

BEFORE THE PUBLIC UTILITIES COMMISSION OF COLORADO

19AL-0268E

IN THE MATTER OF ADVICE NO. 1797-ELECTRIC OF PUBLIC SERVICE COMPANY OF COLORADO TO REVISE ITS COLORADO P.U.C. NO. 8—ELECTRIC TARIFF TO IMPLEMENT RATE CHANGES EFFECTIVE ON THIRTY-DAYS NOTICE

STATEMENT OF POSITION OF LESLIE GLUSTROM

NOVEMBER 22, 2019

TABLE OF CONTENTS

I. INTRODUCTION AND LEGAL MANDATES OF THE PUC..... 2

II. XCEL’S SPENDTHRIFT STRATEGY UNDERMINES PUBLIC CONFIDENCE IN THE LOW-CARBON TRANSITION 3

III. SUMMARY OF REQUESTS IN THIS RATE CASE 5

IV. CONTEXT FOR THE COMMISSION’S DECISIONS 9

V. FIND CACJ EXPENDITURES ON PAWNEE AND HAYDEN IMPRUDENT AND REDUCE RETURN ON ANY ALLOWED EXPENDITURES TO THE COST OF DEBT 20

VI. DISALLOW 50% OF 2018 RUSH CREEK EXPENDITURES—TOO EXPENSIVE AND NOT PRUDENT 25

VII. REDUCE RETURN ON CAP EX ON FOSSIL FUEL RESOURCES TO 4% AND REQUIRE ESSENTIAL RELIABILITY ANALYSES IN THE FUTURE BEFORE SPENDING MORE THAN \$1 MILLION ON A FOSSIL FUEL PLANT 27

VIII. REQUIRE REPORTS OF EXPENSES BY PLANT AND BY YEAR—PUT PSCo ON NOTICE THAT FOSSIL FUEL EXPENSES WILL NO LONGER BE AUTOMATICALLY APPROVED 28

IX. OTHER ISSUES TO EXAMINE 29

A. Tax Cut and Jobs Act (TCJA) Treatment 29

B. EAF—Equivalent Availability Factor 29

C. Comanche 3..... 29

D. Ensure that PSCo Files a Customer Impact Study 30

X. CONCLUSION..... 30

I. INTRODUCTION AND LEGAL MANDATES OF THE PUC¹

While this is a “rate review” (i.e. “rate increase request”) for Xcel’s Colorado operating utility known as Public Service Company of Colorado (“PSCo), it is, of course, true, that where we spend our money reflects our values—and PSCo’s expenditures should also reflect the laws and policies of the State of Colorado including the legal mandates given to the PUC as embodied in the Colorado Revised Statutes (C.R.S.), Chapter 40. In particular, the PUC should:

- 1) Ensure that rates are “just and reasonable” (C.R.S. § 40-3-101(1))
- 2) Ensure that facilities promote the public health and safety (C.R.S. § 40-3-101(2))
- 3) To “correct abuses” and “do all things...which are necessary” (C.R.S. § 40-3-102)
- 4) Give the fullest possible consideration to clean energy (C.R.S. § 40-2-123 (1)(a))

As discussed further below,² Xcel had \$551 million in net income after-taxes from Colorado in 2018, which was an 11.6% increase in after-tax net income from 2017. There is a strong argument to be made that rates that lead to over a half-billion dollars in **profit after taxes** are not rates that are “just and reasonable,” and that given that PSCo customers have been paying for large amounts of excess capacity (on top of the approved reserve margin) that this is an “abuse” that needs to be corrected. Similarly, Xcel’s large expenditures on their fossil fuel generation assets when there are thousands of MW of low-cost clean energy options ready to be built in Colorado is another “abuse” that should be corrected in accordance with CRS §40-3-102.

¹ These Statements were supposed to be both short (30 pages) and written quickly. This is a tough assignment and Ms. Glustrom is also on “grandchild” watch so she apologizes in advance for any roughness in this Statement.

² The arguments summarized in this Statement of Position, are elaborated on more fully in Ms. Glustrom’s Answer Testimony submitted on September 19, 2019 in this 19AL-0268E docket.

The Colorado statutes also direct the PUC to ensure that facilities protect the public health and safety and that the “fullest possible” consideration be given to clean energy and energy efficient technologies. This proceeding involves the expenditure of hundreds of millions of dollars on fossil fuel burning coal and natural gas/fossil methane plants (as detailed in the Direct Testimony and Attachments of PSCo witness Kyle Williams.) These expenditures are most certainly **not** promoting the public health and safety; they are doing the opposite.

It is past time for the Commission to send a strong message to Xcel that it is no longer appropriate to be pouring hundreds of millions of dollars into fossil fuel generation and earning a high rate of return on those capital expenditures. Much of the money that Xcel has been spending on fossil fuel assets could be spent on much cleaner, low-carbon, more resilient 21st century alternatives—options that will be much more in alignment with the laws that the Colorado legislature has passed to direct the workings of the Colorado PUC.³

II. XCEL’S SPENDTHRIFT STRATEGY UNDERMINES PUBLIC CONFIDENCE IN THE LOW-CARBON TRANSITION

Xcel’s repeated requests for rate increases are undermining Coloradan’s belief that lower cost renewable electricity options are available in Colorado. If we are to keep the momentum going in Colorado for decarbonization of our electric supply, Xcel’s profit-seeking rate increase requests need to be severely trimmed so as not to lose the support of Coloradans who have been repeatedly told that

³ In 2019, the Colorado Legislature passed a suite of laws that direct the Colorado PUC to further reduce reliance on fossil fuels and greatly increase the reliance on renewable energy. Those bills include [SB19-236](#) as well as several others. It will behoove everyone, including Xcel, for the Commission to start signaling that it intends to take its new mandates to address climate change and reduce reliance on fossil fuels seriously. This means changing old habits about spending large amounts of capital on old coal and natural gas/fossil methane generation.

renewable energy technologies will save money as compared to the current fossil fuel generation options.

Sadly, Xcel seems to have decided to use the “head room” created by lower cost renewable generation (and natural gas costs) to pour money into capital expenditures that will lead to repeated requests for rate increases and provide shareholder profits on the spending spree. Xcel’s plans for large new capital expenditures are summarized in Slide 41 from Attachment LWG-4 copied below. The Commission should make it clear that these spendthrift behaviors will not be tolerated in Colorado.

Figure LWG-SOP-1
From Attachment LWG-4 (Sept 19, 2019), Slide 4

**Base Plan
Capital Expenditures by Company** 

\$ Millions

	2019	2020	2021	2022	2023	Total
NSPM	\$2,825	\$1,290	\$1,540	\$1,300	\$1,380	\$8,335
PSCo	\$1,370	\$1,380	\$1,335	\$1,395	\$1,530	\$7,010
SPS	\$1,130	\$770	\$460	\$530	\$635	\$3,525
NSPW	\$240	\$240	\$300	\$305	\$275	\$1,360
Other *	(\$50)	(\$70)	(\$25)	\$10	\$15	(\$120)
Total	\$5,515	\$3,610	\$3,610	\$3,540	\$3,835	\$20,110

Base plan includes the \$650 million acquisition of the 760 MW Mankato Energy Center CCGT and the \$135 million acquisition/repowering of Jeffers & Community Wind North, totaling 70 MW

* Other category includes intercompany transfers for safe harbor wind turbines.


Stating their intentions to reduce carbon emissions does not justify Xcel saddling Colorado rate payers with billions in extra capital expenditures⁴ leading to repeated rate increases.

