➢ Whole Home Efficiency

A. Description

The Whole Home Efficiency product is targeted toward existing single-family homes in need of multiple energy efficiency improvements. By providing these customers with rebate incentives, the Company is able to incorporate a bundled, whole home approach to energy efficiency. Whole Home Efficiency is available to residential Xcel Energy account holders with combination electric and natural gas, electric only, or gas only service. Eligibility is dependent on the type of equipment installed.

The concept of the product is to provide the customer with one-stop for all of their home efficiency needs. This comprehensive approach requires an energy audit as a prerequisite which is then used to generate a list of recommendations. The customer may choose to complete this prerequisite through the Home Energy Audit product or a Home Energy Squad Plus visit. The contractor, who may also be the auditor, reviews the recommended improvements and completes the work. Some projects may receive an independent verification of the improvements after completion if a Quality Control inspection is performed. The contractor and homeowner may also request advice on recommended upgrades and rebates from the Energy Advising service offered through the Home Energy Audit product. Since this product requires an audit and deeper engagement from the customer, AMI interval data would greatly enhance the conversation and allow auditors to give customers an even better analysis of the energy usage within their home.

Trade contractors must complete the appropriate contractor trainings depending on the services they offer.

These trainings provide contractors with information on the product components, process, and diagnostic testing required as part of the efficient measure installations. All participating contractors must become a participating trade partner within Whole Home Efficiency before providing installations for participants in the product. A random sample of 10% of the contractor's jobs will be inspected and verified. Once contractors have completed all necessary trainings and signed the agreement, they will be included on the approved contractor list, which is included in the customer packet and on the Company's website.[52]

B. Forecasts, Participants & Budgets

Forecasts and Participants

The product forecasts were developed based on the 2021 product results and the Company's forecasted assumptions for increased participation as a result of the product redesign.

[52] www.xcelenergy.com/cotrades

Budgets
The budget for this product is based on the 2021expenditures and includes costs for third-party implementation, software, measurement and verification inspections, trade incentive rebates, and minimal product promotion.

C. Application Process

Customers interested in participating in Whole Home Efficiency must first complete a Home Energy Audit with blower door test or a Home Energy Squad Plus visit. The customer will be provided information on the Whole Home Efficiency product, tying the specific product requirements into the audit recommendations. The customer may then sign up for Whole Home Efficiency through their auditor at the time of the audit or any time thereafter using the online signup form. The customer will have two years from the Whole Home Efficiency enrollment date to complete the equipment installs and submit applications for rebates.

The Whole Home Efficiency product information, approved contractor list, and signup form are on the Company's website. Customers can only receive applications through their registered and approved contractor. Customers may also contact the Residential Customer Care center to request product information or guidance on how to obtain rebates.

D. Marketing Objectives & Strategies

The Company will provide product information through the website and implement low-cost marketing tactics when available. The Company will also provide Whole Home Efficiency information to the Customer Education team to promote at several "green" community events throughout the year. Trade partners may also be incentivized to identify participants that may not be aware of the "whole house option" through Whole Home Efficiency.

Other products such as the Company's Home Energy Audit product and Home Energy Squad Plus offering will offer information on Whole Home Efficiency. The Company will monitor product participation on a monthly basis and implement additional marketing tactics if necessary, to achieve the year-end forecast.

In addition, the Company will attempt to utilize the trade partners who have been trained and contracted to deliver this product to customers. This is viewed as the most important marketing channel for building awareness and participation in the product. As a result, the Company is offering incentives to participating installation contractors designed to increase the number of projects performed. These incentives provide contractors with additional motivation to promote the Whole Home Efficiency product.

E. Product-Specific Policies

The Whole Home Efficiency product leverages the Company's Home Energy Audit and Home Energy Squad Plus offerings, requiring an advanced in-home blower door audit as a prerequisite

to product participation. Customers are eligible for a Home Energy Audit every two years. The Company will provide the customer a list of contractors participating in the product; however, the Company does not guarantee the contractor's expertise or warrant any of the products or services, nor is one contractor promoted over another. The Company shall have no liability for contractor work or negligence. After the customer completes the audit and meets the product eligibility requirements, the customer may sign up to participate in Whole Home Efficiency.

