

House Energy & Environment

04/30/2026 01:30 PM

HB26-1337 Facilitating Nuclear Energy Development

Typed Text of Testimony Submitted

Name, Position, Representing	Typed Text of Testimony
<p>Edward Behan Against themselves</p>	<p>I will keep this simple, as I am sure the committee will be receiving lots of detailed scientific analysis. I oppose HB26-1337. I don't believe we should be going forward with nuclear energy at this point in time, primarily from the perspective that we STILL don't know what to do with the spent fuel and other waste. As well, even if this is supposed to be oriented toward a "small modular reactor" rather than the large sorts of nuclear generating stations we have seen before, I am not sure we have the infrastructure in place to properly regulate a "smaller" operator, let alone a network of smaller operators. Until these and other questions have answers and protocols in place, this is not a technology I favor advancing when both wind and solar energy systems are so much less expensive and ready to deploy now. Therefore, I ask you not to move this legislation forward.</p>
<p>Steve Szabo Against Alchemy Farms</p>	<p>Dear Sponsors and Committee Members</p> <p>At Alchemy Farms we read bill HB 26 1337, and are opposed to it. We urge the committee to vote it down.</p> <p>The Vogtle Units 3 and 4, in Georgia built by Westinghouse cost \$36 billion and was 7 years behind schedule. The original estimate to build the facility was \$14 billion. As a result, Georgia Power ratepayers saw a 24% increase in their electric bills. Construction was started in 2013 and wasn't completed until 2024.</p> <p>Even the SMR that was scheduled to be built in Idaho was canceled because it's the most expensive of all forms of energy.</p> <p>In contrast the cost difference between Solar, Wind, and Storage vs SMR's is huge. Solar, Wind, and Storage cost is \$73 - 128 a MWh, and SMR's cost is \$230 - 382 a MWh</p> <p>Given the cost difference, the environmental impacts, and the 7 - 12 years it takes for complete a SMR why even bother looking at SMR's.</p> <p>Also why would we want to spend \$20 million to study SMR's, when they are not the best choice.</p> <p>Solar, Wind and Storage aggressive deployment is the clear choice, and aligns with Colorado's clean energy goals.</p>

	<p>Most of the Uranium we get in the USA comes from Russia, and given the world political issues, its not a good choice.</p> <p>Plus there are toxic environmental problems in connection with the mining of Uranium. This sign appears on a forest access road in Mesa County, CO</p>
<p>Simone Colburn Against Mi Familia Vota</p>	<p>My name is Simone Colburn, I am a student at Colorado College in Representative Paschal's district, and I work with Mi Familia Vota to promote the health, safety, and prosperity of Latino communities in Colorado. I am speaking to you today to urge you to vote no on HB26-1337 as a young person who began advocating for the transition away from fossil fuels at fifteen years old.</p> <p>I know addressing the climate crisis is not only a top priority for me, but also for many members of the committee voting on the bill today. Colorado committed to 100% net-zero emissions by 2050 and is falling behind. I understand the temptation to give in to Big Tech companies offering to fund the construction of nuclear power plants. However, I urge you to remember that nuclear energy was only defined as "clean energy" last session despite the opposition of nearly every local social justice organization. Bill HB26-1337 would take advantage of Coloradans' ratepayer dollars, health, and agency to incentivize irresponsible nuclear projects.</p> <p>Nuclear costs eight times more than wind and solar, takes 10 to 15 years to construct, uses millions of gallons of water every day, contributes to the ninety thousand metric tons of highly-radioactive fuel waste already stored across the country, and poses a threat to local communities.</p> <p>While climate change is fast approaching and I would love nothing more than an easy way out of this global crisis, now is not the time to give in. If you are considering voting for this bill in an effort to address environmental degradation, I urge you to consider who is arguing for and against the bill. Big Tech, which is now a top carbon emitter, is lobbying for your support on projects that are opposed by local communities. Meanwhile, I, as your constituent, along with dozens of grassroots environmental organizations, who I assure you are willing to try almost anything to protect the health of this state and our futures on a livable planet, understand that the benefits of Nuclear Power would not go to our communities while the environmental harms would disproportionately impact us.</p> <p>We have the technology with solar and wind power to cut emissions without using dirty, costly, dangerous nuclear power. I am incredibly grateful for all the work you each have done and are continuing to do to help move toward Colorado's clean energy targets. I hope you will continue the fight by voting no on HB26-1337.</p> <p>Thank you for your time.</p>

<p>Rhea Esposito Against themselves</p>	<p>Nuclear Power is a false solution for climate change that would divert public funds from renewable energy sources like solar and wind power. Nuclear power creates waste that remains radioactive for thousands of years, and since there currently exists no good solution for processing or storing radioactive waste, most or all of it will likely be kept onsite. The damage from an accident at a nuclear power plant would be catastrophic, with the risk heightened due to increasing natural disasters due to climate change.</p> <p>Nuclear plants can use hundreds of millions of gallons of water daily, both for energy production and for cooling spent fuel, which Colorado cannot afford. Nuclear power has been getting more expensive, and could increase electric rates in Colorado while decreasing property values for those living near the plant. Nuclear power relies on creating sacrifice zones, both for siting the plants and for extracting the uranium required to feed the reactors. In both cases, nuclear power has been linked to heightened rates of cancer in impacted communities.</p> <p>The bottom line is that nuclear energy is in no way a clean energy source, and Colorado's frontline communities would absorb all the risks, health impacts, and environmental contamination. Given the rapidly diminishing costs in renewable technologies which have shown great promise in tackling the climate crisis, a transition to nuclear power would be a ludicrous waste of time, money, and energy for our state.</p> <p>Please vote NO on HB26-1337.</p>
<p>Angela Kantola Against themselves</p>	<p>I oppose HB26-1337, "Facilitating the Development of Nuclear Energy". Colorado should stay on the leading edge of capturing our abundant, truly clean wind and solar resources. We do <u>not</u> need to jump on the bleeding, expensive, and risky edge of nuclear energy. HB26-1337 would obligate the PUC's captive ratepayers to waste up to \$20 million to pay for nuclear studies, siting, design, etc. The goal of such legislation is nuclear power plants, which are outrageously expensive and which we do not need in Colorado where we have abundant renewable energy from wind and solar.</p> <p>For ourselves, for our children and grandchildren, and for all of God's good creation here in Colorado and beyond, I say NO to HB26-1337. Many years ago (prior to serving as the chair of the Nuclear Regulatory Commission under President Obama), my brother-in-law bet me that clean-up would never be done for the uranium mill tailings at Moab, Utah (a threat to the endangered Colorado River fishes I worked to</p>

	<p>recover). You know what? He was wrong, and was glad to lose the bet! Those tailings did get cleaned up. Let's not embark on the activities proposed in HB26-1337 which risk creating more problematic nuclear waste here in Colorado.</p>
<p>Bernice Wilkins Against themselves</p>	<p>I am opposed to the plan and funding of future nuclear power plants. Nuclear power plants are notorious for cost overruns and are extremely expensive. They also take a long time to build because components are not available for at least 5 years. Colorado is committed to a clean environment to make our state more livable and not plagued by ozone. Let's have a plan to build clean solar and wind with battery storage projects for our energy future.</p>
<p>Tamar Krantz Against themselves</p>	<p>Dear Honorable Members of the House Energy and Environment Committee,</p> <p>Please oppose this bill.</p> <p>My primary objection to nuclear fission technology is the waste problem. There is no permanent storage facility for high level waste. Colorado is fortunate to have only 30 metric tons of high level waste in storage compared to thousands in other states. The costs to maintain spent fuel safely is astronomical. With recent deregulation on the federal level, it is possible states will bear more costs to ensure safe storage in perpetuity.</p> <p>Second, nuclear power projects are frequently abandoned due to cost overruns. This is too economically risky for Colorado and utility ratepayers.</p> <p>Finally, this bill is a distraction from renewable energy resources that are cheaper, cleaner, and proven effective.</p> <p>Please oppose this bill.</p> <p>Tamar Krantz, Louisville</p>
<p>Christine Condit Against themselves</p>	<p>The excessive cost and 45% failure rate of Nuclear projects is a poor investment. There are far better ways to provide power. Solar, Wind, Geothermal and batteries are cheaper, on both a capital and on a levelized cost of delivered power basis, are more reliable and come in on budget. Support safe Renewables don't invest in the continuing saga of abandoned nuclear projects.</p>
<p>Leslie Glustrom Against</p>	<p>Dear Members of House Energy and Environment Committee,</p>

<p>themselves</p>	<p>I may not be able to speak during the hearing tomorrow on HB26-1337 (facilitating nuclear energy) so I wanted to add my written comments in STRONG opposition to the bill.</p> <p>I expect you will hear from many tomorrow, so I will be brief.</p> <p>While I understand that some in Pueblo want a nuclear plant, it is unlikely that they will pay for it--rather it is likely that customers of Xcel energy will be forced to pay for any nuclear plant--as well as for the millions that might be spent on planning for any nuclear plant...that's not fair!</p> <p>If Pueblo wants a nuclear plant, then they should pay for it through their utility rates with Black Hills Energy!!</p> <p>It is hard to know what amendments might be introduced tomorrow but...</p> <p>IMPORTANTLY--even if nuclear energy was perfectly clean--and FREE--it would still be the WRONG choice for the 21st century in Colorado where we have massive potential for low-cost wind and solar.</p> <p>On a grid that relies on large amounts of wind and solar as the Colorado grid increasingly does, THE LAST THING YOU WANT IS AN INFLEXIBLE RESOURCE LIKE NUCLEAR ENERGY.</p> <p>What is needed for this century in Colorado are very flexible resources for the power grid; resources that can be turned on and off quickly to complement Colorado's abundant wind and solar--like batteries and in some cases natural gas.</p> <p>In general nuclear energy is NOT FLEXIBLE because it can NOT be turned on and off quickly to help complement the wind, solar and storage resources that are already dominating our electrical grid.</p> <p>PLEASE VOTE NO ON HB26-1337--NO MATTER WHAT AMENDMENTS ARE INTRODUCED.</p> <p>WE DON'T WANT OR NEED NUCLEAR POWER--NO MATTER HOW MUCH SOME IN PUEBLO WANT IT.</p>
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	<p>A vote for a bill that requires Colorado to move forward with nuclear energy would, respectfully, indicate that you don't understand much about Colorado's grid and the kinds of resources that are needed in this century.</p> <p>It is often said that "Nuclear fights with wind and solar."</p> <p>It makes no sense to vote for expensive and inflexible nuclear plants when they will displace low-cost wind and solar.</p> <p>PLEASE VOTE NO ON HB26-1337.</p> <p>Thank you.</p> <p>Leslie Glustrom</p> <p>A Colorado PUC intervenor and participant for over 20 years.</p>
<p>Scott Bean For themselves</p>	<p>Colorado is way behind other states in the development of nuclear power, which has objectively demonstrated over more than 70 years of commercial operation to be by far the safest and cleanest means to ensure both economic and environmental prosperity for all. The passing of HB26-1337 will be a small, yet important, step towards making the state of Colorado a more appealing option for nuclear energy projects.</p>
<p>Samantha Turley Against themselves</p>	<p>Please take time to consider the see the dee impact that this type of development would have on our communities. As we continue to be in a stage 1 draught and experience the impacts of climate change in our state, nuclear development seems inconceivable. This development would only seem to further the climate crisis and remove community input and oversight, which in these times there needs to be these options and engagement. This land and our communities are for the people, not developments of this kind. To take away even more of our nature and democratic involvement is not what Colorado stands for and therefore should reconsider, heavily, their involvement in this development. Thank you for your time and consideration.</p>
<p>John Stenmark For themselves</p>	<p>Nuclear energy should receive a fair opportunity in Colorado. It can replace coal-fired generation and provide a zero emission complement to wind and solar.</p>
<p>Valerie Passerini Against themselves</p>	<p>Before you race to conclude, now is the time for nuclear, do you trust that recycling nuclear fuel will actually happen? It's not the current practice in this country. Valdez says France does it so, there you go. I guess it's all settled.</p>

