

## Boulder City Staff and Consultant Representations and Xcel Energy's Responses

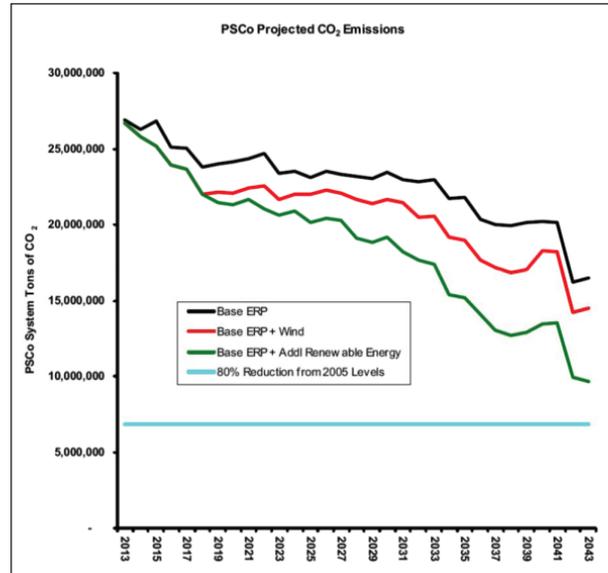
City/Consultant Representation	Xcel Energy's Response
Third-party evaluator makes several remarks concerning RTOs (regional transmission organizations) regarding transmission access and investment issues.	A Regional Transmission Organization (RTO) does not exist in Colorado, showing the consultant did little if any work at all to understand Colorado wholesale market conditions. The wholesale energy market would amount, per the city's own analysis, to be about 70 percent of a Boulder utility's cost structure. Unlike other regions in the country, Colorado is not part of an RTO and has fairly limited ability to import or export power.
Third-party evaluator claimed city's electric system would have more capacity after separating when compared to today's system.	The evaluator offered no analysis to back up this claim. It is intuitively incorrect because under Boulder's proposed separation plan there would be little change in loading on the substations and transmission system.
Third-party evaluator prohibited from reviewing Boulder acquisition cost budget. Boulder claims Xcel Energy provided the value for assets and stranded costs; therefore, no review is needed.	Xcel Energy has never provided the city a formal estimate of asset value, in part because the city's plan for what it wants to acquire continually changes. In 2011, Xcel Energy's consultant advised that the budgets Boulder used for <i>distribution assets only</i> were reasonable for discussion purposes only, within the context of a contested election campaign. That budget, however, did not include compensation for the 115,000-volt transmission lines and substations the city now contemplates purchasing or for any assets outside city limits. In addition, the budget did not include money for other items that could add hundreds of millions of dollars to the cost to form a utility, such as compensation for going concern value and investments in energy efficiency programs, solar energy, smart grid and more.
Third-party evaluator discussed how fuel costs can vary widely and that no one can predict fuel costs.	Volatility in fuel costs, especially natural gas, is a major risk factor with forming a utility. The evaluator made no apparent attempt to analyze the Colorado wholesale market or take into account the value in having a diverse portfolio of power resources like Xcel Energy's, compared to the limited resources of a small-scale utility of the type Boulder is proposing.
Third-party evaluator claims municipal electric utilities will restore power days, even weeks, sooner than investor-owned utilities (IOUs) because an IOU's primary obligation is to shareholders.	The statement shows an inherent bias by the evaluator without any substantiation and support. It ignores that utilities adhere to their obligation to serve and that regulators review and assess quality of service issues generally and outage response in particular. It is also an affront to Xcel Energy's hardworking crews who rebuild electric systems in Boulder after major events such as fires and snowstorms. Our record is one of excellence and many of our personnel have lived and worked in the Boulder area for decades. There is no utility we know of that purposely has extended electrical outages. Electricity is vital to everyone's well-being and getting the power back on as quickly and safely as possible is something all utilities take extremely seriously.

