energy efficiency investments in the Company's service territory.

Q What materials did you rely on to develop your testimony?

A The sources for my testimony and exhibits are public documents, including the Company's responses to discovery requests, as well as my personal knowledge and experience.

Q Was your testimony prepared by you or under your direction?

A Yes. My testimony and the accompanying exhibits were prepared by me or under my direct supervision and control.

II. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

Q Please summarize your primary conclusions.

A The current utility business model in Wisconsin creates a disincentive for WEPCO Electric and other investor-owned utilities in the state to invest in energy efficiency beyond what is statutorily required by Act 141. A recent energy efficiency potential study for the state indicates that there are significant cost-effective energy savings available that can be procured at a cost less than generating, transmitting, and distributing electricity.[1]

[1] Ex.-CW-Lane-22.

The Public Service Commission of Wisconsin (Commission) is currently investigating whether performance-based regulation (PBR), including performance incentive mechanisms (PIM), can better align the current utility business model with the state's energy policy goals.

The current application by WEPCO Electric provides an opportunity to increase investment in energy efficiency and test a PIM mechanism. Within this instant application, the Company is proposing to increase its current authorized revenue requirement by 9.2 percent, which will increase rates for all customers. Providing a PIM to encourage additional funding in energy efficiency will provide more customers with the opportunity to manage and lower their energy bills and will help to mitigate future costs on the electric system by increasing reductions in energy demand.

Q Please summarize your recommendations.

A I recommend the Commission:

- Adopt the proposed 4-year pilot PIM for the low-income, the non-low-income residential, and the commercial and industrial (C&I) sectors that would encourage WEPCO Electric to increase investment in voluntary energy efficiency programs and achieve incremental electricity savings goals in its service territory. This PIM is set at a target incentive level of 10 percent of its incremental energy efficiency funding in each sector for meeting 100 percent of the target electricity savings (kWh) resulting from that funding. The amount of incentive WEPCO Electric can earn increases linearly up to 125 percent if the Company exceeds the target electricity savings and declines linearly to zero incentive if no savings are achieved.

- Authorize WEPCO Electric to provide a total of $52.8 million in additional voluntary energy efficiency funding that can be used to supplement the Focus on Energy (Focus) energy efficiency programs as part of the pilot PIM over the next four years, beginning with $9.0 million in funding in 2023.
- Require the Company to work with Focus on the allocation and tracking of the incremental funding associated with the PIM and report out annually on achievement of energy efficiency savings according to the pilot PIM design.

III. SUMMARY OF THE APPLICATION

Q Please summarize WEPCO Electric's Application.

A The Company seeks to address a 2023 test year revenue deficiency through an increase in electric rates. According to the Company, these deficiencies are primarily driven by capital investments pertaining to transitioning its electric generation fleet from coal to renewables and natural gas, and enhancements to distribution reliability.[2] In total, the revenue requirement for these capital investments will total $139.0 million.[3] Other factors of the Company's 2023 revenue deficiency include increases in transmission expense, expiring wholesale contracts, changes in sales and monitored fuel, amortization of previously authorized regulatory assets, and additional tax expense.[4] In total, the Company states these drivers result in a 2023 test year revenue that is approximately $285.6 million or 9.2 percent higher than its currently authorized revenue requirements.[5]

[2] Direct-WEPCO/WG-Zgonc-7.
[3] Ex.-WEPCO/WG-Zgonc-1r, Schedule 2.
[4] Direct-WEPCO/WG-Eidukas-6
[5] Ex.-WEPCO/WG-Zgonc-1r, Schedule 2.

Q Did the Company calculate the impact its rate increase will have on its customers?

A Yes. The Company calculated average monthly bill impacts based on its as-filed 2023 test year revenue requirement.

The Company estimates that "a typical residential customer's bill is expected to increase between $5 and $6 per month.[6] Non-residential General Secondary customers Cg1 and Cg6 customers with monthly usage of 1,000 kwh are expected to experience monthly bill increases of $10 and $9 per month respectively.[7] A non-residential General Secondary Cg2 customer using 20,000 kWh per month will experience a $223 increase and a Cg3 customer using 80,000 per month will have a $1,130 increase.[8]

Q Does the Company propose any new programs or resources in its application to help customers manage this increase in rates?

A No, it does not. The Company offers a Low-Income Forgiveness Tool to assist low-income customers reduce their overall arrears balance[9] but does not propose anything beyond this to assist its customers. In response 2-CW-5(b), the Company indicates it has not included any proposal to offer additional energy efficiency or demand response programs beyond those currently in place.[10]

[6] Direct-WEPCO/WG-Eidukas-4
[7] Ex.-PSC-Data Request Response:2.04 Nelson-3 Staff Adj.: Schedule 1 Page 2 of 2.
[8] *Ibid.*
[9] Direct-WEPCO/WG-Eidukas-11-12.
[10] Ex.-CW-Lane-36

IV. ENERGY EFFICIENCY AS A LEAST-COST UTILITY INVESTMENT

Energy Efficiency Benefits Ratepayers and the Electric System

Q What options are available to WEPCO Electric's customers to help them mitigate the rate increase proposed in this application?

A The least-cost option to assist customers in lowering their electricity bills in the long term is to increase investment in energy efficiency programs. In addition to helping customers directly reduce their energy consumption through the installation of higher efficiency measures, energy efficiency is a valuable utility system resource that can lower system-wide electricity costs by helping to avoid or defer building expensive power plants and electricity transmission and distribution (T&D) infrastructure systems.

Q Please explain how energy efficiency can lower system-wide electricity costs.

A Investment in energy efficiency creates long-term savings that act as a hedge against volatile fossil fuel prices and can avoid investments in T&D infrastructure by creating reductions in peak demand. The resulting demand savings reduce stress on local T&D systems, potentially deferring expensive upgrades or mitigating local transmission congestion problems. These avoided costs are then passed down to all customers, regardless of whether they participate in energy efficiency programs.

Energy efficiency also remains one of the least-cost ways to meet customer energy demand. A recent study surveying 48 of the largest electric utilities in the country by the American Council for an Energy-Efficient Economy (ACEEE) found that the levelized cost of energy efficiency is cheaper than the least expensive fossil fuel option, including

natural gas.[11] Investing in energy efficiency to meet customer electricity demand instead of building or replacing fossil fuel power plants can lead to overall cost reductions.

Q Are there additional benefits to energy efficiency?

A Yes. In addition to helping lower overall electricity system costs and helping customers take control of their energy bills, energy efficiency creates a variety of additional benefits.

Energy efficiency can improve the overall reliability of the electricity system. As indicated above, efficiency programs can reduce peak demand, which is when reliability is most at risk.[12] In addition, by slowing the rate of growth in peak demand, energy efficiency can provide utilities and generation companies more time and flexibility to respond to changing market conditions, while moderating the "boom-and-bust" effect of competitive market forces on generation supply.[13]

Energy efficiency can also result in significant benefits to the environment and the economy. Every kilowatt-hour saved through efficiency results in less electricity generation and, thus, less pollution and fewer greenhouse gas emissions. Energy efficiency jobs are primarily local jobs ranging from electricians, HVAC technicians, and insulation contractors, to engineers and architects. Energy efficiency also promotes local economic development and job creation by increasing the disposable income of citizens and making businesses and industries more competitive. Further, energy efficiency in

[11] Ex.-CW-Lane-2.
[12] Ex.-CW-Lane-3.
[13] Ex.-CW-Lane-4.

public buildings (schools, hospitals, government buildings) can help reduce the tax burden on all customers by reducing government's annual operating costs.[14]

Current Energy Efficiency Programs

Q Please describe the energy efficiency landscape in Wisconsin.

