



INFORMATION ITEM MEMORANDUM

To: Mayor and Members of Council

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Subject: Update on city participation at the Public Utilities Commission

EXECUTIVE SUMMARY

The City of Boulder participates in multiple venues seeking to transform state policy in support of local action. This includes the General Assembly, the Public Utilities Commission (“PUC”), the Air Quality Control Commission and others. The [2023 City of Boulder Policy Statement on Regional, State and Federal Issues](#) serves as the guidepost to develop city policy positions. A [final report on 2022 Colorado legislation that the city engaged on](#) is also available for review. The Climate Action Plan strategies include an active policy agenda as part of the city’s broader legislative and regulatory efforts. The Department of Climate Initiatives also works closely with other communities and entities such as the Colorado Communities for Climate Action¹ on many legislative and regulatory efforts to build broad policy coalitions.

Staff provide regular updates to council on PUC activities. The previous council information packet for the March 16, 2023, meeting described city action at the PUC in the first quarter of 2023.² This memo updates and builds on that information packet and describes additional activity during the second quarter of 2023. This memo also provides additional details on ongoing and upcoming high visibility proceedings that are likely to draw broad community interest:

- Zero Emissions Communities: A Boulder proposal within the Electric Resource Plan to enable communities that seek zero emissions electricity by 2030 to invest in new, utility-scale renewable generation and energy storage.

¹ [CC4CA Policy Statement](#)

² March 16, 2023 Memo to City Council: [Update on city participation at the Public Utilities Commission](#).

- Electric Resource Plan Phase 2: The evaluation and selection of bids received as part of the Electric Resource Plan competitive solicitation.
- Phase 1 and Phase 2 Electric Rate Case: A proposal to increase revenue by \$312 million and Xcel Energy return on equity, resulting in 5-8% bill increase, depending on customer class.
- 2024-2026 Transportation Electrification Plan: A plan to offer on-bill financing for home charging stations, public fast charging, enhanced rebates for vehicle purchase and charging stations for income-qualified customers and investment in innovative technologies.
- 2023-2028 Gas Infrastructure Plan: A plan to evaluate investments in gas infrastructure and presents several projects intended to improve the safety and reliability of the existing gas distribution system. One of the projects identified directly impacts Boulder – Pearl Street Mall Capacity Expansion Project.
- Public Utilities Commission Affordability Initiative: Near-, mid- and long-term activities to reduce energy burden on the most vulnerable customers. The Affordability Initiative focuses on six topics: (1) energy burden, bill assistance and consumer protection; (2) cross-cutting initiatives that affect both electric and gas utilities; (3) gas volatility, market fundamentals and price monitoring; (4) gas utility investments; (5) gas conservation; and (6) consumer education and communications.
- Demand Side Management/Beneficial Electrification Strategic Issues and Plans: Multiple filings to set budgets, performance targets and design requirements for programs that will help customers reduce energy use and carbon footprint.

BACKGROUND

The city participates in PUC proceedings focused on electricity and natural gas production and consumption, including rate design, resource planning and voluntary customer products. The city advocates for products, programs and services that advance city organization and community priorities of affordability, safety, resilience, equity, transparency and emissions reduction.

In most PUC proceedings, the city's participation is led by the Department of Climate Initiatives with support from other city departments with subject matter expertise on a specific topic (e.g., Transportation Engineering for streetlights or Community Vitality for economic development). Participation at the PUC may take the form of formal intervention as a party (represented by the City Attorney's Office), submission of written or oral comments (without formal intervention) and participation in stakeholder workshops. The city contributes data and analysis based on the city's operational experience, Climate Action Plan³ and the Policy Statement on Regional, State and Federal Issues.⁴ Climate Initiatives staff members routinely engage community members, organizations and working groups to inform the city's participation in a specific proceeding.

Boulder has long recognized the importance of the PUC's role in driving broader systems changes in Colorado's electricity and natural gas sector. The actions taken by the PUC have far reaching implications in the ability of local communities to reach their own energy, climate and equity goals. Since 2016, the city has participated in 44 proceedings at the PUC as well as

³ [June 8, 2021 Memo to City Council Study Session on Update to Climate Action Plan](#)

⁴ [City of Boulder 2022 Policy Statement on Regional, State and Federal Issues](#)

numerous stakeholder workshops to inform the development of future products and services. The city's PUC intervention enables Boulder to take direct action to support fair and equitable rates, accelerate emissions reduction through resource planning, and inform new voluntary renewable electricity and demand-side management programs. The city's PUC work supports community education and engagement [when bill impacts are anticipated](#), greater data transparency in annual Community Energy Reports, and transportation electrification programs for small business customers.

