

Public Service Commission of Wisconsin

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Public Service Commission of Wisconsin
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September 13, 2022

To the Parties:

Re: Quadrennial Planning Process IV
Phase III Memorandum – Goals, Targets, and Key
Performance Indicators

5-FE-104

Comments Due:	Address Comments To:
Wednesday, October 4, 2022 - 1:30 p.m.	5-FE-104
This docket uses the Electronic Records Filing system (ERF).	Public Service Commission P.O. Box 7854 Madison, WI 53707-7854

The Commission memorandum concerning Quadrennial Planning Process IV, Phase III memorandum is being provided to the parties for comment. Comments must be received by **1:30 p.m. on Wednesday, October 4, 2022**. Party comments must be filed using the Commission's ERF system. The ERF system can be accessed through the Public Service Commission's web site at <http://psc.wi.gov>. Members of the public may file comments using the ERF system or may file an original in person or by mail at the Public Service Commission, 4822 Madison Yards Way, P.O. Box 7854, Madison, WI 53707-7854.

Please direct questions about this docket or requests for additional accommodations for persons with a disability to the Commission's docket coordinator, Jolene Sheil at (608) 266-7375 or Jolene.Sheil@wisconsin.gov.

Sincerely,

Kristy Nieto
Division Administrator
Division of Digital Access, Consumer and Environmental Affairs.

Attachments

KN:TK:JP:JS:kle:DL:01904705

PUBLIC SERVICE COMMISSION OF WISCONSIN

Memorandum

September 13, 2022

FOR COMMISSION AGENDA

TO: The Commission

FROM: Kristy Nieto, Administrator
Tara Kiley, Deputy Administrator
Joe Pater, Director, Office of Energy Innovation
Jolene Sheil, Portfolio Manager, Focus on Energy
Mitch Horrie, Performance Manager, Focus on Energy
Division of Digital Access, Consumer and Environmental Affairs

RE: Quadrennial Planning Process IV

5-FE-104

Phase III – Goals, Targets, and Key Performance Indicators

Suggested Minute: The Commission directed the Division of Digital Access, Consumer and Environmental Affairs to draft an Order consistent with its discussion.

The Public Service Commission of Wisconsin (Commission) oversees Wisconsin's statewide energy efficiency and renewable resource programs, known as Focus on Energy (Focus).¹ The Commission has overseen Focus since 2007. Under Wis. Stat. § 196.374(3)(b)1., the Commission is required to evaluate and set goals, priorities, and measurable targets for the Focus programs at least every four years.

I. Background

Fundamentally, the core principles to consider in setting programmatic energy savings goals are:

- The goals should be set in alignment with costs and program budgets; and

¹ Wis. Stat. § 196.374(3)(a).

- The goals should be in alignment with all other program goals and targets.

The Commission has applied different approaches in setting Focus' savings goals in past Quadrennial Planning Processes.

In Phase One of the First Quadrennial Planning Process (Quad I, 2011-2014), the Commission determined it was reasonable to set goals expressed as a percentage reduction in projected energy use, both kWh and therms. This decision was based on an assumption of a program ramp-up whereby a percentage reduction goal would increase gradually over the 2011-2014 quadrennium commensurate with an anticipated increase in the program budget yet to be approved by the Joint Committee on Finance. ([PSC REF#: 141173](#) at 16.) In June 2011, Wisconsin Act 32 repealed the Commission's request for higher program funding levels and returned funding to 1.2 percent of operating revenues beginning in 2012. In January 2012, the Commission reconsidered several of its program decisions tied to future funding level assumptions. Program savings goals were one of the decisions requiring reconsideration. In its Order of January 13, 2012, the Commission determined that Focus' savings goals should reflect annual achievement that is 10 percent higher than the savings achieved by the program in 2009. (*Ibid.*) Savings goals were expressed as actual *net* energy and demand savings to be translated into percentages to allow for direct comparison of achievement in other jurisdictions.

Goal setting for the Second Quadrennial Planning Process (2015-2018) began with defining an appropriate historical baseline level of savings followed by a determination of an appropriate increase in savings from that baseline that could reasonably be achieved in Quad II. The Commission determined it was appropriate to use the Program Administrator's *net* savings achievements during the 2011-2014 quadrennium as the baseline and that 2015-2018 savings goals should represent a 15 percent increase over that baseline. ([PSC REF#: 215245.](#))

Prior to goal setting for Quadrennial Planning Process III (2019-2022), the Commission approved a statewide energy efficiency potential study to inform planning and goal setting (*2017 Potential Study*). ([PSC REF#: 284910.](#)) The Quad III goals adopted by the Commission were based on *2017 Potential Study* outputs for the Business As Usual scenario, with a number of staff adjustments to account for factors outside of the scope of that study. Commission staff's discussion in the Quad III goals memorandum noted that Focus' funding, policies, and market conditions had not changed significantly since the study was published and, therefore, the *2017 Potential Study's* Business as Usual scenario was used as the starting point for determining appropriate Quad III savings goals. ([PSC REF#: 342858.](#))

The Quad III savings goals were reviewed and updated in 2021 to account for a number of issues including methodological errors identified as part of the goal setting process and updated (i.e., lower) avoided energy costs. ([PSC REF#: 423549.](#)) Adjusting the Quad III savings goals to account for the impact of the COVID-19 pandemic on Focus program performance was also considered. The Commission determined it was reasonable to take no immediate action to adjust Focus' fuel-specific minimum performance requirement (MPR) target accounting for the impacts of the pandemic, recognizing that the full impacts of the pandemic were not yet known and adjusting the MPR to reflect those impacts may be premature. The Commission remanded the matter to be handled as part of contract negotiations between the Statewide Energy Efficiency and Renewables Administration (SEERA) and the Program Administrator, APTIM, whereby the parties could propose an adjustment to the performance contract penalty and bonus structure for the Commission's approval at a later date. Table 1 shows the approved, revised Quad III savings goals. Through the first three years of Quad III,

APTIM had achieved 95 percent of its lifecycle kWh goal, 81 percent of its kW goal, 63 percent of its lifecycle therms goal, and 76 percent of its lifecycle MMBtu goal.

Table 1. Quad III (2019-2022) Savings Goals

Type of Savings	Gross Goals (Program Goals)	Net Goals (Commission Goals)
Electric Lifecycle Savings (kWh)*	33,909,564,245	25,432,173,184
Electric Demand Savings (kW)	360,784	270,588
Natural Gas Lifecycle Savings (therms)*	1,670,948,583	1,253,211,437
MMBtu Lifecycle Savings	282,794,224	212,095,668

*Figures are not adjusted to reflect 90 percent minimum performance requirement thresholds by fuel.

Prior to planning and goal setting for Quadrennial Planning Process IV (2023-2026) (Quad IV Planning), the Focus Evaluator performed an updated statewide potential study to inform the Commission’s goal setting for Quad IV. The scope of the *2021 Energy Efficiency Potential Study (2021 EE Potential Study)* was designed to be an update of the *2017 Potential Study*. The *2021 EE Potential Study* kicked off in May 2020 and was completed in October 2021 ([PSC REF#: 420467](#)) along with a companion study, the *2021 Rooftop Solar Potential Study*. ([PSC REF#: 421984.](#)) Results from both studies were presented to the Commission in an informational session on October 7, 2021.

On September 2, 2021, the Commission ordered that certain topics identified in docket 5-EI-158 – Roadmap to Zero Carbon Investigation, be included in the scope for Quad IV Planning. ([PSC REF#: 421399.](#)) Commission decisions related to these topics were considered in Phase I of Quad IV Planning and these decisions and priorities were carried forward in Commission staff’s analysis and development of Commission decision alternatives in Phase II.

II. Potential Study Findings

The *2021 EE Potential Study* ([PSC REF#: 420467](#)) was designed to assess the amount of statewide energy savings potential that is technically feasible, cost-effective, and available to be achieved from 2023 through 2034. The energy saving measures modeled for the study included

technologies currently offered by the program as well as cost-effective technologies and services not currently offered by Focus. The study modeled multiple different scenarios of energy saving potential, with each scenario adjusting model inputs to reflect changes in program policies and market conditions. The study's primary focus, the Current Policy scenario, assumed that Focus funding levels and policies (e.g., funding allocation policies) as of 2021 remained in place for the remainder of the study period. The study produced energy savings potential for the 2023-2026 period as well as for the full 12-year study period. Stakeholder input was key to the development of the study's modeling assumptions. In particular, the Focus Evaluator, Cadmus, gathered input from stakeholders possessing knowledge of energy efficiency markets in Wisconsin to develop adoption rates (i.e., ramp rates) for multiple measure groups modeled.

The *2021 EE Potential Study* found that, under the Current Policy scenario, Focus could achieve electric savings in 2023-2026 that were approximately nine percent greater than Focus' total achieved electric savings between 2018 and 2021 (the most recent four-year period with verified gross savings at the time of this memorandum). On the other hand, the *2021 EE Potential Study* found that, under the Current Policy scenario, Focus could only achieve natural gas savings that were 53 percent of natural gas savings achieved between 2018 and 2021.

The *2021 EE Potential Study* report indicates that lower natural gas potential is not unexpected due to changes in fuel share data inputs and lower avoided costs for natural gas. (*Ibid* at 10.) The natural gas avoided cost of energy decreased substantially compared to the 2017 study. The 25-year levelized avoided cost of natural gas decreased by 30 percent for residential customers and 35 percent for nonresidential customers. (*Ibid* at 26.) Other factors contributing to lower cost-effective natural gas potential include: an updated commercial survey

performed for the study showing less natural gas heating in commercial buildings compared to the 2017 study; and updated industrial data sources determining end-use saturations.

