

BIG PIVOTS

ENERGY *and* WATER transitions in Colorado and beyond

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Holy Cross Energy CEO makes case that you can too have it both ways

by Allen Best

Bryan Hannegan, the chief executive of Holy Cross Energy, was nearly the last witness to testify before the Colorado Joint Select Committee on Rising Utility Rates after a long afternoon on March 14, but he had both significant news to impart and thoughts to share central to why the committee had been formed.

By the end of 2022, he told the legislators, Holy Cross Energy was delivering more than 50% emissions-free electricity to members of the electrical cooperative in the Vail, Aspen, and Rifle areas.

“We are half-way on our journey to 100%,” said Hannegan, a reference to the decision made by directors of Holy Cross more than two years ago to aim for emissions-free energy by the year 2030.

“With contracts and projects we have already secured and things that are being built, signed agreements—by this time next year we will be in excess of 90% clean and renewable energy in our portfolio.”

That alone puts Holy Cross into uncharted territory within Colorado. Nearly every utility has agreed to aim for 80% carbon emissions reductions by 2030 as compared to 2005 levels. That puts them at about 70% to 80% emission-free energy.

If Holy Cross has not yet made any details available about how it can go this far, this deep without significant natural gas, it’s nonetheless a sobering announcement.

Later, in response to questions, Hannegan and Jeff Baudier, the chief executive of CORE Electric Cooperative, described how their enterprises operate. Their descriptions might have legislators thinking hard about the regulatory compact between the state government and its investor-owned utilities.

The special committee was formed in February after an uproar during the winter caused by spiked utility rates. The sharpest increase was for natural gas used for heating. But because the utilities burn natural gas to produce electricity, those rates were impacted, too.

Robert Kenney, the chief executive of Xcel Energy’s Colorado operation, earlier in the afternoon had told committee members that the increases had been caused by far colder weather in November and December even as prices for natural gas surged. By February, rates had started coming down, he said.

“Even with the price spikes, we are still able to maintain some of the lowest bills in the United States,” he said.

Coop expects to surpass 90% clean energy next year —without raising rates, unlike Xcel and other investor-owned utilities

For two hours, Kenney and a representative of Black Hills Energy, Nick Wagner, the company's vice president for regulatory affairs, had made their case and responded to the questions of legislators.

Steve Fenberg, the Senate president and chair of the committee, had asked probing questions, citing \$8 million that Xcel had spent on expert witnesses and other elements in making the case for rate increases. "Just something feels wrong to me about this whole setup," he said, although he did not cite the context for his number.

Kenney, new as of last summer in this top-tier Colorado position, had worked the other side of the table previously as a regulator in Missouri before going to work for an investor-owned utility in California.

He defended the current regulatory model that has been in place for investor-owned utilities since Samuel Insull engineered what is called the regulatory compact in Illinois early in the 20th century. Xcel and other private companies submit to state regulators in return for monopolies in their service territories.

That model has always had its critics, but it has particularly taken a battering in recent years. Analysts have said that utility monopolies have clung to old models and resisted innovation. Xcel can correctly point out that in 2018 it embraced what was then the nation's most ambitious goal of any major utility, the 80% reduction in emissions by 2030 and 100% by mid-century. It said it had a reasonably good idea about how to get to 80%, but assumed the way would become clear to achieve its mid-century goal.

But Xcel has never been shy about asking for the ability to pass along cost to its 1.5 million electric and 1.4 million gas customers in Colorado. In the case of the natural gas



Robert Kenney

spikes of winter 2022-23, it was not making money, said Kenney, only passing along the costs it had incurred because of the volatility of the market. But the regulatory compact was fundamentally sound.

"There is always room for modifications. There are things that we can look at," Kenney told committee members. "Structurally, I think the bones are very sound. Public regulation is very sound. I don't think you need a wholesale transformation."

Fenberg wanted to know about the rate of returns for Xcel and Black Hills Energy.

"The better your credit rating, the lower the interest you pay on that credit," said Kenney. That, in turn, means lower cost to customers.

If the company is not an attractive place for capital to go, he explained, Xcel "would not be able to run a safe, reliable system, and we would not be able to make the investments in renewables. It is that ability to attract capital at favorable rates to pursue policies that we all agree that we prioritize."



Steve Fenberg

Fenberg persisted, broadening his questions to Xcel's investments in the natural gas infrastructure, both in its delivery to buildings and in the plants to generate electricity.

"Are we just creating huge stranded assets for the next generation or the next generation beyond?" he asked, referring to the future of his two daughters, one 6 months old and the other 7 years old.

Kenney said he believed, based on observed evidence, "that we will continue to evolve and technologies will continue to evolve, and I think we will be able to use this infrastructure in exciting ways."

Fenberg wasn't persuaded. In the normal world, he said, markets change.

“Then some companies go away. And that’s incredibly hard for a lot of people,” he said. But he suggested his daughters will be forced to “pay off our mistakes.”

Other committee members also asked questions that Sen. Barbara Kirkmeyer, one of two Republicans on the six-member committee whose district is bisected by I-25 north of Denver, said were beyond the bounds of the committee. The committee’s mission, she said, was to “find strategies, to evaluate long-term reform to stabilize rates. That is why we are here. I will not tell you how to run your business.”

Costs of fuel lie at the center of this debate.

“About 50% of what customers pay for is fuel supply,” said CORE’S Baudier. His electrical cooperative has 400,000 residents within its service territory stretching from Woodland Park and Conifer to Castle Rock and east to Bennett.

Baudier tried to describe a sharp distinction between electrical cooperative such as his and investor-owned utilities. In a cooperative, the members elect representatives to the board of directors, he explained. If the members/customers are dissatisfied, they can elect new board members. If board members don’t like managers, they can get rid of them.