RECENT ACTION

Since the last council update, the following proceedings have been underway at the PUC. These proceedings will have significant impact on the city organization and community priorities, and the city is taking an active advocacy role. A summary of the various proceedings is listed in Table 1. Below are brief summaries of the major actions:

- **Zero Emissions Communities:** Within the 2021 Electric Resource Plan proceeding, Boulder and Xcel filed an [update to the Commission regarding the Zero Emissions Communities proposal](#). The update described the status of the development for a potential new product offering that would help Boulder and other communities achieve their zero emission electricity goals. This includes the modeling results for generic utility-scale solar, wind and battery storage resources that could be added to the Xcel Energy system to reduce system-wide emissions on the scale of Boulder. The results of the modeling indicate the potential for utility-scale wind or solar paired with battery storage to reduce system-wide emissions on the scale of Boulder's anticipated 2026 and 2030 emissions. The results also show substantial incremental system costs as well as the potential for the curtailment (forced outage) of a significant amount of the total annual generation as a result of renewable generation not matching load (even with battery storage). These results suggest a need to investigate alternative zero emissions technologies, such as innovative long-duration storage technologies. The Commission update stated that there is not yet final agreement on the Zero Emissions Communities product and that Boulder and Xcel Energy continue to work together to refine the proposal. If agreement is reached, an application for approval may be made to the Commission as early as the fourth quarter of 2023.
- **Electric Resource Plan 30-day Report:** On March 31, Xcel Energy submitted a 30-day report to provide a high-level summary of the bids received as part of the Electric Resource Plan competitive solicitation. The report provides the number of bids received and the quantity of megawatts for each resource type (e.g., solar, wind, energy storage, natural gas) and the median price for each resource type. Xcel Energy received 1,073 total proposals from 170 projects (an individual project can be bid in multiple configurations; for example, a solar project can be in different sizes and both with and without battery storage). Xcel Energy provided a summary of median bid prices by technology. Compared to the 2018 competitive solicitation, there is a notable increase in bid prices (between 7% and 44% for solar, wind and battery storage and more than 120% for natural gas combustion turbines). The Electric Resource Plan and Clean Energy Plan approved in Phase 1 of this proceeding estimates that system-wide emissions will be reduced by approximately 85 percent versus the 2005 baseline. Although median bid prices are higher than 2018, it is likely there are still very

economically competitive bids available that will enable Xcel Energy to achieve this emissions reduction target while maintaining affordable customer bills.

The 30-day report also provides limited detail on innovative technology bids received. These include a hydrogen fuel cell (long duration energy storage),⁵ adiabatic compressed air energy storage (long duration energy storage), geothermal and biomass generators.

The next major milestone in the Electric Resource Plan is publication of the “120-day report.” This report will include a detailed analysis of at least ten resource portfolios as required by the Phase 1 decision as well as Xcel Energy’s recommended portfolio.

Intervenors (including Boulder) will then have an opportunity to provide comments on the portfolio, including on the potential to include one or more bids in the Zero Emissions Communities program. Additional details on the Phase 2 Electric Resource Plan can be found in the March 16 PUC Update to Council.⁶

- **Phase 1 Electric Rate Case:** Xcel Energy filed a Phase 1 rate case in December 2022, proposing to increase the base rate revenue requirement by \$312.2 million. If approved, the bill impact would be an increase of 8.2 percent for residential customers, 7.77 percent for small commercial customers and between 5 percent and 7 percent for large commercial and industrial customers (depending on rate schedule). Xcel Energy also proposes to increase its authorized return on equity from 9.3 percent to 10.25 percent.
 - The city filed answer testimony on May 3 recommending a reduction in the authorized return on equity to not more than 8.51 percent (equal to the most recent five-year average of the actually earned return on equity). The city also recommended requiring Xcel Energy to improve its estimate of energy insecure customers (defined as paying more than four percent of total annual household income on energy expenses) and to develop a roadmap to reduce energy insecurity for all residential customers to no more than four percent of total annual household income.
 - The city filed cross-answer testimony on May 31 supporting the Colorado Energy Office proposal for a standalone proceeding to evaluate performance-based ratemaking (which would help to shift financial incentives away from more capital investment and toward resilience of the current system). The city also supported a recommendation to reduce the authorized return on equity as a tool to improve customer service.
 - Hearings in the case are scheduled to begin July 6 and a decision is expected in September.
- **Phase 2 Electric Rate Case:** On May 15, Xcel Energy filed a Phase 2 rate case to allocate the costs to each customer class based on the revenue requirement that will be approved in the Phase 1 rate case. Notably, the Phase 2 rate case will examine time-of-use rate design. The city will participate as an intervenor and a decision is expected by the end of the year.
- **2024-2026 Transportation Electrification Plan:** On May 15, Xcel Energy proposed its 2024-2026 Transportation Electrification Plan (“TEP”). This TEP builds on the 2021-2023 plan, offering on-bill financing for home charging stations, public fast charging, enhanced

⁵ For purposes of the 30-day report, “Long duration energy storage” refers to energy storage that is longer duration than four hours, which is common for lithium-ion battery storage in operation today.