<p>Third-party evaluator made this statement at the July 23 council study session: <i>“What we go out to the court with or negotiate with is a significantly lower number...The cities have their study and know what the real cost is and they’ve got their public position and courtroom position.”</i></p>	<p>Xcel Energy does not purposely misrepresent what it thinks asset value and the real cost to form a utility will be. The consultant’s statement is likely the root cause for why cities have done so poorly in contested takeovers where actual results are often several times more expensive compared to a city’s original estimates.</p>
<p>Third-party evaluator stated he only reviewed model runs through April 16, 2013.</p>	<p>Boulder has developed an entirely new set of models that are a radical departure from its February–April models. The models are now showing financial feasibility only up to \$214 million in acquisition costs, compared to more than \$400 million in prior studies. Even at \$214 million, the only financially feasible scenario contains just 35 percent wind in its 2017 fuel mix and coal generation is now required in all feasible scenarios. In addition, the city has once again greatly expanded its scope by now including about 30 miles of 115,000-volt transmission lines and entire substations, which have never been part of the city’s plan in the past.</p>
<p>The third-party evaluator has not produced a formal report.</p>	<p>City staff represented that a formal report from the evaluator will not be published until after August 6, 2013. It is inappropriate that the only material available from the evaluator is a PowerPoint presentation lacking any real details. Yet the city staff recommended, and the city council approved, a condemnation ordinance as well as an ordinance that the evaluator has met the requirements of the city charter for a third-party review.</p>
<p>City staff stated several times it did not know what Xcel Energy would do under certain conditions—such as if a carbon tax were imposed or if low-cost wind energy were available—so they did not attempt to model any change in Xcel Energy’s operations.</p>	<p>Just because an analyst doesn’t know how a company or market might react to an assumption doesn’t mean the analyst is relieved of an obligation to attempt to incorporate those potential changes in a model. As we have pointed out several times, the city’s model assumes a worst case for Xcel Energy’s fuel mix and therefore carbon emissions. It also assumes Xcel Energy would add no wind, even in scenarios where the city assumes for itself low-cost wind is available. A more reasonable assumption is if there is a low-cost wind market, the wind energy Boulder is planning to purchase would be developed whether the city forms a utility or not.</p>
<p>City staff indicated they used a best-case assumption for Xcel Energy.</p>	<p>This is factually untrue. City staff has said it used Xcel Energy’s 2011 Electric Resource Plan (ERP) in the city’s latest models to indicate the company’s carbon emissions. The plan was written assuming Xcel Energy would comply with the Colorado Renewable Energy Standard (RES), and additional renewable resources above that standard would be added as they were cost effective. As a result, the 2011 ERP portrays an extremely conservative position—a worst-case scenario—for Xcel Energy’s future renewable energy resources. However, the company has added, and continues to add, renewable generation at an accelerated pace. Given the changes in the cost of wind and solar that may continue, a more reasonable consideration is to assume Xcel Energy’s carbon emissions would continue to decline as the company acquires more cost-effective renewables above and beyond the minimum level for compliance. Even if Boulder assumes Xcel Energy adds more renewable resources at a slower pace than it has done for the last 10 years, the company would still be on track to reduce CO<sub>2</sub> emissions by nearly 70 percent by 2043.</p>

City staff indicated 2043 was the only year analyzed in the citizens' task force report.

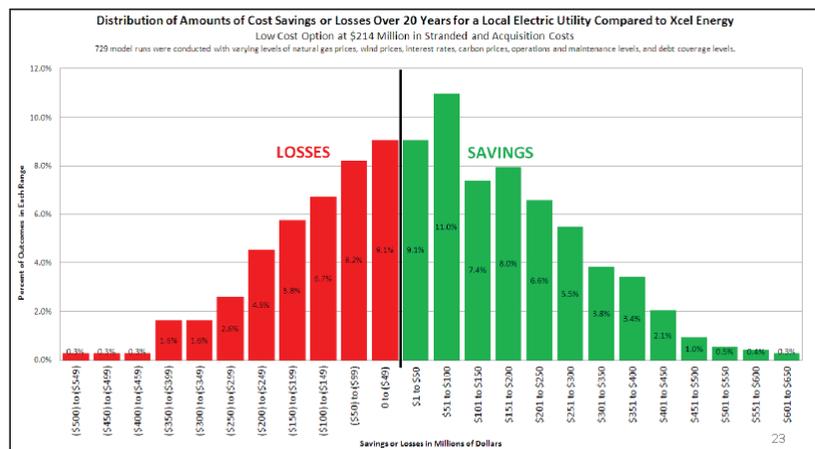
Another factually untrue statement. The citizens' task force (comprised of representatives from the community, the city and Xcel Energy) report contained Xcel Energy's forecast of carbon emissions under three scenarios shown below. The year 2043 was used simply to demonstrate the magnitude of options contained in the task force report. Xcel Energy emissions are on a rapid trajectory for reductions and the gap between the current plan and the city's objectives can readily be filled by pursuing reasonable options proposed by the task force.