The *2021 EE Potential Study's* calculation of 2023-2026 Current Policy scenario savings potential was informed by the Commission's decisions in Quadrennial Planning Process III. For each of the items below, the Commission's decisions in Quad III represented a continuation of its decisions in Quad II.

- **Program priorities** – The *2021 EE Potential Study* Current Policy scenario assumed that Focus would continue to prioritize energy savings over demand savings, and resource acquisition approaches over market transformation efforts.
- **Cost-effectiveness** – The *2021 EE Potential Study* used existing cost-effectiveness tests and maintained certain inputs (e.g., \$15/ton of carbon emissions avoided) to assess the amount of “economic potential.” By definition, all Current Policy potential is economic.
- **Funding allocations** – The Current Policy scenario assumed an annual budget of \$87.3 million for energy efficiency. This amount excluded a \$5.5 million annual budget for incentives for renewable resources, consistent with the Commission's budget decisions for Quad III as well as non-program spending for evaluation and other program oversight.

III. Quadrennial Planning Process IV Determinations Impacting Savings Goals

The energy industry broadly is undergoing a time of comprehensive transition. Energy efficiency and renewables are both underlying and significantly impacted by this transition. In its Phase I decisions in Quad IV Planning, Commission staff, together with stakeholders who submitted input, provided the Commission with a broad range of priorities the Commission could

establish or reestablish for the program, each with options or scenarios as to how fully or expeditiously the Commission would wish to engage or invest in the area of emphasis. Of that broad range presented, the Commission selected certain priorities, and rejected certain priorities or decided a period of transition would be more prudent than broad implementation in Quad IV. In other areas, the Commission opted maintaining status quo. Overall, the Commission established that Quad IV would serve as a transitional period whereby the program would make measurable progress toward a greater emphasis on reducing carbon emissions, that the program would position itself to take on a larger role in promoting beneficial electrification statewide, and that Focus would work with the Department of Administration to fill potential gaps in its low-income offerings while also exploring its own community-based pilot targeting low-income customers. ([PSC REF#: 435163](#).) Also included among the Commission's Phase I decisions was a directive that the Focus Program Administrator propose key performance indicators (KPIs) for income-qualified programs for the Commission's consideration in Phase III of Quad IV Planning. These proposed KPIs will be discussed in greater detail below.

As transitional endeavors, the Phase I priorities represent shifts in current program policies and require program budget to operationalize. The Phase I staff memorandum noted that positioning the program to take on a greater role in carbon emissions reduction will require analysis of opportunities within the current portfolio of programs as well as assessments of new and emerging opportunities through coordinated research, pilot projects, and stakeholder outreach. These efforts would serve to support the Commission's priorities but would require program investments during Quad IV that are unlikely to yield energy savings and demand reductions at costs of acquisition commensurate with the historical achievements of core energy efficiency programs.

The Commission's Phase II Quad IV Planning decisions established that Focus shall set electric energy (kWh) savings and natural gas energy (therm) savings targets expressed in lifecycle savings. The electric energy and natural gas energy targets shall be combined into a single energy savings goal set in millions of British thermal units (MMBtus). The Commission's Phase II decisions also established a 90 percent minimum performance requirement (MPR) for each fuel, meaning that the Program Administrator must achieve 90 percent of the individual kWh and therm goals. Once the MPR thresholds are achieved, the remainder of the overall MMBtu savings goal can be met with either electric energy or natural gas savings. Commission staff have accounted for these Phase II decisions in the savings goals proposed in this memorandum. Additionally, consistent with past practice, staff have also developed a quadrennial electric demand (kW) reduction target for the Commission's consideration.

The Commission's decisions in Phase II gave additional guidance for operationalizing the policy priorities established in Phase I. The Phase II staff memorandum noted that operationalizing these priorities will require investments in research, analysis, and planning, and achieving measurable progress in advancing these priorities may factor into goal setting for Quad IV. Table 2 below outlines the Phase I and Phase II Quad IV Planning decisions and their relationship to goal setting.

Table 2. Quad IV Planning Decisions Impacting Savings Goals

Topic	Decision	Impact on Goal Setting
Phase I: Aligning Focus Performance Goals and Program Offerings with Decarbonization Goals	Use Quad IV as a transitional period where the program makes measurable progress toward a transition to greater emphasis on reducing carbon emissions.	Operationalizing this decision will require budget for research, analysis, and planning. Level of investment may be impacted by program savings goals since there will be competition for resources.
Phase I: Electrification Programs and Offerings	Use Quad IV as a transitional period to position the program to take on a greater role promoting beneficial electrification.	Operationalizing this decision will require budget for research, analysis, and planning. Level of investment may be impacted by program savings goals since there will be competition for resources.
Phase I: Affordability – Low-Income and Income-Qualified Programs and Offerings	Continue offering income-qualified programs and set KPIs for these offerings. Coordinate with the DOA to fill potential gaps in low-income offerings. Explore a community-based pilot(s) in one or more targeted communities.	Programs and offerings targeting hard-to-reach customers tend to have higher cost of acquisition due to higher administrative and outreach costs.
Phase II: New Initiatives or Policy Changes	<ul style="list-style-type: none"> • Research strategies to achieve greater demand reductions.[‡] • Investigate integrating time-varying value of energy efficiency and renewable resources.[‡] • Define winter electric peak; begin quantifying and tracking program impacts.* • Define winter natural gas peak; begin quantifying and tracking program impacts.* • Investigate peak natural gas avoided costs.* • Assess market transformation potential.* • Develop a benefits adder for offerings targeting low-income customers.* • Investigate alternatives for calculating avoided T&D.* • Develop an updated market-based carbon value.* • Perform an analysis to identify underserved customers and develop KPIs for the Commission’s consideration.[‡] • Develop KPIs targeting incentive spending proportional to rural customers in designated zip codes.[‡] • Increase the annual EERD budget from \$100,000 to \$200,000. 	<p>Operationalizing new initiatives requires administrative budget that could otherwise be used for resource acquisition, or may result in savings at higher than average cost of acquisition. The program will need to balance making progress to align with the Commission’s policy priorities for new initiatives and achievement of savings.</p> <p>Total program investment required to serve the new initiatives or to accommodate changes in policy is not precisely known. Individual new initiatives may not materially impact the quad savings goal. There may be a material impact to the quad savings goal when new initiatives are considered in their totality.</p>

[‡] The Commission directed staff to return to the Commission with recommendations on appropriate budget and timing for additional research.

* Program costs will primarily be accounted for in the Program Evaluator contract budget. Additional administrative costs from other parties are also anticipated.

[‡] Costs primarily accounted for in the Quad IV Program Administrator contract budget. Additional administrative costs from other parties are also anticipated.

IV. Key Performance Indicators for Income-Qualified Programs

In Phase I, the Commission directed the Focus Program Administrator to develop KPIs for income-qualified programs for the Commission’s consideration in Phase III of Quad IV Planning. The Phase I memo reviewed various equity measurement frameworks which can be used to develop KPIs. These can include a mix of quantitative goals and qualitative approaches depending on priorities, and can be grouped into categories, such as:² Participation, Accessibility, Impact, Community Engagement, and Capacity. ([PSC REF#: 432286](#) at 98.)

The Phase I memorandum included a detailed history of Focus Income – Qualified programs as well as the current Focus Income-Qualified Programs and incentive expenditures for 2021. ([PSC REF#: 432286](#) at 88.) Customers are considered income-qualified when they earn at least 60 and up to 80 percent of the State Median Income. Incentive expenditures for the Tier 2 and other Income-Qualified Programs under Direct to Customer Solutions³ represented 14 percent of total incentive expenditures in the Residential Portfolio (core efficiency programs, rural, and renewables). The breakdown by program is shown in Table 3 below.

Table 3. 2021 Total Residential Incentives and Income-Qualified Incentives by Program

Program	Total Incentive Expenditures	Income-Qualified Incentive Expenditures	% of Total
Trade Ally Solutions – Tier 2	\$6,243,874	\$870,300	14%
Direct to Customer	\$10,858,758	\$2,144,696	20%
Other Residential Incentives ⁺	\$3,894,191	-	-
Total Residential Portfolio	\$20,996,823	\$3,014,996	14%

⁺Includes other core efficiency programs, rural, and renewables incentive expenditures

² Categories provided by Encolor, a DEI consulting firm, via the Program Administrator.

³ Direct to Customer programs include LEDs distributed by Food Banks and the LEDs sold in dollar discount and thrift stores.

It is important to note that 14 percent is a low-end estimate of income-qualified and low-income customers served by Focus. This is because the numbers do not account for participation by income-qualified or low-income customers that ordered a free energy pack from Focus, purchased products from the Focus Online Marketplace, or purchased LEDs from participating retailers. These programs do not ask for income information, therefore there is no precise way to estimate participation by income-qualified or low-income customers.

