



COVER SHEET

MEETING DATE
December 10, 2019

STUDY SESSION ITEM

(3) Municipalization Update

PRIMARY STAFF CONTACT

Steve Catanach, Director of Climate Initiatives

ITEM UPDATES

We anticipate this item to be uploaded on Wednesday, December 5, 2019.

ATTACHMENTS:

Description

- ▣ **MUNICIPALIZATION UPDATE**



STUDY SESSION MEMORANDUM

TO: Mayor and Members of City Council

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DATE: December 10, 2019

SUBJECT: Local Power/Municipalization Update

EXECUTIVE SUMMARY

This memo provides background information and an update on Boulder's ongoing effort to form a local electric utility. A critical step in the municipalization process is asking Boulder voters whether the city should proceed with issuing bonds associated with creating a local power utility (often called the Go/No-Go Vote), originally planned for the 2020 ballot. Staff is working to refine costs and complete the financial feasibility study for the community to make an informed decision. Staff is now aiming to have this information ready for the 2021 ballot, not the 2020 ballot as previously envisioned.

This memo outlines 1) the key variables that have impacted the timeline of the vote 2) process and timing of getting updated and finalized costs 3) rationale for postponing the vote to 2021 and 4) budget implications of postponing the vote to 2021.

In addition, staff recognizes that it is important that the community understand the benefits a local electric utility would provide and how these benefits align with community values. In this memo, staff proposes that conversations about community values and benefits of a local utility takes place over the next year through a variety of engagement platforms.

QUESTIONS FOR COUNCIL

1. Does council have any questions or direction about the timing of the Go/No-Go Vote, specifically the recommendation to postpone the decision to 2021?
2. Does council have any questions or direction about the variables that inform the financial feasibility of operating an electric utility?
3. Would council like to have a conversation to address whether recent changes in Xcel’s business practices and Colorado State law impact the value-add of municipalization? If so, would council like to have this discussion concurrent to future budget discussions? What information would council like staff to provide in the future to facilitate the conversation?

BACKGROUND

Goals and Vision

The city’s Local Power project is a core component of Boulder’s energy future strategy and climate action plan. The city is working to deliver the community’s vision of an energy system that is clean, local, reliable and secure, providing value to all. This community-driven project is consistent with Boulder’s long-standing commitment to the environment and its legacy of local decision-making about key community resources.

The Local Power project is guided by a series of energy-related goals and specific targets. Because Boulder’s energy supply continues to represent the largest portion of our community’s GHG emissions, one of the primary drivers of municipalization has been the ability to “decarbonize” our electricity supply. Simultaneously, there are additional goals that are essential in addressing accelerating climate change and the associated impacts. Both the energy targets and the Energy Future goals are shown below:

Boulder’s Energy Targets

- **100% renewable electricity by 2030:** How we produce energy—whether we burn coal or natural gas, or generate power from natural sources like the sun, water and wind—greatly influences our community’s greenhouse footprint. In order to limit this impact, the city seeks to achieve 100 percent renewable electricity by 2030.
- **Local Renewable Generation:** In addition to the renewable energy target, the city has also set targets for local renewable generation. This will ensure that our community can realize the economic and resilience benefits of local investments in solar and hydroelectricity.

Local Renewable Generation Targets				
Year	2015	2020	2030	2050
Target	30 MW	50 MW	100 MW	175 MW

Boulder’s Energy Future Goals

- **Renewable:** The community will rapidly decrease its dependence on fossil fuels as an energy source, supporting efficient and electrified buildings and vehicles.
- **Local:** Boulder will host a robust energy economy, with more control over its energy supply, investments, and services, that meets the needs and expectations of its diverse community.
- **Accessible:** Competitively valued energy and technology solutions will serve and help improve the lives of all community members.
- **Reliable and Secure:** The energy supply will be stable, resilient, safe and protected against threats.

At the core of Boulder’s Energy Future goals is the ability to make choices that can result in a variety of additional services and benefits to our community, including:

- The freedom to control our energy supply
- The ability to implement new and important technology, like battery storage and electric vehicle charging, which contribute to community resilience;
- Community-owned decision-making processes; and
- Ability to control the rates it charges and re-invest revenue into improving our community's energy system along with supporting programs to help the community undertake beneficial electrification

Boulder's goals demonstrate that we strive to become a community that no longer relies upon harmful fossil fuels to survive and thrive. Boulder's energy future vision imagines a new and different energy economy that meets the needs and expectations of our diverse community.