III. SUMMARY OF REQUESTS IN THIS RATE CASE

In order to comply with its statutory mandates to ensure just and reasonable rates (C.R.S. §40-3-101(1)), to correct abuses (C.R.S. §40-3-102) and to ensure that Xcel’s facilities promote the public health and safety (C.R.S. §40-3-101(2)), this Statement of Position pleads with the Commission to carefully consider the following:

- **A Rate Reduction:** Xcel is doing more than well in Colorado. It had over half a billion dollars in after-tax net income last year after paying for all its expenses and its stock price has soared in recent years. The Commission should strongly consider the need for a rate reduction as detailed by other parties to address the failure of previous Commissions to adequately regulate Xcel’s rates.

⁴ A review of slide 40 in Attachment LWG-4, demonstrates that these capital expenditures are **not** predominantly for renewable generation, but rather for transmission, distribution and (non-renewable) generation and natural gas infrastructure.

Base Plan Capital Expenditures by Function 						
\$ Millions						
	2019	2020	2021	2022	2023	Total
Electric Distribution	\$775	\$865	\$1,150	\$1,245	\$1,270	\$5,305
Electric Transmission	\$580	\$560	\$950	\$870	\$1,055	\$4,015
Renewables	\$2,315	\$1,105	\$240	\$0	\$0	\$3,660
Electric Generation	\$1,070	\$310	\$480	\$560	\$545	\$2,965
Natural Gas	\$430	\$415	\$420	\$510	\$595	\$2,370
Other	\$345	\$355	\$370	\$355	\$370	\$1,795
Total	\$5,515	\$3,610	\$3,610	\$3,540	\$3,835	\$20,110

Base plan includes the \$650 million acquisition of the 760 MW Mankato Energy Center CCGT and the \$135 million acquisition/repowering of Jeffers & Community Wind North, totaling 70 MW

- **Lower ROE and % Equity**--As other parties will undoubtedly point out, Xcel's requested Return on Equity (ROE) of 10.2% in their rebuttal case is extremely high—especially for an industry with very little risk. A fair return given the very low risk Xcel faces would be below 9%, but it may be necessary to reduce Xcel's ROE in a more stepwise fashion, starting with something in the low 9% range in this proceeding.
- **Disallow Payments for Capacity Above the Approved Reserve Margin**--Xcel's Colorado customers have been paying for significant amounts of excess capacity (on top of the 16.3% approved reserve margin) and they have been paying large amounts for fossil fuel resources that are either obsolete (i.e. coal) or will likely soon be obsolete (i.e. natural gas/fossil methane). These are abuses that need to be corrected.
- **Disallow or Reduce Return on CACJ Amounts for Coal Expenditures**-- Despite numerous warnings not to invest in coal in the 21st century, Xcel proceeded to spend hundreds of millions of dollars on their coal generation under the misleadingly named "Clean Air Clean Jobs" (CACJ) program. The Commission should disallow some of these CACJ expenses and/or reduce the return on them to something well below 9% as they were not prudent.⁵
- **Disallow Part of the Rush Creek Wind Farm**—Even after it was clear that the Rush Creek wind farm cost about twice as much (i.e. \$29/MWh⁶) as it should have, Xcel proceeded to

⁵ Xcel's claims that a "regulatory compact" prevents a prudence challenge are without foundation in Colorado law or regulation as discussed in the body of this Statement of Position. A CPCN (Certificate of Public Convenience and Necessity) is a presumption of prudence—**not a guarantee**. (PSCo acknowledges this in Hearing Exhibit 206). It is up to Xcel to operate their utility with their eyes wide open (even if they have received a CPCN)—just as a driver needs to proceed with caution and attentiveness—even with a green light--if the intersection is not clear or "adverse situations" appear to be arising. Given the information that Xcel knew or should have known (either because it was their own analysis or because it was submitted to the PUC as part of a PSCo docket) it should not have proceeded with the CACJ expenditures as it was clear that the CACJ expenditures on coal plants were **not** prudent—and would quickly become very obviously so, as they have indeed done.

⁶ Rush Creek without transmission was about \$24/MWh but it is still substantially more expensive than the wind bids that PSCo received in November 2017 as shown in the body of this Statement with the median wind bid at about \$19/MWh.

spend over \$400 million on the Rush Creek wind farm without taking any apparent efforts to reduce the price. A substantial part of that \$400 million should be disallowed along with a stern warning to Xcel not to “gold plate” the renewable resources it is acquiring, but rather to bring Colorado ratepayers the most cost-effective renewable generation options.

- **Reduce Return on Capital Expenditures on Fossil Fuel Plants and Establish a Reliability Requirement for Future Fossil Fuel Capital Expenditures**--Capital expenditures on old fossil fuel generation are often a case of putting “good money after bad.” Given the imprudence of investing in fossil fuel plants that was apparent for many years before 2014, PSCo’s return on capital expenditures made since 2014⁷ on fossil fuel generation should be reduced to the cost of debt, or at the very least to something well below 9%. The Commission should make it clear to Xcel that future capital expenditures on generation that is already obsolete (i.e. coal) or will likely soon be obsolete (i.e. natural gas/fossil methane) will not be assumed to be prudent unless there is a clear showing that the fossil fuel plant is essential for reliability. It doesn’t make sense for Xcel’s customers to pay for capital expenditures (including profits) on generation that is accelerating the climate crisis and that is no longer the lowest-cost way to meet electric demand.
- **Create a Reliability Test for Future Operation and Maintenance Expenditures on Fossil Fuel Plants**--Operation and Maintenance (O&M) expenditures for fossil fuel generation (including over \$100 million spent on coal and natural gas/fossil methane generation by Xcel in Colorado in 2018) should no longer presumed to be prudent. The Commission should send a clear message to Xcel that it should not make large O&M expenditures on its fossil fuel fleet

⁷ PSCo’s capital expenditures on fossil fuel expenditures are detailed in PSCo witness Kyle Williams Attachment KIW-1 (later corrected to KLV-1).

unless a resource is essential for reliability. To facilitate this examination, Xcel should make an annual filing with the Commission detailing O&M expenses for its fossil fuel fleet for the coming year and receive Commission approval for those expenses as being essential for reliability to avoid making imprudent expenditures on generation that is already obsolete (i.e. coal) or will likely soon be obsolete (i.e. natural gas/fossil methane).

- **Review Xcel’s TCJA Accounting**--The Commission should take a hard look at the Tax Cut and Jobs Act (TCJA) accounting as Xcel paid over \$130 million less in taxes in 2018 as it did in 2017, but only provided its Colorado customers with a \$42 million credit.
- **Terminate the EAFPM**—The Equivalent Availability Factor Performance Metric should be terminated (or modified to only apply to renewable resources) to avoid creating an incentive for PSCo to use their coal and natural gas resources to increase their EAF scores even when there are lower cost and lower carbon generation sources available.
- **Review the Comanche 3 Coal Plant Situation**--The Commission should take a hard look at the Comanche 3 plant which has had both very low Equivalent Availability Factor and capacity factor ratings in recent years. It does not make sense for Xcel’s Colorado customers to pay Xcel large returns on (e.g. close to \$70 million a year) for a plant that is very unreliable and much more carbon intensive than the abundant low-cost wind, solar and storage bids that Xcel received in 2017. It is past time that both Xcel and its customers were put “out of their misery” for this billion-dollar mistake.
- **Ensure That an Accurate Customer Impact Study is Filed**--The Commission should ensure that there is a full Customer Impact Study filed for this rate case so that any claims made by PSCo about their rates going forward can be verified.

IV. CONTEXT FOR THE COMMISSION’S DECISIONS

While there are a host of issues for the Commission to decide in this docket, keeping in mind the “big picture” as detailed in this Statement of Position and in Ms. Glustrom’s Answer Testimony, should help the Commission determine the proper path that ensures that Xcel’s customers are protected from the monopoly power of Xcel.