A Wisconsin currently has a statewide energy efficiency program called Focus on Energy implemented by a third-party administrator. Wisconsin Act 141 requires each investor-owned utility in the state to spend 1.2 percent of its annual operating revenues to fund the Focus programs.[15] It also requires municipal electric and electric cooperatives to collect funds from customers and either participate in the Focus programs or operate their own Commitment to Community Programs.[16,] This results in total funding of approximately $100 million each year.[17] Most of this funding goes towards energy efficiency. In 2021, Focus spent $78.3 million on energy efficiency and $4.2 million on renewable energy statewide.[18] For the year 2023, WEPCO Electric calculates its funding requirement to be $34.8 million.[19]

Focus offers a comprehensive suite of programs across multiple customer segments. For the residential sector, Focus provides programs to assist new and existing single- and multi-family customers. These programs have a range of offerings for customers, including downstream and midstream incentives, low- and no-cost energy-saving

[14] *See e.g.* Ex.-CW-Lane-5.
[15] Wis. Stat. § 196.374(3)(b)2.
[16] Ex.-CW-Lane-6. Per statute, municipal electric and electric cooperatives are required to collect an average of $8 per meter. According to the Quad IV Phase II memo, all 82 municipal electric utilities participate in Focus, and roughly half of the cooperatives participate in Focus. Total collections from these sources are approximately $3.4 million annually.
[17] *Ibid.*
[18] Ex.-CW-Lane-7.
[19] Ex.-WEPCO WG-Nelson-2: Schedule 3 Page 1 of 1.

measure packs that are mailed to participants, and various educational assistance tools to help customers maintain more efficient homes. Focus also provides programs for non-residential customers. These programs target a variety of different customer types including agricultural, commercial, industrial, and the public sector. Similar to the residential programs, these programs provide a range of offerings including incentives, education, and specialized, sector-specific opportunities to help customers maintain more efficient buildings.[20] The Focus programs also include specific opportunities for customer that are income-qualified[21] or rural.[22]

Between 2014 and 2021, the annual verified gross electricity savings through the Focus programs have ranged from 442 GWh to approximately 558 GWh.[23] In terms of a percentage of sales, ACEEE reports that net savings for Focus equaled 0.63 percent of sales in Wisconsin for the year 2020.[24,25] In 2021, the Focus programs were shown to be cost-effective with a 2.35 benefit-cost ratio based on the Modified Total Resource Cost (TRC) test.[26] This indicates that for every dollar invested in energy efficiency, $2.35 of benefits are created.

[20] Ex.-CW-Lane-8.
[21] Ex.-CW-Lane-9.
[22] Ex.-CW-Lane-10.
[23] Ex.-CW-Lane-11.
[24] Ex.-CW-Lane-12.
[25] ACEEE and Focus reported similar amounts of net savings between 2014 and 2020. Net savings account for outside influences that may affect energy efficiency savings such as free ridership.
[26] Ex.-CW-Lane-7.

Q Are utilities permitted to provide their own energy efficiency programs?

A Yes. Act 141 allows investor-owned utilities, with Commission approval, to fund and administer energy efficiency or renewable resource programs that are in addition to the statewide Focus programs.[27]

In recent years, Wisconsin Power & Light (WP&L), We Energies, and Northern States Power Company-Wisconsin (NSPW) have implemented voluntary energy efficiency programs. These programs seek to increase participation in the service territory of the utility through a range of mechanisms including the use of bonus incentives and enhanced outreach and support. The annual budgets for these programs have ranged from $410,000 for WP&L up to $2.4 million for NSPW.[28] Madison Gas & Electric, WP&L, and NSPW have also implemented or are currently working to launch new demand response programs.[29]

Q Does WEPCO Electric currently offer voluntary energy efficiency programs?

A In coordination with Focus, We Energies currently offers two voluntary energy efficiency programs, the Residential Assistance Program (RAP) and the Voluntary Design Assistance Program (VDAP).[30] RAP provides supplemental weatherization incentives to residential natural gas customers with incomes below 80 percent of the state medium income. The supplemental incentives offered by We Energies covers the remaining project costs that would otherwise be paid by the customer after the Focus incentive.[31]

[27] Wis. Stat. § 196.374(2)(b)2.
[28] *See* Ex.-CW-Lane-13, Ex.-CW-Lane-14, and Ex.-CW-Lane-15.
[29] Ex.-CW-Lane-16.
[30] Ex.-CW-Lane-37.
[31] Ex.-CW-Lane-17.

Annual budgets for RAP have been set at $925,000 for years 2018-2023.[32] VDAP provides additional incentives to supplement Focus' DAP offering. DAP provides incentives and building performance modeling to nonresidential and multifamily new construction and large-scale remodeling projects to identify, prioritize, and help fund efficiency opportunities in project design and construction. If the Focus DAP budget is unable to serve customer demand in the We Energies' service territory in a given year, the VDAP provides additional incentives to meet that demand.[33] Funding for the VDAP program has been approved at $650,000 per year by the Commission in years 2019-2024.[34]

We Energies also provides energy conservation education to residential, commercial and industrial, and K-12 education.[35] The Company does not provide any voluntary energy efficiency programs specific to residential electric customers.

Significant Cost-Effective Potential for Ratepayer Savings

Q Why is additional funding needed for energy efficiency?

A The current investments in energy efficiency, including those voluntarily made by We Energies and the other utilities are lacking. Over the past decade, Wisconsin has been underperforming substantially relative to its neighboring states and other top-performing jurisdictions.[36] At the same time, a recent 2021 Wisconsin energy efficiency potential study revealed there are considerable cost-effective energy savings opportunities beyond

[32] *Ibid* and Ex.-CW-Lane-18.
[33] Ex.-CW-Lane-19.
[34] Ex.-CW-Lane-14.
[35] Ex.-CW-Lane-20.
[36] Ex.-CW-Lane-12.

those funded by the current level of program spending.[37] As the data below will demonstrate, the Focus programs are leaving cost-effective energy efficiency savings on the table due to a lack of funding. This creates a missed opportunity to save WEPCO Electric's customers money by helping to avoid unnecessary utility system investments.

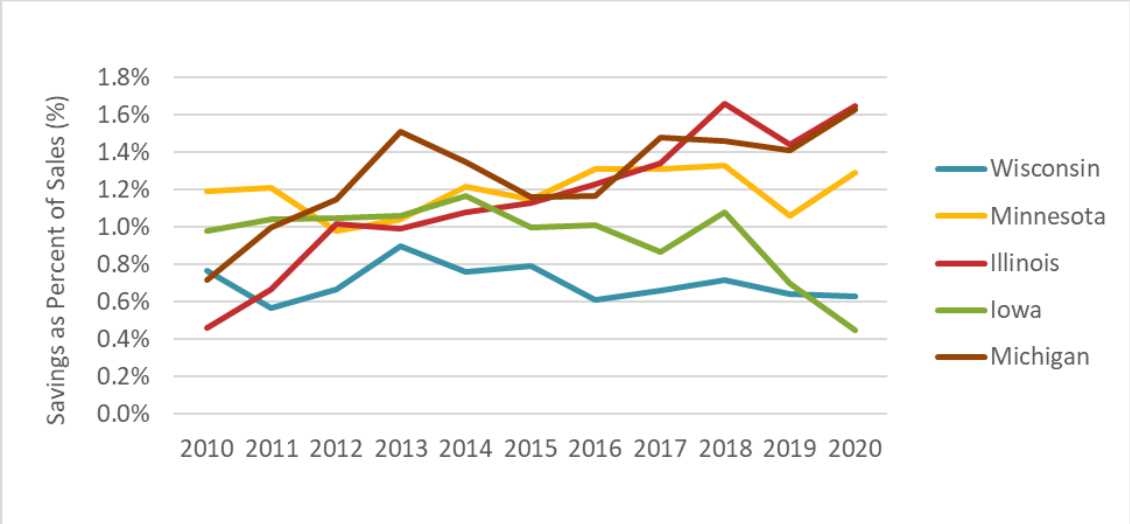
Q Please explain how the state of Wisconsin is underperforming in delivering energy efficiency.