Achieving this Vision

Local Power

The city's analysis over the years has demonstrated that municipalization, the creation of a city-run, community-owned electric utility, is a viable path to achieving the energy future vision. Other cities with municipal electric utilities have experienced the following benefits:

- Freedom to choose how electricity is generated
- Ability to develop programs and services unique to each community
- Options to keep more energy dollars local
- Lower costs for all customers over time
- Power to invest in and improve the reliability and resilience of our infrastructure
- Increased customer input in utility rates and programs

While there is no guarantee that a Boulder municipal electric utility would realize all these benefits, analysis indicates that they are possible.

Other Pathways

It is important to note, however, that while Boulder has focused on developing a local electric utility as an important strategy to meet our energy goals, the city has never relied on just one approach.

Over the past several years, Boulder and city taxpayers have invested valuable resources to strengthening energy codes, begin climate-friendly transportation solutions, work with local and regional partners to advocate for regulatory changes and many other initiatives. As a result, the city's most recent Greenhouse Gas inventory for 2018 indicated that the city had achieved an 18% reduction in greenhouse gas emissions. The city is in the midst of developing new strategies and tactics to broaden and accelerate emissions reduction and sequestration through the development of a [Climate Mobilization Action Plan](#).

In addition, Boulder has continued to support efforts by its current electricity provider, Xcel Energy, that align with Boulder's goals, and the city is always open to finding opportunities to work with Xcel through their transition.

Since this effort began, Xcel has made progress in adding a considerable amount of renewables to their existing generation portfolio. Although the city does not always agree in the approach the company takes, the city supports this transition, as any progress at the utility-scale impacts a significant number of customers.

Finally, the city is also a leader in supporting state-wide policy efforts through its significant involvement in regional and state-wide coalitions like CC4CA (Colorado Communities for Climate Action). This

includes work at the legislature, Colorado Public Utilities Commission and other regulatory agencies. The significant climate policy advances made at the state level in Colorado during the 2019 legislative session ([described in detail in the July 9 Study Session memo](#)) are an important indication of what is possible and necessary to achieve rapid, systems-level change. The 2019 legislative session resulted in significant steps forward from a climate change and emissions reduction perspective. Boulder’s policy leadership was a factor in this slate of new state laws, and the city is closely monitoring the ongoing rule-making process to ensure that the resulting rules are robust.

ANALYSIS

This section provides analysis on:

- 1) Key variables to determine financial feasibility
- 2) Timing of the Go/No-Go vote
- 3) Budget implications
- 4) Communications and engagement
- 5) Community values and municipalization

The key cost variables that determine financial feasibility of a local electric utility fall into these categories:

- 1) Legal: Which assets the city will purchase and their value
- 2) Engineering: Physically separating one electric system into two
- 3) Power Supply: What type of energy the city will supply to its customers and who will provide it, including the analysis of potential stranded costs obligation (SCO)¹
- 4) Operations and Maintenance: How the city will manage the operations of the system

While there are other factors that impact financial feasibility, such as interest rates, capital investment plans, load growth and more, those highlighted in this memo have associated external processes to navigate in order to refine the costs. Unfortunately, some of these processes are out of the city’s control, especially in the legal realm, and have seen unnecessary delays. Xcel Energy has not been willing to sell the system to Boulder at a reasonable price, creating the need to go through legal processes where a major tactic has been to delay and incur additional cost. Due to this, staff is proposing moving the date of the Go/No- Go vote in order to complete the financial feasibility study with the most accurate information.

While the city has good estimates for each variable, the city will update its [Financial Forecast Tool](#) with variables as they’re defined. The updated variables will be used to analyze their impact on the financial feasibility of municipalization.

1. **Key Variables**

Legal

The city is currently undertaking several important legal steps related to municipalization. **Table 1** provides an overview of these matters and their current status. The [full library of legal filings](#) related to municipalization is available on the city’s website. The City of Boulder separation application (Case 1),

¹ As part of the compromise reached to make the transmission grid available to all, a customer (in this case, the City of Boulder) that no longer wishes to receive power from its generation provider (in this case, Xcel) but does wish to continue to use that provider’s transmission system, must reimburse the generation provider if that provider cannot sell to others the power obtained to serve the departing customer. These generation investments that cannot be sold to others are referred to as stranded costs.

has been a long a difficult case for the city. This case became a prerequisite to the city’s condemnation case (Case 2).