A. Xcel Had Over \$551 Million in After Tax Net Income in Colorado in 2018

PSCo had \$551.7 million in after tax net income in 2018 (i.e. after paying all its expenses)⁸—an 11.6%⁹ increase from its 2017 after-tax net income of \$494.1 million. While this “bottom line” is for all of PSCo (not just electric), it is a strong indication that PSCo is doing well and with about 74%¹⁰ of its revenue in 2018 coming from electricity, it doesn’t appear that PSCo is in need of yet more revenue from its electric customers. Indeed, there is a strong argument that rates that lead to over a half billion dollars in net income are not “just and reasonable” and that the “abuse” of taking over \$550 million more from Colorado rate payers than is needed to meet expenses should be corrected as called for in C.R.S. § 40-3-102.

B. PSCo Has Had Numerous Rate Increases Since the Turn of the Century, Increasing Its Revenue by Over \$500 Million Per Year

As can be seen in Table LWG-SOP-1 below, while PSCo has been spending a lot of money over the last decade, they have also received numerous electric rate increases—totaling over \$500 million in increased annual revenue since 2007.

⁸ For PSCo’s \$551 million in net income after taxes in 2018, see PSCo’s 2018 Consolidated Statement of Income in PSCo’s 2018 10-K Annual Report (Attachment LWG-2, September 19, 2019), Page 22

⁹ $(2018 \text{ After Tax Net Income} / 2017 \text{ After Tax Net Income}) - 1 \times 100 = (\$551.7\text{M} / \$494.1 \text{ M}) - 1 \times 100 = 11.66 \%$
(Amounts in millions = “M”) Data from page 22, Attachment LWG-2 (September 19, 2019)

¹⁰ $(\text{Electric Revenues} / \text{Total Revenues}) \times 100 = (\$3,031 \text{ M} / \$4,086 \text{ M}) \times 100 = 74\%$.

(Amounts in millions = “M”) Data from PSCo 2018 10-K, Attachment LWG-2 (September 19, 2019)

Table LWG-SOP-1
Base Rate Electric Revenue Increases Granted to PSCo Since 2006
Data from the Decision Numbers Provided for Each Docket

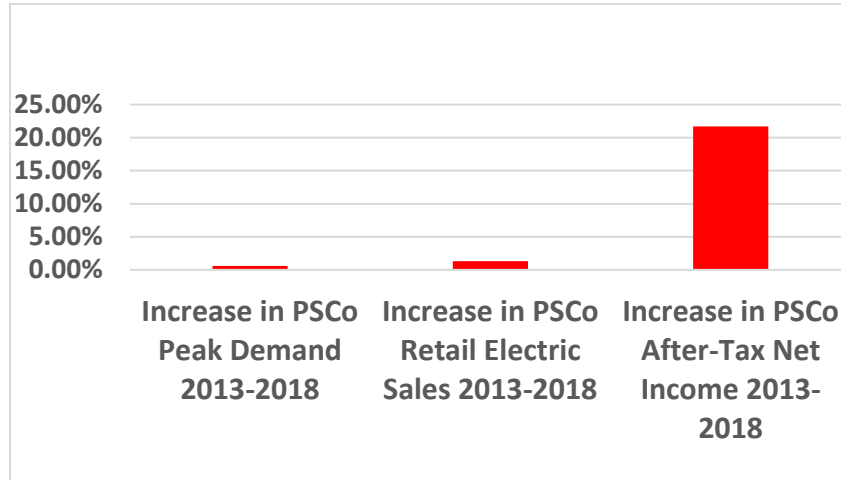
Colorado PUC Docket	Year Xcel Rate Increase Went Into Effect	Colorado PUC Decision	Annual Increase in Electric Base Rate Revenue for Xcel
06S-234EG	2007	C06-1379	\$107 million per year
08S-520E	2009	C09-0595	\$112 million per year
09AL-299E	2010	C09-1446	\$128 million per year
11AL-947E	2012	C12-0494	\$73 million per year
11AL-947E	2013	C12-0494	\$16 million per year
11AL-947E	2014	C12-0494	\$25 million per year
14AL-0660E	2015-2017	C15-0292	\$41.5 million
TOTAL 2007-2015			\$502.5 million per year

C. PSCo After-Tax Profits Are Soaring Despite Basically Flat Sales and Peak Capacity

Figure LWG-SOP-2 below, shows that PSCo’s peak capacity and retail sales have been essentially flat over the last several years while after-tax profits have gone up over 20%. It isn’t at all clear that PSCo needs a rate increase—they are doing more than well from a profit perspective. Now it is (past) time for the Commission to correct the abuses that have led to PSCo taking over half a billion dollars out of the pockets of its Colorado customers to dramatically grow its after-tax bottom line, while the size of its Colorado system and sales have stayed essentially flat.

Figure LWG-SOP-2
PSCo’s System Size, Retail Electricity Sales and
After-Tax Net Income 2013-2018¹¹

*Data from PSCo’s 2018 and 2015 10-K Annual Reports (Attachments LWG-2 and LWG-3
 Details in Ms. Glustrom’s Answer Testimony, September 19, 2019)*



D. Xcel Share Price Has Also Soared In Recent Years

Figure LWG-SOP-3 is the five-year chart of Xcel’s stock price from Reuter’s. Again, there does not appear to be any reason to be concerned about Xcel’s financial condition as Xcel’s stock price has soared over the last 5 years, more than doubling from \$31.27 on September 8, 2014 to \$64.80 on September 2, 2019.

Since Xcel’s financial situation is more than robust, it is past time to correct the “abuse” that is leading to Xcel taking over a half billion dollars from its Colorado customers beyond what is needed to cover its expenses. Many Xcel ratepayers struggle to pay their bills;¹² it is past time to prioritize their needs over Xcel’s corporate desires.

¹¹ If questions arise about longer term trends, the 2012 PSCo 10-K gives the following numbers for 2010-2012:

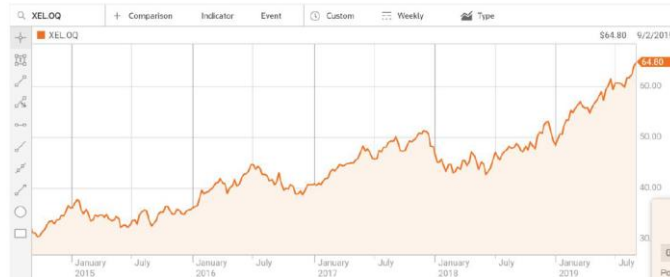
Peak Capacity—6,436 MW (2010), 6,896 MW (2011), 6,689 MW (2012) (page 6, 2012 PSCo 10-K)

Total Retail Sales (millions of kWh)—28,298 (2010), 28,483 (2011), 28,786 (2012) (page 10, 2012 PSCo 10-K)

After Tax Net Income--\$399.7 Million (2010), \$396.8 Million (2011) \$458.1 Million (2012) (page 32, 2012 PSCo 10-K)

¹² As in every rate case, there are numerous letters in the record of this 19AL-0268E proceeding asking the Commission to protect them from Xcel’s seemingly endless rate increases. Most individuals are not able to do more than write a letter or email to the Commission—which is actually a significant undertaking given that it takes no small amount of effort to understand the PUC webpage and comment system. It is only the three Commissioners that can help correct the “abuses” that have plagued these customers while Xcel’s profits and stock price have soared.

Figure LWG-SOP-3
Xcel's Stock Price Sept 2014-Sept 2019
 From Reuters <https://www.reuters.com/companies/XEL.OQ/charts>



Xcel has done extremely well since the last rate case. They are not in financial trouble. It is past time to now correct the “abuses” that have led to over \$550 million coming from the “pockets” and bank accounts of Colorado¹³ ratepayers in 2018 to pad Xcel’s “bottom line.”