	<p>We'll all be stuck funding this through Excel rate hikes. They keep hiking rates and their CEO keeps getting richer. As of April 2026, Xcel Energy CEO Robert Frenzel's total compensation rose to approximately \$16 million.</p> <p>Please vote against HB26-1137.</p> <p>Nuclear doesn't need special treatment.</p> <p>Here are some issues with this bill:</p> <p>1) Where will the waste go? Nuclear plants require secure, permanent disposal for thousands of years.</p> <p>2) Another Chernobyl. This happened only 40 years ago and from what I can tell, combined human error and design flaws, so many factors means that it's hard to control for.</p> <p>3) Chance of affecting our limited water supply (in a dry state that has been in a drought for a long time. Nuclear materials can enter water supplies through leaks or storage failures. This is not conjecture. It already happens as seen with many examples in this article. https://environmentamerica.org/minnesota/center/resources/too-close-to-home-nuclear-power-and-the-threat-to-drinking-water/#:~:text=75%20percent%20of%20U.S.%20nuclear,near%20U.S.%20nuclear%20power%20plants.</p> <p>4) I realize that the government would be providing funding for this but anything that makes us more reliant on this Administration's purse strings is not a good thing.</p> <p>5) The plants could become a target for terrorism.</p> <p>6) Right now nuclear provides 9% of our country's energy. It becomes a race to build and build more and more of these at the expense of cleaner methods like solar and wind.</p>
<p>Mary Juliana Zahniser Against herself</p>	<p>I urge House Energy and Environment Committee members to NOT support and to vote AGAINST HB26-1337 due to the following concerns: environmental impacts of uranium mining, unresolved problem of disposal of radioactive waste, accident risks, water use, thermal pollution, proliferation risks, and the centuries-long burden passed to future generations. Among those concerns, one that stands out and should immediately exclude nuclear power from even momentary consideration in</p>

	<p>Colorado, is the tremendous burden that nuclear power, even SMRs, would place on our already over-committed and rapidly depleting water supply.</p> <p>Please pay serious attention to experts who are not funded by the nuclear industry, who review and report on ever increasing regulatory inadequacy and risk data, costs and delays, and existing and future waste disposal issues. Please read the warnings outlined in the May, 2022 Science Direct article by one of Colorado’s most eminent physicists, Amory B. Lovins, co-founder of Rocky Mountain Institute and Adjunct Professor of Civil and Environmental Engineering at Stanford University where he argued, “Coal plants were built by counting cost but not carbon. Nuclear plants are promoted by counting carbon but not cost. Effective climate solutions must count carbon and cost and speed.”</p> <p>And, please listen to experienced voices saying that we don’t have time to wait for nuclear plants to be built, such as French President Macron in a country that actually has nuclear power, “We need to massively develop renewable energies because it is the only way to meet our immediate electricity needs, since it takes 15 years [global average is ten years] to build a nuclear reactor”.</p> <p>I am a parent, grandparent and retired person who spent her entire career working with individuals with special needs. I am not willing to have nuclear waste stored in my backyard or even the backyard of individuals with whom I don’t agree. Alternatively, in good conscience, I cannot support transporting nuclear waste across our state to another location around cities and across our beautiful state, just to get it somewhere else where I won’t need to see or think about what it will do to the environment and whatever or whoever lives wherever it ends up. People who support nuclear power need to be willing to have the waste transported over or permanently stored in their backyard or that of their family members. Are you that person? Please vote against HB26-1337.</p>
<p>Gabriel Ignetti For themselves</p>	<p>Nuclear power would be a boon for Colorado or any state. Nuclear is rated as the safest form of energy per kWh on the planet. It is also the cleanest. The fake "facts" are about the dangers of atomic radiation which is both natural and ubiquitous for the simple reason that we live on a slowly decaying giant atomic furnace which circles an exponentially larger atomic furnace. We have evolved in an environment that was 10X more radioactive than today. E=MC2 means that an extremely tiny amount of matter produces a monumentally exponential amount of energy. That converts into an extremely small ecological footprint including it's spent fuel 97% of which is recyclable into nuclear fuel for advanced reactors which already exist. The fact is that nuclear power is a modern miracle that plays an indispensable role in our worldwide efforts at decarbonization.</p>
<p>Blane Thingelstad For themselves</p>	<p>Chair and Members of the Committee,</p> <p>My name is Blane, and I submit testimony in strong support of allowing nuclear construction in Colorado.</p> <p>Colorado stands at a crossroads. Electric demand is climbing rapidly “ driven by electric vehicles, manufacturing, building electrification, and Front Range population growth. Xcel and Tri-State both project load growth that will outpace what variable</p>

	<p>resources alone can reliably serve. Meanwhile, Coloradans watch their electric bills rise year after year. We cannot afford to take any clean, firm option off the table.</p> <p>Nuclear energy is the most powerful tool we have to meet this moment.</p> <p>It is carbon-free. A nuclear plant produces zero operational greenhouse gas emissions. If Colorado is serious about its 2050 climate goals, we will not reach them by retiring coal and replacing it only with intermittent generation backed by gas. Nuclear is the only proven, scalable, 24/7 carbon-free source.</p> <p>It is dispatchable and reliable. The U.S. nuclear fleet runs above 92% capacity factor “ higher than any other source on the grid. Nuclear plants generate around the clock, through wildfire smoke, polar vortexes, and windless winter nights. As we retire dispatchable coal, we need dispatchable replacements “ not just energy, but firm capacity.</p> <p>It will deliver decades of stable, predictable power. Nuclear plants routinely operate 60 to 80 years. That long-duration price stability protects ratepayers from the fuel and transmission volatility driving today's bill increases.</p> <p>It is safe. The U.S. commercial nuclear fleet has the strongest safety record of any major energy source, measured in deaths per terawatt-hour. Modern designs are passively safe and rigorously regulated. Communities that currently host nuclear plants overwhelmingly support them.</p> <p>Colorado has the engineering talent, the workforce, and federal partners at INL and NREL to lead. What we lack is permission.</p> <p>Give Colorado the option to build the clean, firm, affordable energy future our grid demands.</p> <p>Thank you.</p>
<p>Gianna Maita-Edwards Against themselves</p>	<p>Madam Chair and members of the committee, thank you for the opportunity to share my views with you today. My name is Gianna Maita-Edwards and I am a resident of Longmont with brief comments in opposition to this bill. I believe it will re-open a dark chapter in Colorado’s history. From the 1950s through the 1980s, people were dying of cancer from plutonium that leaked into the soil around the Rocky Flats Nuclear Weapons Plant. Families and friends who lived near the Plant still mourn their loved ones “ whether they sustained their illnesses manufacturing weapons at the plant or innocently living near it. Even now, the land where the Plant once stood is a health hazard. In the late 1970s, many people put their lives and careers on the line to bring attention to the health violations and crimes being committed by the operator of the Rocky Flats Nuclear Weapons Plant. Today, paving the way for the nuclear industry in Colorado - once again - would make the sacrifices of the activists of the 1970s all for naught. What is even worse, we would do so with more information about the harms of nuclear energy. In 2025, as mentioned by one of the previous individuals, scientists at one of our nation’s leading public health institutions, the Harvard T. Chan School of Public Health, found that residential proximity within 19 miles of a nuclear power plant was associated with significantly increased cancer incidence. (If you’d like to look up the study, the citation is: Alwadi, Y., Evans, J.S., Schwartz, J. et al. Residential proximity to nuclear power plants and cancer incidence in Massachusetts, USA (2000–2018). Environ Health 24, 92</p>

	<p>(2025). https://doi.org/10.1186/s12940-025-01248-6.) Like many Coloradans, I have lost several loved ones to cancer. In the past ten years, I have lost two people to brain cancer and two more to pancreatic cancer. Additionally, my uncle survived brain cancer last year. As you can imagine, my loved ones experienced a lot of suffering. I do not want the nuclear industry to claim yet another cancer victim in my family or in any other family. Please honor the sacrifices of those who came before us and do not pass this bill.</p>
<p>Nate Bernstein For Climate Jobs Colorado</p>	<p>Thank you Madam Vice-chair and members of the Committee. My name is Nate Bernstein and I'm the Exec Director of Climate Jobs Colorado. We are a union-led organization advancing sustainable climate policy and practices charged by good union jobs.</p> <p>We as an organization are pro-environment.</p> <p>We are pro-worker and pro-union.</p> <p>And we are pro-nuclear energy.</p> <p>Colorado has made important strides toward clean energy sustainability. Yet, we still have important work to do to assure Colorado's future.</p> <p>Last year legislators rightly determined that nuclear power fit the definition of clean energy, because it does not emit greenhouse gases. Now we have the opportunity to take the next step and help facilitate nuclear development to address the final mile of the energy conversion.</p> <p>Nuclear energy and other clean firm sources will provide a crucial piece of the energy and jobs puzzle for climate sustainability in the state of Colorado.</p> <p>Other states are investing in clean nuclear energy because they know it works. It is safe; it is reliable; it is dispatchable.</p> <p>We want to assure this state continues to be safe, healthy, and beautiful for future generations and nuclear power can help us achieve this goal.</p> <p>In order for nuclear energy to be successfully deployed we need to start planning now, and we need to assure developers and utilities have the planning and facilitation needed to bring these energy sources online.</p>