A Due to the statutory cap on funding, Focus has been unable to achieve its full potential and is underperforming relative to other jurisdictions. A common metric used to compare energy efficiency programs across jurisdictions is to examine the annual energy efficiency savings achieved as a percentage of sales. The top performing states are achieving savings levels between 2.0 and 2.5 percent of sales each year.

Figure 1 shows how Wisconsin's energy efficiency savings as a percent of sales compares to other states in the region for the years 2010 to 2020. Wisconsin's savings as a percent of sales has consistently lagged behind other states, remaining relatively flat since 2010, while neighboring Minnesota, Illinois, and Michigan have all achieved increases. In the year 2020, Wisconsin's efficiency savings as a percent of sales was less than half that of that achieved in Minnesota, Michigan, and Illinois.

[37] Ex.-CW-Lane-22.

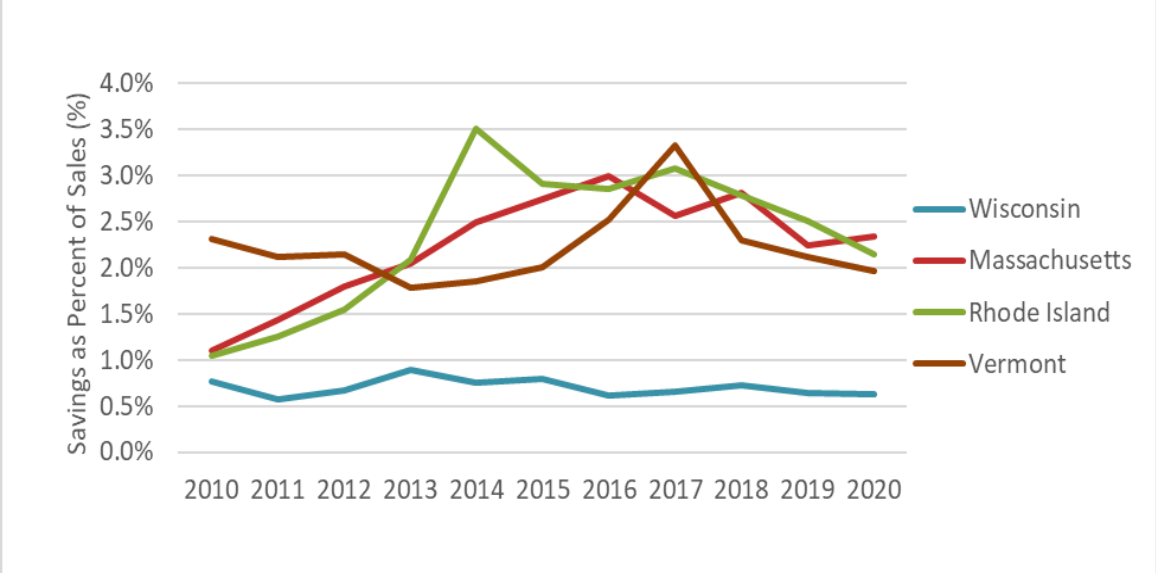
Figure 1. State performance of energy efficiency savings as a percent of annual sales in region



From Ex.-CW-Lane-21. Source: American Council for an Energy-Efficient Economy (ACEEE). The State Energy Efficiency Scorecard. 2010-2020. & Berg, W., E. Cooper, and M. DiMascio. 2022. State Energy Efficiency Scorecard: 2021 Progress Report. Washington, DC: ACEEE.

On a national scale, Wisconsin remains behind leading states shown in Figure 2. The leading states of Rhode Island, Massachusetts, and Vermont are achieving approximately four times as much energy efficiency as a percent of sales compared to Wisconsin.

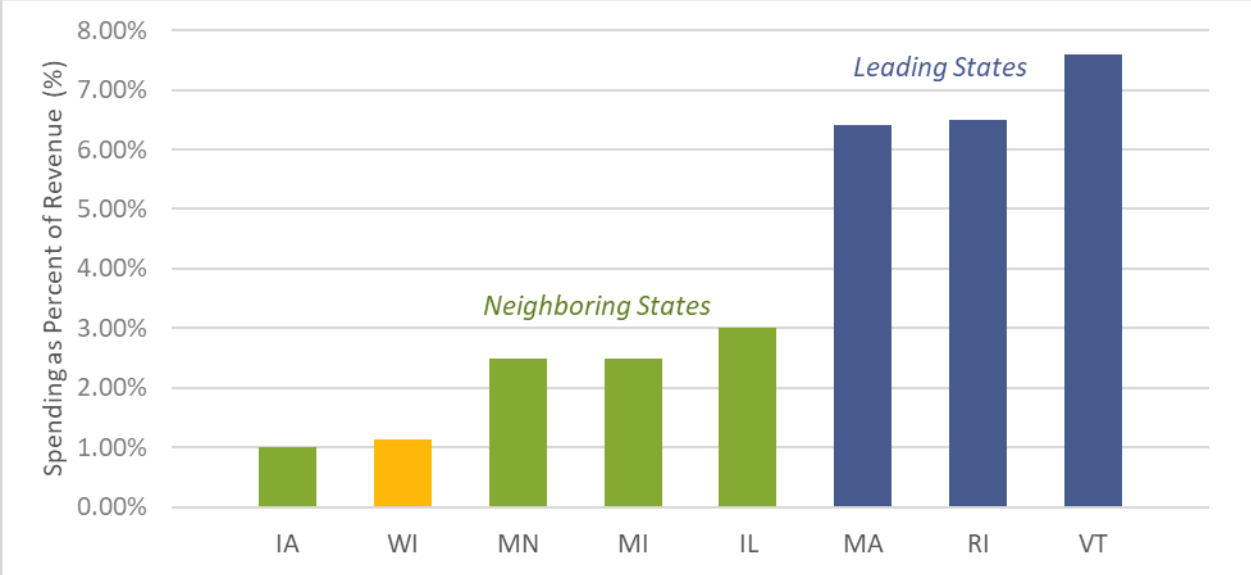
Figure 2. Savings as a percent of sales for leading states, 2010 to 2020



From Ex.-CW-Lane-21. Source: American Council for an Energy-Efficient Economy (ACEEE). The State Energy Efficiency Scorecard. 2010-2020. & Berg, W., E. Cooper, and M. DiMascio. 2022. State Energy Efficiency Scorecard: 2021 Progress Report. Washington, DC: ACEEE.

Another key metric used to compare state energy efficiency programs is program spending as a percent of statewide electric utilities' revenues. As shown in Figure 3, Wisconsin is spending far less on energy efficiency than other states in the region and top-performing states across the country. In 2020, Wisconsin had among the lowest spending compared to the selected neighboring states, with only Iowa spending less.

Figure 3. Spending as percent of revenue, 2020



From Ex.-CW-Lane-21. Source: Berg, W., E. Cooper, and M. DiMascio. 2022. State Energy Efficiency Scorecard: 2021 Progress Report. Washington, DC: ACEEE. Available at: aceee.org/research-report/u2201. p. 22. & Focus on Energy. May 2022. Focus on Energy Calendar Year 2021 Evaluation Report. P 39.

It is clear from these comparisons that Wisconsin is underperforming compared to other states in the region and across the country.

Q Please provide a summary of the recent energy efficiency potential study for Wisconsin.

A Cadmus Group (Cadmus) conducted an energy efficiency potential study in 2021 that examined various levels of energy efficiency potential.[38] Cadmus produced four main potential estimates, summarized in Table 1 below.