Customers will receive the standard prescriptive rebate for all installed measures, with the exception of insulation product envelope measures. The Company is proposing that envelope measures be based on savings achieved. The Company is developing a rebate structure to encourage deeper weatherization retrofits that are based on tiered savings. If a customer installs three or more qualifying measures, the customer will receive an additional bonus rebate of 10% of the prescriptive rebate amount for each measure completed within the two-year time period. The bonus rebate is a one-time offer for each measure completed.[53] The Company will not rebate pre-existing efficient equipment. Self-installations or installations done by non-registered contractors do not qualify for rebates.

The Company is looking into ways to provide a more comprehensive experience for our residential customers that simplifies the process of installing capital intensive energy efficient equipment. This may include an end-to-end solution where the customer chooses from any, or all, of the following as applicable:

- Advice and analysis of the available equipment options
- Financing
- Enrollment in Demand Management products
- Assistance with choosing qualified contractors
- Enrollment in green programs and/or warranty services.

F. Stakeholder Involvement

The Company periodically meets with the Cities of Boulder, Fort Collins, Greeley, and Colorado Springs, the Center for Resource Conservation, the Platte River Valley Authority, the Colorado Energy Office, the EPA, the DOE, Electric & Gas Industries Association, and the EEBC for product feedback. The Company plans to continue meeting with these organizations, and other stakeholders, for feedback to improve the product.

G. Rebates & Incentives

Whole Home Efficiency product rebates are prescriptive, with the exception of insulation product envelope measures and based on the specific measures installed. The rebate amounts and eligibility requirements will be communicated through the Whole Home Efficiency collateral including the rebate application.

[53]Qualifying equipment is subject to change and customer must participate under current product rules designated by the current year in which the install the additional measures.

➢ Custom Efficiency

A. Description

The Custom Efficiency product offers rebates to electric and natural gas business customers who implement energy saving projects that do not fit the requirements of prescriptive products. The product is marketed to all business customers regardless of size using direct contact with customers via our sales representatives, the internet, and trade channels.

This product also offers study funding to help customers determine project viability and energy savings potential.

Energy-saving non-prescriptive projects include installing new equipment, replacing existing equipment, retrofitting equipment, or improving processes that lower a customer's electric or natural gas use. The project list includes, but is not limited to, the following:

Equipment	**Application**
Compressed Air	New equipment, reduction in hp of compressors, storage, vacuum pumps, and variable speed drive compressors, reduction of compressor run time
Controls	CO_2 based ventilation, compressed air, and refrigeration controls
Cooling	Heat recovery, process cooling, and controls
Lighting	Lumen output changes, exterior lighting, light-emitting diode ("LED") and daylighting, retrofits (not one-to-one)
Miscellaneous	Energy efficient windows (film, argon, Low E), humidification, insulation, printing presses, and welders
Motors & Drives	Motors > 200 hp, Drives > 200 hp, any motor type outside the prescriptive parameters, and Drives for non-fan, non-pump processes
Refrigeration	Ammonia compressors, freezer doors, and evaporative condensers
Process Changes	• New system produces more output than the old system while using the same amount of energy as the old system • New system produces the same output as the old system using less energy • Reconfigure system layout
Load Shifting	Ice Storage and other load shifting technologies

B. Forecasts, Participants & Budgets

Forecasts and Participants

The energy savings and participant forecasts were determined by looking at both historical performance and projects that are currently in the product pipeline, as well as consideration of current economic conditions.

Budgets

Historical cost and participation information is tracked and analyzed to project future expenditures. For the Custom Efficiency product, administration and customer rebates are the primary budget drivers.

- *Administration:* Custom Efficiency is a labor-intensive product due to the pre-approval process and analysis components.
- *Rebates:* The budget for rebates is established based on an estimation of participation levels, multiplied by the rebate per kW amount in the technical assumption models.

C. Application Process

The application process for custom projects is more involved than those for prescriptive measures. Each custom project must meet specific eligibility requirements. This process can be broken into distinct steps: Application Submission, Project Analysis, Project Acceptance or Ineligibility, and Project Completion.