	<p>Besides assuring affordable and reliable energy, Colorado has committed to a just transition for workers and communities. Workers want to continue to work, and communities want and need family sustaining careers.</p> <p>Nuclear energy can provide a more just transition. Modular nuclear plants can replace existing coal-fired plants on or near the very sites that are scheduled for decommissioning, helping to actualize Colorado’s goal of a just transition. The amendment today helps to make sure that nuclear can be sited in just transition communities, further ensuring that state commitment.</p> <p>For these reasons, I ask for your support of this legislation, helping us to pave the pathway forward toward true clean energy and economic sustainability.</p>
<p>Cathern Smith Against themselves</p>	<p>Dear Honorable Members of the House Energy and Environment Committee:</p> <p>Please vote no for House Bill 26-1337. The primary reasons to vote no are:</p> <p>(1) There is no permanent storage for high-level nuclear waste in Colorado or elsewhere.</p> <p>(2) Accordingly, the actual dollar cost of nuclear power plants is underestimated -- as are the environmental costs.</p> <p>(3) If the Fiscal Note for this bill reflected the costs of high-level nuclear waste storage, it would become clear that nuclear power is *not* a source of affordable power.</p> <p>(4) Further construction cost overruns are common, making abandonment or excessive cost likely.</p> <p>(5) Well-sited wind and solar energy better serve the public.</p> <p>Best regards, Cathern Smith, Louisville</p>
<p>Julian Guevara Against themselves</p>	<p>My name is Julian Guevara and I am a community organizer here in Colorado. I am reaching out to express my deep concerns regarding HB26-1337, which aims to advance nuclear energy development in Colorado. As a resident of Lakewood, I firmly believe that our state does not need nuclear energy. Instead, we should focus on real clean, renewable energy solutions that align with our vision for a sustainable future.</p> <p>Nuclear energy presents long-term environmental, health, and environmental justice issues that cannot be overlooked. The management of radioactive waste poses a dangerous risk for tens of thousands of years, and the troubling history of uranium</p>

	<p>mining has already harmed vulnerable communities, including Indigenous populations.</p> <p>Moreover, in an arid state like Colorado, the high water usage required by nuclear plants raises further concerns. The streamlined approval processes proposed in this bill could limit vital public input, compromising transparency in decision-making. This bill grants nuclear power undue advantages, such as expedited approvals and mandatory feasibility studies, all while neglecting to adequately evaluate more affordable and sustainable alternatives like wind and solar.</p> <p>By shifting the financial risks from utilities directly onto the ratepayers, HB26-1337 could lead to significant costs for customers, especially considering the industry's notorious history of budget overruns. Furthermore, the call for up to \$20 million in new studies, despite existing analyses and available funding, only heightens concerns about fiscal responsibility.</p> <p>It appears that much of the anticipated demand for new nuclear energy is being influenced by large corporate electricity users, such as data centers, rather than being rooted in the actual needs of our communities. For all these reasons, I respectfully urge you to oppose HB26-1337. It's time to prioritize energy policies that champion affordability, accountability, and equitable benefits for all Coloradans. Thank you for your attention to this critical issue. Your leadership can help ensure a clean and sustainable energy future for our state.</p> <p>Thank you for your time.</p>
<p>Sarah Stone For themselves</p>	<p>"One concern raised by the opposition is the potential burden placed on low-income industrial communities asked to host a nuclear facility. The principle of community consent is not in dispute. . . any development of this kind should absolutely require it. But I'd encourage those who hold this concern to look beyond the hypothetical and examine what communities actually hosting nuclear plants across the United States think about them.</p> <p>Rather than viewing these facilities as burdens, host communities consistently regard their local plant as a pillar of their identity and economy. Nuclear plants command strong public support precisely because they deliver tangible, lasting benefits: well-paying jobs that persist across generations, and substantial tax revenue that flows directly into local schools and public services. These communities are among the most vocal advocates for keeping their plants open."</p> <p>Sarah Stone, HP Atomic Ambassador with Generation Atomic</p>

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04/22/2026

HB26-1337 Facilitating Nuclear Energy Development

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Angie Gridley Against themselves	<p>I want to express my deep concerns regarding HB26-1337, a bill designed to facilitate nuclear energy development in Colorado. I believe that pursuing this path is a significant waste of time, money, and resources. The financial investments required for nuclear energy are exorbitant, and the creation of radioactive waste presents a long-term dilemma with no proven, safe, and effective disposal methods in sight.</p> <p>Living in Pueblo West, I understand the importance of energy solutions that address community needs. Nuclear development raises alarm bells about environmental, health, and fairness issues. The risks associated with toxic waste and the potential impact on vulnerable communities cannot be overlooked. Additionally, the substantial water demands of nuclear plants pose serious concerns in our already arid state.</p> <p>The bill's provision for expedited approvals without adequate public input is particularly troubling. It offers nuclear energy preferential treatment over more sustainable alternatives like wind, solar, and energy efficiency, which are not only proven but also less costly and much faster to construct and become productive. What makes more sense - clean, proven, efficient and cost effective energy sources like solar and wind; or costly, time consuming, unproven technology, inadequately regulated, dangerous, waste producing energy like nuclear? Please ask yourself, "Am I doing what's best for my community; am I considering the health and safety of fellow Coloradans, or am I being swept away in the empty promises and touts being made about nuclear?"</p> <p>The push for new nuclear generation seems to be largely fueled by the demands of large corporations, such as data centers, rather than genuine community needs. Data centers must figure out a different way to do business - not continue to swallow up a community's water supply and pollute the area with nuclear waste all while pushing costs</p>

	<p>onto community members. I urge you to oppose HB26-1337 in order to protect ratepayers, uphold energy affordability, and ensure our energy policies are grounded in fairness and clear evidence. It is crucial that Colorado's energy policy reflects the principles of accountability and equitable benefits for all residents. Thank you for considering my perspective on this vital issue.</p> <p>Sincerely,</p> <p>Angie Gridley</p> <p>858 S Greenway Ave, 858 South Greenway Avenue, Pueblo West, CO, 81007</p> <p>angiegridley@gmail.com</p> <p>(719) 671 - 2906</p>
<p>Brian Highland</p> <p>Against themselves</p>	<p>Mandating nuclear energy will be harmful to Coloradans and must be abandoned. It uses an enormous amount of water, water that Coloradans can't spare. It also requires fuel that must be mined, so it is not renewable. Nuclear is also more expensive than renewables and almost guaranteed to be significantly more expensive than initial estimates.</p> <p>It also takes decades to get a single plant in operation. Oh, we'll make smaller ones instead in a factory? That's even more expensive. Nothing in nuclear's history suggests that we'll ever do it at a scale that is cost effective. It is a doomed technology that should be retired permanently. Renewables are much cheaper, much faster to deploy, take no water, no fuel, and are infinitely more flexible and responsive to future demand. To mandate nuclear is a an egregious harm to Coloradans.</p>
<p>J. Kevin Cross</p> <p>Against Colorado Coalition for a Livable Climate</p>	<p>Dear Members of the House T&E Committee -</p> <p>Nuclear fission power is extremely costly compared to other energy technologies, including wind, solar, and storage. It is also extremely dangerous compared to those other options, owing to the fact that the nuclear waste storage problem hasn't been solved. The state has no business requiring any public utility to investigate potential sites or designs for nuclear power plants.</p>

	<p>The Colorado Coalition for a Livable Climate urges you to kill this bill in committee.</p> <p>Sincerely,</p> <p>Kevin Cross</p> <p>Convener</p> <p>Colorado Coalition for a Livable Climate</p> <p>P.O. Box 672</p> <p>Fort Collins, CO 80522</p> <p>Ph. 970-484-3141 https://colivableclimate.org</p>
<p>Lynn K Fritz</p> <p>Against themselves</p>	<p>Let's use CLEAN Energy (solar and wind) in our state to create energy. I know that nuclear energy was approved in a bill last year as "clean" energy but it's not. There is nuclear waste that needs to be dealt with eventually. I'm sure you would be hard put to find a citizen in our state who is willing to have a nuclear facility constructed near their neighborhood or farm or nuclear waste buried nearby. Please do NOT pass this bill!</p>
<p>Steve Szabo</p> <p>Against Alchemy Farms</p>	<p>Dear Sponsors and Committee Members</p> <p>At Alchemy Farms we read bill HB 26 1337, and are opposed to it. We urge the committee to vote it down.</p> <p>The Vogtle Units 3 and 4, in Georgia built by Westinghouse cost \$36 billion and was 7 years behind schedule. The original estimate to build the facility was \$14 billion. As a result, Georgia Power ratepayers saw a 24% increase in their electric bills. Construction was started in 2013 and wasn't completed until 2024.</p> <p>Even the SMR that was scheduled to be built in Idaho was canceled because it's the most expensive of all forms of energy.</p> <p>In contrast the cost difference between Solar, Wind, and Storage vs SMR's is huge. Solar, Wind, and Storage cost is \$73 - 128 a MWh, and SMR's cost is \$230 - 382 a MWh</p> <p>Given the cost difference, the environmental impacts, and the 7 - 12 years it takes for complete a SMR why even bother looking at SMR's.</p>

	<p>Also why would we want to spend \$20 million to study SMR's, when they are not the best choice.</p> <p>Solar, Wind and Storage aggressive deployment is the clear choice, and aligns with Colorado's clean energy goals.</p> <p>Most of the Uranium we get in the USA comes from Russia, and given the world political issues, its not a good choice.</p> <p>Plus there are toxic environmental problems in connection with the mining of Uranium. This sign appears on a forest access road in Mesa County, CO</p>
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House Energy & Environment

04/30/2026

HB26-1337 Facilitating Nuclear Energy Development

Typed Text of Testimony Submitted

Name, Position, Representing	Typed Text of Testimony
Angela Kantola Against themselves	<p>I oppose HB26-1337, "Facilitating the Development of Nuclear Energy". Colorado should stay on the leading edge of capturing our abundant, truly clean wind and solar resources. We do <u>not</u> need to jump on the bleeding, expensive, and risky edge of nuclear energy. HB26-1337 would obligate the PUC's captive ratepayers to waste up to \$20 million to pay for nuclear studies, siting, design, etc. The goal of such legislation is nuclear power plants, which are outrageously expensive and which we do not need in Colorado where we have abundant renewable energy from wind and solar.</p> <p>For ourselves, for our children and grandchildren, and for all of God's good creation here in Colorado and beyond, I say NO to HB26-1337. Many years ago (prior to serving as the chair of the Nuclear Regulatory Commission under President Obama), my brother-in-law bet me that clean-up would never be done for the uranium mill tailings at Moab, Utah (a threat to the endangered Colorado River fishes I worked to recover). You know what? He was wrong, and was glad to lose the bet! Those tailings did get cleaned up. Let's not embark on the activities proposed in HB26-1337 which risk creating more problematic nuclear waste here in Colorado.</p>
Bernice Wilkins Against themselves	<p>I am opposed to the plan and funding of future nuclear power plants. Nuclear power plants are notorious for cost overruns and are extremely expensive. They also take a long time to build because components are not available for at least 5 years. Colorado is committed to a clean environment to make our state more livable and not plagued by ozone. Let's have a plan to build clean solar and wind with battery storage projects for our energy future.</p>
Blane Thingelstad For themselves	<p>Chair and Members of the Committee,</p> <p>My name is Blane, and I submit testimony in strong support of allowing nuclear construction in Colorado.</p> <p>Colorado stands at a crossroads. Electric demand is climbing rapidly — driven by electric vehicles, manufacturing, building electrification, and Front Range population growth. Xcel and Tri-State both project load</p>