Table 1. Potential scenarios defined by Cadmus in the 2021 Potential Study

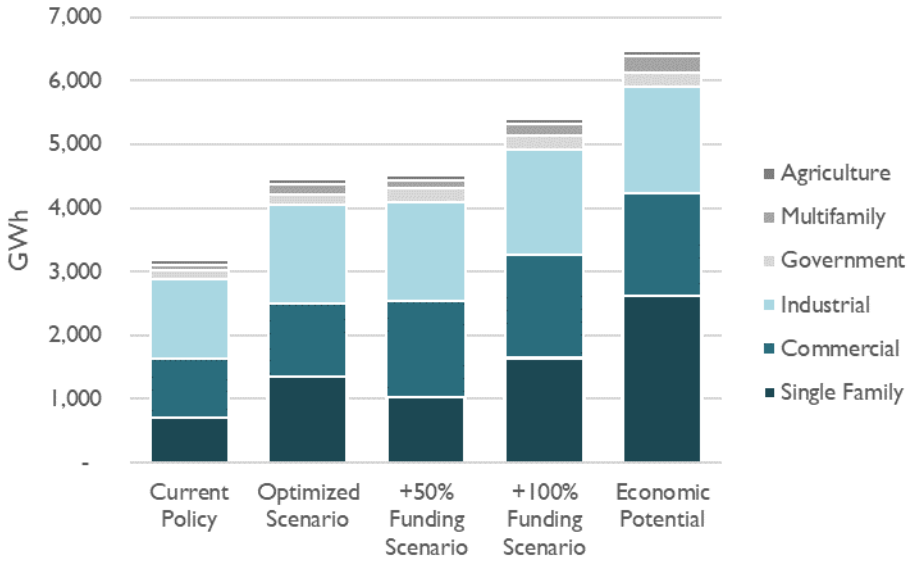
Potential Scenario	Description
Technical Potential	The theoretical maximum conservation potential, regardless of cost or market barriers
Economic Potential	The portion of Technical Potential savings that is cost-effective[39]
Optimized Potential	The portion of Economic Potential savings that could realistically be realized if program funding was not constrained and barriers to customer participation were minimized
Current Policy Potential	The portion of Optimized Potential savings that could be realized considering the current Focus on Energy budget and fuel and sector allocations[40]

Cadmus conducted sensitivity analyses to determine the impacts of additional program funding and other variables for several scenarios. Figure 4 shows the results from the Cadmus study for first-year gross energy savings potential by sector for several scenarios. These represent cumulative gross energy savings across a 4-year period beginning in 2023. As this figure shows, Cadmus found there is substantially more cost-effective

[38] Ex.-CW-Lane-22.
[39] The term c*ost-effective*, used throughout the Cadmus study, is defined by criteria set by the Modified Total Resource Cost (MTRC) test, approved by the PSC for Focus on Energy.
[40] Wis. Stat. § 196.374(2)(b)2.

energy savings potential above what Focus is currently able to provide with the statutory funding limitations.

Figure 4. Cumulative first-year gross energy savings across four years, by sector, for five scenarios analyzed in the Cadmus Potential Study



Source: Cadmus online dashboard that displays energy efficiency potential and related incentive and administrative costs from the Wisconsin Focus on Energy 2021 Energy Efficiency Potential Study Assessment.

As explained in Table 1 above, Cadmus developed the Economic, Optimized, and Current Policy Potential scenarios to narrow the savings potential to those that could be realistically achieved. The +50% and +100% Funding scenarios were sensitivities Cadmus conducted based on the most practical scenario, the Current Policy, to determine the impacts of additional funding for Focus. For each scenario, Cadmus developed costs to acquire the energy savings and benefit-cost ratios. This data allows for the estimation of total costs and total benefits for each scenario.

Q What scenario is most reasonable to target in the next four years?

A The +50% Funding scenario has the most reasonable balance between aggressive energy savings and what is achievable in the near term. This scenario realizes the same level of energy savings as the Optimized Scenario, while being based on the Current Policy

scenario, which considers factors like the allocation of ratepayer contributions and splits between fuels and customer sectors. It is essentially a pure influx of funds into the program without any changes to other aspects of existing policy.

Q Can this analysis be applied directly to WEPCO Electric?

A Yes. I expect that the characteristics of appliance and equipment end-uses are similar within each sector across different utility jurisdictions in the state. For example, it is reasonable to assume that the saturation of compact fluorescent and LED bulbs in residential buildings are similar across the state. On the other hand, the absolute savings potential estimates differ by utility jurisdiction as the total amount of energy usage widely differs across jurisdiction (e.g., more residential energy usage and customers mean more energy savings potential in residential buildings). This means that it is reasonable to assume that energy efficiency potential in terms of the percentage of sector-specific sales is similar across the different utility service territories within the state. Therefore, I developed potential savings estimates for the WEPCO Electric service territory for the +50% Funding Scenario, using WEPCO Electric's sales share as a percent of the state total for each sector. I also consolidated program categories into commercial, industrial, residential income-qualified, and residential non-income-qualified to mirror the current Focus sectors more closely. Table 2 shows a comparison of the potential energy savings in the Current Policy case and +50% Funding scenario.

Table 2. First-year savings potential for the Current Policy and +50% Funding scenarios, 4-year summary

Sector	Current Policy Potential (MWh)	+50% Funding Potential (MWh)	Incremental (MWh)
Commercial	394,452	645,128	250,676
Industrial	381,899	474,812	92,913
Residential Income-Qualified	123,523	139,925	16,402
Residential Non-Income-Qualified	166,959	271,499	104,541
Total WEPCO	**1,066,833**	**1,531,366**	**464,532**

Table 3 below, converts these first-year savings for both scenarios as a percentage of 2020 electricity sales for the utility.

Table 3. Gross projected first-year savings as a percent of 2020 electricity sales

Sector	Current Policy	+50% Funding	Incremental
Commercial	1.18%	1.93%	0.75%
Industrial	1.49%	1.85%	0.36%
Residential Income-Qualified	0.37%	0.42%	0.05%
Residential Non-Income-Qualified	0.51%	0.82%	0.32%
Total WEPCO	**1.16%**	**1.66%**	**0.50%**

From Ex.-CW-Lane-22. Source: 2020 EIA-861; The Cadmus Group. 2021. 2021 Focus on Energy Efficiency Potential Study Report
Note: Gross savings reflect changes in energy consumption that result directly from participation in an energy efficiency program but do not account for the reason for participation.

Q What are the benefits and costs from the +50% funding scenario?

A Table 4 shows the costs and benefits of the +50% Fundings scenario above the Current Policy case using the acquisition costs and benefit-cost ratios for each measure Cadmus analyzed over the course of a 4 year time frame from 2023 to 2026. The results are shown for the total incremental savings, costs, and benefits of the +50% Funding scenario above the Current Policy case.

Table 4. Incremental first-year energy savings, costs, and benefits of the +50% Funding scenario above Current Policy, 4-year summary

Sector	Energy Savings (MWh)	Costs ($ millions)	Benefits ($ millions)	Benefit-Cost ratio
Commercial	250,676	23.7	87.6	3.70
Industrial	92,913	5.7	21.9	3.84
Residential Income-Qualified	16,402	8.0	3.8	0.47
Residential Non-Income-Qualified	104,541	13.8	41.0	2.98
Total WEPCO	**464,532**	**51.2**	**154.3**	**3.02**

At the portfolio level, the benefits outweigh the costs by more than a 3-to-1 ratio. This indicates that for every dollar invested, the portfolio creates $3.02 in benefits. In other words, if WEPCO Electric were to invest an additional $51 million into the Focus on Energy program, more than $150 million in benefits would be realized.

V. PROPOSAL FOR INCREMENTAL ENERGY EFFICIENCY FUNDING

Q What level of investment should WEPCO Electric be investing in voluntary energy efficiency programs?