E. PSCo Has Had Hundreds of MW of Excess Capacity (Above the Approved Reserve Margin) for Most Years in the Last Decade—Ratepayers Should Not Be Responsible for Paying for This Excess Capacity

As detailed in Attachment LWG-5 (Discovery Response LWG1-1, Docket 19AL-0268E) and summarized in Table LWG-SOP-2 below, PSCo has generally had several hundred MW of excess capacity—**on top of** the 16.3% (approximately 1000 MW) approved reserve margin. The average excess capacity (on top of the approved reserve margin) for 2014-2018 is 451 MW.

Capacity is expensive (in the neighborhood of \$1 million/MW) and this excess capacity *on top of* the approved reserve margin is bloating PSCo’s rate base—especially when it is considered that PSCo expects to earn over 7% ¹⁴ on its rate base. For every \$1 billion of rate base, PSCo is earning

¹³ As detailed on pages 21-22 of Ms. Glustrom’s Answer Testimony submitted September 19, 2019, PSCo consistently contributes more to Xcel’s earnings than does Northern States Power of Minnesota, despite NSP having a larger system.

¹⁴ PSCo’s Rebuttal Testimony in this docket proposes a 7.53% WACC. See page 5, Rebuttal Testimony of PSCo witness Alice Jackson.

over \$70 million a year as “return on” the rate base. So, PSCo’s long term practice of having more capacity than the 16.3% approved reserve margin is also an “abuse” that needs to be corrected.^{15,16}

Table LWG-SOP-2
Excess Reserve Margins for PSCo 2009-2018

Data from Attachment LWG-5--19AL-0268E Discovery Response LWG 1-1

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Excess Capacity (MW) Above the Approved Planning Reserve Margin	682	875	368	354	88	736	655	384	348	132

It is also very likely that customers would have lower bills if the Commission forced PSCo to manage the peak with demand response and other demand-side measures rather than acquiring generation to meet the peak demand which, by definition, only occurs for a few hours of the year.

F. PSCo’s Fuel Mix in Colorado in 2018 was 73% Fossil Fuel—40% Coal and 33% Natural Gas—This is Most Definitely Not Promoting the Health and Safety of the Public as Called for By Colorado Statute

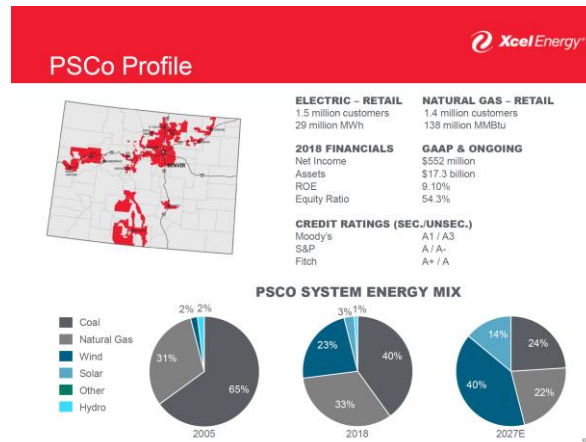
As can be seen from Figure LWG-SOP-4 below, Xcel’s Colorado fuel mix in 2018 was 40% coal and 33% natural gas—or 73% fossil fuel.

¹⁵ PSCo has not done a recent study to assess whether it still needs a 16.3% reserve margin and with the evolution of storage technologies, it is likely that the 16.3% reserve margin could be reduced. The ‘current’ Loss of Load Probability (LOLP) study for PSCo (which is used to determine the size of the reserve margin) was filed with the 2016 Electric Resource Plan. It is dated 2008 and so does not reflect any of the recent advances in storage or prediction and management of wind and solar generation or the ability to manage demand with low-cost demand management techniques. (For PSCo’s “current” LOLP study, see page 373 of 398 in “AKJ-2” (Volume 2 of PSCo’s 2016 Electric Resource Plan), Docket 16A-0396E.)

¹⁶ PSCo’s propensity for having significant excess capacity *on top of* its approved reserve margin can also be seen in the results of the 2016 Electric Resource Plan with a planned 19.3% reserve margin in the year 2023 (See Appendix B (pages 1 and 2), PSCo’s 120 Day Report in Docket 16A-0396E with reference to Portfolio 6, the “Colorado Energy Plan.”)

Figure LWG-SOP-4
PSCo's 2027 Projected Fuel Mix

From Xcel's PPT to the Barclay's Conference, September 2019¹⁷ (Attachment LWG-4, Slide 56)



The impacts of fossil fuel production and combustion are extremely well documented and PSCo's heavy reliance on fossil fuel generation is not protecting the safety and health of the public (or the planet) as required by C.R.S. §40-3-101 (2).¹⁸

With the availability of thousands of MW of low-cost wind, solar and storage projects in Colorado that are just waiting to be developed (see Figure LWG-SOP-5 below), it is past time that the PUC took a hard look at the hundreds of millions of dollars included in this rate case which has been spent to support PSCo's aging fossil fuel infrastructure. We have low-cost alternatives; it is time to rapidly invest in those—not in maintaining an unhealthy and expensive fossil fuel generation system.

¹⁷ Xcel's PPT presented at the Barclays Conference Sept 3-4, 2019 is available from <http://investors.xcelenergy.com/Cache/1001256435.PDF?O=PDF&T=&Y=&D=&FID=1001256435&iid=4025308>

¹⁸ **C.R.S. §40-3-101 (2)** Every public utility shall furnish, provide, and maintain such service, instrumentalities, equipment, and facilities as shall promote the safety, health, comfort, and convenience of its patrons, employees, and the public, and as shall in all respects be adequate, efficient, just, and reasonable.

G. There are Thousands of MW of Low-Cost Wind, Solar and Storage Projects Ready to Be Developed in Colorado

Importantly, PSCo has literally thousands of MW of low-cost carbon free resources available for development in Colorado at costs lower than the costs of operating much of PSCo’s fossil fuel generation fleet. The table below summarizes the bids received by PSCo in the 16A-0396E 2016 Electric Resource Plan Docket, as updated in March 2018.

Figure LWG-SOP-5
PSCo RFP Responses by Technology—March 2018 Update
From Docket 16A-0396E, Colorado PUC

PUBLIC VERSION Updated Attachment A

RFP Responses by Technology

Generation Technology	# of Bids	Bid MW	# of Projects	Project MW	Median Bid	
					Price or Equivalent	Pricing Units
Combustion Turbine/IC Engines	29	6,365	19	4,436	\$ 5.08	\$/kW-mo
Combustion Turbine with Battery Storage	7	804	3	476	6.21	\$/kW-mo
Gas-Fired Combined Cycles	3	873	3	873	█	\$/kW-mo
Stand-alone Battery Storage	28	2,144	24	1,945	10.53	\$/kW-mo
Compressed Air Energy Storage	1	317	1	317	█	\$/kW-mo
Wind	96	41,915	42	16,949	\$ 19.30	\$/MWh
Wind and Solar	5	2,601	4	2,151	19.96	\$/MWh
Wind with Battery Storage	11	5,700	5	2,700	20.63	\$/MWh
Solar (PV)	148	28,382	78	14,085	30.96	\$/MWh
Wind and Solar and Battery Storage	7	4,048	7	4,048	30.41	\$/MWh
Solar (PV) with Battery Storage	79	14,980	57	10,098	38.30	\$/MWh
IC Engine with Solar	1	5	1	5	█	\$/MWh
Waste Heat	2	21	1	11	█	\$/MWh
Biomass	1	9	1	9	█	\$/MWh
Total	418	108,163	246	58,101		

Table LWG-SOP-5 above, shows there are over 50,000 MW of wind, solar and storage bids and even if we eliminate all of the bids above the median price, and eliminate half of the bids below the median price on the chance that they are not “solid” (an extreme assumption, but to make the point), then **there are still approximately 10,000 MW of wind, solar and storage bids available at an average cost well below \$30/MWh or 3 cents/kwh.** The sooner these projects (and others like

them) get built, the sooner ratepayers will start saving money as the operating costs for much of PSCo's fossil fuel system is generally 3 cents/kwh and above.¹⁹

It is past time for the PUC to start taking a hard look at PSCo's very large capital and operating expenses related to their fossil fuel generation fleet and to ensure that PSCo customers aren't paying to maintain old fossil fuel resources when that money could very likely be better invested in fuel-free, cleaner power resources that will better serve PSCo customers and Colorado as we move forward through the 21st century.