	<p>growth that will outpace what variable resources alone can reliably serve. Meanwhile, Coloradans watch their electric bills rise year after year. We cannot afford to take any clean, firm option off the table.</p> <p>Nuclear energy is the most powerful tool we have to meet this moment.</p> <p>It is carbon-free. A nuclear plant produces zero operational greenhouse gas emissions. If Colorado is serious about its 2050 climate goals, we will not reach them by retiring coal and replacing it only with intermittent generation backed by gas. Nuclear is the only proven, scalable, 24/7 carbon-free source.</p> <p>It is dispatchable and reliable. The U.S. nuclear fleet runs above 92% capacity factor — higher than any other source on the grid. Nuclear plants generate around the clock, through wildfire smoke, polar vortexes, and windless winter nights. As we retire dispatchable coal, we need dispatchable replacements — not just energy, but firm capacity.</p> <p>It will deliver decades of stable, predictable power. Nuclear plants routinely operate 60 to 80 years. That long-duration price stability protects ratepayers from the fuel and transmission volatility driving today's bill increases.</p> <p>It is safe. The U.S. commercial nuclear fleet has the strongest safety record of any major energy source, measured in deaths per terawatt-hour. Modern designs are passively safe and rigorously regulated. Communities that currently host nuclear plants overwhelmingly support them.</p> <p>Colorado has the engineering talent, the workforce, and federal partners at INL and NREL to lead. What we lack is permission.</p> <p>Give Colorado the option to build the clean, firm, affordable energy future our grid demands.</p> <p>Thank you.</p>
<p>Cathern Smith Against themselves</p>	<p>Dear Honorable Members of the House Energy and Environment Committee:</p> <p>Please vote no for House Bill 26-1337. The primary reasons to vote no are:</p> <p>(1) There is no permanent storage for high-level nuclear waste in Colorado or elsewhere.</p> <p>(2) Accordingly, the actual dollar cost of nuclear power plants is underestimated -- as are the environmental costs.</p>

	<p>(3) If the Fiscal Note for this bill reflected the costs of high-level nuclear waste storage, it would become clear that nuclear power is *not* a source of affordable power.</p> <p>(4) Further construction cost overruns are common, making abandonment or excessive cost likely.</p> <p>(5) Well-sited wind and solar energy better serve the public.</p> <p>Best regards,</p> <p>Cathern Smith, Louisville</p>
<p>Christine Condit Against themselves</p>	<p>The excessive cost and 45% failure rate of Nuclear projects is a poor investment. There are far better ways to provide power. Solar, Wind, Geothermal and batteries are cheaper, on both a capital and on a levelized cost of delivered power basis, are more reliable and come in on budget. Support safe Renewables don't invest in the continuing saga of abandoned nuclear projects.</p>
<p>Edward Behan Against themselves</p>	<p>I will keep this simple, as I am sure the committee will be receiving lots of detailed scientific analysis. I oppose HB26-1337. I don't believe we should be going forward with nuclear energy at this point in time, primarily from the perspective that we STILL don't know what to do with the spent fuel and other waste. As well, even if this is supposed to be oriented toward a "small modular reactor" rather than the large sorts of nuclear generating stations we have seen before, I am not sure we have the infrastructure in place to properly regulate a "smaller" operator, Let alone a network of smaller operators. Until these and other questions have answers and protocols in place, this is not a technology I favor advancing when both wind and solar energy systems are so much less expensive and ready to deploy now. Therefore, I ask you not to move this legislation forward.</p>
<p>Gabriel Ignetti For themselves</p>	<p>Nuclear power would be a boon for Colorado or any state. Nuclear is rated as the safest form of energy per kWh on the planet. It is also the cleanest. The fake "facts" are about the dangers of atomic radiation which is both natural and ubiquitous for the simple reason that we live on a slowly decaying giant atomic furnace which circles an exponentially larger atomic furnace. We have evolved in an environment that was 10X more radioactive than today. E=MC2 means that an extremely tiny amount of matter produces a monumentally exponential amount of energy. That converts into an extremely small ecological footprint including it's spent fuel 97% of which is recyclable into nuclear fuel for advanced reactors which already exist. The fact is that nuclear power is a modern miracle that plays an indispensable role in our worldwide efforts at decarbonization.</p>

<p>Gianna Maita-Edwards</p> <p>Against themselves</p>	<p>Madam Chair and members of the committee, thank you for the opportunity to share my views with you today. My name is Gianna Maita-Edwards and I am a resident of Longmont with brief comments in opposition to this bill. I believe it will re-open a dark chapter in Colorado’s history. From the 1950s through the 1980s, people were dying of cancer from plutonium that leaked into the soil around the Rocky Flats Nuclear Weapons Plant. Families and friends who lived near the Plant still mourn their loved ones – whether they sustained their illnesses manufacturing weapons at the plant or innocently living near it. Even now, the land where the Plant once stood is a health hazard. In the late 1970s, many people put their lives and careers on the line to bring attention to the health violations and crimes being committed by the operator of the Rocky Flats Nuclear Weapons Plant. Today, paving the way for the nuclear industry in Colorado - once again - would make the sacrifices of the activists of the 1970s all for naught. What is even worse, we would do so with more information about the harms of nuclear energy. In 2025, as mentioned by one of the previous individuals, scientists at one of our nation’s leading public health institutions, the Harvard T. Chan School of Public Health, found that residential proximity within 19 miles of a nuclear power plant was associated with significantly increased cancer incidence. (If you’d like to look up the study, the citation is: Alwadi, Y., Evans, J.S., Schwartz, J. et al. Residential proximity to nuclear power plants and cancer incidence in Massachusetts, USA (2000–2018). Environ Health 24, 92 (2025). https://doi.org/10.1186/s12940-025-01248-6.) Like many Coloradans, I have lost several loved ones to cancer. In the past ten years, I have lost two people to brain cancer and two more to pancreatic cancer. Additionally, my uncle survived brain cancer last year. As you can imagine, my loved ones experienced a lot of suffering. I do not want the nuclear industry to claim yet another cancer victim in my family or in any other family. Please honor the sacrifices of those who came before us and do not pass this bill.</p>
<p>John Stenmark</p> <p>For themselves</p>	<p>Nuclear energy should receive a fair opportunity in Colorado. It can replace coal-fired generation and provide a zero emission complement to wind and solar.</p>
<p>Julian Guevara</p> <p>Against themselves</p>	<p>My name is Julian Guevara and I am a community organizer here in Colorado. I am reaching out to express my deep concerns regarding HB26-1337, which aims to advance nuclear energy development in Colorado. As a resident of Lakewood, I firmly believe that our state does not need nuclear energy. Instead, we should focus on real clean, renewable energy solutions that align with our vision for a sustainable future.</p>

	<p>Nuclear energy presents long-term environmental, health, and environmental justice issues that cannot be overlooked. The management of radioactive waste poses a dangerous risk for tens of thousands of years, and the troubling history of uranium mining has already harmed vulnerable communities, including Indigenous populations.</p> <p>Moreover, in an arid state like Colorado, the high water usage required by nuclear plants raises further concerns. The streamlined approval processes proposed in this bill could limit vital public input, compromising transparency in decision-making. This bill grants nuclear power undue advantages, such as expedited approvals and mandatory feasibility studies, all while neglecting to adequately evaluate more affordable and sustainable alternatives like wind and solar.</p> <p>By shifting the financial risks from utilities directly onto the ratepayers, HB26-1337 could lead to significant costs for customers, especially considering the industry's notorious history of budget overruns. Furthermore, the call for up to \$20 million in new studies, despite existing analyses and available funding, only heightens concerns about fiscal responsibility.</p> <p>It appears that much of the anticipated demand for new nuclear energy is being influenced by large corporate electricity users, such as data centers, rather than being rooted in the actual needs of our communities. For all these reasons, I respectfully urge you to oppose HB26-1337. It's time to prioritize energy policies that champion affordability, accountability, and equitable benefits for all Coloradans. Thank you for your attention to this critical issue. Your leadership can help ensure a clean and sustainable energy future for our state.</p> <p>Thank you for your time.</p>
<p>Leslie Glustrom Against themselves</p>	<p>Dear Members of House Energy and Environment Committee,</p> <p>I may not be able to speak during the hearing tomorrow on HB26-1337 (facilitating nuclear energy) so I wanted to add my written comments in STRONG opposition to the bill.</p>