A As discussed above, the Cadmus potential study estimated several cost-effective potential scenarios including the Current Policy case, a +50% Funding scenario, and +100% Funding scenario. I developed a program investment proposal for WEPCO Electric based on the level of the incremental investments and savings potential over the next 4-year period under the +50% Funding scenario relative to the investments and savings under the Current Policy scenario, as I explained in Section IV above. More specifically, I examined costs, savings, and benefits at the measure level by sector for each scenario and aggregated them at the sector level based on the +50% Funding scenario and the Current Policy case for the entire state. I then scaled down the investments and savings for Wisconsin Electric based on the company's electricity sales share at the sector level

among all utilities in the state. Table 5 presents both the incremental savings in MWh and the incremental measure acquisition costs based on the +50% Funding scenario for WEPCO Electric and for the entire state. WEPCO Electric's portion represents approximately 36 percent of the total statewide potential at the portfolio level.

Table 5. Incremental first-year savings potential and measure acquisition costs for WEPCO Electric and statewide under the +50% Funding scenario, 4-year summary

Sector	First-Year Energy Savings (MWh)		Measure Acquisition Costs ($ million)	
	WEPCO Electric	Statewide	WEPCO Electric	Statewide
Commercial	250,676	673,647	24	64
Industrial	92,913	320,627	6	20
Residential Income-Qualified	16,402	45,481	8	22
Residential Non-Income-Qualified	104,541	289,877	14	38
Total WEPCO Electric	**464,532**	**1,329,633**	**51**	**144**

To develop a specific annual program investment plan for WEPCO Electric, I made two additional adjustments to the investment and savings estimates for the Company. First, I assumed a gradual annual investment schedule so that the sum of the annual investments over the four years reaches close to the total measure acquisition costs of $51 million, shown in Table 5 above. Second, I added program administration costs to the cost estimates based on the Cadmus study that will be needed to support the energy efficiency programs beyond measure acquisition costs. I developed administration cost factors at the sector level based on Focus 2021 program performance, which I obtained from a 2022 report by Cadmus on Focus program performance.[41] The cost factors are 4.0 percent for the residential sector and 2.7 percent for the non-residential sector, relative to the total

[41] Ex.-CW-Lane-7.

sector program costs. I then applied these factors to sector-specific total investments for WEPCO, as shown in Table 5 above.

Table 6 below shows the resulting recommended incremental investment in voluntary energy efficiency programs for WEPCO Electric. This plan includes annual program costs and savings as well as estimates of annual program benefits based on the Cadmus potential study using the Modified TRC test. Under this proposal, annual program investments start at $9 million in the first year and increase to $18.4 million in the fourth year with a 4-year total budget of $52.8 million and an annual average budget of $13.2 million. Annual savings (or first-year program savings) start at 78,980 MWh (representing 0.34 percent of the 2020 electricity sales by Wisconsin Electric) and increase to about 161,580 MWh (or 0.7 percent of the 2020 sales). This program investment plan would yield approximately $100 million net benefits to the customers in the WEPCO Electric service with an overall benefit-cost ratio of 2.9.

Table 6. Recommended incremental voluntary energy efficiency program investment and savings for WEPCO Electric

	2023	2024	2025	2026	Total
Annual Savings (MWh)	78,975	96,222	127,086	161,581	463,863
Annual Savings (% of 2020 sales)	0.34%	0.42%	0.55%	0.70%	2.0%
Costs with program admin cost	$9.0	$11.0	$14.5	$18.4	$52.8
Benefits	$26	$32	$42	$54	$154
Net Benefits	$17	$21	$28	$35	$101

Q Why should WEPCO Electric increase funding for energy efficiency when it is already proposing a rate increase?

A While additional spending for implementing energy efficiency programs often increases rates slightly in the short term, these programs often reduce the overall system costs and average customer bills in the long term. This is because energy efficiency is less

expensive than supply-side resources and can reduce or delay investments in expensive, large-scale power plants and transmission and distribution systems. For example, as I discussed above, the Cadmus potential study estimated that the benefits of the Base Policy and +50% Funding scenarios exceed the costs substantially. Table 7 below summarizes the benefits and costs of the two scenarios, as well as the differences in benefits and costs between the scenarios. Based on the definition of the Modified TRC test, the benefits include the avoided costs of electricity supply, power plant capacity, T&D, and carbon. The study estimated avoided carbon costs using $15 per ton of carbon dioxide, which the Commission approved in its June 6, 2018 Order in docket 5-FE-101 as a "market-based value" for evaluating cost-effectiveness of Focus on Energy's programs.[42] As this table shows, the benefits greatly outweigh the costs.

Table 7. Benefits and costs for the Base Policy and +50% Funding scenarios for Wisconsin

	Base Policy	+50% Funding	Incremental Savings
Benefits	$1,207,985,430	$1,643,264,574	$ 435,279,144
Costs	$273,230,981	$416,967,124	$ 143,736,143
Benefit-Cost Ratio	4.4	3.9	3.0

Q Are there any other benefits from making incremental energy efficiency investments?

A Yes. On behalf of the Midwest Energy Efficiency Alliance, Synapse Energy Economics recently conducted a study to assess the impacts of energy efficiency policies in several Midwestern states including Wisconsin.[43] The study estimates various types of impacts for each state: these include utility system impacts, societal impacts such as social cost of carbon and health damage impacts, and macroeconomic impacts including jobs. For

[42] Ex.-CW-Lane-23.
[43] Ex.-CW-Lane-24.

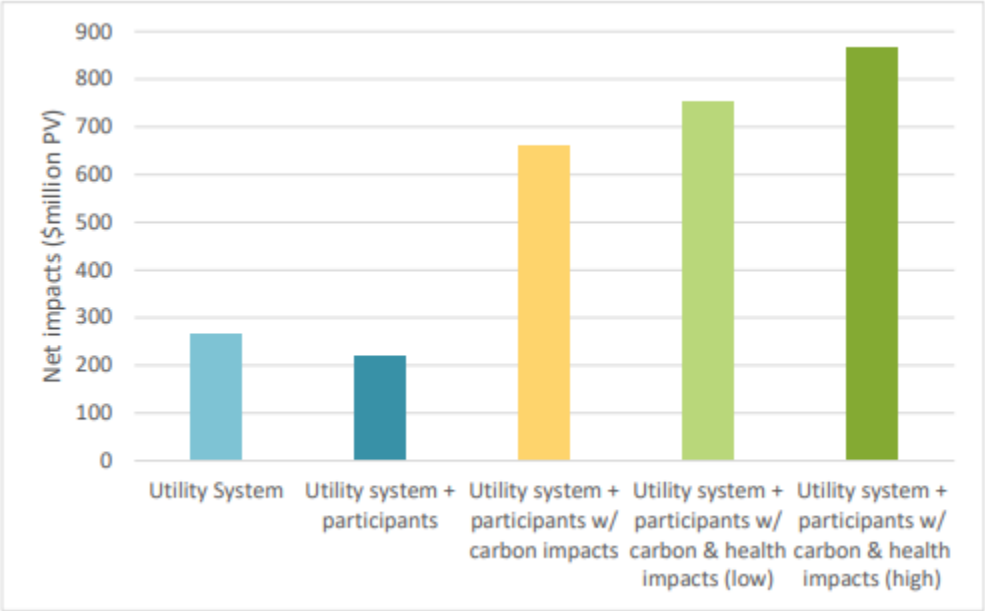
Wisconsin, the study analyzed the net benefits for implementing the increased funding proposed in early 2021 by Governor Evers, which was not adopted. This budget proposal would have roughly doubled Focus program budgets. The study results give insights into the magnitude and the types of benefits that WEPCO Electric's voluntary energy efficiency programs could provide.

As shown in Figure 5 below, the study shows that additional investments in energy efficiency would result in enormous benefits for residents and businesses in the state. Lifetime net benefits for all ratepayers (utility system) and participants range from $200 million to $280 million from the implementation of energy efficiency programs in a single year. With the social cost of carbon, which starts at $116 per ton of carbon in 2020 and increases to $165 by 2050 estimated in this study, net benefits would increase to over $650 million.[44] Further, if the benefits of avoiding health damage costs are included, net benefits would increase to $870 million. The study further estimated that the proposed budget would create approximately 1,530 more job-years than utility investments in alternative resources.[45]

[44] *Ibid.*

[45] One job-year is equivalent to a single person working full-time for a year (e.g., five job-years could be five full-time positions for one year or one full-time position for five years).

