

➤ **Summary of 60-Day Notice: Energy Benchmarking**

Public Service Company of Colorado (“the Company”) posts this 60-Day Notice to add a new indirect impact program—Energy Benchmarking—to the 2016 DSM Plan.

Energy Benchmarking (benchmarking) is a practice long recognized as providing commercial and multi-family building owners with valuable information regarding the energy performance of their properties. Simply put, the practice allows building owners to measure the energy efficiency of their facilities relative to similar facilities. Historically, the process to accumulate the information in order to effectively carry out benchmarking has been complicated by inconsistent analysis processes, restrictive policies surrounding building owner access to aggregate tenant data, and finally, cumbersome methods to access and upload energy data to common benchmarking tools. As discussed below, several advancements have been made recently to address these barriers.

First, the industry has established its common analysis standard through the U.S. Environmental Protection Agency’s (EPA’s) ENERGY STAR Portfolio Manager (ESPM) software tool¹. Second, the Colorado Public Utilities Commission (PUC) recently enacted significant changes to the Data Access and Privacy Rules² including specific provisions to simplify building owner access to aggregate energy usage information, which is necessary to perform energy benchmarking. The Company, with assistance from stakeholders in Colorado and across the country, developed a system that streamlines the data request process in conformance with the new rule, and automatically transfers aggregate energy usage data from the Company’s systems into ESPM.

With this Notice, the Company will budget \$120,000 in 2016 to assist building owners in using the ESPM tool, to educate customers about the benefits of benchmarking, and to perform marketing activities to engage participating building owners in the Company’s direct impact DSM offerings.

The Company plans to continue the program into 2017 and 2018 at a similar level of funding.

Included with this Notice is the following document:

- a) Energy Benchmarking Write-Up.

These documents can be found on our website at the following link:

<http://www.xcelenergy.com/Company/Rates & Regulations/Filings/Colorado Demand-Side Management>.

¹ For more information, visit www.energystar.gov/benchmark.

² See Decision No. R15-0406 under Proceeding No. 14R-0394EG:

<http://www.sos.state.co.us/CCR/eDocketDetails.do?trackingNum=2014-00436>.

➤ Energy Benchmarking

A. Description

Energy benchmarking of commercial and multi-family buildings is an established and growing trend in the energy efficiency sector. Through the City of Denver’s *City Energy Project*, the City of Boulder’s *Building Performance Ordinance*, and several other local efforts, building owners in Colorado are especially engaged in the practice of benchmarking. The program allows building owners, policy makers, and program administrators to more effectively target buildings with the highest energy efficiency potential by identifying those properties that are performing below a portfolio average, or “benchmark.” According to the U.S. Department of Energy (DOE):

“Energy benchmarking is a standardized process of measuring building energy efficiency. Benchmarking helps building owners identify cost-effective energy upgrades, realize the energy and cost savings benefits from those upgrades, document the savings achieved, and communicate these accomplishments to stakeholders. A 2012 study found that energy performance benchmarking prompted energy efficiency investments through improved energy management processes (62% of those who participated in a benchmarking program) or building upgrades and behavioral efficiency projects (84% of benchmarking participants).

To date, more than a quarter-million buildings representing almost 30 billion square feet have been benchmarked. This number continues to grow thanks to multiple drivers, including the private sector adoption of benchmarking, state and local voluntary benchmarking initiatives, utility energy efficiency programs incorporating benchmarking, and state and local legislation requiring that buildings be benchmarked and that the results be disclosed to the public.

As more building owners begin benchmarking, these building owners seek streamlined, consistent processes for obtaining whole building energy usage data. Building owners and managers want easy, automated ways to get utility data into their benchmarking software. In addition, many owners of multi-tenant commercial buildings and multifamily buildings cannot access energy consumption data for their entire building due to separately metered tenant spaces.”³

In response to this need, the Company is launching an indirect impact benchmarking program.

Program Design

Xcel Energy participated in a DOE effort under the Better Buildings Initiative titled the Energy Data Accelerator (“the Accelerator”) which is designed to bring utilities and municipal leaders together to “demonstrate streamlined, best-practice approaches for building owners to access whole-building energy usage data—with a specific focus on providing building owners with

³ Factsheet associated with the Company’s participation in the DOE Energy Data Accelerator.

aggregated energy usage information across multiple tenants.”⁴ The Company learned valuable insights from both its municipal partner in the Accelerator, the City of Minneapolis, as well as from DOE facilitators and utility collaborators across the country. Outside of the Energy Data Accelerator, the Company worked closely with stakeholders in Colorado through PUC Proceeding No. 14R-0394EG as well as directly with the City of Denver and the *City Energy Project* to investigate feasibility of many technical elements of the design in response to a Settlement Agreement in Proceeding No. 14A-1057EG.⁵ The design implemented by the Company is a product of these accumulated insights and is representative of best practices identified through this effort.