	<p>I expect you will hear from many tomorrow, so I will be brief.</p> <p>While I understand that some in Pueblo want a nuclear plant, it is unlikely that they will pay for it--rather it is likely that customers of Xcel energy will be forced to pay for any nuclear plant--as well as for the millions that might be spent on planning for any nuclear plant...that's not fair!</p> <p>If Pueblo wants a nuclear plant, then they should pay for it through their utility rates with Black Hills Energy!!</p> <p>It is hard to know what amendments might be introduced tomorrow but...</p> <p>IMPORTANTLY--even if nuclear energy was perfectly clean--and FREE--it would still be the WRONG choice for the 21st century in Colorado where we have massive potential for low-cost wind and solar.</p> <p>On a grid that relies on large amounts of wind and solar as the Colorado grid increasingly does, THE LAST THING YOU WANT IS AN INFLEXIBLE RESOURCE LIKE NUCLEAR ENERGY.</p> <p>What is needed for this century in Colorado are very flexible resources for the power grid; resources that can be turned on and off quickly to complement Colorado's abundant wind and solar--like batteries and in some cases natural gas.</p> <p>In general nuclear energy is NOT FLEXIBLE because it can NOT be turned on and off quickly to help complement the wind, solar and storage resources that are already dominating our electrical grid.</p> <p>PLEASE VOTE NO ON HB26-1337--NO MATTER WHAT AMENDMENTS ARE INTRODUCED.</p> <p>WE DON'T WANT OR NEED NUCLEAR POWER--NO MATTER HOW MUCH SOME IN PUEBLO WANT IT.</p>
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	<p>A vote for a bill that requires Colorado to move forward with nuclear energy would, respectfully, indicate that you don't understand much about Colorado's grid and the kinds of resources that are needed in this century.</p> <p>It is often said that "Nuclear fights with wind and solar."</p> <p>It makes no sense to vote for expensive and inflexible nuclear plants when they will displace low-cost wind and solar.</p> <p>PLEASE VOTE NO ON HB26-1337.</p> <p>Thank you.</p> <p>Leslie Glustrom</p> <p>A Colorado PUC intervenor and participant for over 20 years.</p>
<p>Mary Juliana Zahniser</p> <p>Against themselves</p>	<p>I urge House Energy and Environment Committee members to NOT support and to vote AGAINST HB26-1337 due to the following concerns: environmental impacts of uranium mining, unresolved problem of disposal of radioactive waste, accident risks, water use, thermal pollution, proliferation risks, and the centuries-long burden passed to future generations. Among those concerns, one that stands out and should immediately exclude nuclear power from even momentary consideration in Colorado, is the tremendous burden that nuclear power, even SMRs, would place on our already over-committed and rapidly depleting water supply.</p> <p>Please pay serious attention to experts who are not funded by the nuclear industry, who review and report on ever increasing regulatory inadequacy and risk data, costs and delays, and existing and future waste disposal issues. Please read the warnings outlined in the May, 2022 Science Direct article by one of Colorado's most eminent physicists, Amory B. Lovins, co-founder of Rocky Mountain Institute and Adjunct Professor of Civil and Environmental Engineering at Stanford University where he argued, "Coal plants were built by counting cost but not carbon. Nuclear plants are promoted by counting carbon but not cost. Effective climate solutions must count carbon and cost and speed."</p> <p>And, please listen to experienced voices saying that we don't have time to wait for nuclear plants to be built, such as French President Macron in a country that actually has nuclear power, "We need to</p>

	<p>massively develop renewable energies because it is the only way to meet our immediate electricity needs, since it takes 15 years [global average is ten years] to build a nuclear reactor.</p> <p>I am a parent, grandparent and retired person who spent her entire career working with individuals with special needs. I am not willing to have nuclear waste stored in my backyard or even the backyard of individuals with whom I don't agree. Alternatively, in good conscience, I cannot support transporting nuclear waste across our state to another location around cities and across our beautiful state, just to get it somewhere else where I won't need to see or think about what it will do to the environment and whatever or whoever lives wherever it ends up. People who support nuclear power need to be willing to have the waste transported over or permanently stored in their backyard or that of their family members. Are you that person? Please vote against HB26-1337.</p>
<p>Nate Bernstein For Climate Jobs Colorado</p>	<p>Thank you Madam Vice-chair and members of the Committee. My name is Nate Bernstein and I'm the Exec Director of Climate Jobs Colorado. We are a union-led organization advancing sustainable climate policy and practices charged by good union jobs.</p> <p>We as an organization are pro-environment.</p> <p>We are pro-worker and pro-union.</p> <p>And we are pro-nuclear energy.</p> <p>Colorado has made important strides toward clean energy sustainability. Yet, we still have important work to do to assure Colorado's future.</p> <p>Last year legislators rightly determined that nuclear power fit the definition of clean energy, because it does not emit greenhouse gases. Now we have the opportunity to take the next step and help facilitate nuclear development to address the final mile of the energy conversion.</p> <p>Nuclear energy and other clean firm sources will provide a crucial piece of the energy and jobs puzzle for climate sustainability in the state of Colorado.</p>

	<p>Other states are investing in clean nuclear energy because they know it works. It is safe; it is reliable; it is dispatchable.</p> <p>We want to assure this state continues to be safe, healthy, and beautiful for future generations and nuclear power can help us achieve this goal.</p> <p>In order for nuclear energy to be successfully deployed we need to start planning now, and we need to assure developers and utilities have the planning and facilitation needed to bring these energy sources online.</p> <p>Besides assuring affordable and reliable energy, Colorado has committed to a just transition for workers and communities. Workers want to continue to work, and communities want and need family sustaining careers.</p> <p>Nuclear energy can provide a more just transition. Modular nuclear plants can replace existing coal-fired plants on or near the very sites that are scheduled for decommissioning, helping to actualize Colorado’s goal of a just transition. The amendment today helps to make sure that nuclear can be sited in just transition communities, further ensuring that state commitment.</p> <p>For these reasons, I ask for your support of this legislation, helping us to pave the pathway forward toward true clean energy and economic sustainability.</p>
<p>Rhea Esposito Against themselves</p>	<p>Nuclear Power is a false solution for climate change that would divert public funds from renewable energy sources like solar and wind power.</p> <p>Nuclear power creates waste that remains radioactive for thousands of years, and since there currently exists no good solution for processing or storing radioactive waste, most or all of it will likely be kept onsite. The damage from an accident at a nuclear power plant would be catastrophic, with the risk heightened due to increasing natural disasters due to climate</p>

	<p>change.</p> <p>Nuclear plants can use hundreds of millions of gallons of water daily, both for energy production and for cooling spent fuel, which Colorado cannot afford. Nuclear power has been getting more expensive, and could increase electric rates in Colorado while decreasing property values for those living near the plant. Nuclear power relies on creating sacrifice zones, both for siting the plants and for extracting the uranium required to feed the reactors. In both cases, nuclear power has been linked to heightened rates of cancer in impacted communities.</p> <p>The bottom line is that nuclear energy is in no way a clean energy source, and Colorado’s frontline communities would absorb all the risks, health impacts, and environmental contamination. Given the rapidly diminishing costs in renewable technologies which have shown great promise in tackling the climate crisis, a transition to nuclear power would be a ludicrous waste of time, money, and energy for our state.</p> <p>Please vote NO on HB26-1337.</p>
<p>Samantha Turley</p> <p>Against themselves</p>	<p>Please take time to consider the see the dee impact that this type of development would have on our communities. As we continue to be in a stage 1 draught and experience the impacts of climate change in our state, nuclear development seems inconceivable. This development would only seem to further the climate crisis and remove community input and oversight, which in these times there needs to be these options and engagement. This land and our communities are for the people, not developments of this kind. To take away even more of our nature and democratic involvement is not what Colorado stands for and therefore should reconsider, heavily, their involvement in this development. Thank you for your time and consideration.</p>
<p>Sarah Stone</p> <p>For themselves</p>	<p>"One concern raised by the opposition is the potential burden placed on low-income industrial communities asked to host a nuclear facility. The principle of community consent is not in dispute. . . any development of this kind should absolutely require it. But I'd encourage</p>

	<p>those who hold this concern to look beyond the hypothetical and examine what communities actually hosting nuclear plants across the United States think about them.</p> <p>Rather than viewing these facilities as burdens, host communities consistently regard their local plant as a pillar of their identity and economy. Nuclear plants command strong public support precisely because they deliver tangible, lasting benefits: well-paying jobs that persist across generations, and substantial tax revenue that flows directly into local schools and public services. These communities are among the most vocal advocates for keeping their plants open."</p> <p>Sarah Stone, HP</p> <p>Atomic Ambassador with Generation Atomic</p>
<p>Scott Bean</p> <p>For themselves</p>	<p>Colorado is way behind other states in the development of nuclear power, which has objectively demonstrated over more than 70 years of commercial operation to be by far the safest and cleanest means to ensure both economic and environmental prosperity for all. The passing of HB26-1337 will be a small, yet important, step towards making the state of Colorado a more appealing option for nuclear energy projects.</p>
<p>Simone Colburn</p> <p>Against Mi Familia Vota</p>	<p>My name is Simone Colburn, I am a student at Colorado College in Representative Paschal's district, and I work with Mi Familia Vota to promote the health, safety, and prosperity of Latino communities in Colorado. I am speaking to you today to urge you to vote no on HB26-1337 as a young person who began advocating for the transition away from fossil fuels at fifteen years old.</p> <p>I know addressing the climate crisis is not only a top priority for me, but also for many members of the committee voting on the bill today. Colorado committed to 100% net-zero emissions by 2050 and is falling behind. I understand the temptation to give in to Big Tech companies offering to fund the construction of nuclear power plants. However, I urge you to remember that nuclear energy was only defined as "clean energy" last session despite the opposition of nearly every local social justice organization. Bill HB26-1337 would take advantage of Coloradans' taxpayer dollars, health, and agency to incentivize irresponsible nuclear projects.</p> <p>Nuclear costs eight times more than wind and solar, takes 10 to 15 years to construct, uses millions of gallons of water every day, contributes to the ninety thousand metric tons of highly-radioactive fuel</p>

	<p>waste already stored across the country, and poses a threat to local communities.</p> <p>While climate change is fast approaching and I would love nothing more than an easy way out of this global crisis, now is not the time to give in. If you are considering voting for this bill in an effort to address environmental degradation, I urge you to consider who is arguing for and against the bill. Big Tech, which is now a top carbon emitter, is lobbying for your support on projects that are opposed by local communities. Meanwhile, I, as your constituent, along with dozens of grassroots environmental organizations, who I assure you are willing to try almost anything to protect the health of this state and our futures on a livable planet, understand that the benefits of Nuclear Power would not go to our communities while the environmental harms would disproportionately impact us.</p> <p>We have the technology with solar and wind power to cut emissions without using dirty, costly, dangerous nuclear power. I am incredibly grateful for all the work you each have done and are continuing to do to help move toward Colorado’s clean energy targets. I hope you will continue the fight by voting no on HB26-1337.</p> <p>Thank you for your time.</p>
<p>Steve Szabo</p> <p>Against</p> <p>Alchemy Farms</p>	<p>Dear Sponsors and Committee Members</p> <p>At Alchemy Farms we read bill HB 26 1337, and are opposed to it. We urge the committee to vote it down.</p> <p>The Vogtle Units 3 and 4, in Georgia built by Westinghouse cost \$36 billion and was 7 years behind schedule. The original estimate to build the facility was \$14 billion. As a result, Georgia Power ratepayers saw a 24% increase in their electric bills. Construction was started in 2013 and wasn’t completed until 2024.</p> <p>Even the SMR that was scheduled to be built in Idaho was canceled because it’s the most expensive of all forms of energy.</p> <p>In contrast the cost difference between Solar, Wind, and Storage vs SMR’s is huge. Solar, Wind, and Storage cost is \$73 - 128 a MWh, and SMR’s cost is \$230 - 382 a MWh</p>