*Xcel Energy's carbon emissions under a baseline forecast from Xcel Energy's 2011 ERP (black line). Red line shows reductions if Xcel Energy's recently announced wind projects are approved. Green line indicates a scenario with a modest amount of renewable generation added.*



City staff talked only of the upside potential of forming a municipal utility.

The city staff only discussed the possible financial upside of forming a utility, while ignoring the hundreds of millions of dollars in potential financial downside in its own graph, shown below. The graph indicates that even by the city's own optimistic assumptions, financial feasibility amounts to a flip of the coin with potentially disastrous financial outcomes as likely as positive ones, even if acquisition costs were just \$214 million. The wide spread in potential outcomes also implies the end result is extremely risky with few ways to manage the inherent risk involved in forming a utility in the manner Boulder proposes.



<p>City staff represented that the task force options would cost more.</p>	<p>While further study is required on the potential cost and benefits of most options, not all options would necessarily cost more, especially if the city's assumption of a carbon tax comes to fruition. In addition, one proposed option would allow a city to opt into purchasing more wind and solar energy at a timing of its choosing. If Boulder truly believes its forecast of carbon tax and wind energy prices, there would be no need to increase electric rates or costs under such a scenario.</p>
<p>City staff represented Xcel Energy did not contact the city about an options task force until April 2013 and didn't provide any options to explore until late in the task force deliberations</p>	<p>This is also factually untrue. The city and Xcel Energy started discussions in early 2013 and a task force is mentioned on page 33 of the city staff's February 26, 2013, memo: "<i>Xcel officials have stated they are willing to work with the city to evaluate and pursue partnership options by establishing a joint city-Xcel working group that would include representatives from the community. If council agrees, staff will begin this process after the Feb. 26 work session.</i>" In addition, many of the options that the task force ultimately presented were discussed in the first meetings of the task force.</p>
<p>City staff represented it used a natural gas price forecast with a range of 2.6 to 7.97 \$/MMBtu with the median set at 4 \$/MMBtu.</p>	<p>The city staff continues to show a modeling bias by skewing its distribution of uncertain variables such as wind and natural gas prices. The city set the median value for natural gas price to \$1.94 above the low price assumed, yet nearly \$4 from the highest assumed price. This has the effect of greatly biasing the city's cost modeling to a low-cost result. If its model is done according to statistical theory, half the cases would have a price between 2.06 and 4 \$/MMBtu and the other half between 4 and 7.97 \$/MMBtu. Since the city's study is now showing only a 5 percent rate savings even under the most favorable of conditions, it would not take much of a change in this assumption to have all cases become financially infeasible.</p>
<p>City staff claims using a 4.6 percent per year revenue requirement growth rate for Xcel Energy is conservative.</p>	<p>The city based its claim on a recent five-year period for all of Xcel Energy Colorado customers. In the past five years Xcel Energy has made substantial capital investments. Historically over the past 20 years Xcel Energy's average Colorado retail rates have increased at a compounded annual rate of about 2.3 percent.</p>
<p>City staff represented a scenario was run without the carbon tax.</p>	<p>This scenario appears to only have been done to show the city could still meet the charter requirement that on the first day of the city utility's operations, it would have rate parity with Xcel Energy. But the city continues to use a carbon tax in all the cases it illustrates in Table 9 of its July 23, 2013, memo. If the carbon tax assumption is removed from all scenarios, the city's study would likely show most if not all of the cases for forming a utility are financially infeasible.</p>
<p>City staff implies because Xcel Energy received 6,500 MW in response to its wind request for proposal Boulder will likely have low-cost wind available when the city seeks power supply.</p>	<p>While Xcel Energy did receive a large number of bids, only up to 548 MW proved to be potentially feasible from both financial and technical perspectives. Market conditions are currently favorable for low-cost wind due to the availability of a federal production tax credit (PTC), set to expire in 2013; an oversupply of wind turbines; and adequate transmission capacity (without additional construction) to interconnect wind. These favorable market conditions may not exist at the time Boulder forms a utility.</p>
<p>City staff quoted risk factors Xcel Energy cites in its regulatory filings with the Securities and Exchange Commission (SEC).</p>	<p>Most if not all the risk factors listed in the SEC filing would also be faced by the city. In fact, due to the small size of the city utility, the risk factors would be amplified. Even if one factor, such as loss of load, becomes a reality the city would be especially vulnerable because the utility would be saddled with debt payments and "take or pay" wind energy contracts.</p>