Table 1: Notable Legal Proceedings

Case 1	Colorado Public Utilities Commission (PUC): City of Boulder Separation Application – A proceeding at the PUC to approve which assets could be transferred from Xcel to Boulder to maintain a safe and reliable electric system.
Status	Complete
Overview	<p>In January 2015, the Boulder District Court ruled that the City of Boulder must seek approval from the PUC prior to condemning electric infrastructure owned by Xcel Energy.</p> <p>The city filed its first application for the transfer of assets in July 2015 at the PUC. The city filed its third and final transfer of assets application in May 2017. This application was the subject of an eight-day hearing in July and August 2017. In September 2017, the PUC issued a 90-page decision granting in part and denying in part the city’s application and conditionally approving the transfer of assets.</p> <p>Since September 2017, the city and Xcel Energy have worked to complete the conditions set forth in the ruling. These conditions relate to the list of assets for transfer, the list of property rights that Xcel would retain and an agreement to protect Xcel ratepayers from the costs of municipalization.</p> <p>The PUC deemed that the city had satisfied these conditions.</p> <p>On October 28, Regulators granted Boulder unconditional approval to transfer assets outside substations, completing the PUC proceeding. The deadline for appeals has passed with no appeals from the city or other parties.</p> <p>The city, through the ruling, has gained approval for the transfer of assets outside substations. In September, the commission issued an order that defines the process to transfer assets inside substations. This process, which will not involve the PUC, requires agreement(s) between the city and Xcel Energy.</p>
Case 2	Boulder District Court: Petition to condemn Xcel Energy assets necessary for the creation of a local electric utility – Condemnation determines the value of the assets the city is purchasing.
Status	<ul style="list-style-type: none"> • Case filed in June 2019 was dismissed, city appealing dismissal • Good faith negotiations began in late-November to prepare for re-filing of case
Overview	<p>In December 2018, City Council authorized the city to move forward with the acquisition process, including authorization to condemn Xcel’s assets if the parties did not reach agreement.</p> <p>Earlier this year, the city originally offered \$68.5 million based on the appraisal including assets inside substations. In June, the city increased its final offer to \$82 million. Xcel did not respond to the city’s offers.</p>

	<p>In June, the city filed a petition in District Court to condemn Xcel Energy assets. This case was dismissed by the District Court in September. The District Court granted Xcel’s motion to dismiss, citing that the PUC process was incomplete. The PUC issued a final ruling October 28.</p> <p>In October, the city filed a notice of appeal of the condemnation dismissal. When the city files another condemnation petition at District Court, this appeal will continue in parallel to the condemnation petition.</p> <p>The city appraisals were amended to remove the substation assets Xcel identified in its Facility Study. The revised appraisal was \$62,348,000. The negotiator for the city sent a Notice of Intent to Acquire to Xcel on Nov. 20 with a deadline to respond of Dec. 6. The offer was \$93,963,800 representing twice the amount that Xcel reports for rates as original cost less depreciation. Upon completion of good faith negotiations, if they are not successful, staff plans to file a revised Petition in Condemnation with the court.</p> <p>In accordance with the PUC order, the city is also pursuing agreement with Xcel on the assets inside the substations. The substation facilities that would become Boulder’s on separation are identified in the Facilities Study that Xcel completed in response to the city’s application under Xcel’s Open Access Transmission Tariff (OATT). Xcel has requested co-location agreements in addition to the OATT requirements. Staff is waiting for Xcel’s response to the city’s edits to the last version of the agreements sent by Xcel.</p>
Case 3	Boulder District Court: Xcel Energy petition for reimbursement of attorney’s fees incurred in condemnation case
Status	In the briefing process
Overview	<p>In October, Xcel filed a motion in district court seeking repayment of approximately \$210,000 in attorney’s fees incurred in filing their Aug. 5 motion to dismiss the city’s condemnation case.</p> <p>Under the law, Xcel is entitled to recover only the reasonable amount of attorney’s fees for filing the Motion to Dismiss. Xcel is not entitled to reimbursement for fees incurred in filing other documents or working with other parties to the case.</p> <p>The city responded to this motion Nov. 20, requesting that the court reduce the fees and award no more than \$49,565.</p>

Engineering Analysis

The process of operating an electric utility includes an extensive engineering analysis of how the current electrical system (distribution system and substations) will be divided into two separate systems. Once separated, one system will serve customers under Boulder’s utility and the other system will serve Xcel’s remaining customers outside of city limits. Boulder and Xcel are completing designs for their respective systems.