System design elements include a web portal, where building owners will gain access to property-specific information and execute tasks of tenant identification and data privacy authorizations; and an automated, monthly feed of energy data from the Company’s systems into the building owner’s ESPM account. Building owners will register for the program by gaining access to the portal and executing the necessary steps to complete the data connection.

Key features of the Energy Benchmarking program include building owner authorization; tenant identification; Data Privacy Rule⁶ implementation; consumption data aggregation and normalization; and automated data transfer to the ENERGY STAR Portfolio Manager (ESPM). Each of these elements is discussed in more detail below.

Building Owner Authorization

Pursuant to the Code of Colorado Regulations (CCR), Electric Rule 3034 *Property Owner Request for Whole Building Energy Use Data from a Utility*, upon registration to the Company’s web portal, building owners or their contracted agents will be verified using publicly available records as well as information available within the Company’s customer information systems.

Tenant Identification

Using the property address, the Company will provide a list of tenants (meters or premises) that appear to be associated with the building to the building owner. Once verified as accurate, this list will be used to associate those premises to the property in the Company’s customer information systems.

Data Privacy Rule Implementation

The system is designed to implement thresholds based on either the tenant count, individual tenant usage percentage, or both, as is currently the case under Code of Colorado Regulations (CCR), Electric Rule 3034 *Property Owner Request for Whole Building Energy Use Data from a Utility*. No energy data will be shared with the building owner until these rules have been satisfied.

⁴ For more information, visit <http://www1.eere.energy.gov/buildings/betterbuildings/accelerators/energy.html>.

⁵ See Paragraph 5 section (m),

https://www.dora.state.co.us/pls/efi/efi.show_document?p_dms_document_id=464644&p_session_id=

⁶ See: http://www.sos.state.co.us/CCR/4%20CCR%20723-3.pdf?ruleVersionId=6403&fileName=4_CCR_723-3.

Consumption Data Aggregation and Normalization

Acknowledging that most building owners seek whole-building aggregate data, the Company will automatically combine data across meter readings and normalize those readings to a common calendar month cycle. Building owners will also have the ability to request data for individual tenants, or subsets of tenants as desired; however, these requests will be subject to aggregation methodologies outlined in CCR Electric Rule 3034, and will be more likely to require individual tenant consent.

Automated Data Transfer to ENERGY STAR Portfolio Manager (ESPM)

The program relies upon ESPM to standardize the transfer of energy data from the Company's customer information systems because ESPM is well-established as the industry standard tool for energy benchmarking. Launched in 1999, ESPM has been used to benchmark more than 350,000 buildings and over 40% of U.S. commercial building space.⁷ As voluntary and mandatory benchmarking policies at the municipal and state levels have emerged and expanded in the U.S. in recent years, the use of ESPM as the tool of choice has been universal.⁸ ESPM is a consistent, free, and robust option for building owners to gain valuable information about their buildings.

B. Targets, Participants & Budgets

Targets and Participants

The Company plans to promote this offering to building owners in the commercial and multi-family sectors. Building owners subject to local benchmarking ordinances or corporate initiatives are expected to make up a significant proportion of program participants. The Company will coordinate with local stakeholders to ensure training materials and energy efficiency program offerings are communicated to building owners as they complete the task of benchmarking.

Budgets

The total budget for the pilot will be \$120,000 in 2016 to support marketing, promotion, and the administrative activities required to facilitate building owners in setting up data transfer from the Company's customer information systems to ESPM, as well as to support interpreting and using the ESPM results to identify cost-effective energy-saving measures. Table 1 summarizes the forecasted program expenditures by budget category and fuel type.

⁷ EPA analysis as of June 2014,

⁸ To view data across various policies across the U.S. and world, visit <http://www.buildingrating.org/policy-comparison-tool>.