<p>City staff indicated there is no quantification available for curtailment of wind due to the use of coal.</p>	<p>Another factually untrue statement. Wind curtailment is currently less than 2 percent and is expected to decline as Xcel Energy retires coal plants. In addition, Xcel Energy released a 2011 study that looked at the impact of incorporating up to 3,000 MW of wind into the system.</p>
<p>City staff said they are absolutely uncertain on projections.</p>	<p>The city's model amounts to a guess of numbers where the city has little if any control over the end results. Just turn back the clock five years when natural gas prices were double, even triple of current levels and the risk involved in the city's projections are clear.</p>
<p>City staff indicated losing a major load would lower their wholesale cost and therefore, by implication, would not impact rates.</p>	<p>This discussion shows a clear lack of understanding of industry costs. If the lost load is every-hour-every-day consumption or anything that is more than an "average" load shape, a utility can take a substantial hit with costs on the wholesale side, especially on a cents-per-kilowatt-hour (kWh) basis. These are exactly the types of loads that are most likely to move to alternate solutions, such as self-generation, if the city's electric rates escalate above competitive options. The term used in the utility industry is the "fixed cost death spiral" and describes a situation in which a utility loses a large load and rates (cents/kWh) must increase to continue covering those fixed and higher "variable" costs. Then when more load is lost due to competitive options, rates increase even more, and the cycle continues. In reality there haven't been many "spirals" because utilities (IOUs and municipalities) have been careful to keep rates competitive. Certainly, however, the smaller the scale of operations, the more vulnerable it is to this scenario. And Boulder's model of issuing large amounts of debt and having large fixed costs, such as "take or pay contracts" for wind energy, especially exposes Boulder to the risks of load reductions.</p>
<p>A councilperson expressed concern about city staff time associated with exploring options with Xcel Energy and indicated the company does not have similar issues because Xcel Energy's personnel are rate based.</p>	<p>"Rate base" normally refers to the assets Xcel Energy is required to finance through a combination of approximately equal amounts of debt and equity. Employees are not normally "rate based" and, regardless of that fact, staff engaged in exploring options are typically senior resources that have many other responsibilities. We appreciate that city staff time is also valuable and do not underestimate the commitments required from both parties to fully explore and develop options.</p>
<p>City staff showed a slide of innovative initiatives in the industry that included only municipal efforts.</p>	<p>The city continues to cite examples of municipal utilities such as operations in Seattle, Washington, and Denton, Texas. While these are certainly well-respected utilities, it is important to point out that these and other communities cited by Boulder are in fundamentally different markets. For example, Seattle is a utility in the Pacific Northwest with predominantly hydropower and a small amount of nuclear energy. For Seattle to become carbon neutral would take an entirely different set of initiatives than for communities in Colorado. Denton, with 40 percent wind energy today, also has 50 percent coal power and operates in a state market known as the Electric Reliability Council of Texas (ERCOT) that has 33.8 percent coal. ERCOT is also a deregulated market, though Denton chose to not allow its customers a choice in electricity supplier.</p>