(In fact, turnout for coop elections tends to be very, very low, less than 10%. Some, including, Holy Cross, have tried to beef up the turnout. The jury remains out).

CORE has \$340 million in annual revenue and \$1.2 billion in capital investment. “We think of ourselves as a company,” said Baudier.

Daniel Hodges, executive director of the Colorado Association of Municipal Utilities, also emphasized the direct accountability of municipal utilities to customers. Colorado has

dozens of them, most very small, less than 2,000 customers. Colorado Springs Utilities is by far the largest.

Hannegan took issue with what he said were suggestions earlier in the afternoon that clean energy transition will come at a significant cost to our customers.

“Respectfully, we could not disagree more. Our experience has shown quite the contrary. Over the last five years we have avoided more than \$28 million in power supply costs by working with different suppliers and different projects that have focused on the development of clean energy here in Colorado,” he said.

Power supply constitutes half to two-thirds of its members’ electric bills. Saving on fuel costs by switching to renewables saves money for consumers.

Holy Cross, he said, has used that saved money to reinvest in grid modernization with such things as smart switches and technologies that allow integration of distributed resources, protecting against the growing threat of cyberattacks, and addressing the threat of wildlife to transmission and distribution lines.

“All of this without a rate increase since 2018,” he said.

Prices of electricity rose during Winter Storm Uri in February 2021, and Holy Cross—which still buys the bulk of its power from Xcel—had to swallow \$2 million in added cost, which it absorbed within its operating budget.

It could have been much worse, Hannegan said, if not for the increasingly diversified portfolio of Holy Cross.

“This example speaks to the value of maintaining a portfolio of low-cost, increasingly clean power resources utility portfolio,” he said.



Jeff Baudier



Bryan Hannegan

“When utilities are highly reliant on natural gas as their go-to fuel, higher electricity bills follow,” he said. “It’s pretty straight-forward.”

By embracing wind and solar—plus now increasing storage, he said, rates remain stable and low. “If you think about renewable energy projects, they are mostly capital and less fuel. And in the case of wind and solar, the fuel is essentially free.”

For evidence, he pointed to the latest survey of electric rates published by the Colorado Association of Municipal Utilities. Holy Cross’s rates ranked second lowest among Colorado’s 22 electrical cooperatives—and were 5% less than those of Xcel, “despite our small size and the economies of scale that utilities like Xcel usually have,” Hannegan said.

Then came the questions about access to capital. Hannegan explained revenues and also something called patronage capital, which in theory can be distributed to customers much as customers of REI get credit toward future purchases. Or, said Hannegan, the cooperative can plow the money back into upgrades, which it has been doing.

The rest comes from the private market, in the case of Holy Cross through the [Cooperative Finance Cooperation](#), which works exclusively with cooperatives. Rates there are in some cases a full percentage point less than the private sector.

Baudier also described ease of utilities in obtaining loans.

“It’s the safest money you can invest, because people generally pay their utility bills, so it is not hard for a utility to get capital, and there is so much money out there now trying to invest in infrastructure and utilities that the competition is not for you... the competition is for the banks to loan money to utilities.

Hannegan then had his turn. “We don’t suffer from what is called the capital bias. As not-for-profit entities, it doesn’t matter whether we build a little or a lot. More

important is that we build enough to serve our customers with the reliability they have come to expect.”

The challenge among investor-owned utilities, he went on, is to create a larger denominator, even if the return on equity is the same. In other words, more infrastructure costs mean more costs passed along to consumers—with the utility taking its cut along the way,

“We don’t have that incentive,” said Hannegan. “We have a bit more of a free hand in ways that are not capital intensive. Do we build bigger wires on the transmission system or do we invest in demand-response to obviate the need for that larger infrastructure? In our minds, those are the same because they accomplish the same goal.”

The committee has now met three times, hearing from Erin O’Neill, the chief economist on the Public Utilities Commission staff, and Joe Pereira of the Office of the Utility Consumer Advocate, along with Meera Fickling from Western Resource Advocates and Albert Lin from Pearl Street Station Finance Lab and a dozen others.

Whether legislation will emerge yet from these hearings in this session or perhaps another, cannot be said with any certainty.

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Cañon City task force outlines options to Black Hills as electric provider

A committee appointed by the Cañon City Council has issued an interim report outlining options if the city wants to separate from Black Hills Energy.

The rates of Black Hills, 34% higher than the state average, are at issue. The utility's franchise agreement with Black Hills expired in 2017, and voters in 2020 rejected a new agreement by a decisive margin.

The Cañon City Record reports the energy franchise committee has concluded that creating an electrical cooperative is not a viable option. Kirk Suther, a committee member, said they would need to buy the assets of Black Hills within Cañon City.

That value has not been determined, although the Record points out that San Isabel Electric Association in 2018 had offered \$1.1 billion for the Black Hills Energy electric assets in Cañon City, Pueblo, and some adjoining areas.

The Record cautioned that the committee had yet to make a formal recommendation, but the discussion in its report to the council suggested the most viable alternative would be to partner in a hybrid municipal utility. The city would have

to identify a service area and the assets to be condemned. One committee estimates the cost of a consultant would be \$250,000 to \$300,000.

Suther said it would require an experienced third-party partner to even consider municipalization. Kathy Worthington, a council member, suggested ratepayers would not save money for 5 to 10 years, although beyond that cost increases would be less than if the city sticks with Black Hills.

Speaker in Aspen says we must end fossil fuel subsidies

Doug Koplow, the founder of [Earth Track](#), told an audience in Aspen recently that fossil fuels still enjoy many more times the subsidies than they pay in taxes even now.