The city anticipates its distribution system design will be complete in Q1 of 2020. Xcel’s distribution system design and estimates will be complete by Q2 2020. The substation separation cost estimates for both the city and Xcel is anticipated to be complete in Q2 2020, but Xcel’s estimates will be based on a design that is less than 50% complete at that point. More complete plans won’t be done until the end of

2020. Once all the respective designs are complete, the city and Xcel can issue requests for proposals to refine the construction costs associated with separating the system.

Power Supply and Stranded Costs

Power supply is the largest on-going cost to operate an electric utility and is also the key element to support meeting the city's renewable electricity and emissions goals. To this end, in 2018, the city released a request for indicative pricing (RFIP) for power supply and received pricing for high percentages of renewable energy at lower costs than the current wholesale power supply from Xcel. View **Attachment A: Power Supply, Costs and Climate Goals**, for more details on the RFIP. As this process moves forward, the city is implementing a strategy on power supply that includes entering negotiations with wholesale providers.

A critical factor in considering power supply is stranded costs, as the two are intertwined. As part of the compromise reached to make the transmission grid available to all, a customer (in this case, the City of Boulder) that no longer wishes to receive power from its generation provider (in this case, Xcel) but does wish to continue to use that provider's transmission system, must reimburse the generation provider if that provider cannot sell to others the power obtained to serve the departing customer. These generation investments that cannot be sold to others are referred to as stranded costs. In other words, calculation of potential stranded costs is not as simple as estimating Boulder's percentage of Xcel's total revenue in Colorado.

The Federal Energy and Regulatory Commission (FERC) [Order 888](#) includes a formula to calculate the stranded costs amount². There are several variables that impact the calculation of stranded costs, including:

- When and if a generating utility needs additional resources on its system;
- The length of time the generation assets are deemed stranded; and
- The price at which the utility or the departing customer could resell the generation acquired.

While the variables themselves seem simple the actual value of each is not clearly defined.

Xcel has a duty to mitigate its claim for stranded costs from the city, including by using or selling the power that is available because of the city's departure. The city has several ways to mitigate its stranded costs obligation, including:

- Using alternate transmission than Xcel's system to the extent available;
- Generating a portion of electricity using local generation, such as on-site solar, connected to the Boulder distribution system. The city currently has over 50 MW of local generation;
- Continuing to purchase some or all electricity from Xcel and to depart as a generation customer of Xcel over time as a gradual departure scenario;
- Buying less expensive wholesale power from a provider other than Xcel and using the savings to pay any stranded costs obligation; and
- Reallocating the capacity Xcel acquired to serve Boulder to remaining Xcel customers as load grows instead of having Xcel build new generation to serve that load, thereby saving costs to other ratepayers (this approach was approved by FERC but may require approval by the Colorado PUC as well).

² The stranded costs formula is (Revenue Stream Estimate – Competitive Market Value Estimate) * Length of Obligation. The revenue stream estimate is calculated as the average annual revenues for the three years proceeding start up less transmission-related expenses. The competitive market value estimate is calculated by determining the value of energy and capacity that can be resold. The length of obligation is the duration of the stranded costs obligation.

In anticipation of the analysis of any potential stranded costs obligation, the city is currently evaluating these and other strategies to mitigate or avoid any stranded costs liability. Each of these approaches require detailed information on electricity costs and obligations at the time the city is evaluating power supply contract options. Stranded costs calculations involve complicated analyses, potential negotiations and/or possibly litigation before FERC.

Currently, the [Financial Forecast Tool](#) (“FFT”) contains two inputs for users to estimate potential stranded costs obligation and to determine its effect on the financial viability of the electric utility:

1. Power Supply Scenarios: The power supply scenarios tab enables users to select different scenarios. These scenarios include purchasing all wholesale power from Xcel, purchasing a portion of wholesale power from Xcel and purchasing all wholesale power from new providers. The scenarios vary in both cost and greenhouse gas emissions as well as the impact on potential stranded costs obligation (for example purchasing 100% power supply from Xcel would eliminate any stranded costs obligation).
2. Stranded costs Obligation: On the assumptions tab, users can enter any value for potential stranded costs obligation. The value entered is then included in the total revenue requirement for the utility, enabling users to assess the impact on the financial viability of the electric utility.