Application Submission:

Public Service Account Managers and/or a BSC representative work with a customer and their vendor to identify a project with energy efficiency opportunities and start the application process. In addition to the application, which must be signed by the customer, an electronic "workbook" is filled out with a detailed description of the project.

Project Analysis:

Engineers review the project information and enter pertinent data into a MTRC test model to determine the projected energy savings, benefit/cost ratio and payback. The model calculates energy savings for various end-uses (lighting, motors, cooling, compressed air, etc.) to ensure consistency in analysis from one project to another. All calculations are based on approved ASHRAE methods or other similar industry standards. Based on the modeled results, the project either passes or fails.

Project Acceptance or Ineligibility:

Once the engineers have completed the analysis, an approval or not rebate eligible letter is sent to the customer. The letter provides critical information regarding the project, including: rebate amount, project description and costs, energy savings, and any conditions that must be met to receive the rebate (e.g., measurement and verification). Should a project be ineligible for a rebate, a letter is sent to the customer with an explanation as to why the project was not approved.

Project Completion:

When a project is completed, the customer will inform their Account Manager or BSC representative. The customer will sign the verification section of the application and submit it along with copies of invoices and other required information as stipulated in the approval letter. If the final documentation matches the approved project information, the project the paperwork is submitted to Rebate Operations for issuance of the rebate.

Occasionally, projects must undergo re-analysis because the final project parameters do not match the original project application. This may be due to minor changes in project scope, cost, or technology. In these cases, the actual project information will be given to the technical staff for review and re-analysis. The original analysis will be updated with the new information to determine if the project still meets passing criteria. A passing project will be awarded a rebate based on the calculated savings from the updated analysis. A project that fails on re-analysis will not be issued a rebate.

D. Marketing Objectives & Strategies

Marketing is conducted primarily by Account Managers, leveraging their direct relationships with customers. In addition, the Company will use the following strategies to achieve the product's energy savings forecasts in 2023:

- *Target Industrial Customers*: Colorado's industrial base is relatively small, but these few customers offer substantial opportunity. Many of the opportunities will come from specialized applications or processes requiring a greater insight into the individual customer's operations. To achieve this, the Company relies heavily on leads from Account Managers and outreach to the vendor community.
- *BSC Representatives*. The BSC provides direct support to non-managed commercial customers.
- *Use of Collateral*: Public Service has developed a broad range of marketing collateral for the product; this information is available in electronic format on Xcel Energy's website[27] and in hard copy format for customers, trade allies, and internal Public Service staff as needed. This material is continually reviewed and revised based on feedback from participants and as changes are made to the product. The key collateral includes:
    - Custom Efficiency Brochure – This is the primary tool for Account Managers that helps describe the product to customers and trade allies. It provides examples of projects that may qualify; business reasons to participate; and a summary of the procedures to follow.
    - List of Potential Projects – Project types that have fared well in Colorado and Minnesota serve as the basis for this list. The list includes both electric and natural gas conservation measures.
    - Trade Partner Website[28] – This resource was designed specifically for the Company's trade allies. It includes all the materials indicated above and other helpful information.
    - Energy Exchange – A quarterly email newsletter that goes out to all trade allies who have registered to be part of the trade ally network.
    - Custom Specific Workshops – Workshops will be conducted for vendors and/or customers to communicate project opportunities specific to custom end-use situations.

[27] https://www.xcelenergy.com/programs_and_rebates/business_programs_and_rebates/equipment_rebates/custom_efficiency
[28] https://www.xcelenergy.com/working_with_us/trade_partners

E. Product-Specific Policies

All custom projects must have an MTRC ratio of equal to or greater than 1.0, and a simple payback of over one year, and less than the estimated life of the product to be eligible for a rebate. Rebates are capped at 60 percent of the incremental project cost.

F. Stakeholder Involvement

Customers, trade allies, and other stakeholders are engaged at the project level to gather input regarding best practices, methods, and support for evaluating new technologies.