Figure 5. Lifetime net benefits of Governor Evers' budget proposal from a single program-year



Q How do these benefits accrue to ratepayers?

A The recommended increase in voluntary energy efficiency spending will create benefits to energy efficiency program participants, non-participants, and the environment. The benefits associated with the avoided cost of electricity supply (kWh) will be primarily realized by ratepayers that participate in the energy efficiency programs in the form of reduced consumption. Non-participants and program participants alike will benefit from avoided generation capacity and T&D costs, the savings of which are passed onto all ratepayers.

In addition, the investment in energy efficiency measures will provide a valuable hedge against costs associated with future greenhouse gas compliance requirements. If and when state or federal policy establishes more stringent greenhouse gas emissions standards on the electricity industry, through carbon pricing or other measures, the reduced emissions from the energy efficiency investments will save customers money.

Q Did you estimate benefits and costs from energy efficiency programs for all electric ratepayers based on the Utility Cost Test perspective?

A Yes. The Utility Cost Test (UCT) is a useful secondary cost-effectiveness test to provide an indication of how an investment will affect utility system costs, which are ultimately paid for by all ratepayers. This test also enables energy efficiency investments to be examined through the same lens as traditional supply-side resources.

To conduct this test, I made some adjustments to Table 7 above to estimate the total benefits and costs for all electric ratepayers. For this calculation, I developed a UCT benefit factor that excludes emissions benefits (which are not currently embedded in electric system costs). This factor can then be applied to the benefits in Table 7 to show the only the benefits that ratepayers would experience as utility system benefits. I developed this factor based on the share of benefits by benefit type for Focus's Calendar Year 2021 programs reported in the Cadmus 2021 program evaluation study, as shown in Table 8 below. Note that I adjusted the reported total emissions benefits downward in this table based on an 80/20 benefit split factor for electricity and gas that I developed based on the data available in the report.[46] I estimate that the UCT benefit factor is roughly 80 percent of the total benefits.

[46] Focus' natural gas programs saved 255 million therms for CY2021. This results in about 7.3 million tons of CO_2 reduction, based on a factor of 5.85 tons of CO_2 per thousand therm factor reported in the Cadmus report on page 1-19 of Volume III. This amount of emissions results in about $22.3 million based on $15/ton of CO_2. I subtracted this amount from the reported total emissions benefits in order to obtain the emissions benefits exclusive to electricity savings.

Table 8. Calculation of Utility System Benefit Factor

	Focus 2021 Benefits	Benefit share
Electric Energy Benefits (kWh)	$195,199,260	46%
Electric Capacity Benefits (kW)	$97,532,509	23%
T&D Benefits	$45,297,768	11%
Emissions Benefits	$82,808,102	20%
Total	$420,830,277	100%
Total w/o Emissions Benefits	$338,029,537	80%

Source: Cadmus. 2022. Focus on Energy Calendar Year 2021 Evaluation Report – Volume III Appendices, Table E-2, I-8, I-22, I-23, I-24.

Table 9 below presents benefits and costs that exclude avoided emissions benefits. The resulting electric system benefits for all ratepayers are still substantially greater than the costs of energy efficiency measures, indicating that all ratepayers will experience long-term utility system savings. The Current Policy results in a 3.6 benefit-cost ratio and the +50% Funding scenario has a 3.2 benefit-cost ratio. The net benefits of the incremental savings of the +50 Funding scenario is approximately $205 million to the electric utility system. This analysis demonstrates that both the Current Policy case and the +50% Funding scenario provide substantial benefits.

Table 9. Utility Cost Test for the Base Policy and +50% Funding scenario

	Current Policy	+50% Funding	Incremental Savings
Benefits	$970,275,171	$1,319,899,046	$349,623,875
Costs	$273,230,981	$416,967,124	$143,736,143
Net benefits	$697,044,191	$902,931,922	$205,887,731
Benefit-Cost Ratio	3.6	3.2	2.4

VI. THE ROLE OF PERFORMANCE INCENTIVE MECHANISMS

Utility Business Model

Q If energy efficiency is so beneficial why isn't WEPCO Electric proposing to increase its investment in these programs?

A Under traditional cost-of-service utility regulation, investor-owned utilities have a financial incentive to increase investments in capital assets and increase the volume of energy sales.

It is widely recognized that utilities have a financial incentive to maximize their capital expenditures in order to increase rate base and thereby increase profits, as long as a utility's rate of return is greater than the cost of borrowing. This is often referred to as the Averch-Johnson effect.[47]

Utilities also have an incentive to increase electricity sales between rate cases. Once a utility's revenue requirement is approved, customer rates are established to allow the utility to recover its approved revenue. The calculation of rates is a function of the amount of revenue allowed to be recovered from customers and the volume of electricity sales. Once the Commission approves a utility's rates, they are fixed until it files another rate case. This creates what is often referred to as a "throughput incentive," where the utility's revenue is highly dependent on the amount of electricity it sells.[48] If a utility can increase sales, it can increase profits, all else equal. Conversely, if electricity sales decrease, profits will decline until rates increase accordingly in a subsequent rate case.

[47] Ex.-CW-Lane-25.
[48] Ex.-CW-Lane-26.

Energy and peak demand savings from energy efficiency negatively impact the traditional way utilities earn profits by reducing sales and lessening the need for load-growth- and reliability-related capital investments. Without intervention in the current regulatory construct, utilities lose profits if they invest in energy efficiency for their customers. This creates a strong disincentive for utilities to voluntarily invest in energy efficiency beyond the requirements of Act 141.

Q What regulatory tools are available to remove a utility's disincentive to invest in energy efficiency?

A There are three common tools available. These are often referred to as the "three-legged stool" to address financial disincentives.

1. Provide the utility with cost recovery for its expenditures on energy efficiency programs.

2. Address the throughput incentive. This typically involves the adoption of revenue decoupling to remove the link between utility sales and profits by allowing rates to be adjusted upwards or downwards between rate cases based on the utility's actual sales. Through periodic rate adjustments, the utility is able to recover its revenues regardless of the impact of energy efficiency on sales.

3. Provide the utility with an ability to earn on its investments in energy efficiency. PIMs can provide a utility with financial rewards or penalties related to its achievement of specific targets. PIMs are used to positively influence utility behavior towards the advancement of energy policy goals.

Q Are you recommending the Commission adopt one of these tools in this proceeding?

A Yes. I am recommending that the Commission to approve a pilot PIM to encourage WEPCO Electric to increase its investment in voluntary energy efficiency programs and to authorize the Company to receive cost-recovery for these increased investments. This is the most straight-forward approach to support increased investment in energy efficiency in the near term while discussions continue as part of the Commission's investigation into performance-based regulation.

Q Have PIMs been shown to be effective at encouraging utilities to invest in energy efficiency?

A Yes. At least 35 states and Washington, D.C. have PIMs in place to support energy efficiency and demand response.[49] Studies by ACEEE have shown a strong correlation between states with the highest performing energy efficiency programs and the existence of PIMs. Specifically, states with PIMs in place have invested 50 percent more in energy efficiency programs on a per capita basis than states with no incentive policy.[50] This also extends to the achievement of energy savings. On average, states with PIMs are achieving more than twice the energy savings than states without these incentives in place. Based on a review by ACEEE, the average net incremental electricity savings as a percent of retail sales for states with PIMs was 0.97 percent in 2016, while those without incentive policies averaged only 0.43 percent.[51]

[49] Ex.-CW-Lane-27.
[50] Ex.-CW-Lane-28.
[51] Ex.-CW-Lane-29.

Interaction with the Commission's Examination into Performance-Based Regulation

Q Is the Commission currently examining issues related to PIMs?