"We're talking about trying to have pricing on carbon, but at the same time, states and counties all over the world are also providing subsidies to the fossil fuel industry. So the two are working at cross-purposes," he told Scott Condon of the Aspen Daily News.

The International Monetary Fund estimates worldwide subsidies for oil, gas, and coal at \$4.9 trillion. That includes externalities, such as the monetary value assigned to local air pollution and traffic congestion. Koplow estimates the direct subsidies at more than a trillion dollars.

His presentation was part of the Aspen Skiing Co.'s Aspen U sustainability speaker series. "In the climate fight, we're desperate for bipartisan solutions," said the company's Auden Schendler. "Not subsidizing a mature industry that is highly profitable is something we can all agree on."

We've used all the time we have, says Becker. We must go with answers we have.

Former Colorado resident William S. Becker had a column in The Hill on March 22 under the headline ["Fossil fuels are impoverishing us."](#)

"We've seen all the science we need to see and heard all the warnings we need to hear about the imperative of clean energy," he writes. "We have all the technologies we need. So now, what will it take to overcome the oil industry's insatiable greed, formidable political power and futile resistance to change? It's stealing wealth we may never get back."

Becker directs the Presidential Climate Action Project, a nonpartisan initiative that works with national thought leaders to develop recommendations to Washington decision makers on climate and energy policies.

He points out that energy-related emissions set a record last year. "Countries still provide fossil fuels with trillions of dollars annually in direct and indirect subsidies. The world's 60 biggest banks provided \$4.6 trillion in fossil fuel financing,

including \$742 billion in 2021, since nations agreed to the Paris climate accord in 2015. The four biggest oil companies had \$1 trillion in sales and record profits last year. And 20 of the biggest oil companies plan to spend nearly \$1 trillion to develop new oil and gas fields by the end of 2030. Even President Biden, fully aware of the climate crisis, has given the go-ahead to an \$8 billion oil project in Alaska.

"In other words, the global oil and gas industry has never been better, while the world has never been closer to simultaneously environmental, economic and humanitarian disasters expected to displace 1.2 billion of the world's people by 2050 and have violent impacts that will last thousands of years."

Is Colorado actually lagging in its transition to renewables?

The Center for Biological Diversity issued an analysis that the group contends shows that Colorado is actually lagging behind its neighboring states in its conversion to renewable generation.

Consider wind. According to [a story in The Hill on March 1](#), it was responsible for 29% of Colorado's electrical generation in 2022. This compares to 55% in South Dakota, 37% in North Dakota, 47% in Kansas, 44% in Oklahoma, 35% in New Mexico and 31% in Nebraska.

In solar, the story offers a comparison only to Utah, where solar provided 12% of electricity. Colorado was 6%.

State officials pointed out that 38% of Colorado's electricity in 2022 came from renewables, 10th in the nation. "The facts remain that Colorado continues to be a national leader in clean energy policy while making progress toward achieving Gov. Polis's bold goal of 100% renewable energy by 2040," Conor Cahill, a spokesperson for Polis, told the Hill.

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Do you have the juice to keep the lights on? Bill would mandate annual resource adequacy report

So who is being targeted by a bill that quickly moved through its first Colorado legislative committee?

The bill, [HB23-1039, “Electric Resource Adequacy Reporting,”](#) would require annual reports by those who provide retail or wholesale electric services of their resource adequacy. In other words, what assurances do they have in their generating mix that they can keep the lights on?

The regulated investor-owned utilities, Xcel Energy and Black Hills Energy, already must do so. Tri-State Generation & Transmission must do so as a result of legislation in 2020.

That leaves a handful of electrical cooperatives and municipal providers—and now some independent companies, most prominently Guzman Energy, an aggregator that has started building its own electrical generation. Still other companies have also started moving into the Colorado market.

Under this legislation, the Colorado Energy Office would be required to aggregate these reports. If the utility begins serving in an organized wholesale market, the reporting obligation ends.

The bill passed was passed unanimously by the Colorado Senate Transportation and Energy Committee on March 22.

As San Juan coal plant tumbles, New Mexico solar plants arise

Wrecking balls beginning this spring will lay down the San Juan Generation Station near Farmington, in northwestern New Mexico’s San Juan County, just as solar panels arise.

“The metamorphosis from 19th century to 21st century technology is breathtaking to behold,” writes Mark Pearson in the Cortez (Colo.) Journal.

Pearson, director of the San Juan Citizens Alliance, reports that the “innards” of the plant are already on the auction block, and buildings and smokestacks could be demolished as soon as April. Reclamation will take two more years. The plant had a 924-megawatt capacity.

Construction is scheduled to begin on a 200-megawatt solar and a 100-megawatt battery storage project called San Juan Solar Phase 1 on land adjacent to the old coal plant. Two other solar projects intended to replace electricity from the San Juan Generating Station are planned for northwestern New Mexico, near Cuba. The two, with 350 megawatts of combined capacity and 20 megawatts of battery storage, should be operating in May.



Pivot Energy puts solar plans near Grand Junction on hold

Pivot Energy has put its plans for a 2.5-megawatt solar project along Interstate 70 near Grand Junction on hold while it tries to figure out how to allay local concerns.

Neighbors complained that the project north of Clifton, a suburb of Grand Junction, would intrude on their views of Mount Garfield, reports the Grand Junction Sentinel. “There is no other project like this

in Mesa County, and given Xcel’s rules, we cannot pick a new location,” the company’s letter said. “Trust us. If we could, we would.”

The company hopes to return with something that works a little better, the Sentinel reports. Pivot Energy already has two solar gardens in the area along with five in adjacent Garfield County.