G. Rebates & Incentives

Rebates apply to new and leased equipment. Used or portable equipment is not eligible. To determine eligibility for a rebate, all projects are analyzed as described in the application process. Rebates are calculated based on the demand reduction (kW) yielded by the project. Additional details are identified in the Electric and Natural Gas Forecast Technical Assumptions within Appendix H: Technical Reference Manual. For 2023, Public Service will offer an incentive level of $500.00 per peak coincident kW and $100.00 per off-peak kW for electric energy savings projects and $4 per Dth for natural gas savings project.

➢ Data Center Efficiency

A. Description

The Data Center Efficiency product helps customers address energy conservation opportunities in both new and existing data centers, as well as other computing spaces. This specialized product was designed in response to the significant energy savings potential of these customers and the projected growth in energy use in data centers and computing spaces.

There are numerous ways data centers can become more energy efficient, including:

- High efficiency servers;
- Airflow improvements;
- Electrical equipment;
- High-efficiency cooling;
- Humidification;
- Power systems;
- High-efficiency lighting;
- Plate and frame heat exchangers; and,
- Virtual Desktop Infrastructures ("VDI").

Any size data center or computing space may participate. The product encourages a holistic approach to energy efficiency within the data center, data closet, or computing space.

For existing facilities, the product provides funding towards an on-site evaluation and analysis and rebates based on the energy savings resulting from implementation. Such projects are evaluated under the Custom Efficiency analysis and must follow the rules of the Custom Efficiency product. However, prescriptive rebates for high-efficiency computer room air conditioner ("CRAC") units, plate and frame heat exchangers, servers and VDI equipment are available. Data center customers can also apply for prescriptive equipment rebates from other products offered in the Company's DSM portfolio. Data Center prescriptive equipment rebates will also be available to non-data center customers.

For new facilities, the product delivers expert knowledge and resources to help data center owners optimize the efficiency of their facilities during the design, early construction and operation stages of the new data center. Aligned closely with the design of the Energy Design Assistance ("EDA") offering within New Construction (for commercial new construction projects), this Data Center offering will provide free consulting during the design phases of new data center construction projects and provide financial incentives to offset the increased costs of more advanced energy systems. The product commences with the customer's first discussions with the Company regarding siting of a new data center and ends after construction and occupancy of the last in-scope portion of the data center.

Public Service maintains a list of approved study providers to perform data center studies and analysis. Study paths leverage the study providers, who have been provided training on Company tools, to conduct the analysis.

Fifteen-minute interval data could show an operator if cooling is adjusting properly to match changes in IT load. It could also be used as a basic indication if fan speeds, compressors or free cooling are adjusting as IT load or outside air changes.

B. Forecasts, Participants & Budgets

Forecasts and Participants
Electric energy savings and participation forecasts were determined by looking at historic participation and identified projects from the last several years.

Budgets
Budgets were developed commensurate with the electric energy savings forecast, based on historical cost of achievements. The largest cost in the budget is for energy efficiency project implementation and study rebates.

C. Application Process

Customers learn about the product through a variety of channels, including: the product website, Account Managers and trade partners or study providers. In addition, the Company will identify data center experts to help with the education of the product to customers. Product applications are available through all of these channels. Customers may submit an application through their Account Manager or trade partner or send it via mail or email to Public Service. A digital application is available for the prescriptive equipment rebates.

Customers building a new data center need to submit their application in the early phases of design to ensure recommended strategies are included in final design plans. The data center design study is similar to the New Construction product's Energy Design Assistance guidance for facilities.

Pre-approval is required to receive rebates for studies. Prescriptive measures do not require pre-approval and will be rebated for implemented projects. Custom rebates are available for energy saving measures that are not included under the prescriptive rebate category. Such projects are evaluated under the Custom Efficiency analysis and must follow the rules of the Custom Efficiency product.

D. Marketing Objectives & Strategies

The marketing strategy for Data Center Efficiency leverages a variety of channels including Account Managers, trade relations managers, professional organizations and direct customer communications. The goal of the Data Center Efficiency product is to build and/or retrofit data centers and computing spaces, with their copious electronic equipment, to be as efficient as

possible. Because the market for this product is so specific, Public Service will have Account Management focus on recruiting data center customers to participate. Account Management and a product engineer will work together to maintain contact with data center customers from identification of potential energy saving measures through implementation of the recommended measures. Face-to-face contact with our customer base is necessary to engage them in the product.