	<p>Given the cost difference, the environmental impacts, and the 7 - 12 years it takes for complete a SMR why even bother looking at SMR’s.</p> <p>Also why would we want to spend \$20 million to study SMR’s, when they are not the best choice.</p> <p>Solar, Wind and Storage aggressive deployment is the clear choice, and aligns with Colorado’s clean energy goals.</p> <p>Most of the Uranium we get in the USA comes from Russia, and given the world political issues, its not a good choice.</p> <p>Plus there are toxic environmental problems in connection with the mining of Uranium. This sign appears on a forest access road in Mesa County, CO</p>
<p>Tamar Krantz Against themselves</p>	<p>Dear Honorable Members of the House Energy and Environment Committee,</p> <p>Please oppose this bill.</p> <p>My primary objection to nuclear fission technology is the waste problem. There is no permanent storage facility for high level waste. Colorado is fortunate to have only 30 metric tons of high level waste in storage compared to thousands in other states. The costs to maintain spent fuel safely is astronomical. With recent deregulation on the federal level, it is possible states will bear more costs to ensure safe storage in perpetuity.</p> <p>Second, nuclear power projects are frequently abandoned due to cost overruns. This is too economically risky for Colorado and utility ratepayers.</p> <p>Finally, this bill is a distraction from renewable energy resources that are cheaper, cleaner, and proven effective.</p> <p>Please oppose this bill.</p> <p>Tamar Krantz, Louisville</p>

<p>Valerie Passerini</p> <p>Against themselves</p>	<p>Before you race to conclude, now is the time for nuclear, do you trust that recycling nuclear fuel will actually happen? It's not the current practice in this country. Valdez says France does it so, there you go. I guess it's all settled.</p> <p>We'll all be stuck funding this through Excel rate hikes. They keep hiking rates and their CEO keeps getting richer. As of April 2026, Xcel Energy CEO Robert Frenzel's total compensation rose to approximately \$16 million.</p> <p>Please vote against HB26-1137.</p> <p>Nuclear doesn't need special treatment.</p> <p>Here are some issues with this bill:</p> <ol style="list-style-type: none">1) Where will the waste go? Nuclear plants require secure, permanent disposal for thousands of years.2) Another Chernobyl. This happened only 40 years ago and from what I can tell, combined human error and design flaws, so many factors means that it's hard to control for.3) Chance of affecting our limited water supply (in a dry state that has been in a drought for a long time. Nuclear materials can enter water supplies through leaks or storage failures. This is not conjecture. It already happens as seen with many examples in this article. https://environmentamerica.org/minnesota/center/resources/too-close-to-home-nuclear-power-and-the-threat-to-drinking-water/#:~:text=75%20percent%20of%20U.S.%20nuclear,near%20U.S.%20nuclear%20power%20plants.4) I realize that the government would be providing funding for this but anything that makes us more reliant on this Administration's purse strings is not a good thing.5) The plants could become a target for terrorism.
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	<p>6) Right now nuclear provides 9% of our country's energy. It becomes a race to build and build more and more of these at the expense of cleaner methods like solar and wind.</p>
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I oppose HB26-1337 for the following reasons.

Poor NRC regulatory oversight - Trump's DOGE fiasco gutted the NRC of experienced staff and the federal administration's deregulation bent in favor of industry would endanger Colorado residents. Now is not the time for legislators to contemplate, if there ever is a time, building a nuclear energy project with the risk of inadequate NRC oversight and increased safety risks.

Water consumption of large nuclear facilities – How can Colorado support another water guzzling industry on par with data centers and oil and gas development with Colorado's dwindling water supplies as evidenced by declining snowpack – the lowest ever this year, depleted groundwater supplies, over appropriated rivers, the practice of farm land buy and dry, year round fire season and red flag warnings with many fire restrictions and bans in place now.

Xcel Energy's ever-increasing rates to satisfy its shareholders – Really? Another wildly expensive big project for Xcel Energy and its shareholders to pass on the cost to its rate payers? For a nuclear facility that could very well be placed outside its electricity coverage area?

Environmental Justice - How will disproportionately impacted communities be protected from increased electricity rates and the added burden of the possible location of a nuclear energy facility placed in or near their community?

Colorado's experience with nuclear energy and environmental harm – The St. Vrain Nuclear Power plant was closed due to costly technical failures and unreliable operations. There is no guarantee that a new nuclear energy project would supply reliable energy to Colorado. Though not power plants, Coloradans have also lived through the decommissioning and remediation of Rocky Flats and other nuclear contaminated sites in the State such as the Uranium Project, the Colorado Legacy Land/Lincoln Park and the Slick Rock Mill Site.

Nuclear energy is not clean energy.

Thank you for your consideration.

Please vote NO on HB26-1337.

Comment to the Energy and Environment Committee, Colorado House of Representatives, on HB26-1337, for the Committee's hearing on 30 April 2026

To all members of the Committee,

As a six-decade observer of nuclear energy issues, I have serious concerns about HB26-1337, a bill that seeks to facilitate its development in Colorado. I kindly urge you to consider the broader implications this legislation may have on ratepayers, our communities, and the future of clean energy in our state.

Nuclear energy has no operational need and no business case, with any technology, at any scale, anywhere in the world. It also exacerbates climate change by producing less electricity and hence displacing fewer fossil fuels, both per dollar and per year, than buying cheaper alternatives. Those are efficient and timely use of electricity (four-fifths of which can be profitably saved by techniques I teach at Stanford), and modern renewables, chiefly solar and windpower. Renewables have already swept the US and world market, providing over 90% of net new generating capacity, meeting the world's entire growth in demand last year, and delivering what the International Energy Agency calls the cheapest energy in world history. Batteries—about 96% cheaper than in 2010—have destroyed the old case for "clean firm" capacity by making solar and windpower dispatchable, and there are nine other (non-battery) carbon-free ways to keep the grid balanced, many of them even cheaper than batteries.

Renewables reliably provide the majority of annual electricity in modern economies like Germany, Denmark, and Portugal. The gigawatt-scale grid of South Australia, already three-fourths powered by sun and wind, expects 100% next year, and that state has been approached by 37 companies (totaling ten times current demand) wanting to set up factories there to get its stably and affordably priced green power. Six US states are now more than half renewably powered (SD, WA, ID, IA, KS, and ND, with Iowa ~65-65% windpowered).

My rural co-op, Holy Cross Energy in Glenwood Springs, is already ~85% renewably powered, heading for 100%; its rates are stable and are one-third below the Colorado average. My home, office, and cars have long been solar-powered; both buildings export surplus energy to the grid, and operate without interruption even through grid-power failures. By choosing the best buys first and following conservative economic principles of transparency, honest pricing, and full and fair competition, Colorado can expand its leadership in building an affordable, secure, clean, safe, and healthy energy future for all.

I am also concerned that this bill's potential to fast-track nuclear approvals violates those sound economic principles and raises significant concerns about public input and accountability. It favors nuclear power with expedited approvals and guaranteed cost recovery (turning a deliberative body into a rubber-stamp) while neglecting to compare or compete more cost-effective and proven energy alternatives such as I just outlined.

Transferring the financial uncertainties from utilities to ratepayers, especially given the nuclear industry's worldwide history of drastic cost and schedule overruns, could impose substantial financial burdens on communities. The imposition of costly new studies, amidst existing analyses, further questions the fiscal prudence involved. In my view, the bill, far from trying to enlist Coloradans in a promising new technology, is a last-gasp effort to stick them with bailouts for a failed old technology, now dying of an incurable attack of market forces.

As a former advisor to the US Departments of Energy and Defense (where I served on the Defense Science Board panels that reframed military energy doctrine), I am especially concerned about nuclear power's enabling the spread of nuclear weapons, as currently in Iran. I don't want Colorado

to contribute to that looming disaster for our national security. (More on that in my Foreign Policy article reprinted at <https://rmi.org/insight/on-proliferation-climate-and-oil-solving-for-pattern/>.)

Lastly, it seems the projected increase in nuclear power demand is more aligned with the interests of large corporate electricity users rather than addressing genuine community needs. My four recent skeptical papers on AI data centers and electricity* are now being corroborated in the marketplace as many (recent estimates span a range of 30–90%) of the proposed AI data centers are turning out to be phantom loads that won't be built. But for those that are, Redwood Energy's remarkable supply-side solution is now operating modular data centers in Sparks, Nevada: it delivers 100% solar power, 24/7/365, using long-term storage by ~800 second-life electric-vehicle battery packs. That installation, which can scale to much larger sizes and adapt to costlier land, is producing power more reliably and cheaply than the 8¢/kWh grid power, and was built in four months—far faster than an AI data center, which takes 18 to 30 months if it avoids all the actual acute shortages of key components.

For all these reasons, I strongly urge you to oppose HB26-1337, advocating instead for policies that prioritize affordability, accountability, and equitable benefits for all residents of Colorado. I appreciate your consideration of these pressing concerns.

Respectfully,

ABL

Amory B. Lovins (my bio is at <https://profiles.stanford.edu/amory-lovins>)
Adjunct Professor (2020–24) and Adjunct Lecturer (2025–) in the Department of Civil and Environmental Engineering, and Senior Precourt Scholar of Integrative Design and Energy Efficiency in the Precourt Institute for Energy, Stanford University

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*"Artificial intelligence meets natural stupidity: managing the risks," https://integrative-design-for-radical-energy-efficiency.stanford.edu/sites/extreme_energy_efficiency/files/media/file/data-centersaiel-dr-16-10-may-2025.pdf

"Managing Data Centers' Financial Risk," Public Utilities Fortnightly, 3 Sep 2025: <https://www.fortnightly.com/fortnightly/2025/09/managing-data-centers-financial-risk?authkey=5d9a2eae6d84806f7bcc3c54a62826b34d7eb964e52b4769898729b09aa29c0a>

"Nuclear power is failing, and AI can't rescue it," Utility Dive, 5 Sep 2025: <https://www.utilitydive.com/news/nuclear-power-smr-ai-amory-lovins/758660/>

"AI: Does not compute," Canary Media, 3 Mar 2026: <https://www.canarymedia.com/articles/data-centers/ai-does-not-compute>

WRITTEN TESTIMONY IN SUPPORT OF
HB26-1337 — Facilitating Nuclear Energy Development

Colorado House Energy & Environment Committee

2026 Regular Session, 75th General Assembly

Submitted by: Patrice McEahern President & CEO, HukariAscendent, Inc

Introduction

Chair and Members of the Committee:

My name is Patrice McEahern, and I am the President and CEO of HukariAscendent, Inc., a small, woman owned, Colorado-based business with deep roots in the nuclear energy sector. I am here today as a proud Coloradan, as a local employer, and as a professional with more than 40 years of hands-on experience in the nuclear industry — from reactor design, construction, operations and safety systems to supply chain, workforce development, and project management.

I strongly support HB26-1337, and I urge this committee to advance it without delay.