In 2022, Focus is offering the same Tier 2 and Income-Qualified programs and is also offering a new pilot program - the Affordable Housing Solar PV Pilot,⁴ with an original budget of \$797,628 and an additional \$200,000 which was added from 2021 carryover dollars. ([PSC REF#: 442173.](#)) Also, the Program Administrator used 2021 carryover dollars to increase the budget for Tier 2 measures by \$255,000 and increased incentives accordingly. ([PSC REF#: 442173.](#))

Commission Alternatives – Key Performance Indicators for Income-Qualified Programs

Should the Commission determine that a KPI based on increased participation and improved accessibility to program offerings is appropriate, it could choose Alternative One. Alternative One would set a KPI to increase the number of applications received by the Tier 2 Income-Qualified Programs by six percent by 2024 over an average baseline from Quad III. This alternative is appropriate should the Commission want to start down the path of increasing the number of applications, but recognizes that not all applications lead to completed projects and distributed incentive payments. For example, the Program Administrator reported that while the Tier 2 program averages 1,600 qualified applications annually, only about 1,300 incentive

⁴ APTIM began planning for this pilot during the fourth quarter for 2021. Focus is working with organizations such as: Habitat for Humanity, Urban League and Housing Authorities to add solar to new homes constructed for income-qualified residents. It is expected that 60-80 projects will be completed in 2022.

payments are paid to customers. The Program Administrator sees an opportunity to increase the number of applications for current Income-Qualified offerings by implementing a streamlined application process using publicly available data. The Program Administrator and Implementer are currently exploring development of a tool to identify Income-Qualified utility customer clusters using new, simplified qualification pathways versus the current standard qualification path of requiring customer-submitted income information.⁵ The new process is expected to reduce customer barriers to applying as well as shorten the approval timeline, resulting in more customers applying to the program and receiving incentives for heating and cooling equipment, air sealing, and insulation. The Program Administrator will use the first quarter of 2023 to test the new tool, with a launch date in quarter two. Therefore, the KPI timeframe will be 1.75 years rather than two full years.

In addition to the new qualification tool, the Program Administrator has invested in expanding local partnerships by hiring a Focus Local Government Liaison. The Focus Liaison will work with local governments to provide Focus program information and identify customers that may qualify for Focus programs but do not know they exist or where to begin. This process is also expected to help the Focus program identify better ways to reach these customers. In turn, the local governments could identify potential customers, including income-qualified customers, and send them to the Focus program.

Prior to the Liaison position being created, Focus had some initial success increasing program participation by working with local governments such as the City of La Crosse. La

⁵ The Program Administrator is currently looking to use the U.S. Department of Energy's Justice40 data. This data defines whether an area is considered disadvantaged at the census tract level, which is the smallest geographic unit for which publicly available and nationally consistent datasets can be consistently displayed on the Justice40 mapping tool. Many states and energy efficiency programs are using Justice40 language and data within their own policies. However, other tools are being discussed and evaluated for use in Wisconsin.

Crosse received a grant from the Mayor’s Challenge that resulted in an increase in the number of projects completed in an area of the city that traditionally had lower participation. Again, with the new dedicated Focus Liaison position, Focus could identify and support larger initiatives and partnerships with local governments and community groups by leveraging grants and other external funding sources. This could then increase accessibility to the Focus program and result in more applications being submitted. Finally, the Program Administrator could work more closely with utilities to identify income-qualified customers, especially those that reside in multi-unit buildings, or attached single-family row/townhouses.

Alternative One proposes a KPI for the first year-and-three quarters years of the quadrennium because as the Phase I memorandum mentioned, measurable progress can take time and it may not happen within the program cycle in which success is typically determined. ([PSC REF#: 432286](#) at 100.) Also, it is important to give the implementers flexibility to add and remove leading indicators based on data collected in the field. As more is learned about the wants and needs of the customers being served, metrics can be adjusted to better serve them. Flexibility also helps the programs to more systematically focus on what really drives change instead of measuring outputs that have little value to long term success.⁶

Alternative Two would be to increase the number of applications received by the Tier 2 Income-Qualified Programs by a different percentage (other than 6 percent) by 2024 over an average baseline from Quad III based on its discussion.

Alternative Three is appropriate should the Commission want to set a KPI based on spending levels or incentives received. While this type of KPI is often referred to as an impact

⁶ Parker, Q., Blackwell, J. (2021). *Building Equity into your Program Design*. Association of Energy Services Professionals. <https://www.aesp.org/page/AESPTTraining>

KPI, it is perhaps not a true impact KPI because that category typically assesses whether the impacts of the program are equitable by analyzing the share of impacts for a targeted group compared to the share of impacts for the total program-eligible population. As stated before, the program does not have data on what the total Income-Qualified population is in Wisconsin. But the KPI based on impact does set a savings or spending target. Therefore, Alternative Three would set a KPI to increase the Income-Qualified spending to at least 16 percent of annual residential portfolio incentives by 2024. In 2021, Focus spent 14 percent of its residential portfolio budget serving Income-Qualified customers through targeted initiatives including Tier 2 programming (higher insulation; air sealing; and heating and cooling incentives) and Food Bank initiatives.

This spending KPI could result in two different outcomes given that budgets are limited. First, it could result in getting incentives to more individual Income-Qualified customers, assuming that the new approach for qualifying customers described under Alternative One is successful in bringing in more applicants. The second outcome could be that incentive amounts are increased to cover the increasing cost of equipment due to inflation and supply chain challenges. For example, Focus is currently covering roughly 10 percent of current HVAC measure costs for Income-Qualified participants. Trade Allies have reported that program incentives covering 50 percent or more of measure costs are most conducive to moving an Income-Qualified program participant to install new HVAC equipment. In the end, the Program Administrator may have to find a balance between the two approaches, or use the first year-and-three quarters to see if one approach has a greater impact than the other.

Finally, looking beyond spending for Tier 2 measures, the Program Administrator mentioned that a spending KPI could also lead to updating the energy efficiency packs to

include a wider assortment of energy saving measures. Alternative Four would be appropriate should the Commission want to set a KPI to increase the Income-Qualified spending to a different percentage of annual residential portfolio incentives by 2024 based on the Commission's discussion.

Alternative One: Set the KPI to increase the number of applications received by the Tier II Income-Qualified program by six percent by 2024 over an average baseline from Quad III. The Program Administrator would use the first quarter of 2023 to test the new qualification tool.

Alternative Two: Set the KPI to increase the number of applications received by the Tier II Income-Qualified program by a different percentage by 2024 over an average baseline from Quad III based on the Commission's discussion.

Alternative Three: Set the KPI to increase the Income-Qualified spending to at least 16 percent of annual residential portfolio incentives by 2024.

Alternative Four: Set a KPI to increase the Income-Qualified spending to a different percentage of annual residential portfolio incentives by 2024 based on the Commission's discussion.

V. Rural Spending Key Performance Indicator

In its Phase II decisions, the Commission determined that Focus shall develop KPIs to target a percentage of incentive spend proportional to the percentage of rural customers in designated zip codes. The history of rural programs was reviewed in detail in the Phase II memo. ([PSC REF#: 442095](#) at 118.) Rural was defined as customers living in zip codes of the state that were defined primarily as rural by the Census Bureau (using the 2010 Census), and those customers eligible to receive benefits under the federal broadband Connect America Fund

II (CAF-II) and the Alternative Connect America Cost Model (ACAM) programs.⁷ ([PSC REF#: 295733.](#))

When the Commission decided to continue a rural Focus program during Quad III planning, rural customers continued to be defined as all agricultural or customer sites in the 582 zip codes defined as eligible for the 2017-18 Rural Broadband Programs. Based on the Census Bureau definition and the corresponding program assignment of rural or non-rural by zip code, it was found that 36 percent of the state's population live in the state's 582 rural-eligible zip codes. Data presented in Table 4 below summarizes Focus' incentive spending in rural zip codes since 2015. These data show two different splits, the first with all spending for residential and business programs including upstream (i.e., retail store) lighting incentives and the second showing only residential programs, again with upstream lighting incentives included.⁸

As provided in the Phase II memorandum, the data presented in Table 4 show that incentives received by customers in rural zip codes have been maintained in proportion to rural population size (35 percent in the All Spending category and 36 percent in the Residential Only category). The Commission found it would be reasonable to continue to maintain this proportionate spend, and set a KPI at a percentage equivalent to rural population.

⁷ To document the level of service, Commission staff collected address data for all Focus participants in 2014 and 2015, mapped those addresses to census blocks, and compared Focus participation in census blocks served by CAF-II and ACAM to 8 census blocks elsewhere in the state. The analysis focused on participation in Focus programs for single-family residential homes, in part because comparing participation in Focus business programs can be heavily affected by the location of a limited number of large energy customers who receive large incentives. Census blocks identified as served by nonparticipating cooperatives, which encompass about 7 percent of total statewide population, were excluded from the analysis.

⁸ Focus' upstream lighting program offers retail markdowns for efficient lighting products. While purchase location is known, the program does not collect data on the installation location of the products incentivized through the program. Focus has developed an algorithm to assign these savings to a location based on the purchase location, however, there is uncertainty as to the precise location of product installation.

Table 4: Rural & Non-Rural Incentives Per Capita Comparison Between 2015 - 2021

Year	All Spending			Residential Spending (Core & Rural)		
	Per Capita			Per Capita		
	Rural	Non-Rural	% Spend Rural	Rural	Non-Rural	% Spend Rural
2015	\$10.05	\$11.51	33%	\$2.40	\$4.75	22%
2016	\$7.87	\$12.41	26%	\$2.28	\$4.71	23%
2017	\$8.17	\$10.74	30%	\$2.30	\$4.50	22%
2018	\$14.06	\$12.34	39%	\$6.49	\$4.74	44%
2019	\$11.38	\$11.78	35%	\$3.19	\$3.72	33%
2020	\$8.91	\$10.39	33%	\$3.53	\$3.98	34%
2021	\$7.94	\$9.68	32%	\$2.95	\$3.45	33%
Avg. Pre-Rural Emphasis	\$8.70	\$11.58	30%	\$2.33	\$4.49	22%
Avg. Post-Rural Emphasis	\$10.57	\$11.05	35%	\$4.04	\$3.97	36%

The Program Administrator updated the analysis used to identify rural customers using 2020 Census data.⁹ The 2020 Census data presents a slight decline in the rural population since the 2010 census. The total population of Wisconsin was 5,893,718, with 1,826,655 or 31 percent of Wisconsin residents residing within the rural zip codes. As mentioned above, this figure was 36 percent for Quad III using 2010 census data.