Any potential stranded costs obligation can be paid either as one lump sum (through debt financing) or can be included in transmission rates paid over-time to Xcel (which does not require debt financing). Any value for stranded costs entered into the FFT assumes that stranded costs is paid in one lump sum which is an unlikely way to do this. Staff will be working to refine the FFT to include analysis for paying any potential stranded costs over time.

City staff is continually analyzing the latest proceedings for resource plans at the PUC to estimate the possibility of a stranded costs obligations. The results of these analyses will inform the city’s direction on a power supply contract. In 2020 the city will continue to evaluate SCO, publish a power supply RFP as well as enter power supply negotiations with Xcel. The results of these efforts will be evaluated in the financial forecast tool and used to inform the community prior to a vote.

Operations and Maintenance of a Utility

Initially, the city plans to outsource many of the functions associated with operating and maintaining a local electric utility with plans to transition certain functions in-house over time. This will ensure the most efficient, reliable transition to Boulder’s operations. Towards the end of 2020, the city will issue a request for proposals to better define these costs and include them in the financial analysis.

2. Timing of the Go/No-Go Vote

To proceed with the purchase of the distribution system, separation of the system and operation of an electric utility, the city is required to put the question to the voters. This is often referred to as the Go/No-Go vote. Council has committed to refining and verifying as many of the costs as possible prior to this vote. Many of the costs are described in this memo (purchase of the assets, engineering, power supply/stranded costs and operations and maintenance).

Additional drivers of financial feasibility that the city will refine prior to a vote include:

- **Interest rates**

- **Xcel's revenue requirement:** The amount of money the utility needs to collect to cover its expenses (based on their most recent rate case in order to provide a base case comparison to what it will cost a local electric utility to operate)
- **Load growth:** How fast electric load grows in Boulder on an annual basis
- **Debt service coverage:** The measure of cash flow available to meet debt obligations

Initially, the city believed these costs would be known in time for a vote in 2020. While some will be, others will not due to delays in legal proceedings, filings and decisions at the PUC that have been beyond the city's control. There are three key elements that have a significant impact on financial feasibility that will not be known in time for a 2020 vote:

1. The value of the system determined through condemnation.
2. Xcel's next Electric Resource Plan (ERP)³: While staff can complete its stranded cost calculations prior to a 2020 vote, its analysis, as well as the comparison to Xcel's revenue requirement, will be much more accurate if Xcel's most up-to-date ERP is reflected.
3. An alternative process to acquiring assets inside substations: This process, which will not involve the PUC, requires agreement(s) between the city and Xcel Energy based on the final PUC order (Case 1 on p. 5).

Based on the commitment that voters would understand the associated costs, risks and benefits of creating a local electric utility, staff is proposing to complete the necessary analysis and postpone the Go/No-Go vote to 2021.

3. Budget Impacts of a 2021 Vote

In 2017, Boulder voters authorized the city of Boulder to extend and increase the [Utility Occupation Tax](#) (UOT) through 2022 to continue funding costs associated with forming a municipal electric utility.

The five-year tax increase was to provide funding for three years (2018-2020) of essential engineering, litigation and staff work, with advanced funding from the General Fund Reserve in 2018 and 2019 to cover projected costs in anticipation of a 2020 go/no-go vote. **Attachment B** provides a report of the 2018-2020 budget/costs and progress on milestones, including:

- Breakdown of costs into major work plan categories
- High-level milestones related to the work plan
- Report on progress toward milestones and budget to inform how money is being spent

While the city has made substantial progress in accomplishing many of the milestones, delays in reaching agreements with Xcel and uncertainties with the timing and outcomes of regulatory and legal processes have impacted the city's ability to provide a complete analysis to inform a 2020 vote. As a result of these delays, further funding will be necessary to support the final analysis necessary for a go/no-go vote in 2021.

Staff is currently analyzing the impact of an additional year on the budget. Additional funding will be required for legal costs which will allow the city to prepare and respond to the actions of the courts and regulatory agencies, personnel and associated non-personnel office costs to complete the work required to support a vote in 2021. Budget estimates will be analyzed and refined and funding options for the shortfall will be determined. Staff will bring the analysis on the budget to council in the spring of 2020.

³ Xcel's next Electric Resource Plan is to be filed by February 2020. Xcel has requested, but not yet received, an extension to file in March 2021.