⁶ March 16, 2023 Memo to City Council: [Update on city participation at the Public Utilities Commission](#).

rebates for vehicle purchase and charging stations for income-qualified customers and investment in innovative technologies. The city will participate as an intervenor and a decision is expected by the end of 2023.

- **2023-2028 Gas Infrastructure Plan:** On May 18, Xcel Energy submitted its first Gas Infrastructure Plan. The initial plan describes how Xcel Energy evaluates investments in gas infrastructure and presents several projects intended to improve the safety and reliability of the existing gas distribution system. One project would address capacity constraints that would be realized if Xcel Energy abandons the gas main that runs under the Pearl Street Mall due to safety concerns associated with its age and materials of construction. The Gas Infrastructure Plan does not require Commission approval but the city will participate as an intervenor and provide comments on the proposed plan.
- **Affordability Initiative:** In April, the Commission launched an affordability initiative to implement near-term (through October 2023), mid-term (November 2023 to April 2024) and long-term (May 2024 and beyond) activities intended to reduce energy insecurity and help to better manage gas industry investments and cost recovery. Some activities are internal to Commission operations while others will occur within other proceedings. The city will participate as appropriate in various activities as they arise. The Affordability Initiative is in addition to the Implementation of Senate Bill 272 proceeding, which is intended to inform a future Commission rulemaking to integrate equity into Commission operations and decision-making.⁷
- **Demand-side Management Strategic Issues and the 2024-2026 Demand-Side Management Plan:** In May, the Commission adopted targets and budgets for electricity and gas efficiency programs and beneficial electrification as part of a “strategic issues” proceeding. These targets will guide the development programs, products and services for the 2024-2026 Demand-Side Management Plan. Notably, the Commission adopted aggressive targets for beneficial electrification (primarily the electrification of space and water heating) with an estimated system-wide emissions reduction of more than 107,000 metric tons of CO₂ between 2024 and 2026. The natural gas targets will reduce consumption by two million dekatherms. The Commission also voted to phase out rebates for certain gas fired appliances such as hot water heaters and furnaces in new construction. The next step is for Xcel Energy to submit its 2024-2026 Demand-Side Management Plan, expected later this year. The City of Boulder will intervene and play an active role in developing the plan.

SUMMARY

Staff recognizes the importance of keeping City Council and the community informed on the various PUC-related activities. Climate Initiatives will continue to provide regular updates to council on the city’s involvement in PUC activities. The update will describe current and anticipated proceedings and the relevance to the interests of the city organization and the Boulder community. The table below includes proceedings in which the city is currently participating as

⁷ See the March 16, 2023 Memo to City Council: <https://boulder.novusagenda.com/agendapublic/CoverSheet.aspx?ItemID=5140&MeetingID=776> for additional detail on this proceeding.

well as anticipated proceedings for 2023. The column “City Status” includes links to the city’s testimony and statements of position in each proceeding.

Proceeding	Number	City Status / Results	Description	Relevance to Boulder Goals ⁸
Implementation of Senate Bill 272 (Equity and Disproportionately Impacted Communities)	22M-0171ALL	<p>Boulder submitted initial comments focused on Boulder’s equity priorities, participated in the first stakeholder workshop and provided additional comments on the EnviroScreen tool.</p> <ul style="list-style-type: none"> • Initial Comments • Comments on EnviroScreen tool <p>Additional workshops are planned for the first half of 2023, leading to a formal rulemaking expected in late 2023.</p>	<p>This rulemaking is intended to establish rules for the Commission to determine how best to provide equity, minimize impacts and prioritize benefits to disproportionately impacted communities and address historical inequalities.</p> <p>The rulemaking will affect all industries regulated by the PUC, including electricity, natural gas, steam, rail, telecommunications and transportation.</p>	Income-qualified, equity, distributed generation, equity, energy insecurity

⁸ The keywords used in the column “Relevance to Boulder Goals” are intended to identify the major topics addressed in the proceeding that are included in Boulder’s Climate Action Plan or other city priorities. For example, “emissions reduction” means that the decision in the case may affect Boulder’s emissions reduction work, “local generation” means that the decision will affect rooftop solar, and “streetlights” means the decision may affect the rates Boulder pays for the operation of streetlights.