Yampa Valley to get 8 more soil moisture monitoring stations

Eight additional soil-moisture monitoring stations will be installed in the Yampa Valley, the result of \$860,000 in funding from the Colorado Water Conservation Board, the Colorado River District, and the Upper Yampa Water Conservancy District.

The impetus for this comes from the Yampa Valley Sustainability Council.

“We’re filling data gaps,” said the council’s Madison Muxworthy. “As part of our two-year process leading up to this, we did a basin analysis where we had talked to some key local stakeholders in the basin to identify their needs for water management and where they saw gaps.”

“Our snow-to-flow patterns have been changing considerably in recent years, and monitoring soil moisture data is an important step toward a better understanding of how water in our basin is changing due to changing climate,” said Michelle Stewart, executive director of the sustainability center.

Marty Ralph, director of the Center for Western Weather and Water Extremes, calls soil moisture the “fourth reservoir” in water planning, the missing piece of the puzzle in addition to snow, rivers, and reservoirs.

“The network will be critical to establishing a baseline for long-term monitoring of new trends in soil moisture expected due to greater evapotranspiration—the cumulative transfer of moisture from soils and plants to the atmosphere— related to warming as climate changes,” he said in a release from the sustainability council.

Colorado River District talks up water demand strategies, but there is some hesitation

Kathleen Curry, who represents Gunnison County on the board of directors of the Colorado River Water Conservation District, the primary policy organization for most of the Western Slope, reported to her constituents about efforts to enlist agricultural producers in demand-management programs.

The System Conservation Pilot Program, a federally funded effort, is offering \$125 million for projects that reduce historic consumptive use. The district is also spearheading a pilot program for demand management for storage in reservoirs, in this case at Blue Mesa, according to the Crested Butte News .

Declining levels of Lake Powell and the prospect of a potential compact curtailment—whereby Colorado and other upper-basins states are required to take less water from the river—are driving this.

What is the uptake? Sonja Chavez, general manager of the Upper Gunnison River Water Conservancy District, said that ag users are “not jumping up and down to participate in a program like this.” She said it can take three to six years for ag production to return to former levels of productivity.

Also of note, according to the CB News report, is a survey of Gunnison Basin users that shows increased concern about water availability for ag fisheries and water quality and somewhat decreased concerns about water for recreational purposes since the last survey in 2016.

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Facing our deadlines & declines in water and in climate, too

by Allen Best

The International Panel on Climate Change last week issued its latest report, warning of a dangerous temperature threshold that we'll breach during the next decade if we fail to dramatically reduce emissions. A Colorado legislative committee on the same day addressed water withdrawals in the Republican River Basin that must be curbed by decade's end.

In both, problems largely created in the 20th century must now be addressed quickly to avoid the scowls of future generations.

The river basin, which lies east of Denver, sandwiched by Interstates 70 and 76, differs from nearly all others in Colorado in that it gets no annual snowmelt from the state's mountain peaks. Even so, by tapping the Ogallala and other aquifers, farmers have made it one of the state's most agriculturally

The main stem of the Republican River flows into Nebraska east of Wray augmented by water from special wells and a pipeline constructed at a cost of \$60 million. *January 2023 photo/Allen Best*

productive areas. They grow potatoes and watermelons but especially corn and other plants fed to cattle and hogs. This is Colorado without mountains, an ocean of big skies and rolling sandhills.

Republican River farmers face two overlapping problems. One is of declining wells. Given current pumping rates, they will go dry. The only question is when. Some already have.

More immediate is how these wells have depleted flows of the Republican River and its tributaries into Nebraska and Kansas. Those states cried foul, citing a 1943 interstate compact. Colorado in 2016 agreed to pare 25,000 of its 450,000 to 500,000 irrigated acres within the basin.

Colorado has a December 2029 deadline. The Republican River Water Conservation



Much of the agricultural production in the Republican River Basin supports livestock sectors, including this dairy near Holyoke. *Photo/Allen Best*

District has been paying farmers to retire land from irrigation. Huge commodity prices discourage this, but district officials said they are confident they can achieve 10,000 acres before the end of 2024.

Last year, legislators sweetened the pot with an allocation of \$30 million, and a like amount for retirement of irrigated land in the San Luis Valley, which has a similar problem. Since 2004, when it was created, the Republican River district self-encumbered \$156 million in fee collections and debt for the transition.

It's unclear that the district can achieve the 2030 goal. The bill unanimously approved by the Colorado House Agriculture, Water and Natural Resources Committee will, if it becomes law, task the Colorado Water Center at Colorado State University with documenting the economic loss to the region – and to Colorado altogether – if irrigated Republican River Basin agriculture ceases

altogether. The farmers may need more help as the deadline approaches.

This all-or-nothing proposition is not academic. Kevin Rein, the state water engineer, testified that he must shut down all basin wells if compact requirements are not met. The focus is on the Republican's South Fork, between Wray and Burlington.

Legislators were told that relying solely upon water that falls from the sky diminishes production 75 to 80 percent.

In seeking this study, the river district wants legislators to be aware of what is at stake.

Rod Lenz, who chairs the river district board, put it in human terms. His extended-family's 5,000-acre farm amid the sandhills can support 13 families, he told me. Returned to grasslands, that same farm could support only two families.

An "evolution of accountability" is how Lenz describes the big picture in the Republican River Basin. "We all knew it was

coming. But it was so far in the future. Well, the future is here now.”

The district has 10 committees charged with investigating ways to sustain the basin’s economy and leave its small towns thriving. Can it attract Internet technology developers? Can the remaining water be used for higher-value purposes? Can new technology irrigate more efficiently?