Commission Alternatives – Key Performance Indicator for Rural Spending

Alternative One aligns with the Commission’s Phase II decision to set a KPI target at 31 percent of incentive spend which is proportional to the 31 percent of rural customers in the designated zip codes based on 2020 Census data. This alternative sets this percentage for 2023 and 2024, similar to the timeframe suggested for the Income-Qualified KPIs. This timeframe would allow for the Commission to make adjustments to the KPIs pending the outcome of the Program Administrator’s analysis on underserved markets, emphasizing energy burden and small businesses. Alternative Two also sets a KPI to target 31 percent of incentive spend which is

⁹ 2020 Census data zip code tabulation area (ZCTA) has not been released at this time. In order to apply 2020 census data for this analysis, the Program Administrator downloaded 2020 Census data at another level and used available crosswalk guidance to map data from another geography to ZCTA.

proportional to the 31 percent of rural customers in the designated zip codes, but sets it for the entire quadrennium. This alternative would ensure that at a minimum, those in the rural zip codes receive incentives in proportion to their population regardless of any decisions that would be made based on the Program Administrator's analysis of underserved markets. Alternative Three would be to set the spending KPI at some other percentage based on the Commission's discussion.

Alternative One: Set a KPI to target 31 percent of incentive spend which is proportional to the 31 percent of rural customers in the designated zip codes for 2023 and 2024.

Alternative Two: Set a KPI to target 31 percent of incentive spend which is proportional to the 31 percent of rural customers in the designated zip codes for the four years of Quad IV.

Alternative Three: Set a different KPI based on the Commission's discussion.

VI. Development of Energy Savings Goals

The Phase I and Phase II staff memoranda and the preceding section of this memorandum discuss funding, policy, and market conditions that have changed since the beginning of Quad III that have direct implications on Focus' savings goals. The *2021 EE Potential Study* included multiple scenarios that modeled the impacts of certain policy or market conditions in isolation. The study was performed well in advance of the Commission's policy decisions for Quad IV and prior to the Commission ordering certain topics stemming from the Roadmap to Zero Carbon docket be included in the scope of Quad IV Planning. Thus, no modeling scenario output is fully representative of today's market conditions and the Commission's decisions and priorities from Phase I and Phase II.

The *2021 EE Potential Study* modeling outputs, factored with historical program data, can serve to reasonably guide staff's proposed Quad IV goals. Certain Commission priorities

have changed since the study was scoped, performed, and completed that impact the ability to translate results into Quad IV energy and demand savings goals. Commission staff are cognizant that a program and industry in transition, coupled with lingering impacts of a global pandemic add uncertainty to goal setting that the Commission may want to consider. To that end, staff offer the Commission a decision alternative that would formalize a mid-Quad review of goals and measurable performance targets later in this memorandum.

Commission staff, in consultation with the Program Administrator, have reviewed the results of the *2021 EE Potential Study* and considered the Commission's decisions in prior phases of Quad IV Planning to arrive at proposed Quad IV savings targets. Similar to the approach used in setting goals for Quad III, Commission staff began with the output of the core potential study scenario and made adjustments to derive final proposed goals. These adjustments are discussed below.

Custom Industrial Process Measures Adjustments

Natural gas savings were increased to account for savings associated with customized projects improving the efficiency of industrial processes. The *2021 EE Potential Study* report notes that “it is difficult to characterize highly customized measures that may be designed specifically for a single project or customer facility.” It goes on to state that the study, “does not capture all potential from industrial facility ‘custom process’ measures specific to individual manufacturing processes or facility designs. Given that Focus has historically achieved substantial savings from industrial custom process projects, potential presented here may not fully reflect total program potential in that sector.” ([PSC REF#: 420467](#) at 22.) The Program Evaluator advised that upward adjustments to study results for custom industrial process measures were appropriate in setting natural gas savings goals due to particular model calibration

complexities encountered. The Program Evaluator indicated that similar adjustments to electric energy savings were less necessary due to improvements to data collection and modeling advancements compared to the prior study. Staff, in consultation with the Program Administrator, used historic custom industrial process project budgets and savings to inform the adjustment.

Budget Adjustments

A number of adjustments were made to account for certain budget allocation considerations both as part of modeling for the *2021 EE Potential Study* and to reflect program operations in practice.

Cadmus applied budget allocation assumptions by fuel type to the *2021 EE Potential Study* model. These assumptions determined the amount of annual funding available within the model to attain natural gas and electric savings. While there are no statutory requirements that a particular portion of annual funding go toward programs saving natural gas or electricity, this approach was intended to model the requirement in Wis. Stat. § 196.374(5m) to ensure the opportunity for grants and benefits under energy efficiency programs are equal to the amount that is recovered from each customer class. The baseline assumption allocated 20 percent of budget to natural gas savings and 80 percent to electric savings. This assumption was based on a combination of historical Focus funding analysis and Commission staff assumptions when reporting program expenditures for various industry tracking initiatives such as the American Council for an Energy Efficient Economy's (ACEEE's) state scorecard. Historical utility contributions from natural gas customers vary year-to-year and have averaged just under 23 percent of the total annual contributions in Quad III. In practice, Focus does not track expenditures specifically devoted to saving natural gas or electricity. Some project offerings,

such as insulation and air sealing and other building shell improvements, save both electricity and natural gas. Thus, the precise amount of budget devoted to saving natural gas is difficult to track and is not unequivocally known.

The *2021 EE Potential Study* found that savings potential for natural gas was highly sensitive to the amount of funding modeled. The results of the study's increased funding scenarios concluded that, "the incremental increase in funding from +50% to +100% results in a proportionally similar increase in estimated [therm] savings potential compared to the funding increase from current policy to +50%." (*Ibid* at 7.) This differed from the results for electric energy savings potential, which showed that increases in electric savings potential were readily available while not similarly proportional to increases in funding. The study found that there was significant cost-effective natural gas savings potential, particularly in the residential sector, and that when funding within the model became available, more of these measures were able to be included in the estimated potential.

Commission staff have determined that an upward adjustment to the study's output for therm savings potential is reasonable and have made that adjustment as part of its proposed Quad IV savings goals. Staff's adjustment is a simple replacement of budget allocated for electric savings being replaced with budget to achieve natural gas savings at levels in line with observed program contributions from utility customers. This adjustment was made to reflect the fact that there is uncertainty with respect to actual program dollars devoted to natural gas savings, the high degree of sensitivity of natural gas savings potential to model funding allocation assumptions, and the uncertainty of future prices of natural gas.

A second adjustment was made to account for known carryover budget. Dollars carried over from Quad III into Quad IV will be available to spend on programs and offerings and thus

should be accounted for in goal setting. In its order of July 7, 2022, the Commission approved the carryover of \$5.5 million of 2021 budget into the 2023 program year. ([PSC REF#: 442173.](#)) These funds were approved for the Large Industrial, Business, and new Small Business program areas. Staff adjusted the savings goal accounting for the dollars allocated for the Business and Small Business program areas based on historical cost of acquisition data for similar programs.

The savings goal was not adjusted to account for the \$2 million in approved funding for the Large Industrial program at this time. Program Administrator staff have identified potential projects currently under review that, if approved, would be completed in Quad IV and paid for with the 2021 carryover funding. The magnitude of savings associated with projects pending approval would have a material impact on the overall Quad IV term savings potential that staff propose should be accounted for in goal setting. However, given that the status is uncertain, Commission staff suggest addressing the impact of the Large Industrial program carryover on Quad IV savings goals at a later date.

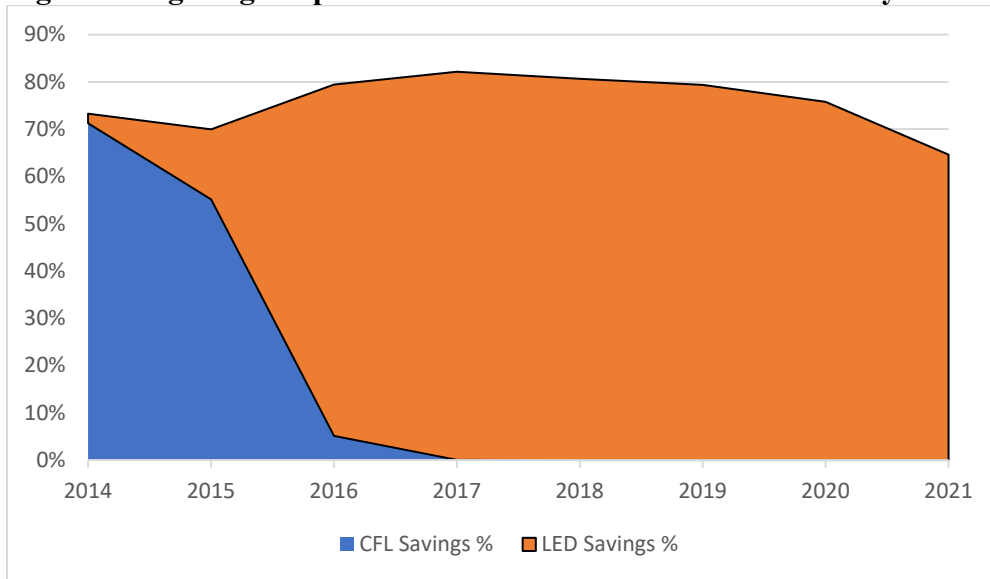
The Commission will approve the allocation of 2022 carryover dollars in the first half of 2023. The process to approve carryover of Focus funding from Quad II to Quad III (i.e., from the 2018 program year to the 2019 program year) included Commission alternatives to adjust the Quad III savings goals to account for the carryover funding. ([PSC REF#: 368257.](#)) Staff anticipate a similar approach be used in Quad IV. That is, Commission staff will come to the Commission for approval of 2022 carryover funds in the first half of 2023, at which point the status of the Large Industrial project in question will be known. In its memorandum to the Commission, staff will present options for the Commission to adjust the Quad IV savings goal to account for both the 2021 carryover for the Large Industrial program as well as any adjustments

accounting for unspent funds from the 2022 budget that could be used to achieve energy savings in Quad IV.