The Company will also conduct meetings with study providers and design firms to provide rebate information and other support for customer engagement. The Company will use these meetings to discuss new potential energy saving measures and best practices to encourage energy efficiency in a data center. Additional study providers will be sought after to help data center customers identify potential energy saving strategies at their location.

Soliciting Data Center Efficiency participation has typically required significant marketing effort to influence customers; many are reluctant to make changes to their mission-critical operations and upgrades require agreement across many function areas.

Public Service will offer on-site walkthrough audits of a customer's data center by a product engineer to help identify energy efficiency opportunities. Once the walkthrough audit is complete, the customer will receive a report that describes the identified opportunities and the possible paths for earning a rebate. This offer is intended to generate awareness of the product to data centers that have not previously participated in the product.

As part of our strategy to increase participation in demand response products, this product will provide opportunities for customers to participate in Critical Peak Pricing ("CPP"), Peak Partner Rewards ("PPR"), and Interruptible Service Option Credit ("ISOC"). Further details are provided in the technical assumptions.

E. Product-Specific Policies

Existing Facilities

Customers may perform a study by selecting a pre-qualified study provider[29]. If they select a provider who is not on the Company's list, the new provider will be required to submit qualifications prior to receiving study funding approval.

The Company typically evaluates measures identified within a study as one project, based on the customer's indication to implement all measures included in the project. Pre-approved projects must be cost-effective. If at least two years has passed since a project was approved, the technical staff will re-analyze it to determine if the savings/payback has changed. This re-analysis is conducted prior to issuing a rebate check.

Studies, once pre-approved, need to be submitted to Public Service within three months of issuance of the pre-approval letter.

[29] http://www.xcelenergy.com/staticfiles/xe/PDF/Marketing/CO-BUS-Data-Center-Efficiency-Provider-List.pdf

New Facilities

To participate in this measure, customers will work directly with contracted agents of the Company who will facilitate the integrated design and modeling components of the measure. The choice of contracted providers is influenced primarily by the fact that the new Data Center market is highly dynamic and complex. To manage the risk introduced by this complexity, the Company chose to move forward with a limited provider delivery model. As the market evolves, the Company will evaluate the potential to open the consulting services of this measure up to other providers in a manner similar to the existing Data Center Efficiency studies and EDA offerings.

Computing Spaces

For prescriptive VDI measures and prescriptive high efficiency servers, all equipment rebated through the measure must be new and meet all measure rules and requirements. A minimum of 10 units must be purchased in order to qualify for the rebate. The application must be submitted within twelve months of the invoice date.

F. Stakeholder Involvement

The Company continues to develop collateral and educational materials to support the product. As participant feedback is received, suggestions will be evaluated for feasibility of incorporating changes.

The Company has been an active participant in the CEE Data Centers and Servers Initiative[30]. The initiative focuses on collaboration among utilities striving for energy efficiency standards for data center equipment, including knowledge sharing of data center efficiency product development.

Xcel Energy is also a member of the Association for Computer Operations Management ("AFCOM")[31], the leading association of data center and facilities management providers, and 7x24 Exchange[32], a not-for-profit organization for the mission critical industry.

G. Rebates & Incentives

Study rebate: Data Center Efficiency studies for existing facilities will be rebated up to 75% of the data center study cost, not to exceed $25,000. This cap will be re-evaluated if a very large data center is being reviewed.

Custom rebate: Rebates are calculated based on the demand reduction (kW) yielded by the custom project. For 2023, Public Service will offer an incentive of $500 per peak coincident kW and $100 per off-peak kW.

[30] http://www.cee1.org/content/committee-work
[31] http://www.afcom.com
[32] http://www.7x24exchange.org

Prescriptive rebate: Rebates are available for High Efficiency CRAC units, Plate and Frame Heat Exchangers, VDI, and High Efficiency Servers. Prescriptive rebate levels are shown on the rebate application and on the Company's website.

Data Center New Construction rebate: The product will provide rebates on the actual savings of a project based on the times of day the project saves energy compared to the modeled baseline.