“We do know we must evolve,” Lenz told me. The farmers began large-scale pumping with the arrival of center-pivot sprinklers, a technology invented in Colorado in 1940. They’re remarkably efficient at extracting underground water. Aquifers created over millions of years are being depleted in a century.

Now, they must figure out sustainable agriculture. That’s a very difficult conversation.

The Republican River shares similarities with the better-known and much larger Colorado River Basin. The mid-20th century was the time of applying human ingenuity to development of water resources. Now, along with past miscalculations, the warming climate is exacting a price, aridification of the Colorado River Basin.

Globally, the latest report from climate scientists paints an even greater challenge. To avoid really bad stuff, they say, we must halve our greenhouse gas emissions by 2030. They insist upon need for new technologies, including ways to suck carbon out of the atmosphere, that have yet to be scaled.

We need that evolution of accountability described in Colorado’s Republican River Basin. We need a revolution of accountability on the global scale.



Rod Lenz and siblings moved to the Republican River Basin in 1974 to take advantage of new technology that allowed them to draft the then-vast stores of the Ogallala and other High Plains aquifers.

And what you had to say after this story was posted...

My wife and I spent a week in the Fort Scott (Kan.) area. We had the opportunity to talk to several current and retired farmers. They have very serious concerns about water levels in the area.

They also told about a decrease in crop production.

The most surprising comment I heard several times was “we need to take climate change very seriously.”

Robert Martin
Arvada

Your article should provide a wake-up call for all of us. It signals a dire need to find alternative energy solutions to address the overbearing carbon footprint.

Unless you live in Eastern Colorado, understanding the gravity of draining Bonny Reservoir in 2016 was lost on most Coloradans. It would be like draining Horsetooth Reservoir, and all that it provides for people living along the northern front range. The people in Burlington and other towns in the Republican River drainage have been dealt such a gut punch. They lost a



primary source of irrigation water, and a one-of-a-kind recreation spot for families in the area.

Whether we live in the Republican River Basin, or along the Front Range, the problems faced by farmers in the Basin should be everyone’s problem. No farms, no food.

Pete Simon
Arvada

Great article. I get mad when I read about the procrastination. Heads in the sand. You can’t keep doing what got you in this mess. It was never going to work out. The aquifers were getting drained. Cheap water and cheap fossil fuel. We know what will work. Let it go back to grasslands and move livestock on it like the buffalo used to. Centuries of that built up topsoil many feet thick. Which was also holding a hell of a lot of carbon.

Maybe the rainwater and a tenth of what was used for irrigating. What plants could

work in that situation? Where are the ag researchers? There is a theory of why farmers and ranchers are so conservative. They self-select. The stubborn never-changers stayed and the liberals all got out.

From Top Gun: “It’s not looking too good.”

Patrick Hunter
Carbondale

Will there be middle ground in issue of housing and land use?

The Polis administration and Democratic state legislators aimed high with their proposal to address housing costs—and deteriorated air quality and high energy use created by dispersed, low-density housing patterns.

Their solution, to use state authority to override local zoning, has drawn uncommonly vigorous fire from local governments.

“Local control is sacred,” Arvada Mayor Marc Williams told The Denver Post.

“All of a sudden the state legislature in their wisdom is saying, ‘You’re not doing a good enough job, you don’t know what you’re doing, we do, we’re going to tell you what to do,’” Colorado Springs Mayor John Suthers told the Post. “I just resent it.”

Kim Langmaid, mayor of Vail, said she is particularly concerned about the provision in the 105-page bill that would allow accessory-dwelling units and middle-housing—structures like carriage houses, townhomes, duplexes, and six-plexes—to be built by property owners. That would create more short-term housing for visitors, not for workers. “We feel like we have enough of them already. We can’t handle anymore.”

The Colorado Municipal League’s Kevin Bommer has vowed to aggressively fight the bill.

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In ending the coal era, how should debt on stranded assets be paid?

by Allen Best

Xcel Energy will be retiring its coal plants in Colorado. That is without doubt. It retired Comanche 1 last December and, by the end of 2031, will retire the two remaining Comanche units, the two units at Hayden, and its share of the second unit at Craig.

Before the Colorado Public Utilities Commission is the question of how much money should Xcel be able to earn on some of these coal plants as they go doddering into the sunset of Colorado's coal-burning era? Unamortized balances and decommissioning costs must yet be paid.

The Pawnee plant was retrofitted as a result of legislation in 2010 to burn coal more cleanly. It will soon be retrofitted to burn natural gas. In question is how much Xcel Energy should be able to realize in profits from the component of the coal unit being retired. *January 2023 photo/Allen Best*

Shocking to nobody, opinions vary. Those differences were evident in a public hearing conducted by the PUC on Tuesday, March 21.

A dozen or so people, most from Boulder, testified that Xcel should not be able to ding ratepayers at all to retire the debt and pay for decommissioning costs of these shuttering coal plants or, in the case of Pawnee, that portion of it that will be retired from coal.

Those making this argument point to Xcel's history of considerable profit for its investors, just shy of 10%. With risk comes reward, they said, but Xcel's strategy was generally without risk. So why send investors

handsome checks—checks cut from the payments of Xcel’s customers?

Xcel, of course, sees it very differently. In its testimony in this case, it has argued for using what is called the “regulatory asset approach.” This method capitalizes costs and depreciates them over time.

Then there’s another approach, one that would deliver Xcel a lesser rate of return but still much better than nothing. This third path would use a financial process called securitization. It was authorized by Colorado legislators in 2019. Ron Lehr, a PUC commissioner in the 1980s and 1990s, spoke on behalf of this approach at the public comment session.