LED Lighting Adjustments

Lighting measures have represented a significant portion of historical program savings. Beginning in 2016, light emitting diode (LED) lighting overtook compact fluorescent lighting (CFL) to become the dominant lighting technology offered by Focus. Since 2016, lighting measures portfolio-wide have accounted for 59 percent of all verified gross lifecycle electric savings and 59 percent of all verified kW savings. The significance of lighting measures within the residential customer segment is even more pronounced. Since 2016, lighting measures in residential programs (single family and multifamily) have accounted for 78 percent of all verified gross lifecycle electric savings and 71 percent of all verified kW savings.

Figure 1. Lighting Proportion of Total Residential Electric Lifecycle Savings



The *2021 EE Potential Study* was performed over the 2020-2021 period. At that time, and for a prolonged period prior, the fate of the 2007 Energy Independence and Security Act

(EISA) rulemaking procedures to establish new, and more stringent efficiency standards for most lightbulbs on the market was unknown due to a series of events spanning multiple presidential terms.

EISA required the Secretary of the DOE to publish a final rule amending the minimum efficiency standards for general service lamps (GSLs) by January 1, 2017. In the event this rulemaking was not complete, Congress established a “backstop” provision of EISA requiring the Secretary of the DOE to prohibit the sale of any GSL that does not meet a minimum efficiency standard of 45 lumens per watt, effective January 1, 2020. In effect, this EISA backstop provision would all but ensure an overall market transition to LED light bulbs because it was generally understood that many incandescent bulbs could not meet the 45 lumens per watt standard and that CFL lamps were unlikely to occupy a significant proportion of the overall market share.¹⁰

In early 2017, the Obama Administration revised the definition of GSLs and general service incandescent lamps (GSILs) in advance of the effective date of the EISA backstop. In September 2019, the Trump Administration rescinded the Obama Administration’s definitions and prevented the EISA backstop from taking effect on January 1, 2020. In August 2021, the Biden Administration reinstated the Obama Administration’s definitions and in December 2021 proposed to impose the EISA 45 lumen per watt backstop. The DOE issued a final rule on May 9, 2022, codifying the EISA backstop.¹¹ The DOE intends to apply a gradual enforcement

¹⁰ Technological advancements have made LEDs a preferred option over CFLs for consumers over time. The market share of CFL bulbs in the U.S. has all but disappeared over the last six years. In 2015, CFLs accounted for 24 percent of the U.S. lighting market while LEDs accounted for 19 percent. In 2021, CFL market share was less than one percent nationally, while LEDs accounted for 76 percent of the U.S. market. For additional information on lighting market shares, see the Focus CY 2021 Evaluation Report, Volume III, Appendix G: https://focusonenergy.com/sites/default/files/inline-files/WI_Focus_on_Energy_CY_2021_Volume_III.pdf.

¹¹ 10 C.F.R. § 430 (2022). <https://www.govinfo.gov/content/pkg/FR-2022-05-09/pdf/2022-09480.pdf>.

of the rule to account for lead time necessary to phase out the sale of less efficient light bulbs. Full enforcement will begin in July 2023.

The Phase II staff memorandum discussed the efforts of Focus to accelerate the adoption of LED lighting in Wisconsin. ([PSC REF#: 442095](#) at 46-48.) As the market share of LEDs in Wisconsin has increased, the Focus Evaluator has determined that the savings per bulb that can be claimed by Focus has decreased significantly because the baseline bulb against which savings are claimed is becoming more efficient and Focus programs have less influence on consumers' choice to purchase efficient bulbs. In other words, as LEDs achieve greater market share, claimable savings decrease.

The *2021 EE Potential Study* baseline scenario assumed full market saturation of screw-base LEDs for residential and commercial customers by 2027 with delayed saturation for specialty lamps and for the income-qualified segment. This approach is based on information on market penetration of LEDs and TRM savings guidelines for LEDs at the time the study was conducted. The study's results showed that, even with full market saturation by 2027, lighting comprised 23 percent of the total 4-year electric lifecycle savings potential.

The *2021 EE Potential Study* modeled two scenarios of accelerated compliance with the EISA backstop. Scenario 1 (EISA 1) accelerates EISA backstop compliance for residential and commercial screw-base and specialty LEDs to 2025. Scenario 2 (EISA 2) accelerates EISA backstop compliance for residential and commercial screw-base and specialty LEDs to 2024. The DOE's May 9, 2022 ruling establishing full enforcement by July 1, 2023 is more accelerated than either of the two potential study scenarios.

Commission staff's goal setting adjustment to the *2021 EE Potential Study* output to account for the DOE's EISA backstop rule required an examination of all measures impacted by

the EISA scenarios. Staff adjusted the baseline Current Policy scenario to remove the savings potential for those measures impacted by EISA at a cost of acquisition aligned with recent lighting program activities and replace it with savings achievable at the corresponding budget, but at a higher cost of acquisition consistent with recent program cost of acquisition levels.

Adjustments Accounting for New Program Initiatives

Table 2 above outlines the new program and policy initiatives directed by the Commission during Phase I and Phase II of Quad IV Planning. Commission staff have made minor adjustments to the overall kWh and therm savings goals to account for the fact that these efforts are likely to impact the program's ability to achieve low-cost energy savings with fewer dollars. Additionally, the Commission's decision in Phase II of Quad IV Planning directing Focus to identify ways to adapt the program to achieve long-term market effects and develop strategies to support that direction will mean that certain program resources that would otherwise support achieving near-term savings will be directed toward positioning the program for long-term market transformation. The staff adjustment reduces the energy savings goal, after accounting for the adjustments above by two percent.

Savings from Renewable Energy Resources

Savings from renewable energy resources were outside of the scope of the *2021 EE Potential Study*. The Quad III renewable budget of \$5.5 million annually was excluded from the study's modeling inputs and renewable energy measures were not included among the measures modeled for the study. A separate study of rooftop solar PV potential was conducted ahead of Quad IV Planning to estimate the overall market potential for commercial and residential rooftop solar systems statewide. ([PSC REF#: 421984.](#))

The Commission's decisions in Phase II of Quad IV Planning directed Focus to set a quadrennium budget of \$22 million for renewable resource project incentives. Therefore, the total amount of budget available for renewable resource incentives did not change from Quad III to Quad IV. Consequently, the possibility that Focus will be able to influence accelerated market adoption of rooftop solar PV and achieve energy savings and demand reductions above and beyond those historically observed appears unlikely. Program Administrator staff also point out that efforts to expand solar PV offerings to the affordable housing market and tribal communities are likely to result in a higher cost of acquisition for renewables in Quad IV. Commission staff account for the Commission's Quad IV renewables budget decision in developing the proposed Quad IV savings goals. Electric energy and demand savings were added to the savings goals to account for the Quad IV renewables budget at a cost of acquisition aligned with historic levels. Staff did not adjust natural gas savings from renewables, as program data does not warrant an adjustment need.

Demand Reduction Goal

Discussions from staff memoranda in prior phases of Quad IV Planning have underscored the fact that historically, Focus has placed a greater emphasis on achieving energy savings compared to demand savings. Consequently, while demand savings are tracked by the program, they have historically been a secondary priority both in terms of savings achievements and in terms of detailed accounting of measure level demand reduction impacts. Certain measures accounted for in the *2021 EE Potential Study* show particularly high potential for cost-effective demand reduction, but are not currently offered by Focus and do not appear to be appropriate measures to emphasize considering the Commission's direction to emphasize energy savings in

Quad IV.¹² Research directed by the Commission to be performed in Quad IV may contribute insights into program strategies to better achieve cost-effective reductions in demand.

In practice, as a secondary priority, demand savings are achieved through program activities that typically target low-cost energy savings. Incentive amounts are set to reflect the program's emphasis on achieving energy savings. To reflect this reality, the proposed kW goal is derived based on historical program achievements. That is, staff assume that since energy savings continue to be the primary emphasis of the program, the ratio of demand savings to energy savings is likely to persist and the kW goal is calculated assuming the historical ratio is maintained.

Summary of Adjustments

Table 5 below summarizes staff's adjustments to the savings goals discussed in this section.

¹² For example, Direct Energy Feedback – Residential – HVAC Schedule Setback was shown to have considerable opportunity for demand reduction. However, program potential for this measure is currently limited. Realizing savings may require deployment of in-home monitoring devices, development of messaging, and measurement and evaluation of impacts to ensure the savings potential is realized.

Table 5. Summary of Savings Goal Adjustments

Adjustment	Description of Impact
Begin with Potential Study Current Policy scenario output	
Account for budget sensitivity to natural gas savings potential	-Decrease kWh savings target -Decrease kW savings target -Increase therm savings target
Account for custom industrial process savings	-No change to kWh savings target -No change to kW savings target -Increase natural gas savings target
Account for compliance with Federal lighting efficiency standards	-Decrease kWh savings target -Decrease kW savings target -No change to therm savings target
Account for Quad IV Renewables budget	-Increase kWh savings target -Increase kW savings target -No change to therm savings target
Account for known approved carryover budget allocated to Quad IV	-Increase kWh savings target -Increase kW savings target -Increase therm savings target
Account for program investment in new initiatives	-Decrease kWh savings target -Decrease kW savings target -Decrease therm savings target

VII. Final Savings Goals

Quad IV Gross Savings Goals

Table 6 shows Commission staff’s final proposed 2023-2026 Focus *gross* savings goals. These goals are the result of the *2021 EE Potential Study* and the aforementioned adjustments. The final proposed figures represent a slight decrease in the kWh, and kW goals, and a significant decrease in the therm goal compared to the current 2019-2022 quadrennium. Historically, the Commission has also set net savings goals. Staff present a discussion of net savings and decision alternatives for the Commission in determining a Quad IV net savings goal in the section below.