Table 1: 2016 Energy Benchmarking Budget

	Electric	Natural Gas	Total
Program Planning & Design	\$4,000	\$1,000	\$5,000
Admin. & Program Delivery	\$75,000	\$25,000	\$100,000
Adv. / Promo / Cust. Ed	\$10,000	\$5,000	\$15,000
Rebates & Incentives	\$0	\$0	\$0
Equip. & Install	\$0	\$0	\$0
M&V	\$0	\$0	\$0
Total	\$89,000	\$31,000	\$120,000

C. Application Process

Users will register via the Company’s web portal⁹ and be granted access to property-specific information once their status as a building owner has been verified (see Building Owner Authorization process described above).

Eligibility

Per CCR Electric Rule 3034, any building owner, or contracted agent of the building owner, is eligible for participation in the program (see section E. Product-Specific Policies below).

D. Marketing Objectives & Strategies

The Company will employ a variety of strategies to promote the new program. As stated above, many municipalities and corporations encourage the practice of energy benchmarking to their constituents. The Company plans to work closely with these entities to ensure appropriate training and promotional materials are shared. More broadly, the Company will market the program via its website, and target participants, or interested participants, in its existing energy efficiency programs. Through the practice of benchmarking, the Company also plans to promote additional participation in its existing commercial and multi-family building programs.

E. Product-Specific Policies

As stated above, the program will follow the recently established CCR Electric Rule 3034, which states:

- a) *If requested by a property owner or its authorized agent, a Tier I utility shall provide whole building energy use data to the property owner or its authorized agent so long as:
 - (1) the whole building energy use data contains at least four customers or tenants, which may include the property owner’s own account; and no single customer’s customer data, unless it is the property owner’s, comprises more than 50 percent of the whole building energy use data used to generate the whole building energy use data report;*

⁹ <http://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager>

- (II) *the property owner agrees to not disclose the whole building energy use data except for the purposes of building benchmarking, identifying energy efficiency projects, and energy management; and*
- (III) *the property owner signs a non-disclosure agreement with the utility requiring the property owner, at a minimum to:*
 - A. *take appropriate administrative, technical, and physical safeguards to protect the whole building data from any unauthorized use or disclosure to protect the data from unauthorized access, destruction, use, modification, or disclosure;*
 - B. *only use the whole building energy use data for the purposes of building benchmarking, identifying energy efficiency projects, energy management, and complying with laws or ordinances;*
 - C. *agree to not attempt to determine an individual utility customer's energy use from the whole building energy use data and not to use the information to contact the subject of the information;*
 - D. *agree to not use the whole building energy use data for a secondary commercial purpose not related to the authorized purpose without first obtaining the customer's consent as provided for in these rules;*
 - E. *destroy any whole building energy use data that is no longer necessary for the purpose for which it was transferred;*
 - F. *agree not to permit access to the whole building data by anyone that has not agreed to abide by the terms pursuant to which the data was provided by the utility. This includes, but is not limited to, all interns, subcontractors, staff, other workforce members, and consultants; and*
 - G. *agree that any recipient of the whole building data pursuant to this rule does not obtain any right, title or interest in any of the data provided by the utility.*
- b) *Upon request by a property owner or its authorized agent, a Tier II utility shall provide whole building energy use data upon the same conditions to the extent of, and based upon, information available in the ordinary course of business.*
- c) *A utility shall provide a requested whole building energy use data report in electronic, machine readable format that conforms to nationally recognized open standards and best practices.*
- d) *A utility may charge a property owner or its authorized agent for the development of a whole building energy use data report. Such rate shall be determined in a utility tariff as a non-standard aggregated data report. Alternatively, the utility need not charge the customer if the cost to charge a property owner or its authorized agent is greater than the cost to develop a whole building energy use data report.*
- e) *Availability of whole building energy use data pursuant to this rule does not preclude a property owner from requesting other data reports.*

The latest version of the rule can be accessed on the State's website here:

<http://www.sos.state.co.us/CCR/4%20CCR%20723-3.pdf?ruleVersionId=6403&fileName=4%20CCR%20723-3>.

F. Stakeholder Involvement

As discussed above, throughout Proceeding No. 14R-0394EG, which resulted in CCR Electric Rule 3034, the Company received input to inform the design of the program. The Company also participated in DOE's Better Buildings Accelerator, which brought industry and government stakeholders from across the country together to develop best practice approaches to delivering

whole building energy data to customers. Although not official partners in the Accelerator, the Cities of Boulder and Denver were consulted through the Company's involvement in the effort.

G. Rebates & Incentives

As an indirect impact program, no rebates are proposed.