Between now and the vote, the project will focus on continued engineering and litigation work for the transfer of assets and transition plan, condemnation, Federal Energy Regulatory Commission (FERC) proceedings, potential appeals and continued implementation of the transition work plan. Recognizing this work represents a substantial amount of resources, the city will remain mindful of spending in support of this project and will continue to provide [quarterly updates](#) to the community and council on spending related to work plan activities.

4. Communication and Engagement

The city's local power effort has always been rooted in strong community participation. Before the community decides whether to move forward with the creation of a local electric utility, it's important that the city's communication and engagement efforts provide a host of opportunities for the community to learn about the project, have space to discuss the pros and cons and ultimately make an informed choice.

Currently, city staff is implementing a [2018 communication plan](#) that reflects the recommendations of the [2018 Energy Future Communication and Engagement Working Group](#). Implementation of this plan has enhanced the city's communication on this topic. Some highlights include:

- Revamped [Local Power website](#) offering streamlined information on this lengthy and complex topic
- Five community updates attended by an average of 35 community members that provided key project updates and clarified the project's next steps; meetings are recorded and archived on the city's website
- Several accessible articles on the city's newsroom and in the community newsletter
- 26 [Climate and Energy e-newsletters](#); list grown from 1400 in January to 1800 in November

This plan assumes a go/no-go decision in 2020. Following the Dec. 10 council discussion, staff's focus over the next several weeks will be to update this plan to reflect a 2021 go/no-go decision as well as potential communication and engagement synergies with the city's Climate Mobilization Action Plan (CMAP) project. Finally, an updated communication and engagement plan will also incorporate the recommendation that the city provide space for the community to discuss its values and answer the question: should the city municipalize. Spaces for this conversation will include the city's ongoing quarterly public information meetings and other venues.

5. Community Values and Municipalization

The Boulder community has embarked on a significant undertaking that could change the future of electric service and energy management for its residents and businesses. City staff has continued to analyze the viability of various options to help the community achieve its Energy Future goals. The process is grounded in commitments to be objective, to include as many alternate viewpoints as possible, and to project out not only the results on the first day of potential service from a municipal utility, but for decades into the future.

The analysis to date, has, in large part, been designed to answer a critical first-level question: Can the city municipalize? In other words, is there at least one form of municipalization that meets the prerequisites that voters approved as part of the City Charter?

As the municipalization effort enters the acquisition stage of the process, council and voters must consider equally important second-level questions: What has changed over the past few years regarding state

legislation and Xcel Energy's services? Why is a city-owned utility the path to accomplish the broad set of goals the community set for its energy future? What are the risks and benefits of a city-owned electric utility? These types of questions are part of a value-based conversation on why the city is pursuing municipalization.

Based on the analyses to date, it is possible (from a financial, technical and operational perspective) to municipalize, and the findings to date are promising in terms of the potential value a local electric utility could bring when compared to other alternatives. The results of the city's ongoing evaluation indicate that a local utility could operate effectively with cost savings and flexibility, creating significant advantages in Boulders ability to accelerate its climate and energy-related efforts, including local control, community equity and resilience.

That said, one of the primary drivers of municipalization has been the ability to "decarbonize" our electricity supply. Boulder's Climate Commitment targets a 2030 date for 100% renewable electricity. As staff highlighted in council's [July 9 Study Session](#), the 2019 legislative session resulted in state climate policy that will not only make considerable advances in Colorado's climate-related efforts but enhance local jurisdictions' ability to achieve their specific targets. During the legislative session, more than a dozen bills were signed into law that focus on emissions reduction, energy efficiency and electric transportation.

At the core of the municipalization effort is a vision that is bold and exciting. No matter what energy path Boulder chooses to take, it strives to be a leader in reducing the impact our energy use has on climate change and in providing local energy resources and services that support an equitable, resilient and visionary energy system. To prepare for the ultimate "Go/No-Go" decision on municipalization, council and the Boulder community must consider which of the overarching paths – staying with Xcel energy, forming a local electric utility, or some variation – presents the greatest opportunities to achieve our goals.

The good news is that the pathway to a sustainable, carbon-free energy supply is emerging much faster than most anyone had anticipated just a few years ago. Over the coming year, staff will be engaging with the Boulder community and council to revisit the various risks and benefits associated with municipalization in the hopes the Boulder's Energy future is one that is informed, engaged and transformative.