Table 6. Proposed Focus on Energy Gross Savings Goal, 2023-2026

Type of Savings	Gross Lifecycle Savings Goal
Overall MMBtu Goal	185,692,431
Electric Savings Goal (kWh)	31,676,270,000*
Natural Gas Savings Goal (therms)	776,085,000*
Electric Demand Goal (kW)	293,900

*Figures are not adjusted to reflect 90 percent minimum performance requirement thresholds by fuel.

Commission Alternatives – Focus on Energy Savings Goals

With the decision alternatives below, the Commission can approve, approve with modifications, or reject the Quad IV savings goals proposed in Table 6. If the Commission were to reject the goals proposed in Table 6, the Commission may want to provide guidance to staff as to the appropriate approach to arriving at a quadrennial savings goal.

Alternative One: Approve the proposed Focus on Energy gross savings goal in Table 6.

Alternative Two: Modify the proposed Focus on Energy gross savings goal in Table 6 consistent with the Commission’s discussion.

Alternative Three: Reject the proposed Focus on Energy gross savings goal in Table 6 and direct Commission staff to conduct further analysis on appropriate goals consistent with the Commission’s discussion.

VIII. Net Savings Goal

Among the duties of the Focus third-party independent evaluator is to determine program attribution of net savings. Wisconsin Admin. Code § PSC 137.01(1)(a) and Wis. Admin. Code § PSC 137.01(1)(b) define “Attribution” for the purposes of the statewide program as:

(a) The amount of energy savings or renewable resource energy production that a program participant would have achieved even in the absence of the energy efficiency or renewable resource program and,

(b) The amount of energy savings or renewable resource energy production that is directly attributable to the influence of the energy efficiency or renewable resource program but is not included in the program.

Adjusting program savings for attribution takes both of these factors into account.

Net savings is also used to measure cost-effectiveness. Wisconsin Admin. Code § PSC 137.05(12) requires the Program Administrator to deliver programs that pass a portfolio level test of net cost-effectiveness. Wisconsin Admin. Code § PSC 137.01(7) defines “net cost-effectiveness” as, *the extent to which an energy efficiency program or a renewable resource program is cost-effective, after being adjusted for attribution.*

The Focus Evaluator assesses net savings using two primary approaches: customer self-report surveying and standard market practice (SMP). Customer self-report surveys rely on program participants responding to a set of hypothetical questions about actions they would have taken in the absence of the program. By contrast, SMP is a data-driven process that uses market data to determine the baseline efficiency of equipment available to the customer in the marketplace to understand what a customer would have installed in absence of the program.

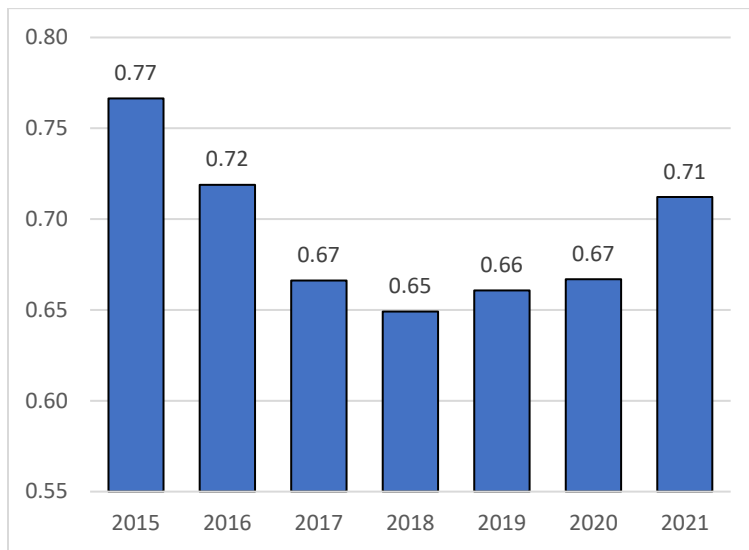
Critiques of the customer self-report approach claim there can be bias among survey respondents as to their stated motivations for completing a project or that if surveying occurs too long after participation, the customer may not fully recall their motivations and what actions they would have taken in absence of the program. SMP analyses are a more robust approach but can require significant time and data to perform. They often require purchasing proprietary market sales data, and data accessibility and consistency can vary over time. The Focus Evaluator currently uses both approaches in its assessment of the program’s net savings, and both approaches are accepted by commissions in several states. The EWG has historically indicated a

preference for an SMP approach to assessing net savings; however, data and budget considerations have limited its application in practice.

Program-level net-to-gross (NTG) ratios are reported by the Focus Evaluator in its Annual Evaluation Reports.¹³ The figure below shows the annual portfolio level NTG ratios since the beginning of Quad II.

Through the first three years of Quad III, the portfolio has achieved an NTG ratio of 0.68. The Quad III net lifecycle savings goal adopted by the Commission assumes an NTG of 0.75. The Commission staff memorandum seeking approval of Quad III goals acknowledged this ratio as a slight increase from NTG ratios achieved in Quad II. ([PSC REF#: 342858](#) at 7.)

Figure 2. Focus Actual Net-to-Gross Ratios, 2015-2021



The Focus Evaluator has assessed the program’s market effects, a form of net savings quantifying a program’s impacts on the broader market for energy efficient technologies, since Quad II. Market effects attributable to Focus during Quad II were cumulatively applied and the end of the quadrennial period for reporting purposes and are accounted for in the figure

¹³ <https://www.focusonenergy.com/evaluation-reports>

above.^{14,15} Quantifiable net savings from market effects will similarly be applied at the end of 2019-2022 quadrennium. Accounting for these additional net savings improves the portfolio NTG ratio. For Quad II, the Focus Evaluator quantified nearly 6.6 million MMBtu of additional net lifecycle savings from retail LED market effects. These net savings alone raised the Quad II portfolio NTG from 0.68 to 0.70.

Net Savings in the Focus Performance Contract

During Quad II of Focus, the Program Administrator performance contract with SEERA required achievement of the Commission's net savings goals in order for the Program Administrator to be eligible for monetary bonuses. ([PSC REF#: 226701](#).) Specifically, the performance bonus mechanism within the Quad II contract had two steps to determine eligibility for a performance bonus. First, the Focus Evaluator needed to determine that the MPRs for *gross* lifecycle kWh and therm savings had been met. Second, if both MPRs were met, the Focus Evaluator would determine whether Focus had met the Commission's goals for *net* first-year savings. (*Ibid* at 64.) If both of these targets were achieved, the Program Administrator was eligible for the performance bonus.

The Quad III Focus performance contract does not contain any bonus provisions related to achievement of net energy savings. ([PSC REF#: 355902](#).) In other words, under the current performance contract between APTIM and SEERA, APTIM can earn a performance bonus for achieving its *gross* lifecycle savings targets without achieving the Commission's *net savings* goal.

¹⁴ Other types of net savings estimated by the Program Evaluator and applied at the end of the quadrennium include non-participant spillover and non-residential Training Program spillover savings.

¹⁵ Details on the method used to quantify market effects in Quad II can be found in the *Quadrennial Market Effects* section of the Retail Lighting and Appliance Program chapter within Volume II of the CY 2018 Evaluation Report: https://www.focusonenergy.com/sites/default/files/WI_FOE_CY_2018_Volume_II.pdf.

The Quad III performance contract includes performance bonuses for KPIs other than energy and demand savings that were not part of the Quad II contract. Performance bonuses can also be earned for achievement of a measurable targets for customer satisfaction, customer participation, and equity of incentive spending in utility territories (i.e., a utility equity KPI). One-third of the \$750,000 in available performance bonuses outlined in the Quad III contract are for achievement of gross savings KPIs (i.e., savings-based performance bonus), one-third is for achievement of a customer satisfaction KPI, and one-third is for the combined bonuses for customer participation and utility equity. (*Ibid* at 76.)

The fact that portfolio cost-effectiveness is dependent upon achieving a certain amount of net savings means the Program Administrator has an incentive to mitigate free-ridership regardless of whether a contractual performance bonus or penalty is at stake.

The Commission, under its authority outlined in Wis. Admin. Code § PSC 137.04(1), determines the performance indicators, minimum performance standards, and any other provision that shall be included in the collective contract for statewide programs. With the decision alternatives below, staff present options for the Commission's consideration as to whether and how a *net savings* KPI is factored into the Quad IV performance contract between SEERA and the Program Administrator.

Commission Alternatives – Net Savings KPI

The *net savings* KPI proposed under Alternative One would function as a standalone component of the overall available performance bonus, similar to the customer satisfaction performance bonus in the Quad III contract. This approach differs from the Quad II savings performance bonus setting *net savings* achievement as a minimum criteria used to determine eligibility for an overall savings-based performance bonus. With Alternative One, the target

would be achievement of a portfolio NTG ratio for the 2023-2026 quadrennium. The portion of the overall available performance bonus achieved for meeting or exceeding this target would be proposed by SEERA for the Commission's approval following contract negotiations between SEERA and the Program Administrator.

Alternative One may be reasonable if the Commission wants to establish a *net savings* performance incentive in the Quad IV Program Administrator contract. Factoring a *net savings* performance indicator into the Quad IV performance contract would incentivize the Program Administrator to mitigate free-ridership in its programs and offerings through a contract performance bonus. The Sub-Alternatives under Alternative One present the Commission with options for the appropriate Quad IV portfolio NTG ratio used to define the net savings KPI. The Quad IV net savings goal (kWh and therms) would be equal to the gross savings goal adopted above multiplied by the NTG ratio target selected by the Commission from the Alternative One Sub-Alternatives.