A Yes. The Commission has included the topic of PIMs as part of its broader investigation into PBR. As part of the Roadmap to Zero Carbon Investigation in Docket No. 5-EI-158, the Commission is holding a series of workshops to investigate PBR and has issued several requests for public comment. There have been three workshops held in 2022 to date. Thus far, participants have reviewed the steps needed to establish performance metrics and incentive mechanisms and shared preliminary recommendations for proposed goals and outcomes.

Q Please provide a summary of PBR.

A PBR is an alternative to traditional cost-of-service regulation that seeks to better align utility profits with state policy goals. PBR seeks to accomplish this through compensating utilities based on how well they achieve certain outcomes instead of investing in more capital assets and selling more electricity. While approaches vary across jurisdictions, PBR generally consists of multi-year rate plans (MRP) and PIMs.

An MRP is a set of rules governing the rates or allowed revenues of the utility for multiple years into the future, with a requirement that the utility not file another rate case until the end of a stay-out period. Allowed revenues or rates are designed to change in a known or formulaic fashion from year to year, fully or partially independent of utility costs. Since utility profits depend on the difference between revenues and costs, this structure provides an incentive for the utility to contain and reduce costs over multiple

years. MRPs are commonly implemented to create cost-control incentives to the utility, encourage utility innovation, and reduce regulatory costs and burdens.[52]

As indicated above, PIMs are sets of metrics with targets and financial implications. PIMs can serve as a useful regulatory mechanism to positively influence utility behavior towards the advancement of energy policy goals that are not directly aligned with a distribution company's public service obligations or existing financial incentives.

Q Is it appropriate to create a standalone PIM for energy efficiency without other aspects of PBR in place?

A Yes. It is common for a state to have an energy efficiency PIM without PBR in place. Utility incentives for the achievement of energy efficiency goals have been in place since the early 1990s, well before discussions of PBR began to gain traction. Most notably, Massachusetts, Rhode Island, and New York had well established PIMs prior to investigating PBR.

Q Why is it appropriate to recommend a PIM for energy efficiency before the conclusion of the Commission's investigation into PBR?

A This proceeding represents an opportunity to test a PIM design and increase funding for energy efficiency in the near term. As indicated in Section IV of my testimony, there is significant untapped energy efficiency potential in Wisconsin. Delaying the opportunity to potentially obtain more funds for energy efficiency until after the conclusion of the PBR investigation creates a lost opportunity to save customers money and reduce electricity system costs.

[52] Ex.-CW-Lane-30.

Furthermore, public comment thus far indicates that many stakeholders see increased activity and investment related to energy efficiency as an important outcome of PBR. The promotion of energy efficiency was included in the draft list of goals, with initial outcomes relating to decreasing demand, capturing more energy efficiency potential, increasing energy efficiency savings, and increasing financing, among others.[53] Several commenters specifically expressed interest in "establishing performance-based regulation to encourage increased activity on demand-side activities such as demand response and energy efficiency" and indicating this as a common approach in other states to help counter the financial impacts of reduced energy sales and incentive to construct generation sources.[54] The Wisconsin Utilities Association (WUA) also recommended that the Commission focus on the goals of customer affordability, energy efficiency, and demand response as part of this investigation.[55]

Q If the Commission approves a PIM as part of this case, will it negatively impact the ongoing work of the PBR investigation?

A No. I recommend a PIM be created as a 4-year pilot to test the effectiveness of its design. There could be several outcomes of this PIM pilot, none of which should negatively impact the concurrent Commission investigation. One such outcome is a finding that this PIM is effective and becomes one of the recommended models of the PBR investigation. Other outcomes could be a determination that this PIM should be modified or replaced

[53] Ex.-CW-Lane-31.
[54] Ex.-CW-Lane-32.
[55] Ex.-CW-Lane-33.

entirely with a different mechanism to better support energy efficiency and align with any broader regulatory changes that may result from the investigation.

VII. PROPOSAL FOR PERFORMANCE INCENTIVE MECHANISM

Q Please explain your PIM Proposal.

A I recommend three separate PIMs: for the low-income, the non-low-income residential, and the commercial and industrial (C&I) sectors. Under each of these PIMs, WEPCO Electric would be eligible to earn a financial incentive for incremental voluntary investments in energy efficiency and the achievement of energy savings goals within its service territory.

The target PIM that WEPCO Electric can earn is set at 10 percent of its incremental energy efficiency funding in each sector for meeting 100 percent of the target electricity savings (kWh) resulting from that funding. The amount of incentive WEPCO Electric can earn increases linearly up to 125 percent if the Company exceeds the target electricity savings and declines linearly to zero incentive if no savings are achieved.

Basing the PIM on incremental achieved savings will incentivize the Company to work with Focus to ensure that incremental energy efficiency savings occur from the voluntary programs.

Q Please explain your PIM proposal further.

A To be eligible for the PIMs, WEPCO Electric must make the additional investments in voluntary energy efficiency programs as described in Section V of my testimony. Table 10, Table 11, and Table 12 demonstrate how the PIMs would be calculated. Each table shows the following information:

- Annual Funding: The incremental investment in voluntary energy efficiency by WEPCO Electric.

- Target Annual Savings (MWh): The annual amount of electricity savings that are anticipated to result from that funding

- Target PIM amount: 10 percent of WEPCO Electric's annual incremental energy efficiency funding.

It is important to note that the annual savings and maximum PIM potential are estimates based on the measure mix from the Cadmus study for these sectors. The actual savings will vary based on which measures are actually installed in any given year.

Table 10. Commercial and Industrial sector

	2023	2024	2025	2026
Annual Incremental Efficiency Funding	$5,138,989	$6,261,297	$8,269,638	$10,514,253
Target Annual Savings (MWh)	58,413	71,170	93,998	119,512
Target PIM Value (100% Target Savings)	$513,899	$626,130	$826,964	$1,051,425

Table 11. Non-Low-Income Residential sector

	2023	2024	2025	2026
Annual Incremental Efficiency Funding	$2,438,158	$2,970,629	$3,923,472	$4,988,414
Target Annual Savings (MWh)	17,773	21,654	28,600	36,363
Target PIM Value (100% Target Savings)	$243,815	$297,063	$392,347	$498,841