CONCLUSION

Staff will continue its work to refine costs and complete the financial feasibility study for the community to make an informed decision in a future Go/No-Go vote. Staff is now aiming to have this information ready for the 2021 ballot, not the 2020 ballot as previously envisioned. An additional year of exploration of municipalization will require additional funds, and staff will return to council in the spring of 2020 with more information.

As this remains an important topic for discussion in our community, in 2020 and 2021, the city will provide opportunities for community learning and engagement about paths to achieve the city's energy future vision. An updated Local Power Communication and Engagement Plan will detail these opportunities.

NEXT STEPS

Some key next steps include:

- Work with Xcel to determine path forward regarding substations
- Negotiated acquisition or condemnation
- Resolve litigation related to Xcel's attorney's fees
- Completed separation design engineering
- Participation in Xcel's next Electric Resource Plan proceeding
- Continued financial analysis to determine value of the electric utility assets and other high-impact variables for financial analysis
- Return to council with analysis on the budget
- Updated Communication and Engagement Plan

ATTACHMENTS

Attachment A: Power Supply, Costs and Climate Goals

Attachment B: 2018-2020 budget/costs and progress on milestones



The city is working to get an accurate picture of costs prior to the 2020 community decision. **One of these costs is power supply.**

Understanding power supply

Of all the costs associated with running an electric utility, power supply is generally the single-greatest expense. Therefore, understanding the costs and availability of electricity supply from various providers is an essential step in the planning process. Because Boulder will not build or buy generation assets in the short-term, the bulk of our electricity needs will be met through contracted agreements with wholesale providers.

How can the city determine the cost of wholesale power supply?

Over the past several years, the city has analyzed the state of the power market. Staff have met with independent power producers, intervened in Xcel Energy’s Electric Resource Plan to evaluate ongoing market rates, monitored utility power supply solicitations and industry reports, and most recently, [issued a request for indicative pricing or RFIP](#).

What is a Request for Indicative Pricing (RFIP)?

Through this non-binding document, the city expresses an interest in acquiring wholesale power based on certain criteria. Qualified companies respond to the city’s request by offering power supply plans and prices that give the city an estimate of what the actual costs would be under an official contract. The RFIP process establishes a contractual framework between the potential buyer and the seller and ensures the confidentiality of the proprietary information from the responding companies. This means the city cannot publish individual responses.

Through its process, the city was eager to answer several important questions:

1. *Are power providers available to serve Boulder’s potential electric utility?*
2. *Are there sufficient and available renewable resources to serve Boulder customers?*
3. *What is the anticipated cost to generate, integrate and transmit that power to Boulder?*
4. *Has the price of power changed since the city’s earlier financial analysis?*

What companies responded, and what did they propose?

Respondents provided detailed costs to provide Boulder with power that’s always available—even in adverse conditions—and could meet the community’s renewable energy goals. Boulder received several responses, which included combinations of wind, large and small scale solar, storage and natural gas to create reliable, affordable and clean portfolios. Firms included:

- Able Grid
- Capital Dynamics
- Convergent Energy
- Guzman Energy
- Invenergy
- Lightsource BP
- Nebraska Municipal Power Pool
- Tenaska

The RFIP responses confirm that there are power providers that can meet the city's energy goals at reasonable costs.

How do the responses inform our thinking about power supply?

The responses to the city's RFIP confirmed that there are [power providers](#) that can serve Boulder's energy needs and meet the [city's energy goals](#) at costs consistent with recent industry trends. The prices received in the 2018 RFIP are significantly lower than the city's prior estimates. The results signal that renewable resources have the potential to provide significant cost savings to the utility.

So, does that mean Boulder will contract for power with one of these firms?

Not necessarily. The purpose of the RFIP was to test the market. Any of the responding firms can provide Boulder with reliable and affordable electricity that puts us on a path to meet our 100 percent renewable electricity by 2030 target. Should Boulder choose to operate a local electric utility, the city will release a request for bids to contract for power.

How is the city using this information?

Based on the pricing information received and existing information on Xcel Energy's wholesale rates, the city created four wholesale power supply scenarios for the [December 2018 update](#) of its Financial Forecast Tool. The financial analysis indicates that there are a variety of potential scenarios that allow Boulder to achieve high-levels of renewables at a cheaper cost than purchasing power from Xcel Energy. The average costs and percentage of the portfolio that is renewable is illustrated in the table below.