Why does this matter to the general public? Lehr points to a \$130 million difference between his favored securitization approach and that of Xcel’s favored approach. That’s roughly a third of the rate hike that Xcel wants the PUC to approve.

On late Friday afternoon, after this report was substantially completed, a proposed settlement agreement was filed by Xcel and other key parties: the trial staff of the PUC, Colorado Energy Consumer, the Natural Resources Defense Council and Sierra Club, and the Colorado Office of the Utility Consumer Advocate. The PUC is not obligated to accept this proposed settlement, although it usually does in such cases.

The proposal would represent a compromise of Xcel’s preferred cost-recovery and the bundled securitization that was Lehr’s proposal during the public testimony.

Regardless, the testimony reveals larger talking points and might best be understood

as an adjunct to the story on page 1 of this issue of Big Pivots about the Colorado legislative committee conversation about rising utility rates.

The four coal-burning units in question began operations between 1965 and 1982. Three of the units—Hayden and Pawnee—were extensively retrofitted as a result of the Clean Air, Clean Jobs Act of 2010 to reduce emissions that were causing violations of federal air quality standards.

Colorado’s last-built coal plant, Comanche 3, which was commissioned in 2010, is not a focus of this proceeding. Xcel has separately agreed to use securitization to recoup the debt on the plant, which was built with the expectation of burning coal until 2070 but is now scheduled for retirement no later than 2031.

The public session was full of allegations about motivations.

“It’s time for the investor-owned utilities to have some skin in the game,” said Steve Whitaker. He was challenging the business model by which Xcel’s allowed rate of return is based on how much it has invested.

“They can choose the most expensive solution to a problem because it gets them the most amount of dollars in their bottom line,” said Jan Rose. “Consider reworking the model of risk and reward.”

Ratepayers, said Marie Venner, “should not be forced to pay off Xcel’s mistakes.”

Leslie Glustrom cited “abuses” that she said the PUC was obligated to correct. “And we have had so many abuses in this state. Xcel spent all-told well more than \$1.5 billion

on coal plants in the first decade of this century, and now they have privatized all of the profits and they want to socialize the risks.”

Instead of 9% or 10% return on equity, said Steve Pomerance, a former Boulder City Council member, Xcel should be

Cost recovery at issue in this docket

(estimated remaining NBV* & decommissioning costs)

	Original retirement	and now	Costs
Craig 2	2039	2028	\$32.2 million
Hayden 1	2030	2028	\$35.4
Hayden 2	2036	2027	\$45
Pawnee coal portion	2041	2025	\$209.7

• NBV is net-book value, i.e. that amount that has not already been depreciated.

rewarded with 3% to 4%. Others cited similar figures.

Xcel has laid out its case primarily through the testimony of Jack Ihle, who oversees the company’s regulatory policy in Colorado. His testimony filed last November, as this proceeding began, pointed to the accomplishments of the company in Colorado, “one of the most aggressive trajectories for power sector emissions in the United States.”

While some on the environmental side of the fence might disagree with his history, he traces Xcel’s retreat from coal to 1998. He is on firmer ground in defining milestones since 2016, leading to the company’s remarkable declaration in 2018 to march toward 2030 and 2050 decarbonization goals. The company is now on track to deliver 55% renewable energy by 2025.

The specific issue here is how will Xcel recover the net book value of its remaining investments of the three units in the Yampa Valley and the retired portion of Pawnee.

Ihle, in his November testimony, said the company performed a comparative analysis of multiple potential cost-recovery methods. It found that the “tried-and-true regulatory asset approach” be used. “It is more cost-effective for customers than separately securitizing each plant, avoids the potential for relatively large near-term rate increases associated with accelerated depreciation, and appropriately considers the need to keep Public Service (the name of Xcel’s Colorado Division) financially whole for its Commission-approved investments” as it accelerates emission reductions.

“Put simply, it provides regulatory support for actions taken to advance State of Colorado energy policy,” he wrote.

“Negative ratemaking outcomes that function to penalize utilities for voluntarily committing to early retirements to support clean energy transition would run counter to the policies and incentives that Colorado’s emissions reduction statutes were enacted to advance.”

— Jack Ihle
Xcel Energy

A back-and-forth between the various parties, including the Sierra Club and Natural Resources Defense Council, the Office of Utility Consumer Advocate, and a number of others continued through winter. By February, Xcel had retreated.

In Ihle’s rebuttal testimony, Xcel insisted on the “utility’s right to a return on its invested capital. He referred to [SB19-236](#), the law that set the target of 80% emission

reductions of electrical utilities. Nothing in that law “suggests that the opportunity to invest in replacement generation should lead to inadequate cost recovery treatment for retiring generation,” he wrote. “Indeed, negative ratemaking outcomes that function to penalize utilities for voluntarily committing to early retirements to support

clean energy transition would run counter to the policies and incentives that Colorado’s emissions reduction statutes were enacted to advance.”

In his rebuttal testimony, Ihle promised the company would evaluate the potential for a 2030 bundled securitization in conjunction with that of Comanche 3. It wanted to kick the decision down the road. But it also noted that Colorado’s securitization law passed in 2019 left the decision to the sole discretion of the utilities.

Lehr, the former PUC commissioner in the 1980s and early 1990s, says he was responsible for introducing the concept of securitization to then State Rep. Chris Hansen. Hansen failed to get the law passed in 2018 but in 2019, with Democrats in control of both the House and the Senate, it went through.

As [defined by the Rocky Mountain Institute](#), securitization is a financing tool that creates the possibility for a win-win-win that uses low-cost bonds. [Power magazine](#)

[explains](#) that it involves issuing a new loan, collateralized by the (government-backed) promise of future payments from customers of the utility.