H. The Climate Crisis is Here and Extremely Serious

It is now widely recognized²⁰ that emitting carbon dioxide and other greenhouse gases (GHGs) increases their levels in the atmosphere and oceans, contributing to the warming of the planet, the acidification of the oceans, the disruption of the climate and the occurrence of extreme weather. Almost every week there is another story about hurricanes, fires, floods, droughts and weather that seasoned observers "have never seen before."

As evidence that the scientific consensus on climate change was clear long before²¹ Xcel decided to spend hundreds of millions of dollars on old fossil fuel plants, Figure LWG-SOP-6, below is the final graphic in the 2001 Intergovernmental Panel on Climate Change Climate Change ("IPCC")

¹⁹ The current operating costs (only) of Xcel's Colorado fleet as calculated by the Office of Consumer Counsel and included in Attachment LWG-28 are typically in the range from 2.2 cents/kWh to 22 cents/kwh or from \$22/MWh to \$220/MWh. This means that many of the wind, solar and storage bids can provide lower cost electricity than the current coal and natural gas resources that Xcel is relying on—and into which they are pouring millions of dollars of capital and O&M expenditures (see the Attachments to the Answer Testimony of PSCo witness Williams, KLW 1-4.)

²⁰ For summaries of opinion polls on climate change, see <https://climatecommunication.yale.edu/>.

²¹ As of now, the very voluminous scientific trail of reports of the warming caused by carbon dioxide goes back to 1856 when Eunice Foote showed how much hotter a container of air got when it contained CO₂ (then called carbonic acid gas) than when it contained "common" air. The journal in which these results were published is at <https://archive.org/stream/mobot31753002152491#page/381/mode/2up>. The paper from Eunice Foote is on pages 382-383. An excerpt is from Eunice Foote's paper showing how much hotter the container with CO₂ got than the container with "common" air is found in Footnote 23 of Ms. Glustrom's Answer Testimony.

Synthesis Report—showing the expected dramatic expected increase in temperature of the planet during this century.

Figure LWG-SOP-6
Figure SPM-10 from the 2001 IPCC Synthesis Report Summary for Policy Makers
Earth's Surface Temperature from the Year 1000 to 2100
From Attachment LWG-6 (Filed at the Colorado PUC September 19, 2019; Red star added)

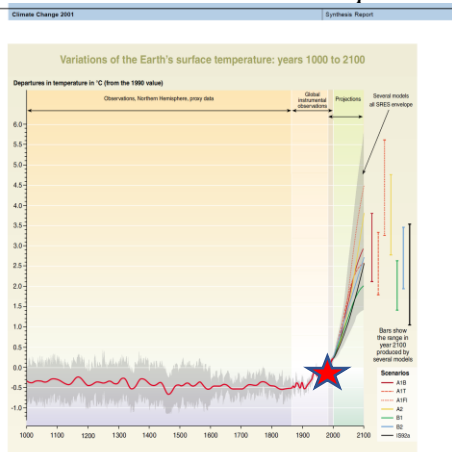


Figure SPM-10a: Variations of the Earth's surface temperature: years 1000 to 2100. From year 1000 to year 1850 variations in average surface temperature of the Northern Hemisphere are shown (corresponding data from the Southern Hemisphere not available); reconstructed from proxy data (tree rings, ice cores, and historical records). The line shows the 50-year average; the grey region the 95% confidence limit in the annual data. From years 1850 to 2000 are shown variations in observations of globally and annually averaged surface temperature from the instrumental record; the line shows the decadal average. From years 2000 to 2100 projections of globally averaged surface temperature are shown for the six illustrative SRES scenarios and INDCs using a model with average climate sensitivity. The grey region marked 'several models at SRES envelope' shows the range of results from the full range of 35 SRES scenarios in addition to those from a range of models with different climate sensitivities. The temperature scale is departure from the 1990 value; the scale is different from that used in Figure SPM-2.

If the graph in Figure LWG-7 was the projected report for the temperature gauge on an Xcel truck, any employee that didn't respond immediately would probably not have a job for long and they certainly wouldn't be in line for a promotion—yet Xcel's top management at the time ignored this clear warning about the fate of our planet and then proceeded to spend very large sums of money on coal plants in Colorado at about the time where the red star is in Figure LWG-SOP-6. This was even more unconscionable than pouring kerosene on your neighbor's house that was on fire. Xcel's customers should not be responsible for paying off these ill-conceived management decisions and providing a high return (e.g. 9-10% on equity) for PSCo's imprudent expenditures that are accelerating the already extremely serious climate crisis.

This rate case involves the expenditures of hundreds of millions of dollars in capital and operating expenses for Xcel’s Colorado fossil fuel plants and given what Xcel either knew or should have known,²² this was imprudent—***and unconscionable.***

The fact that Xcel was able to convince the PUC to approve large expenditures on coal plants is just a sign of how broken Colorado’s regulatory system was. Now it is time for this Commission to correct these abuses as called for in C.R.S. §40-3-102.

I. Coal Supply Issues Are Intensifying and Could Easily Become Critical in the Coming Decade

There is a simple fact that the Colorado PUC, its staff and most of the parties have repeatedly failed to understand. This simple fact is that you need a supply of coal to operate a coal plant.

Given what is now abundantly clear about the US coal industry, we can’t assume that just because PSCo has the concrete and steel that makes up a coal plant, that it will have a supply of fuel to operate that plant until its stated retirement date.

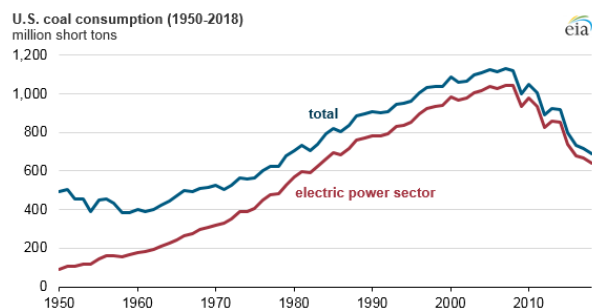
Attachments LWG-9 and LWG-10 (filed at the Colorado PUC in this docket on September 19, 2019) detail the geology and financial situation of the US coal industry from the time when Xcel was making the decision to spend over \$300 million on the Pawnee and Hayden coal plants. The predictions made in these reports related to the declining economic viability of the US coal industry have been borne out in a dramatic fashion with the top three US coal companies (Peabody, Arch and

²² For more information on what US utilities knew about climate change starting in 1968, see Attachment LWG-8, the Energy and Policy Institute report “Utilities Knew” report from 2017, “Documenting Electric Utilities’ Early Knowledge and Deception on Climate Change from 1968-2017.”

Alpha Natural) all declaring bankruptcy in 2015 and 2016²³ and numerous smaller coal companies also declaring bankruptcy.²⁴ Yet, Xcel continues to pour money into its Colorado coal plants while asking to earn 10.2% on the equity portion of those expenditures, showing no apparent awareness of what is very likely the structural decline of the US coal industry. Figure LWG-SOP-7, below, shows how US coal consumption has dropped off quite dramatically since the peak in 2008.

Figure LWG-SOP-7
EIA Graph of US Coal Consumption 1950-2018

From <https://www.eia.gov/todayinenergy/detail.php?id=37692>



In recent months there have been three more dramatic coal company bankruptcies²⁵ affecting the Powder River Basin in Wyoming which supplies the coal to the Pawnee coal plant in Brush and the Comanche coal plants in Pueblo.