Alternative Two would maintain the status quo from Quad III. That is, the Commission would set a net savings target, but achievement of this target would not impact the Program Administrator's eligibility to receive all or a portion of a contract performance bonus. The Quad IV net savings goal (kWh and therms) would be equal to the gross savings goal adopted above multiplied by the NTG ratio target selected by the Commission from the Alternative Two Sub-Alternatives.

As discussed above, the methods for determining program attribution are typically based on customer responses to post-participation surveys or through a data-driven approach analyzing primary market data, both of which have certain benefits and limitations. A decision to exclude achievement of a *net savings* KPI from the Quad IV contract performance bonus structure would

not mean that the Focus Evaluator would no longer estimate program attribution or that achievement of net savings would not be used to assess program performance. Evaluation activities designed to calculate program and portfolio net savings would continue to be a core duty of the Focus Evaluator and program and offering NTG ratios would still be used to inform program design and delivery and net savings would still be used to estimate portfolio cost-effectiveness, consistent with administrative code.¹⁶

The Commission may want to account for achievement of a net savings KPI in Quad IV, but find that none of the options proposed by staff align with its priorities or preferences. In that case, the Commission may want to use Alternative Three to set a different *net savings* KPI for Quad IV consistent with its discussion.

Finally, staff note that the upcoming influx of Federal funds for certain energy efficiency and renewable energy technologies as part of the Bipartisan Infrastructure Law and Inflation Reduction Act have the potential to complicate measurement and verification of program attribution used to calculate net savings in Quad IV. For example, it may be difficult to determine program attribution when a customer receives incentives from Focus and Federal grants, rebates, or tax credits. The Commission may want to factor this consideration into its selection of a decision alternative below. To that end, alternative Four below represents an option for the Commission to take no action at this time and defer the matter for a future Commission meeting. Section IX. below, proposes an option for a mid-Quad review of goals and KPIs. If the Commission pursues a mid-Quad review, it may wish for this matter to come back at mid-Quad as well.

¹⁶ Wis. Admin. Code § 137.05(12) requires the Program Administrator to deliver energy efficiency and renewable resource programs that pass a portfolio level test of net cost-effectiveness.

Commission Alternatives – Net Savings KPI

Alternative One: SEERA’s Quad IV proposed contract to the Commission for approval shall include a performance bonus provision for achievement of a portfolio net savings key performance indicator to be verified by the Focus third-party independent evaluator.

Sub-Alternative A: The Quad IV portfolio net-to-gross KPI shall be 0.75.

Sub-Alternative B: The Quad IV portfolio net-to-gross KPI shall be 0.70.

Sub-Alternative C: The Quad IV portfolio net-to-gross KPI shall be 0.65.

Sub-Alternative D: The Quad IV portfolio net-to-gross KPI shall be 0.60.

Sub-Alternative E: The Quad IV portfolio net-to-gross KPI shall be a different ratio consistent with the Commission’s discussion.

Alternative Two: Status Quo from Quad III. SEERA’s Quad IV proposed contract to the Commission for approval shall not factor the achievement of net savings into the performance bonus structure. The Commission sets a Quad IV net portfolio lifecycle savings goal for itself based on the portfolio gross savings goals approved above. The portfolio net lifecycle savings goals shall be equal to the portfolio gross lifecycle savings goal multiplied by a net-to-gross ratio of:

Sub-Alternative A: 0.75

Sub-Alternative B: 0.70

Sub-Alternative C: 0.65

Sub-Alternative D: 0.60

Sub-Alternative E: A different ratio consistent with the Commission’s discussion.

Alternative Three: Different action consistent with the Commission’s discussion.

Alternative Four: Take no action at this time and defer this matter.

Sub-Alternative A: Mid-Quad Review of Goals and KPIs

Sub-Alternative B: A different date in the future consistent with the Commission's discussion.

IX. Mid-Quad Review of Goals and KPIs

The discussion in this memorandum highlights a number of uncertainties that may impact program operations in Quad IV. Lingering economic and supply chain impacts of the COVID-19 pandemic have had material impacts on Focus programs in Quad III. Furthermore, the Commission's approval of certain initiatives identified in prior phases of Quad IV Planning to position Focus to better address the challenges of an industry in transition will require innovative approaches and dedicated program resources. Finally, as determined in Quad III, the Commission has found that significant changes to program avoided energy and capacity costs from one quadrennium to the next are an appropriate reason to review four-year savings goals set prior to the beginning of the quadrennium.¹⁷ Given this uncertainty, staff present the Commission with a proposal to order a mid-quad review of program goals and measurable targets with the decision alternatives below.

Should the Commission want to direct staff to assess the appropriateness of the Quad IV goals and present this analysis to the Commission during Quad IV, timing of that review is an important consideration. A goal adjustment during middle of a quad will need to take into account the ability for program operations to make shifts to program design and delivery to

¹⁷ Avoided costs are typically updated once per quadrennium following methodologies and data sources approved by the Commission for the purposes of evaluating Focus' cost-effectiveness. Electric and natural gas avoided energy costs are based on long-term price projections. Avoided energy and capacity costs are reviewed by the Evaluation Contractor annually and presented to the EWG. The Commission has directed an annual review of avoided costs to help maintain an understanding of how the values align with market realities, trends, and forecasts.

achieve the revised goals. Nevertheless, a mid-quad review may be a useful opportunity to ensure that the goals and measurable targets set by the Commission align with certain market factors beyond the program's control such as the cost of energy, supply chain disruptions, and labor shortages to name a few. Additionally, recent Federal investments in energy efficiency and renewable resources to be deployed over the course of Quad IV may also impact program performance and factor into a mid-quad review of goals.

As it stands, there will be two opportunities for the Commission to consider revising program goals and KPIs for Quad IV. In the *Development of Energy Savings Goals* section above, staff propose presenting the Commission with an opportunity to revise Quad IV energy and demand goals during the first half of 2023 as part of the Commission's process to approve budget carryover from one quadrennium to the next. In addition, the Commission's decisions in Phase II of Quad IV Planning directed the Focus Program Administrator to develop KPIs for underserved customers for the Commission's consideration no later than March 31, 2024. Selecting a mid-quad review of goals and KPIs would formally establish a third opportunity for the Commission to consider revisions to program goals and KPIs during Quad IV.

The Commission may find it reasonable to take no action on ordering a review of Quad IV goals and measurable targets at this time. With this decision, through its oversight duties, staff will monitor program conditions and work with the Delegated Commissioner to determine whether it is appropriate to return to the Commission to review the Quad IV program goals and targets established during Quadrennial Planning Process IV.

Commission Alternatives – Mid-Quad Review of Goals

Alternative One: Direct staff to perform a mid-quad review of Focus' goals and measurable targets and report the results to the Commission.

Alternative Two: Take no action at this time.

Attachment A - Summary of the Commission's Phase I and Phase II Decisions

Attachment B - Phase I Comments

Attachment C - Phase II Comments

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Attachment A - Summary of the Commission’s Phase I and Phase II Decisions

Issue	Commission Decisions Phase I
Alignment with Decarbonization Goals	<p>Focus should play a larger role in cost-effectively reducing carbon emissions and Quad IV should serve as a transitional period during which the program continues to emphasize energy savings but also seeks to make measurable progress toward a transition to greater emphasis on reducing carbon emissions.</p> <p>The Focus Evaluation Work Group (EWG) shall develop recommendations to operationalize enhanced measurement and tracking of the program’s carbon emissions reduction impacts for the purposes of program evaluation and performance tracking.</p>
Electrification – Fuel Switching from Unregulated Fuels	<p>Focus shall continue not to claim savings and other benefits from directly supporting beneficial electrification where fuel switching from unregulated fuels to electricity provided by a participating utility occurs through its own programs and offerings.</p>
Electrification – Emphasis	<p>Focus shall use Quad IV as a transitional period to position the program to take on a larger role in promoting beneficial electrification statewide.</p>
Utility Voluntary Programs	<p>The Focus Program Administrator shall develop and maintain a menu of options for utility voluntary programs to be shared with participating Focus utilities.</p>
Collaboration with Utility Demand Response Programs	<p>Focus shall maintain its current level of support for utility demand response programs.</p>
Affordability – Low-Income and Income-Qualified Programs	<p>Focus should continue to offer income-qualified programs and coordinate with the Department of Administration’s weatherization programs to fill potential gaps in low-income offerings and should explore developing a community-based pilot(s) in one or more targeted communities.</p> <p>The Focus Program Administrator shall convene a stakeholder group that includes community-based organizations that work with marginalized communities to gather input on effective methods to reduce barriers in order to effectively reach these customers.</p> <p>The Focus Program Administrator shall develop Key Performance Indicators for income-qualified programs for the Commission’s consideration in Phase III of the Quad IV Planning Process.</p>

Issue	Commission Decisions Phase II
How to State Energy Savings Goals	The Commission directed Commission staff to establish an overall millions of Btu (MMBtu) saving goal with minimum performance requirement thresholds for kilowatt-hours (kWh) and therm savings set at 90 percent of fuel-specific goals.
Lifecycle vs. Annual Savings Goals	Focus shall continue to maintain a four-year savings goal expressed in lifecycle savings, and shall continue to make first-year savings available for public reporting purposes.
Emphasis Between Energy and Demand	Focus should continue to establish goals based on reductions in energy use and peak demand with more emphasis on energy use savings and associated emissions reductions. The Quad IV Program Administrator performance contract shall be structured to reflect this priority. Focus shall also perform additional research in Quad IV to assess strategies for achieving greater demand savings and better understand the additional value of demand savings.
Time-Varying Value of Energy Efficiency and Renewable Resources	Focus shall investigate opportunities to integrate the time-varying value of energy efficiency and renewable energy into program operations.
Winter Peak Period Definition	Focus shall adopt a winter electric peak period definition and begin quantifying and tracking winter electric peak savings in Quad IV. The Evaluation Workgroup (EWG) shall determine the appropriate winter peak period definition.
Peak Natural Gas	Focus shall adopt a winter natural gas peak period definition and begin quantifying and tracking winter natural gas peak demand savings in Quad IV. The EWG shall investigate and develop recommendations for estimating peak natural gas avoided costs for the Commission’s consideration.
Emphasis Between Business and Residential	Focus shall allocate 60 percent of funds to Business programs and 40 percent to Residential programs.