New Mexico, which also passed securitization legislation in 2019, has now used it, as have Michigan and Missouri, says Lehr. It has also been used in California but even Oklahoma and Texas.

“It’s a tool that can be used for all sorts of bad debt,” he says. That can include cost recovery from hurricanes or nuclear power plants. In this case, it’s coal plants.

In an interview after the PUC hearing, Lehr identified two major questions before the PUC. One is how much bad debt should be recognized as debt to be paid by ratepayers. That, he says, is the issue identified by the speakers primarily from Boulder at the PUC hearing. “It’s a good issue. But it’s not what this docket is about,” he says.

Second, whatever the amount that must be paid off, how should it be paid off? He wants to see the securities from each of the coal plants in question securitized and bundled.

Xcel, in its filing, had argued that such a maneuver is expensive and complicated. Lehr insists that is not the case.

“Every place we have gone through this in the country, there are rather larger savings to consumers from paying through securitized debt. There are two reasons. One is the difference between the company’s authorized rate of return, which I believe is 9.25%. That is a generous return on equity, especially for a plant that doesn’t exist.”

The interest from the Xcel approach would be 9.25% as compared to the bundled securitization, which would be 4.8%.

“If your house mortgage was at 9.25% and you could get a loan for 4.8%, you would refinance your mortgage.”

“And all the big, expensive attorneys have been wrong time and time again.”

— **Leslie Glustrom**

In the public session, Lehr and Glustrom disagreed about process if not the underlying issues. Lehr said that the commissioners were legally bound to consider only the question based on the evidence in front of them.

Glustrom announced that she had expanded the scope by filing evidence that very afternoon that called into question Xcel’s decisions from past decades.

“This docket is a chance for a comprehensive view of how to deal with the particulars of Brush and Craig and Hayden.

You do have the power. The statues do give you the power,” she said. She pointed to the \$238 million that Xcel had spent at Pawnee, the plant at Brush, to retrofit it in order reduce emissions from coal combustion and hence keep it in operation.

It came down to risk, she said, Xcel has no risk when it has a monopoly and can pass along costs to its customer. As such, lower rates of return would be in order. “You are not required by statute to keep Xcel in a no-risk position.”

Glustrom also shared some frustration.

“We have been right, and (we have been) right time and time again,” she said. “And all the big, expensive attorneys have been wrong time and time again.”



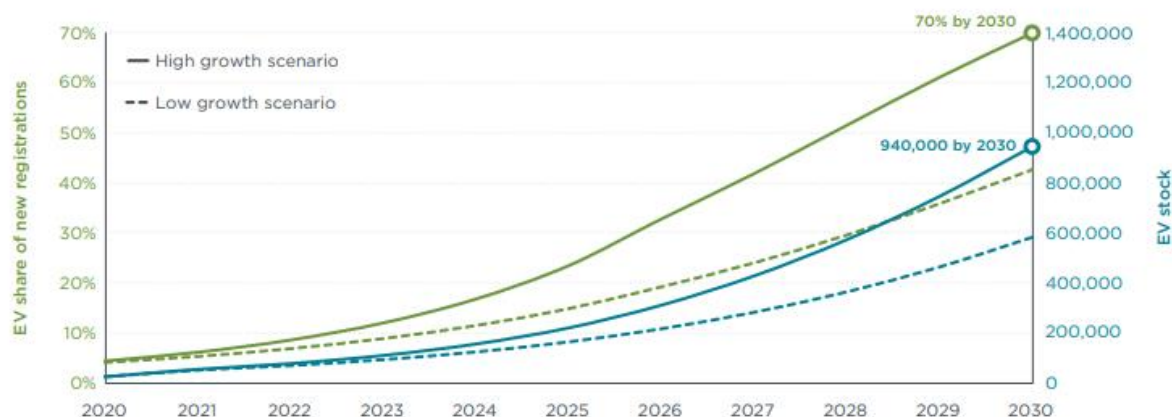


Figure 1. Assumed Colorado new vehicle EV share (green) and total EV stock (blue) from 2020 to 2030 for high (solid line) and low (hashed line) growth scenarios.

Can Colorado hit its 2030 goal for EVs?

by Allen Best

Colorado in 2018 identified a goal of having 940,000 registered electric vehicles in the state by 2030. Is the state on track to achieve that?

Xcel Energy, the state’s largest electrical utility, and the Colorado Energy Office at first glance seem to offer conflicting appraisals.

“The state is on track to meet its 2030 target,” says the Colorado Energy Office in a statement. “We are well on our way toward achieving our goal of 940,000 electric vehicles on Colorado roads by 2030.”

Xcel Energy, in a March filing to the Public Utilities Commission, seems to suggest a gap. “It is important to clarify that the IRA (Inflation Reduction Act) and IJA (Infrastructure Investment and Jobs Act) likely do not provide all the funding necessary to reach the state’s EV goal of 940,000 vehicles by 2030 nor the company’s vision of 1 in 5 electrified vehicles by 2030,” says the Xcel document.

The filing was in response to the PUC’s request of utilities to identify how the company intends to tap the new federal

funding in those two major laws passed in 2021 and 2022.

“Estimates from other organizations indicate that a business-as-usual forecast of EV adoption could increase by about 20% because of the IRA,” the Xcel filing adds, citing a Bloomberg story. “While such an increase in EV adoption would certainly be material, it would not close the gap between pre-IRA expectations and the amount of electrification needed to meet the state’s clean transportation goals.”