Power Supply Scenario	10-year-average Energy & Capacity Cost (\$/MWh)	% Renewables (Year)	Average Annual Cost of Power Supply
Xcel Energy (Wholesale)	\$68.28	53% (2024)	\$123.6M
3 years Xcel; then High Renewables	\$51.40	53% (2024)	\$94.1M
Day 1 High Renewables	\$45.54	89% (2024)	\$83.9M
100% Renewable Electricity	\$51.00	100% (2030)	\$93.3M

What's next?

A major component of the city's work between now and the 2020 community decision is ongoing financial analysis of a city-run electric utility. We're working to identify potential costs to develop the utility so that the public can weigh the costs with the benefits when making the go/no-go decision. Visit the city's [Financial Analysis page](#) to stay up-to-date on this area of work.

Tracking Worksheet Electric Utility Development				2018-2020 Budget	2018-2019 Expenditures	2019 Percent Expended	Estimated Progress	2018 Goals				2019 Goals				2020 Goals				2021 Goals			
12/3/2019	Category	○ Completed Milestone Δ Anticipated Milestone on schedule # Anticipated Milestone behind schedule																					
		QTR1	QTR2	QTR3	QTR4	QTR1	QTR2	QTR3	QTR4	QTR1	QTR2	QTR3	QTR4	QTR1	QTR2	QTR3	QTR4	QTR1	QTR2	QTR3	QTR4		
Energy Administration		\$ 2,977,343	\$ 2,881,892	97%																			
City Council Meeting and Public Hearing regarding proposed agreements with Xcel Energy					100%			○															
File Xcel agreements and updated asset list with the Colorado PUC					100%				○														
Update to City Council on Load Interconnection Agreement and Separation Engineering (Information Packet)					100%					○													
Boulder files notice regarding proposed process to resolve outstanding issues with the Colorado PUC					100%						○												
Boulder files additional documents with the Colorado PUC as outlined in the notice					100%						○												
Colorado PUC order regarding transfer of assets												○											
Communications and Engagement		\$ 400,973	\$ 170,189	42%																			
Communications and Engagement Working Group					100%		○																
Develop 2018-2019 Communications and Engagement Strategic Plan					100%			○															
Separation Engineering		\$ 10,517,989	\$ 1,620,025	15%																			
Load Interconnection Application Submitted to Xcel Energy					100%	○																	
City Agrees to Load Interconnection Study Scope, Cost and Schedule					100%		○																
Load Interconnection Study Completed					100%				○														
Execute Vendor Support Contracts for Boulder Substation Work					100%					○													
Complete Boulder Substation Separation Design, Cost Estimate, Construction Timeline and Bidding Work					50%																		
Negotiate Agreement for Xcel Energy Substation Separation Design					100%						○												
Xcel Energy Completes Substation Separation Design, Cost Estimate, Construction Timeline and Bidding Work					50%																		
Complete Work Plan for Xcel Energy Distribution Separation Scope of Work					100%	○																	
Negotiate Scope of Work and other Terms of Distribution Separation Design, Cost Estimate, Construction Timeline and Bidding					100%			○															
Xcel Energy Completes Distribution Separation Design, Cost Estimate, Construction Timeline and Bidding Work					75%																		
Execute Vendor Support Contracts for Boulder Distribution Separation Work					100%			○															
Complete Boulder Distribution System Separation Design, Cost Estimate, Construction Timeline and Bidding Work					60%																		
Acquisition and Potential Condemnation		\$ 2,330,193	\$ 569,972	24%																			
Appraisals					100%					○													
Condemnation Ordinance Adopted by City Council					100%				○														
Good Faith Negotiations					100%						○												
File Condemnation Case in District Court - Court Dismissed					100%							○											
Re-file Condemnation Case in District Court					0%																		
Condemnation Verdict					0%																		
Power Supply and Resource Planning		\$ 279,237	\$ 6,278	2%																			
Advertise Request for Indicative Pricing					100%			○															
Receive Vendor Provided Indicative Pricing					100%				○														
Analyze Power Supply Options and Develop Strategy					75%																		
Negotiate Power Supply					0%																		
NITS Application					0%																		
Transition Planning		\$ 875,171	\$ 285,186	33%																			
Refine Future Utility Operations Vision/ Plan					40%																		
Issue Requests for Information and Qualifications for Utility Operations					20%																		
Update Information and Plans Based on Operations Vision/ Plan and Identify Strategic Decisions Affecting IT/OT Systems, Planning, Engineering and Outsourcing					0%																		