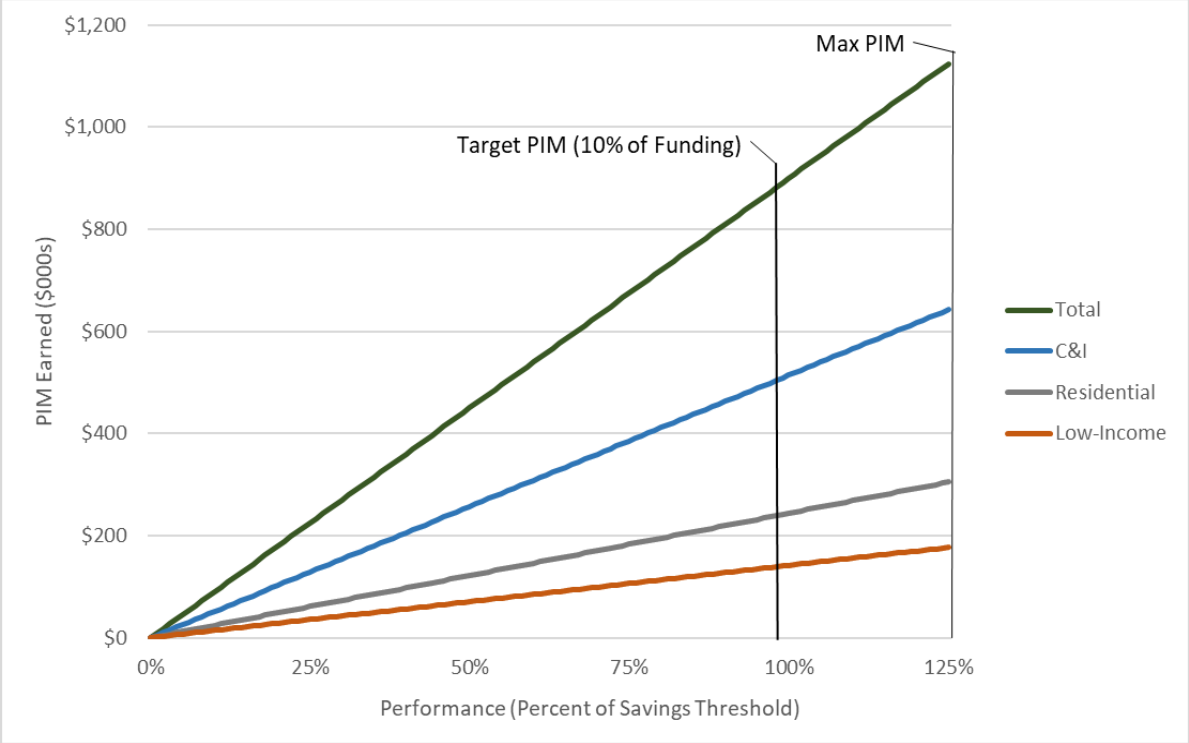
Table 12. Low-Income sector

	2023	2024	2025	2026
Annual Incremental Efficiency Funding	$1,415,156	$1,724,213	$2,277,262	$2,895,376
Target Annual Savings (MWh)	2,789	3,398	4,487	5,705
Target PIM Value (100% Target Savings)	$141,516	$172,421	$227,726	$289,538

Figure 6 below shows the linear trend of the proposed PIM structure for year 2023 based on the achievement of energy savings goals for each sector and all sectors combined. For example, if the Company only achieves 75 percent of its target annual savings in 2023 for

the C&I sector, the PIM would be calculated taking 75 percent of the Target PIM value of $513,899, resulting in an incentive of $385,424.

Figure 6. Potential WEPCO Electric PIM Values in Program Year 2023



Q Is the target PIM amount similar to what is found in other jurisdictions?

A Yes. A survey by ACEEE determined that, for utilities with PIMs based on program funding, the PIM incentive ranged from roughly 5–15 percent of funding levels, with a median value of 8 percent.[56] My proposal for a target PIM based on 10 percent of program funding is generally consistent with the median value for this type of PIM.

[56] Ex.-CW-Lane-28.

Q How would WEPCO Electric need to demonstrate performance to earn these PIMs?

A For WEPCO Electric to earn the maximum PIM, it must take several actions. It must invest the proposed incremental annual energy efficiency funds in voluntary energy efficiency programs that are coordinated with Focus for distribution within its service territory. At the end of the program year, the Company must file a report with the Commission demonstrating the amount of funds invested and total electricity savings (kWh) achieved from these funds. After review by the Commission, WEPCO Electric will receive an incentive based on the actual savings achieved relative to the target savings. If actual electricity savings are less than the target savings, then the PIM award will be determined by linearly scaling down from the 10 percent target PIM amount. In this annual filing, the Company should also demonstrate how it collaborated with Focus in the allocation of these funds and in providing assistance to increase participation.

Q Does Focus on Energy currently earn a PIM?

A Yes. The 2019–2022 contract between the Statewide Energy Efficiency and Renewables Administration (SEERA) and the Focus program administrator, Aptim Government Solutions, LLC, includes a performance bonus mechanism for the achievement of several goals. The maximum allowed over the 4-year period is an incentive of $750,000, ranging from $62,500 in the first year to $462,500 in the last year.[57]

Q How would your proposed PIM interact with the Focus performance mechanism?

A As occurs with current voluntary programs, Focus would claim savings for all program participants, even those who receive funds from the utility.

[57] Ex.-CW-Lane-34.

The net benefits resulting from the proposed increased investment in voluntary energy efficiency are large enough that the customers still retain the majority of the net benefits even with both the Company and Focus earning incentives. For example, in 2023 alone the estimated net benefits from the incremental energy efficiency investments across all sectors is $17 million. This greatly outweighs the costs of both the Focus performance incentive and the proposed WEPCO Electric target PIM.

VIII. IMPACTS ON CUSTOMER RATES

Q What are the implications of your proposal on customers' rates?

A There are three implications. In the short term, the recovery of the voluntary program costs and PIM costs will cause a slight increase in rates. In addition, utility lost revenues resulting from a decrease in electricity sales would be recovered in the next rate case. In the medium and long term, the installed energy efficiency resources will provide electric system benefits in terms of avoided infrastructure investment in generation, transmission, and distribution. These avoided investments will ultimately flow through rates and help to offset the short-term increase.

Other jurisdictions have examined this effect by conducting rate and bill impact assessments of energy efficiency programs. For example, Eversource New Hampshire's recent three-year plan included a rate and bill impact assessment that indicated the levelized net change in rates of its three-year plan for its portfolio of electric residential energy efficiency programs was 0.6 percent after accounting for the program cost, lost revenues, and avoided costs. Customers that participated in these programs can completely offset this increase. Residential participants are projected to save between 0.3

percent to 2.4 percent per month on their electricity bills depending on the type of installed measures.[58]

Q How will your proposal for incremental funding and the PIM increase rates in the short term?

A I calculated the annual incremental rate for each year of the 4-year period shown in Table 15. To calculate this cost, I took the annual funding request plus the target PIM and divided it by the Act 141 Designated Sales (MWh) as provided for in Ex.-WEPCO WG-Nelson-2. Schedule 3 Page 1 of 1.

Table 13. Total cost and average rate from incremental funding request

	2023	2024	2025	2026
Annual Funding ($)	$8,992,302	$10,956,138	$14,470,372	$18,398,044
Target PIM ($)	$899,230	$1,095,614	$1,447,037	$1,839,804
Total Costs ($)	$9,891,533	$12,051,752	$15,917,409	$20,237,848
Rate ($/kWh)	$0.00061	$0.00075	$0.00099	$0.00126

For an average residential customer consuming 600 kWh per month, the total short-term impact of this rate is 41 cents per month or $4.86 per year.

Q How will your proposal reduce utility system costs over the medium to long term?

A The incremental energy efficiency savings will help reduce utility system costs over the medium to long term by reducing the costs of generation, transmission, and distribution. As noted above in Section IV, the incremental energy savings from this additional funding is expected to create a total of $205,887,731 in net-benefits to the utility system over the life of the installed energy efficiency measures.

[58] Ex.-CW-Lane-35.

Q Please explain how this PIM is in the public interest?

A The proposed PIM would provide WEPCO Electric with an incentive to support additional energy efficiency funding, which will provide a range of benefits to customers including reduced generation, transmission, and distribution costs, reduced risk, non-energy benefits to host customers, reduced greenhouse gas emissions, and other environmental benefits. The PIM is designed to represent a small portion of the net benefits of these programs. This design ensures that, even with the PIM payments to WEPCO Electric, the majority of the benefits from the incremental investments in energy efficiency will go to customers.

IX. CONCLUSION

Q Please summarize your primary conclusions.

A Energy efficiency is an important, cost-effective, utility system resource for Wisconsin. However, due to the statutory limitations of Act 141 and the currently utility business model in Wisconsin leads to continued underinvestment in this resource. The recent Cadmus energy efficiency potential study indicates that there are significant cost-effective energy savings available that can be procured at a cost less than generating, transmitting, and distributing electricity.[59]

This proceeding provides a valuable opportunity for the Commission test a PIM mechanism to encourage investment by WEPCO Electric in additional voluntary energy efficiency.

[59] Ex.-CW-Lane-22.

For these reasons I recommend that the Commission adopt the proposed 4-year pilot PIM, authorize WEPCO Electric to provide a total of $52.8 million in additional voluntary energy efficiency funding, and require the Company to work with Focus on the allocation and tracking of the incremental funding and report out annually on achievement of energy efficiency savings according to the pilot PIM design.

Q Does this conclude your testimony?

A Yes, it does.