Actually, both the state agency and the utility are correct, says Travis Madsen, the transportation program manager at the Southwest Energy Efficiency Project. “Xcel is saying that financial incentives in the two federal laws will not be enough to get Colorado, which was 5th among states during 2022 in EV sales, to its goals. It will take more.”

The state agency, he adds, is correct in saying that with aid of new state programs, it is on track to get there.

“If all the pieces come together, I’m optimistic we will meet our goals,” says Madsen. “But we need Xcel, we need the state, we need the federal government, and we need auto manufacturers all working together.”

If still early, Colorado does appear to be in step with its goals. Modeling by the state had



Tesla has 17,000 of the nation's 37,000 fast-chargers. An agreement announced in February by the White House will make many of those chargers interoperable, available to non-Tesla vehicles. In theory, these charging ports at a gas station in Craig will get heavier use than was the case during this first Sunday in March. Photo/Allen Best

concluded that 10% of all vehicle sales during 2022 needed to be EVs to keep the state on track. Sales came in at 10.5%.

As of mid-March, Colorado has 80,486 registered EVs, [according to Atlas Public Policy](#).

Incentives have been sweetened by both federal and state tax credits. Colorado offers \$2,000 for a new EV and \$1,400 for a two-year lease through 2026.

Federal tax credits allow up to \$7,500 for a new EV and up to \$4,000 for a used EV, [according to Drive Electric Colorado](#).

"The way I see those tax credits for EVs, they are just incredibly significant," says Madsen. "There is no cap on how many tax credits can be claimed. As Xcel says, this sets the stage for mass adoption of EVs. I hope Xcel will use some of their own federal resources to drive that transition."

Charging infrastructure is also part of the package. The federal government provides a tax credit of up to \$1,000 for charging equipment.

A Colorado law passed two years ago, [SB21-260, "Sustainability of the Transportation System,"](#) was a sweeping law that was partly concerned with widespread

adoption of electric motor vehicles. A component addressed charging infrastructure, particularly in lower-income communities.

Not all of Colorado is covered. You won't find a fast-charging station in Springfield, in the state's southeastern corner, for example, but you will in Lamar, just 45 miles away.

The state's Charge Ahead program has been responsible for 36 fast-charging stations across Colorado with just one, at Burlington, along I-70, near the Kansas border, still to be completed.

Now comes an agreement announced by the Biden administration in February. Tesla has agreed to have at least 7,500 of its chargers available for all EVs by the year's end. This includes 3,500 new and existing high-speed chargers. It has 17,000 high-speed chargers at present, while other companies have 20,000 altogether.

Tesla agreed to this new interoperability using third-part software in order to qualify for a cut of the \$5 billion in electric vehicle charging grants authorized under the 2021 infrastructure law.

The federal government plans to distribute \$5 billion in grants over the next

five years through its National Electric Vehicle Infrastructure program.

Still to be worked out is the public charging infrastructure of the future. We go to gas stations to gas up. We most likely will charge our cars at home. But companies like 7-Eleven are studying how public charging might fit into their business model.

“A lot of this has to be sorted out,” says Madsen.

Yet to be fully addressed is the charging infrastructure for those who do not live in single-family homes.

One answer may come from [HB-23-1233, “Electric Vehicle Charging and Parking Requirements,”](#) which will get its first hearing on Wednesday, April 5, before the Senate Energy & Environment Committee.

Madsen describes this bill as an improved version of last year’s bill sponsored by State Rep. Alex Valdez in the last session that was vetoed by Polis. Among its provisions, the bill would seek to get more charging stations installed in apartment complexes and ban homeowner associations from banning them similar to how some once tried to ban solar panels on roofs.

The 2023 Colorado EV Plan issued in March says the Polis administration wants to see expanded EV tax credits for light, medium and heavy-duty vehicles (and also create a new tax credit for e-bikes).

The state sees expanding the number of fast chargers to 1,700 by 2025.

It also wants to have 23 of Colorado’s 26 designated Scenic & Historic Byways classified as electrified by the end of fiscal year 2025. Three were electrified as of 2020.

The next phase of the clean-car standard may also result in accelerated adoption of EVs. This would set greater sales targets for EVs in Colorado starting in 2027.

Madsen expects to see a draft of the rule that will be considered for adoption by the Air Quality Control Commission no sooner than

July and then the commission’s hearing in October.

“Much remains to be worked out,” he says. “Other states have set goals of 100% EVs by 2035. Colorado is not talking about going that far. But if Colorado were to adopt some (higher) standard, that would be a really big deal in terms of driving progress.”

Colorado’s story actually begins with California, which adopted a low-emission vehicle standard. The federal government normally leads in such matters, but California had an exemption that allowed it to go beyond.

In 2018, instigated by then-Gov. John Hickenlooper, Colorado adopted a standard based on California’s model. That rule requires that fleets of new vehicles sold in Colorado must average 36 miles per gallon by the year 2025, about 10 mpg better than before. In other words, while there may be some energy pigs, like big pickups, the overall fleets of vehicles sold by manufacturers must clear that higher bar.

Now comes a new wave of clean-car standards. Seven states since last year have adopted standards that require 100% EVs by 2035, but Colorado officials have not indicated they intend to propose requirements that high.

Colorado proposed rule, [as identified on the CDPH&E website.](#) would move more gradually so that EVs would comprise approximately 80% of electric vehicles by 2032. The proposed rule to be submitted to the Colorado Air Pollution Control Commission would apply to vehicles sold beginning model year 2027 (new vehicles sold in calendar year 2026).

The state agency held a listening session on March 16 and plans another one on May 20. Madsen says he does not expect to see a draft of that rule from the air commission until July. A hearing is likely in October.

If Colorado adopts some standard, “that would be a really big deal in terms of driving progress,” says Madsen.