Proceeding	Number	City Status / Results	Description	Relevance to Boulder Goals ⁸
Phase 1 Rate Case	22AL-0530E	<p>Boulder was admitted as an intervenor on February 15, filed answer testimony on May 3 and cross-answer testimony on May 31. A hearing is scheduled in July 2023.</p> <ul style="list-style-type: none"> • Answer Testimony • Cross-Answer Testimony 	<p>This rate case proposes a base rate revenue increase of \$312.2 million, an increase of the authorized return on equity from 9.3 percent to 10.25 percent and the associated tariff changes necessary to implement this increase.</p>	<p>Energy burden, affordability, equity, energy insecurity</p>
Phase 2 Rate Case	23AL-0243E	<p>The Phase 2 Rate Case was filed on May 15. Boulder will seek to participate as an intervenor. Decisions on interventions will occur after June 30. The procedural schedule will be set by admitted parties in July 2023.</p>	<p>This rate case will design rates based on the revenue requirement approved in the first phase of the rate case.</p>	<p>Energy burden, affordability, equity, energy insecurity</p>

Proceeding	Number	City Status / Results	Description	Relevance to Boulder Goals⁸
Transportation Electrification Plan	23A-0242E	The Transportation Electrification Plan was filed on May 15. Boulder will seek to participate as an intervenor. The timeline for interventions is not yet set. The procedural schedule will be set by admitted parties in summer 2023.	The Transportation Electrification Plan will propose options to address three primary challenges or gaps in the EV market: lack of information and awareness regarding EVs, upfront costs associated with purchasing EVs and charging infrastructure and suboptimal incentives for EV charging when it is most beneficial to the grid.	Mobility electrification, emissions reduction, equity
Gas Infrastructure Plan	23M-0234G	This is a non-litigated proceeding. Boulder will seek to participate as an intervenor (schedule to be determined). Admitted intervenors will be able to submit comments but the Commission will not approve or reject the plan.	The Gas Infrastructure Plan evaluates investments in gas infrastructure and presents several projects intended to improve the safety and reliability of the existing gas distribution system.	Natural gas infrastructure, emissions reduction.

In addition to these active proceedings, there are several anticipated proceedings with significant impact to community priorities. The table below briefly summarizes these proceedings.

Proceeding	Description	Anticipated Timeline
Zero Emissions Communities	As part of the Electric Resource Plan, Boulder proposed a tool for communities with more aggressive greenhouse gas emissions reduction goals than Xcel Energy to purchase utility-scale renewable generation and storage to enable the communities to “close the gap” and to achieve their emissions reduction goals. Boulder and Xcel Energy provided an update to the Commission on their partnership work on this project on March 23.	<ul style="list-style-type: none"> • Additional work with Xcel Energy and community engagement to follow.
Electric Resource Plan Phase 2	Xcel Energy solicited bids for generation and storage to meet the resource need identified in Phase 1. Bids were submitted March 1. Intervenors, including Boulder, will have an opportunity to comment on the proposed portfolios in July and August.	<ul style="list-style-type: none"> • August 18 proposed portfolios published in “120-day Report” • August-September intervenor comments on 120-day Report. • Commission decision on selected resources expected in November.
Distribution System Plan Phase 2	This proceeding will solicit proposals for pilot projects approved in the first phase of the distribution system plan.	<ul style="list-style-type: none"> • Anticipated to be filed by July 17.
Clean Heat Plan	The Clean Heat Plan will propose emissions reduction programs for the Xcel Energy natural gas system.	<ul style="list-style-type: none"> • Anticipated to be filed by August 1.

Proceeding	Description	Anticipated Timeline
2024-202X Demand-Side Management Plan	The 2024-202X Demand-Side Management Plan will propose products for conservation, energy efficiency, demand response and beneficial electrification for electricity and natural gas customers based on the vision and targets in the Demand-Side Management Strategic Issues proceeding currently pending before the Commission.	<ul style="list-style-type: none"> • Anticipated to be filed in the third quarter of 2023.
Quality of Service Plan	The Quality of Service Plan reports on customer service and distribution system reliability metrics and sets penalties for failure to perform.	<ul style="list-style-type: none"> • Anticipated June 30.
Renewable Energy Standard / Net Energy Metering Rulemaking	This rulemaking will focus on revising rules related to how utilities must comply with the renewable energy standard (30% renewable energy by 2020, 3% of retail sales from retail renewable distributed generation) and net energy metering (the financial compensation mechanism for customers with on-site solar).	<ul style="list-style-type: none"> • Anticipated to be filed by the end of 2023.
Natural Gas Rate Case	In early 2022, the Commission reduced Xcel Energy's proposed natural gas rate increase request from \$214.6 million to \$64.2 million. Xcel Energy indicated it may file a rate case to recover the remaining expenses. In early February, Xcel Energy indicated it is not currently planning to file a natural gas rate case but may do so in the future. ⁹	<ul style="list-style-type: none"> • To be determined.

⁹ <https://www.cpr.org/2023/02/15/xcel-energy-gas-rate-hike/>