²³ Alpha Natural Filed for Bankruptcy August 2015

<https://www.forbes.com/sites/nathanvardi/2015/08/03/u-s-coal-company-alpha-natural-resources-files-for-bankruptcy/#24f529ce4379>

Peabody filed for bankruptcy April 2016

<https://money.cnn.com/2016/04/13/news/companies/peabody-coal-bankruptcy/index.html>

Arch filed for bankruptcy Jan 2016

<https://www.reuters.com/article/us-arch-coal-restructuring-idUSKCN0UP0MR20160111>

²⁴ For a 2015 report on the structural decline in the US coal industry, see <https://www.carbontracker.org/reports/the-us-coal-crash/>

²⁵ Westmoreland filed for bankruptcy in October 2018 <https://westmoreland.com/restructuring/>

Cloud Peak filed for bankruptcy May 2019

<https://investor.cloudpeakenergy.com/press-release/corporate/cloud-peak-energy-voluntarily-files-chapter-11>

Blackjewel filed for bankruptcy July 2019 and closed the Eagle Butte and Belle Ayr mines abruptly that afternoon

<https://www.cbsnews.com/news/blackjewel-bankruptcy-the-first-coal-mine-to-open-in-wyoming-is-now-closed/>

and https://trib.com/business/energy/bankrupt-coal-company-blackjewel-has-yet-to-call-back-most/article_b2ee7c3d-b1c4-5a3e-983a-7ffe73f8e788.html

<https://www.sfchronicle.com/news/us/article/Mine-shutdowns-in-top-US-coal-region-bring-new-14439916.php>

This PSCo “rate review” involves the expenditure of hundreds of millions of dollars on Xcel’s Colorado coal plants. There are a host of environmental and economic reasons to oppose pouring money into old coal plants, but perhaps the most fundamental reason is the rapid and very likely structural collapse of the U.S. coal industry. It is “abusive” to continually force Xcel’s customers to pay “return of and return on” (at 9-10% no less) for expenditures on obsolete and polluting generation resources with uncertain fuel supplies, especially when thousands of MW of lower-cost and cleaner generation and demand-side options exist.

V. FIND CACJ EXPENDITURES ON PAWNEE AND HAYDEN IMPRUDENT AND REDUCE RETURN ON ANY ALLOWED EXPENDITURES TO THE COST OF DEBT

As discussed above and below, Xcel should have known that moving ahead with the Clean Air Clean Jobs (“CACJ”) expenditures on the Pawnee and Hayden coal plants was not prudent. The Commission should send a clear message to Xcel that it should have known better and that it must move forward in the 21st century with its eyes wide open—even if it has been granted a CPCN. Xcel is the “driver” of PSCo and it needs to drive a lot more prudently than it has been.

Table LWG-6 below shows the amounts of CACJ expenditures that Xcel is asking to transfer to rate base in this proceeding.

Table LWG-SOP-3
Clean Air Clean Job Expenditures that Xcel is Asking to Transfer to Rate Base
From Discovery Response LWG2-2, Docket 19AL-0268E

Gross Plant in-Service	Total Company	Retail Allocation	Retail Amount
Cherokee 2X1CC	\$ 583,883,318	91.18%	\$ 532,381,691
Pawnee SCR	\$ 288,880,540	91.18%	\$ 263,399,733
Hayden Unit 1	\$ 49,218,732	91.18%	\$ 44,877,377
Hayden Unit 2	\$ 27,420,812	91.18%	\$ 25,002,150
Total CACJA	\$ 949,403,402		\$ 865,660,951

For the reasons discussed in this testimony, Xcel’s Colorado customers should not be responsible for paying the full cost plus 9-10% return on equity for the expenditures on the Pawnee and Hayden coal plants.²⁶

Given what Xcel knew or should have known, the expenditures on Pawnee and Hayden were not prudent and Ms. Glustrom’s Answer Testimony and attachments were submitted on September 19, 2019 in this proceeding in accordance with the statutory requirements to ensure that rates are “just and reasonable” (C.R.S. § 40-3-101(1)) and that “abuses” are corrected (C.R.S. §40-3-102) and in accordance with PUC Rule 3617(d) (4 C.C.R. 723-3) which is copied below.

- (d) Effect of the Commission decision. A Commission decision specifically approving the components of a utility’s plan creates a presumption that utility actions consistent with that approval are prudent.
 - (l) In a proceeding concerning the utility’s request to recover the investments or expenses associated with new resources.
 - (A) The utility must present prima facie evidence that its actions were consistent with Commission decisions specifically approving or modifying components of the plan.
 - (B) To support a Commission decision to disallow investments or expenses associated with new resources on the grounds that the utility’s actions were not consistent with a Commission approved plan, an intervenor must present evidence to overcome the utility’s prima facie evidence that its actions were consistent with Commission decisions approving or modifying components of the plan. Alternatively, an intervenor may present evidence that, due to changed circumstances timely known to the utility or that should have been known to a prudent person, the utility’s actions were not proper.

As provided for in PUC Rule 3617 (d) (I) (B), copied above, Xcel knew or should have known that the expenditures they were going to make on the Pawnee and Hayden plants were not prudent given the seriousness of the climate crisis and the compelling reasons to reduce emissions of carbon dioxide, the strong questions about coal supplies and the likelihood that low-carbon wind and solar resources would soon be lower cost than Xcel’s fossil fuel fleet. This information was provided to the Commission by Ms. Glustrom and many others starting in 2005—long before the CACJ expenditures were undertaken. Detailed information was submitted in Dockets 04A-214E, 06S-34EG, 07A-447E,

²⁶ It is possible that the expenditures on the Cherokee 2 x 1 combined cycle coal plant will also become obsolete before they are fully depreciated, but I am not challenging these expenditures.

08S-520E, 09AL-299E, 10M-245E, 11A-325E, 11A-869E and 11A-917E²⁷—all of which occurred before Xcel undertook the large investments in the Pawnee and Hayden coal plants.

Ms. Glustrom’s Answer Testimony and Attachments in this 19AL-0268E proceeding provide just **a few of the many** examples of information that was available to Xcel underscoring the need to take climate change, coal supplies and the declining cost of renewable energy seriously and not to proceed with large investments in coal plants.²⁸

Xcel was told time and again that expenditures on coal would not be prudent and it had abundant evidence that the declining costs of renewable energy would soon make low-carbon generation lower cost than fossil fuel generation. It is past time that the Colorado PUC stopped making Xcel’s customers pay full “return of and return on” for Xcel’s ill-advised expenditures like the CACJ expenditures on Pawnee and Hayden. These expenditures on old coal plants added more carbon dioxide to the atmosphere and oceans leaving a planet whose climate and ecosystems will become increasingly unstable—and in many regions, unlivable...while it was clear that lower-cost and cleaner alternatives were just “on the horizon.” (See Attachments LWG 13-21).

An unwillingness to read the facts that were presented to them many, many times and ignoring the facts displayed by their own analyses, leading to a stance of willful ignorance, is not a prudent way to “drive” a utility. Xcel either knew or should have known that large expenditures on coal plants were imprudent—and they knew it (or should have known it) many, many years before choosing to make large investments in the Pawnee and Hayden coal plants.

²⁷ Refer to Ms. Glustrom’s testimony and attachments in these dockets. Additional information was submitted by other parties and by the hundreds of Xcel customers who testified in the public hearings held in these proceedings.