Four Decades in a Safe, Proven Industry

I have spent my entire career in the nuclear industry. I have worked at operating plants, supported new facility development, and run a business serving this industry right here in Colorado. Over those 40 years, I have watched safety standards respond to industry input — from post-Three Mile Island regulatory reforms to the post-Fukushima design changes that fundamentally transformed how we build and operate reactors.

Modern reactor designs — including small modular reactors (SMRs) and advanced Gen IV concepts — incorporate passive safety systems that require no operator action and no external power to shut down safely. They are physically incapable of the accidents that shaped public perception decades ago.

The numbers bear this out. Per unit of energy produced, nuclear power has the lowest fatality rate of any major energy source — safer than solar, safer than wind, safer than natural gas. The safety record I have personally witnessed across my career is something I am genuinely proud of, and it is a record that deserves to be recognized and built upon.

Nuclear Is Clean, Firm, and Dispatchable

Colorado has made ambitious clean energy commitments, and I support those goals. But meeting them requires more than solar panels and wind turbines. Renewables are essential — but they are intermittent. Colorado needs firm, always-available, zero-carbon baseload power that can run through January blizzards, cloudy weeks, and low-wind summers.

Nuclear energy offers exactly that:

- Zero greenhouse gas emissions during operation — comparable to wind and solar on a lifecycle basis
- Capacity factors above 90%, meaning it produces clean power around the clock, 365 days a year
- The smallest land footprint per unit of energy of any clean source
- Proven technology at commercial scale, with new advanced designs specifically suited to Western states and grid needs

Colorado cannot achieve its clean energy future by relying solely on sources that go dark when the sun sets. Nuclear is the indispensable bridge — and for many scenarios, the destination itself.

Colorado Cannot Afford to Be Left Behind

Across the country, a nuclear renaissance is underway. States like Wyoming, Utah, Virginia, and Georgia are aggressively positioning themselves for the next generation of nuclear development. TerraPower is breaking ground in Wyoming — just across our border. Microsoft, Google, Amazon, and other major technology companies are signing nuclear power purchase agreements as they race to power AI data centers with clean, reliable electricity.

The federal government has committed tens of billions of dollars to nuclear energy development through the Bipartisan Infrastructure Law and the Inflation Reduction Act. States that have done the groundwork — that have identified sites, built regulatory relationships, and developed workforce pipelines — are the ones that will capture those investments.

Colorado has world-class national laboratories, a highly educated workforce, a strong engineering culture, and communities eager for the economic opportunity that nuclear development brings. We have everything we need to compete. What we have lacked is a state-level framework to move forward with intention.

HB26-1337 provides that framework. By establishing the Colorado Energy Office as permitting coordinator, directing utilities to begin site identification, enabling cost recovery for feasibility studies, and setting clear milestones — a site identified by 2035, construction begun by 2040 — this bill positions Colorado to compete in the industry.

The View from a Colorado Business Owner

From where I sit as a business owner, the opportunity is real and the window is now. A nuclear energy project in Colorado would mean hundreds of high-paying construction jobs, followed by decades of permanent skilled operations roles that cannot be offshored. It would mean contracts for Colorado suppliers, engineers, and service providers — businesses like mine.

More broadly, reliable and affordable clean energy is a competitive advantage for every business in this state. Industries from manufacturing to data centers need power that is clean, affordable, and always on. A future Colorado with a nuclear plant on the grid is a Colorado better positioned to attract investment and sustain growth.

I have spent 40 years building expertise in this field, and I have waited a long time for Colorado to step up. HB26-1337 is the right bill at the right moment.

Conclusion

Nuclear energy is safe. It is clean. It is the firm backbone that a genuinely carbon-free Colorado grid requires. And the competitive race to build next-generation nuclear projects in America is already underway.

I respectfully urge the committee to pass HB26-1337 and give Colorado the tools it needs to be part of this historic energy transition. Our state — and future generations of Coloradans — deserve nothing less.

Respectfully submitted,

Patrice McEahern

President and CEO, HukariAscendent, Inc.

Wheat Ridge, CO

303-384-9079, patricem@hukari.com

April 2026

Date: April 27, 2026

To: Chairperson Valdez and Members of the House Energy and Environment Committee

From: Dr. Mark Jensen, Professor and Jerry and Tina Grandey University Chair, Colorado School of Mines

Re: Strong Support for HB26-1337 Facilitating Nuclear Energy Development

Dear Chairperson Valdez, Vice-Chairperson Velasco, and Committee Members:

My name is Mark Jensen. I live in Littleton and I am the Director of the graduate Nuclear Science and Engineering Program at the Colorado School of Mines. I am writing today as a citizen to express my strong support for HB26-1337, which establishes a framework to enable permitting of a next-generation nuclear power reactor in Colorado and provides a process for public utilities to begin searching for suitable sites in the state that would desire to host a nuclear reactor.

Nuclear energy is advancing rapidly across the United States and in the Mountain West. It is a source of abundant baseload low-carbon electricity and heat that can supply our increasing energy demands for many decades. While Colorado's clean energy plan requires steep reductions in greenhouse gas emissions over the next few years, and we have made great advances in developing wind and solar energy and electrification of transportation, more than half of Colorado's energy still comes from burning coal, natural gas, or gasoline. Nuclear energy could replace some of these greenhouse gas emitting energy sources and extend Colorado's energy leadership in the 21st Century with baseload power to supplement our renewable energy resources.

However, there are two key hindrances to developing nuclear energy in Colorado. First, the U.S. Nuclear Regulatory Commission retains responsibility for regulating nuclear reactors in all 50 states, but on top of this there is a daunting patchwork of local and state regulations and permits that will confound any entity seeking to develop nuclear power for the good of Colorado. Second, it is critical that any nuclear power project is supported by the community that hosts the plant. It takes substantial effort to work with local communities in order to identify suitable host sites for a nuclear plant. HB26-1337 deals with both of these critical issues in a forward thinking and logical way that I strongly support.

Admittedly, nuclear energy is a topic that causes strong reactions from some of my fellow citizens. In voting for this bill, you are not voting to establish nuclear power in Colorado, but you are taking very reasonable steps that enable entities to search for interested host communities and that make it practical for them to pursue nuclear power through intense regulatory processes if a willing and suitable host community can be identified. This is a commonsense piece of legislation that lays the foundation necessary for the possible development of a key energy source. I support this legislation personally, but I must also mention that the Colorado School of Mines has taken the position to support HB26-1337 as essential energy enabling legislation too.

I urge you to vote yes on HB26-1337 to ensure that Colorado can benefit from low-carbon energy sources like nuclear power when communities decide nuclear energy is the right choice for them. Thank you for your time, your service to our state, and for considering my testimony.

Sincerely,



Mark P. Jensen, Ph.D.

7627 S Bear Mountain

Littleton, CO 80127

mark.jensen242@gmail.com

Kill HB26-1337 - Stop Pledging Colorado resources to promote nuclear in Colorado - 4/29/2026

Nuclear Cost - nuclear is an open hole into which utilities, ratepayers and governments have poured billions with a history of failed projects. If Excel wants to bet its or its shareholders investment in nuclear fine, but don't commit ratepayers, nor taxpayers to cover the bill.

The 45% failure rate is too big a gamble.

<https://www.powermag.com/interactive-map-abandoned-nuclear-power-projects/>

The overall industry history shows a near **50% abandonment rate** overall with projects anywhere from 1% to 97% complete.

Here are two examples:

* **2017:** V.C. Summer 3 and 4 (each 1.1 GW)—SCANA Corp. and its partner Santee Cooper scrapped two AP1000 reactors that were 64% complete, claiming completion would cost \$9.8 billion. The project, whose construction began in 2013, was dogged by costly delays stemming in part due to new safety rules implemented in the wake of the 2011 Fukushima disaster. In early 2017, delays at the project and two other AP1000s under construction in Georgia forced contractor Westinghouse to declare bankruptcy. The partners spent \$9 billion on the project they estimated could cost up to \$24 billion to complete.

* SMRs are no solution: NUScale is bankrupt and out of business. Dont rely on its old promises.

"The collapse of NuScale's project should spell the end for small modular nuclear reactors

Although there were problems specific to the Utah Associated Municipal Power Systems project, the financial challenges and cost **trends witnessed in that case will afflict any SMR project."**

Published Jan. 31, 2024

<https://www.utilitydive.com/news/nuscale-uamps-project-small-modular-reactor-ramanasmr-/705717/>

" In [April 2023, Lazard](#), a financial firm, estimated that the unsubsidized levelized cost of electricity from new nuclear plants in the U.S. will be between \$141 and \$221 per megawatt hour. By comparison, a newly constructed utility-scale solar facility with some storage to provide power after the sun sets will produce power at an unsubsidized levelized cost of between \$46 and \$102 per megawatt hour, according to Lazard. Costs for these technologies have been trending in opposite directions: nuclear is going up whereas [solar and batteries have become cheaper](#) and are expected to decline further.

Small modular reactors are at an [economic disadvantage](#). The lower power output of these reactors, less than 300 MW per unit by definition as compared to the roughly 1,000 MW for the typical reactors that have been constructed for over four decades, means less revenue for the owning utility. But the cost of construction is not proportionately smaller. Engineers call this [economies of scale](#). In terms of cost per unit (megawatt) of generation capacity, SMRs and the electricity they produce will be more expensive than power from large nuclear plants currently under construction. As the Lazard estimates show, these large plants are themselves not competitive with renewables."

NuScale Power and the Utah Associated Municipal Power Systems (UAMPS) had invested over \$600 million in the Carbon Free Power Project before its abandonment.

<https://remainingproblems.com/problems/46747962-f282-42a0-bdb1-aa0df97aa161>

"NuScale Power — the only company with an NRC-approved SMR design — and Utah Associated Municipal Power Systems (UAMPS) terminated the Carbon Free Power Project (CFPP) in November 2023 after the estimated cost ballooned from \$3 billion in 2016 to \$9.3 billion, and the target electricity price rose from \$58/MWh to \$89/MWh, and only 101 MW of the plant's 462 MW capacity had been subscribed."

My primary objection is wasting limited resources on Nuclear's failed promises. Solar, Wind, Geothermal and batteries are cheaper, on

both a capital and on a levelized cost of delivered power basis, are more reliable and come in on budget. Support safe Renewables don't invest in the continuing saga of abandoned nuclear projects.

Nuclear Safety: The 1984 Zimmer history sure provides no confidence in NRC oversight as sufficient to assure "safe enough."

The press and the industry wanted to blame the anti nuclear movement but in fact despite NRC oversight of construction, Zimmer flunked its final safety tests and cost the utility and its rate payers Billions.