Issue	Commission Decisions Phase II
Resource Acquisition and Market Transformation	Focus shall continue to emphasize near-term savings but shall increase the program’s emphasis on long-term market transformation by identifying ways to adapt Focus’ existing portfolio to achieve long-term market effects and develop strategies to support this direction. The Focus Evaluator shall report on the program’s progress in support of this direction in annual evaluation reports. The Focus Evaluator shall develop an assessment of the Focus’ market transformation potential in coordination with the Program Administrator and Commission staff, with input from stakeholders. This assessment shall, at minimum, identify the existing and emerging markets and technologies best suited for program intervention, theories of change for select markets, potential short-term, mid-term, and long-term market outcomes, appropriate market performance indicators, data collection plan(s), evaluation plan(s), and budgets. This assessment shall be delivered to the Commission prior to scoping for Quadrennial Planning Process V.
Cost-Effectiveness- Primary Test	The Focus portfolio shall meet a modified Total Resource Cost (TRC) Test of net cost-effectiveness.
Cost-Effectiveness – Secondary Tests	Focus shall use an Expanded TRC Test, and Utility Cost test as secondary tests to be calculated and reported for additional information. As an additional secondary test, Focus shall use a Societal Cost Test to be calculated and reported for additional information.
Cost-Effectiveness- Low Income and Income Qualified Programs	For purposes of evaluating Focus cost-effectiveness, a benefits adder shall be applied to programs and offerings targeting customers below 60 percent of statewide median income in Focus’ primary cost-effectiveness test. The EWG shall review available options and propose an approach for the Commission’s consideration prior to the first program year evaluation of portfolio cost-effectiveness in Quad IV.
Avoided Costs – Avoided Electric Energy Costs	For purposes of evaluating Focus cost-effectiveness, Focus shall continue to base electric avoided energy costs on a forecasted locational marginal price (LMP) across Wisconsin nodes.
Avoided Costs – Avoided Electric Capacity Costs	For purposes of evaluating Focus cost-effectiveness, Focus shall maintain the current approach to calculating avoided electric capacity costs based upon the unit cost of a peaker plant consistent with the approach approved by the Commission in Quad III.

Issue	Commission Decisions Phase II
<p>Avoided Costs – Avoided Transmission & Distribution Costs</p>	<p>For purposes of evaluating Focus cost effectiveness, Focus shall maintain the current approach to calculating avoided transmission and distribution costs using an incremental cost approach based on recent transmission line investments reported in annual investor-owned utility reports and data requested and received from the operating electric transmission and distribution infrastructure entities in the state.</p> <p>The EWG shall present to the Commission during Quad IV for its consideration an alternative method (or multiple alternative methods) for calculating avoided electric transmission and distribution costs for the purpose of evaluating Focus in the future. A third party or EWG shall submit its proposed recommendation prior to the first program year evaluation of portfolio cost-effectiveness in Quad IV, or by an alternative timeline deemed reasonable by Commission staff.</p>
<p>Avoided Cost – Natural Gas Avoided Costs</p>	<p>For purposes of evaluating Focus cost effectiveness, Focus shall maintain the current approach to calculating avoided natural gas costs based on EIA forecasts of Henry Hub prices adjusted using Wisconsin City Gate prices and retail prices to estimate avoided natural gas costs in Wisconsin.</p>
<p>Carbon Value</p>	<p>Focus cost-effectiveness tests shall value avoided CO2 emissions using an updated market-based value. No later than September 30, 2023, the EWG shall provide a report to the Commission on alternatives for an appropriate market-based carbon value, at which time the Commission will select the preferred valuation.</p>
<p>Discount Rate</p>	<p>Focus shall continue to use a discount rate of 2.0 percent in Focus’ cost effectiveness tests.</p>
<p>Budgets – Energy Efficiency & Renewables</p>	<p>Focus shall set a four-year maximum budget Key Performance Indicators (KPI) at \$22 million to give the Program Administrator the flexibility to shift funds between the Renewable and Core Efficiency budgets with approval from Commission staff. The maximum budget KPI is for incentives only, non-incentive costs shall be taken out of the Core-efficiency budget.</p>
<p>Budgets – Underserved & Rural</p>	<p>Focus shall develop KPIs to target a percentage of incentive spend proportional to percentage of rural customers in designated zip codes.</p>

Issue	Commission Decisions Phase II
Budgets – Underserved & Rural	The Program Administrator is directed to conduct data gathering and analysis during the first year of Quad IV to better identify underserved customers, target program offerings, and develop KPIs and report back to the Commission by March 31, 2024. This effort should emphasize underserved customers facing the highest energy burdens as well as small business customers.
Budgets – EERD	Focus shall increase the annual Economic Research and Development Program (EERD) budget to \$200,000 and Commission staff shall identify alternative sources of funding.
Behavioral Programs	Focus funds may be used for behavioral pilots at the discretion of the Program Administrator.
Items That Were Directed for Further Investigation or Research	For those items where the Commission directed further research or analysis be conducted as part of Quad IV, Commission staff shall return to the Commission with recommendations as to the budget and timing for such additional research.

Attachment B - Phase I Comments

Commenter	Link to Comments
Legislature	
Sen. Julian Bradley and Rep. Mike Kuglitsch	PSC REF#: 434027
Utilities/Fuel Providers	
WI Propane Gas Association	PSC REF#: 434105
WPPI Energy	PSC REF#: 434087
WI Utilities Association	PSC REF#: 434220
Organizations	
350 Wisconsin	PSC REF#: 434002
ACEEE	PSC REF#: 434040
APTIM, Focus Program Administrator	PSC REF#: 434107
Axiom Energy Group	PSC REF#: 434021
Center for Energy & the Environment	PSC REF#: 434214
Citizens Utility Board	PSC REF#: 434196
Clean Wisconsin	PSC REF#: 434025
CLEAResult Consulting	PSC REF#: 433971
Domtar –Nekoosa Mill/Jason McCauley	PSC REF#: 434109
Franklin Energy	PSC REF#: 434106
Industrial Customers Group	PSC REF#: 434182
Midwest Building Decarbonization Coalition	PSC REF#: 434092
Midwest Energy Efficiency Alliance	PSC REF#: 434101
Midwest Tribal Energy Resources Association	PSC REF#: 434104
RENEW Wisconsin	PSC REF#: 433908
Rocky Mountain Institute	PSC REF#: 434014
Sierra Club	PSC REF#: 434231
Sierra Club – Combined Comments from Members	PSC REF#: 434232
Slipstream	PSC REF#: 434110
U.S. Green Building Council	PSC REF#: 433907
Vernon County Energy District	PSC REF#: 434042
Wisconsin Cast Metals Association	PSC REF#: 433460
Wisconsin EcoLatinos	PSC REF#: 434037
Wisconsin’s Greenfire	PSC REF#: 433963
Wisconsin Health Professionals for Climate Action	PSC REF#: 434108
Wisconsin Local Government Climate Coalition	PSC REF#: 434059
Wisconsin Manufacturers & Commerce	PSC REF#: 434219

Individuals	
Kathy Allen	PSC REF#: 433957
Mike Arny	PSC REF#: 433990
William G. Braier	PSC REF#: 433758
Michael Erkamaa	PSC REF#: 434033
Thomas Hickey	PSC REF#: 434003
Chris Klopp	PSC REF#: 434289
Andrea Kremer	PSC REF#: 433986
Bruce Krawisz	PSC REF#: 433958
Nancy Kriofsky	PSC REF#: 434011
Mark Lindborg	PSC REF#: 434082
Suzanne Moynihan	PSC REF#: 433896
Harry Parrott	PSC REF#: 433855
George J. Perkins	PSC REF#: 434017
Katherine Riebe	PSC REF#: 433867
Mary E. Ross	PSC REF#: 433868
Jenny Ruggini	PSC REF#: 434230
Donald Schaeffer	PSC REF#: 433903
Lila Zastro/Dave Hendrickson	PSC REF#: 434062

Attachment C - Phase II Comments

Commenter	Link to Comments
Utilities	
WI Utilities Association	PSC REF#: 444102
Organizations	
APTIM, Focus Program Administrator	PSC REF#: 444189
Cadmus	PSC REF#: 444212
Center for Energy and Environment	PSC REF#: 444187
Citizens Utility Board	PSC REF#: 444217
Clean Wisconsin	PSC REF#: 444184
CLEAResult Consulting	PSC REF#: 444190
Franklin Energy	PSC REF#: 444174
Industrial Customers Group	PSC REF#: 444207
Midwest Energy Efficiency Alliance	PSC REF#: 444175
Oracle Energy and Water	PSC REF#: 444169
RENEW Wisconsin	PSC REF#: 444179
Rocky Mountain Institute	PSC REF#: 444143
Vernon County Energy District	PSC REF#: 444165
Wisconsin Local Government Climate Coalition	PSC REF#: 444133
Individuals	
Judith Stadler	PSC REF#: 444133