²⁸ For information that was submitted to Xcel and the Colorado PUC after construction began on the Pawnee and Hayden CACJ pollution controls, see Ms. Glustrom’s warnings about changes in the US coal industry submitted in the fall of 2012 in the 11A-325E (Pawnee) and 11A-917E (Hayden) dockets and the Notice of Dire Financial Conditions in the US Coal Industry filed in the 11A-917E (Hayden) docket in June 2015

A Certificate of Public Convenience and Necessity provides a presumption of prudence, **but it is not a guarantee**²⁹—any more than a green light is a guarantee of prudence that it is OK to proceed forward if there are pedestrians in the cross walk. It is up to the “driver” of the vehicle or the utility to use their best judgment so as not to injure anyone.

While PSCo witness Alice Jackson made assertions about a “regulatory compact” in her rebuttal testimony, she did not cite any relevant Colorado law or regulation in support of an assertion that a claimed “regulatory compact”³⁰ prevented a prudence challenge of the Clean Air Clean Jobs expenditures on Pawnee and Hayden as provided for in PUC regulation 4 CCR 723-3 3617(d) (I)(B), copied above.

Given what Xcel knew or should have known long before proceeding with the CACJ expenditures on Pawnee and Hayden, it was not prudent to spend several hundred million dollars on old coal plants as the climate crisis was already clear and the cost of operating the coal plants would soon exceed the costs of generation from cleaner sources. In addition, PSCo was warned after it began construction of the Pawnee and Hayden pollution controls that changes in the US coal industry were likely to lead to coal supply constraints long before the CACJ expenditures were depreciated.³¹

The failure of Xcel to heed these warning is most assuredly not something that should be rewarded with full cost recovery and a 9-10% return on equity.

²⁹ PSCo’s acknowledgement that a CPCN is a presumption of prudence but not a guarantee is found in the response to Discovery Request LWG18-21, which is in the record as Hearing Exhibit 206.

³⁰ While preparing this Statement of Position, Ms. Glustrom noted that PSCo’s response to Discovery Request LWG17-3 provided an incorrect citation to “§40-2-105 C.R.S.” on the front page, while the statute section copied on the back side is actually to C.R.S. §40-5-102.)

³¹ For the large changes that were occurring in the US coal industry while Xcel was building the Pawnee and Hayden CACJ pollution controls, see Ms. Glustrom’s warnings about the changes in the US coal industry submitted to the Colorado PUC in the fall of 2012 in the 11A-325E (Pawnee) and the 11A-917E (Hayden) dockets. and the Notice of Dire Financial Conditions in the US Coal Industry filed in the 11A-917E (Hayden) docket in June 2015

From Table LWG-6, above, Xcel’s expenditures on the Pawnee plant at issue here are over \$288 million (with about \$263 million being requested to add to PSCo’s rate base.) In docket 11A-325E (Pawnee CACJ Emission Controls) PSCo estimated that the Pawnee pollution controls would “only” cost \$236.5 million as seen in paragraph 20 from Colorado PUC decision C12-0159E, reproduced below, along with the paragraph from that same decision that discuss the burden of proof that PSCo bears to demonstrate the prudence of its expenditures on the Pawnee coal plant.³²

The Commission should review this increase in costs for the Pawnee CACJ expenditures and the requirements of Decision C12-0159E (as well as Decision R12-0593, paragraphs 78-80 in Docket 11A-917E related to Hayden) carefully as part of its deliberations in this 19AL-0268E docket.

From Colorado PUC Decision C12-0159E, Docket 11A-325E

1. Public Service

20. Public Service estimates the costs of the SCR and LSD at Pawnee to be \$236.5 million in Docket No. 10M-245E. Public Service also includes the additional costs of the sorbent injection controls at Pawnee in its analysis of the total estimated cost and rate impacts of the Company’s entire emission reduction plan pursuant to the CACJA.

40. Public Service fully carries the burden of proof that the Company acted in a prudent manner in constructing the facility. The general presumption of prudence that attaches to the CPCN is rebuttable. Hence, an intervenor challenging the construction costs may make a *prima facie* showing through Answer Testimony that the Company acted in some imprudent manner. Although such a prudence challenge is generally necessary for some amount of the actual costs incurred to be disallowed, fair and efficient rate case proceedings require that the Company not wait until the development and filing of Rebuttal Testimony in order to carry its burden of proof.

To the best of Ms. Glustrom’s knowledge, PSCo provided neither Direct nor Rebuttal testimony that “carried its burden of proof” that the expenditures on Pawnee and Hayden were prudent

³² Similar language regarding PSCo’s burden of proof exists in the decision granting the Hayden CPCN from Docket 11A-917E, Decision R12-0593, paragraphs 78-80.

as called for in ¶ 40 of C12-0159 for Pawnee or ¶s 77-78 in R12-0593 for Hayden.³³ As a result, PSCo has not complied with Commission’s orders and the prudence of the Pawnee and Hayden expenditures has not been established.

Possible actions for the Commission to take with respect to the CACJ expenditures on the Pawnee and Hayden coal plants include:

- a) Disallowing all (or a significant amount) of the CACJ expenditures in order to send a strong message to Xcel to “drive” more prudently.
- b) Disallowing the increased cost of the Pawnee pollution controls above the cost projected in Proceeding 11A-325E.
- c) Reducing the return on equity for any of the allowed expenditures made on Pawnee and Hayden under the CACJ to the cost of debt—or at the very least, to something well below 9%.
- d) Sending a strong message to Xcel that expenditures on old coal plants will no longer be assumed to be necessary and will receive very serious scrutiny going forward.

VI. DISALLOW 50% OF 2018 RUSH CREEK EXPENDITURES—TOO EXPENSIVE AND NOT PRUDENT

Ms. Glustrom is a strong proponent of using carbon-free electrical generation sources like wind farms, but the Rush Creek Wind Farm was too expensive and Xcel knew it for sure by late 2017—but does not appear to have taken any steps to address the high cost of the Rush Creek project--\$29/MWh (or \$24/MWh without transmission).

³³When Mr. Williams was asked during cross-examination on Wednesday morning November 6, 2019 by Ms. Glustrom where in his Direct or Rebuttal testimonies he discussed the prudence of the Pawnee and Hayden expenditures, he was not able to identify any such testimony.

In late November 2017, Xcel received numerous bids as part of the 2016 Electric Resource Plan, Docket 16A-0396E. The median price for the wind bids was well under \$29/MWh. (as well as under \$24/MWh).³⁴

Xcel continued to spend over \$400 million dollars on the Rush Creek wind farm after it unequivocally knew that wind prices had dropped dramatically and it was paying much too much for the Rush Creek wind farm.³⁵ Ratepayers should not be expected to pay for “gold plated” wind farms like the Rush Creek wind farm. Since the Rush Creek wind farm cost about twice as much as it should have, the PUC should disallow \$200 million or approximately one half of the Rush Creek expenditures (detailed in Attachment LWG-23) made in December 2017 and throughout 2018.³⁶

In general, the Commission needs to send a strong message to Xcel that it needs to stop going to the Commission and claiming that it needs to “rush, rush” to obtain the Rush Creek wind farm or some other generation outside of the standard bidding process.³⁷ The PUC should make it clear that it will not take it lightly when Xcel abuses the bidding process so that it can own a resource that is significantly more expensive than it almost certainly would have been if it had been put out for bid.

³⁴ The final wind bids that PSCo accepted were between \$11 and \$18/MWh as stated in the 120-Day Report for Docket 16A-0396E, (bottom of page 50, top of page 51.) The 30-Day Report summarizing the November 2017 bids is Attachment LWG-22 to Ms. Glustrom’s Answer Testimony in this 19AL-0268E docket, submitted September 19, 2019. The March 2018 summary for the “refresh” of the bids is given in Figure LWG-SOP-5 above.

³⁵ Attachment LWG-23 shows PSCo’s expenditures on the Rush Creek Wind Farm by month and year and show that PSCo spent \$46.3 million in December 2017 and \$359.3 million on the Rush Creek wind farm in 2018.

³⁶ Xcel could have easily known earlier than November 2017 that it was paying too much for the Rush Creek wind farm, so only disallowing \$200 million is actually not a very steep price to pay for Xcel having proceeded cavalierly with the Rush Creek wind farm without putting it out to bid and even after it knew unequivocally it was paying way too much for the Rush Creek wind farm.

³⁷ Large PSCo-owned resources that have not been put out to bid in the last decade include the Comanche 3 coal plant, the Cherokee combined cycle plant, the Fort St. Vrain 5 and 6 turbines and the Limon II and Rush Creek wind farms.

VII. REDUCE RETURN ON CAP EX ON FOSSIL FUEL RESOURCES TO 4% AND REQUIRE ESSENTIAL RELIABILITY ANALYSES IN THE FUTURE BEFORE SPENDING MORE THAN \$1 MILLION ON A FOSSIL FUEL PLANT

Xcel has known for many years that wind and solar generation and demand-side measures could save ratepayers money. Once that became clear, Xcel should have begun taking a hard look at the **hundreds** of millions in capital expenditures³⁸ on its fossil fuel fleet and start phasing out that fossil fuel generation as quickly as possible to avoid throwing “good money after bad.”

The Commission should consider the following:

1) Disallowing a percentage of the capital expenditures made on coal and natural gas generation after 2014;

2) Reducing the return on these capital expenditures to the cost of debt—or at least to something well below 9%;

3) Sending a strong message that capital expenditures made on fossil fuel generation will be receiving close scrutiny going forward and without a detailed analysis of why any particular capital expenditure is essential for system reliability and make it clear that capital expenditures on fossil fuel generation will carry a rebuttable presumption of imprudence.

While it has been clear for a long time that coal will soon be obsolete, it is also likely that natural gas will also become obsolete with a growing number of media reports³⁹ of natural gas being replaced with solar and storage and detailed analyses warning about investments in natural gas. While

³⁸ PSCo’s capital expenditures, including hundreds of millions of dollars spent on coal and fossil methane plants are found in the testimonies of PSCo witnesses Kyle Williams and attachments KIW-1 and KIW-2.

³⁹ See for example <https://www.latimes.com/environment/story/2019-09-10/ladwp-votes-on-eland-solar-contract> and <https://www.vox.com/energy-and-environment/2018/7/13/17551878/natural-gas-markets-renewable-energy>

the Colorado PUC failed to heed the warnings about coal becoming obsolete, they can now (if they read the reports before them) avoid making the same mistake with respect to natural gas.⁴⁰

VIII. REQUIRE REPORTS OF EXPENSES BY PLANT AND BY YEAR—PUT PSCo ON NOTICE THAT FOSSIL FUEL EXPENSES WILL NO LONGER BE AUTOMATICALLY APPROVED

Xcel should be taking a very hard look at its fossil fuel fleet and not spending any significant amounts of O&M money on these resources⁴¹ that are already obsolete (coal) or soon will be (natural gas/fossil methane.) Only if a resource is shown to be essential for reliability should it be maintained. Otherwise it is past time to retire these aging resources and instead spend the money on much cleaner solutions that will keep Colorado reliably powered in the 21st century.

The Commission should send a very clear signal to Xcel that these expenses will no longer be presumed to be prudent unless there is a strong showing that they were essential for reliability—and that the analysis of alternatives includes an accounting for the social cost of carbon and other external costs accompanying the production and use of fossil fuels.⁴²

To help Xcel determine what expenses will and won't be deemed prudent, the Commission should require an annual forecast of operating and maintenance expenses by fossil fuel plant with a justification for why this fossil fuel generation is essential for reliability in the coming year. To do otherwise would require Xcel's Colorado customers to pay for expenses that are not just and

⁴⁰Warnings about natural gas generation becoming largely obsolete in the coming decade are detailed in Attachments LWG 25-27 submitted with Ms. Glustrom's Answer Testimony in this docket on September 19, 2019.

⁴¹ The operating and maintenance ("O&M") expenses for Xcel's assets are found in KIW-3 and KIW-4. A breakdown of O&M by fuel type was provided in response to Discovery Request LWG13-48 in this 19AL-0268E proceeding,⁴¹ showing that PSCo spent over \$100 million dollars on O&M expenses in 2018 on last century's resources--\$72 million on coal and \$44 million on natural gas.

⁴² The analysis of alternatives should also be done at discount rates below PSCo's WACC to ensure that future fuel costs are not inappropriately "discounted" and made to look like a small fraction of what they will actually be.

reasonable given the availability of thousands of MW of wind, solar and storage options below 3 cents/kwh as shown in Figure LWG-SOP-5, above.

IX. OTHER ISSUES TO EXAMINE

A. Tax Cut and Jobs Act (TCJA) Treatment

From PSCo's 2018 10-K (Attachment LWG-2, page 22), PSCo only paid \$113.7 million in income taxes in 2018 or \$138.5 million less than the \$252.2 million paid in income taxes in 2017. It appears that the \$138.5 million less that PSCo paid in taxes in 2018 was a lot more than the \$42 million it passed through to its Colorado customers as a result of the Tax Cut and Jobs Act (TCJA) proceeding 18M-0401E. The Commission is requested to take a close look at what is going on with PSCo's actual tax burden in light of the TCJA passed by Congress in late 2017.

B. EAF—Equivalent Availability Factor

I believe it is likely time to eliminate Equivalent Availability Factor (EAF) Performance Metric (EAFPM).⁴³ Given the growing amount of wind and solar on Xcel's Colorado system, the EAFPM can serve as an ill-advised incentive to keep fossil fuel plants running when they could be left off, as we heard was the case with getting Comanche 1 back on line from Mr. Williams during cross-examination by Ms. Glustrom on Wednesday November 6, 2019.

C. Comanche 3

The Comanche 3 coal plant has had numerous problems going back to the problems bringing the plant on-line in 2009 and 2010. The low capacity factors and Equivalent Availability Factor data found in Ms. Glustrom's Answer Testimony reflect the numerous problems PSCo has experienced

⁴³For reference, the EAF for Xcel's Colorado fossil fuel generation plants is given in Ms Glustrom's Answer Testimony (page 57) as provided in Discovery Response CPUC10-5 in this 19AL-0268E docket.

with Comanche 3 (see also Hearing Exhibit 228 for a list of forced outages at Comanche 3 from 2015-2018.) Hearing exhibits 227 and 229 make it clear that Xcel can operate their system without Comanche 3—even when the outage occurs during the summer peak. It is past time that the Commission took a hard look at the situation with Comanche 3 and put both Xcel and its customers out of their collective misery for this billion-dollar mistake.⁴⁴

D. Ensure that PSCo Files a Customer Impact Study

The Commission should ensure that PSCo files an appropriate Customer Impact Study with the final resolution of this case so that any future claims about customer rates and bills can be verified.

X. CONCLUSION

Xcel is in fine shape with \$551 million in after-tax net income in Colorado in 2018. They certainly want a rate increase, but they certainly don't need it as detailed in this testimony.

In contrast, Xcel's Colorado ratepayers have been the subject of numerous rate increases in this century, totaling over \$500 million per year in additional income for Xcel-Colorado. They have been paying for excess capacity and poorly conceived decisions to spend over \$1 billion on coal plants and hundreds of millions on natural gas plants that either are already, or soon will be, obsolete. It is long past time that the Colorado PUC corrected these abuses as called for in C.R.S. § 40-3-102 and as outlined in this Statement of Position by Ms. Glustrom.

⁴⁴ A detailed history of the Comanche 3 process in Colorado is provided in the 2009 report by Ms. Glustrom entitled, "Comanche 3—Colorado's Billion Dollar Mistake" available from <http://cleanenergyaction.org/2010/03/31/comanche-3-the-billion-dollar-mistake/>