<https://academic.oup.com/kentucky-scholarship-online/book/61353/chapter-abstract/532779120?redirectedFrom=fulltext&login=false>
[Preface | Zimmer: The Movement That Defeated a Nuclear Power Plant ...](#)

The story ends in **1984**, when the resulting William H. **Zimmer nuclear** power station—with \$1.7 billion invested into it—was canceled, **99 percent complete** and still unlicensed by the federal government. "However, as news spread that construction on the **Zimmer** plant was unsafe as well as over budget, public opinion of the project soured, culminating in a consumer-led campaign that ultimately compelled investors to abandon the **nuclear** station in **1984**."

Nuclear is safe until it is not and then it's too late. At that point the Industry promises of safety are worth less than the surviving scrap paper they were first written on.

<https://www.powermag.com/chernobyl-at-40-the-worlds-worst-nuclear-power-accident-and-where-it-stands-now/>

Any legislator who has received funding or support from the power industry for a nuclear "solution" should remember "It is difficult to get a man to understand something when his salary depends on his not understanding it."

--

best, Frank Hruby

I am a retired lawyer who represented industry clients in rate cases in another state. Glad to be a citizen of Colorado.

(m) 314-873-8534

Loveland CO

John Ord
3102 . Fillmore St.
Denver, CO 80210

Date: April 28, 2026

TO: Colorado General Assembly

RE: House Bill HB26-1337 Facilitating Nuclear Energy Development

I support this bill because it's really about being prepared and making smart, practical choices for Colorado's energy future.

As we move toward cleaner energy, we're going to need power sources we can count on 24/7—not just when the wind is blowing or the sun is shining. Nuclear energy is one of the few options that can provide that kind of steady, carbon-free power, so it makes sense for Colorado to at least seriously explore it.

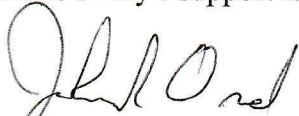
What I like about this bill is that it doesn't rush anything. It doesn't commit us to building a plant tomorrow. Instead, it sets up a process so we can actually understand what's possible, what it would cost, and where it might make sense. Right now, the permitting process for something like this is complicated and spread across a lot of agencies. Having the Colorado Energy Office help coordinate that just makes things more efficient and easier to navigate.

The bill also makes sure local communities are part of the conversation from the beginning. It asks utilities to reach out to places that might actually want to host a project, rather than forcing anything on anyone. That's important.

There's also a relatively small investment—up to \$20 million—to study potential sites and designs. That's not a commitment to build anything; it's just doing the homework so we can make informed decisions later instead of guessing.

And finally, the timeline is realistic. Looking at possible sites by 2035 and maybe starting construction by 2040 gives us time to see how the technology develops and what makes sense for Colorado.

At the end of the day, this bill is about keeping our options open, staying competitive for federal funding, and making sure we have reliable, clean energy in the future. That's a smart approach, and it's why I support it.



John R. Ord

303-808-0467

TECHNICAL POSITION PAPER	
Rebuttal to Colorado HB26-1337 — Facilitating Nuclear Energy Development	
Document Number	PP-2026-0429-HB1337
Revision	1.5 — Revised issue incorporating academic reviewer findings: softened absolute claims; bounded nuclear dataset; added study-phase vs. construction-phase risk distinction; strengthened water cooling-type analysis; improved Lazard citation with snapshot disclaimer; improved reference [13] citation guidance; revised Fort St. Vrain, Messmer, conclusions, and recommendations language; ratepayer-protection framing throughout
Date	2026-04-29
Classification	Public
Author	Energy Systems Analysis
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Distribution	Colorado General Assembly, Colorado Energy Office, Colorado PUC, Interested Stakeholders
Status	ISSUED
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Revision History

Rev	Date	Description	Author
1.0	2026-04-29	Initial issue	Energy Systems Analysis Division
1.1	2026-04-29	Added adversarial purpose statement to §1	Energy Systems Analysis Division
1.2	2026-04-29	Added §6.2.4 SMR analysis. Partial corrections.	Energy Systems Analysis Division
1.3	2026-04-29	Final corrected issue. All PE review findings implemented: V.C. Summer case study (§6.2.2); Xcel IRP conflict (§6.4); firm capacity/dispatchability rebuttal (§6.5 expanded); water consumption analysis reinstated (§6.8); Olkiluoto/Flamanville citations added; risk count arithmetic corrected; LCOE multiplier corrected; FSV \$/W corrected; Vogtle schedule language corrected; \$36.8B financing qualification added; Wikipedia [3] and Google Sites [11] replaced; "analytically unsound" softened; conclusions tone corrected; Scope §2 narrowed; references [37]–[61] completed; duplicate [48] removed.	Energy Systems Analysis Division

Cautionary Note: This paper was completed within a 6 hour time frame by using various AI tools for research, drafting and checking purposes. The paper was produced from a human produced outline with human in the approver loop to help assure accuracy. A properly scheduled study would produce a higher quality product, actionable alternatives and a clearer path forward.

1. Purpose

This position paper provides a systematic, evidence-based technical rebuttal to Colorado House Bill 26-1337 ("Facilitating Nuclear Energy Development"), introduced on March 17, 2026, by Representatives Alex Valdez and Ty Winter in the Seventy-fifth General Assembly, Second Regular Session.[1] The bill proposes to designate the Colorado Energy Office as the state permitting coordinator for nuclear energy projects, requires investor-owned utilities with more than 500,000 customers to solicit site proposals, authorizes up to \$20 million in ratepayer-funded site and design studies, and establishes statewide goals of identifying at least one nuclear site by 2035 and beginning construction by 2040.[1]

This paper evaluates these provisions against the current techno-economic evidence base, Colorado's own nuclear history, international construction experience, and the demonstrated maturity of competing low-carbon generation and storage technologies. The analysis is framed as a ratepayer-protection and resource-planning assessment rather than a categorical judgment on nuclear energy in the abstract. It addresses four core questions: whether HB26-1337 duplicates or bypasses Colorado's existing integrated resource planning process; whether it exposes ratepayers to asymmetric financial risk without adequate safeguards; whether current nuclear construction experience justifies a technology-specific legislative pathway; and whether lower-risk alternatives can meet Colorado's reliability and decarbonization needs at lower cost and on a faster timeline. The analysis follows ISO 9001:2015 documentation principles to ensure traceability, reproducibility, and auditability of all findings.

This paper is a critical policy evaluation — a position paper assessing HB26-1337 as a ratepayer-protection and resource-planning mechanism in Colorado's current regulatory and market environment. Colorado should not rule out nuclear technology categorically, but the state should not create a nuclear-specific permitting and study pathway unless it is paired with clear cost caps, technology-neutral competition, decision gates, and explicit ratepayer protections. In its current form, HB26-1337 would authorize public spending and regulatory momentum toward a capital-intensive technology whose commercial track record remains highly uncertain in the United States, and whose risks would be borne largely by captive ratepayers. Consistent with ISO 9001:2015 documentation principles, all findings are traceable to cited sources and all analytical assumptions are stated explicitly. Readers seeking a balanced assessment of nuclear energy's merits and limitations in the abstract are directed to the IEA World Energy Outlook and the MIT Future of Nuclear Energy study; this paper evaluates a specific legislative proposal against the specific conditions prevailing in Colorado.

2. Scope

This paper addresses the following domains:

- Legislative provisions of HB26-1337 as introduced (75th General Assembly, Second Regular Session).[1]
- Historical performance of nuclear construction in Colorado (Fort St. Vrain) and internationally (France's Messmer Plan, U.S. Vogtle Units 3-4, V.C. Summer, Finland Olkiluoto-3, France Flamanville EPR).
- Current levelized cost of energy (LCOE) comparisons between nuclear, solar, wind, gas, and storage, drawing on Lazard LCOE+ Version 18.0 (June 2025) and the U.S. Energy Information Administration Annual Energy Outlook 2025.[14][15]
- SMR/advanced reactor cost track record, including the NuScale CFPP cancellation (2023).[52][53][54]
- Financial analysis of the Inflation Reduction Act's impact on clean energy investment.[16][17][18][19]
- Xcel Energy's PUC-approved Clean Energy Plan and its relationship to HB26-1337.[42]
- Wholesale electricity market dynamics, including negative pricing in U.S. ISOs and European markets.[20][21][22][23]

- Agrivoltaic dual-use land deployment in Colorado and neighboring states.[24][25][26][27][28][29]
- Large-scale battery energy storage demonstrations.[30][31][32][33][34][35]
- Water consumption implications of nuclear versus renewable generation in Colorado's prior-appropriation context.[40][41][45]
- Risk framework for ratepayer exposure under HB26-1337, assessed per ISO 31000:2018.

Exclusions: SMR-specific NRC Part 53 licensing pathway details, fusion energy technologies, and military naval reactor programs are outside the scope of this analysis. This paper does address SMR cost and commercial track record, which is material to evaluating HB26-1337.

3. Normative References

- ISO 9001:2015 — Quality management systems — Requirements
- ISO 31000:2018 — Risk management — Guidelines
- IEEE 762-2006 — Standard Definitions for Use in Reporting Electric Generating Unit Reliability, Availability, and Productivity
- North American Electric Reliability Corporation (NERC) — Reliability Standards
- International Energy Agency — Electricity Mid-Year Update 2025[20]
- Lazard — Levelized Cost of Energy+ Version 18.0 (June 2025)[14]

4. Definitions

Term	Definition
Agrivoltaics	The co-location of agricultural production and photovoltaic electricity generation on the same land area, designed to optimize both crop yield and energy output through controlled shading and microclimate modification.
BESS	Battery Energy Storage System. An electrochemical storage facility that absorbs electricity during periods of surplus generation and discharges it during periods of deficit or high demand, providing grid balancing, peak shaving, and ancillary services.
Capacity Factor	The ratio of actual electrical energy output over a given period to the maximum possible output if the generating unit had operated at its nameplate rating continuously during that period, expressed as a percentage (per IEEE 762-2006).
CAISO	California Independent System Operator. The entity responsible for managing the flow of electricity across the high-voltage transmission grid serving approximately 80% of California and a small portion of Nevada.
CWIP	Construction Work in Progress. A rate-recovery mechanism permitting a regulated utility to collect costs of constructing a generating facility from ratepayers before the facility enters commercial operation.
Curtailement	The deliberate reduction of electrical output from a generating facility below its available capacity, typically ordered by a system operator to maintain grid stability or in response to negative wholesale prices.
ERCOT	Electric Reliability Council of Texas. The independent system operator managing the electric grid for approximately 90% of Texas's electric load.
HTGR	High-Temperature Gas-Cooled Reactor. A nuclear reactor design using graphite as moderator, helium as primary coolant, and ceramic-coated fuel particles capable of operating at higher thermal efficiencies than light-water reactors.

IRA	Inflation Reduction Act of 2022 (Pub. L. 117-169). U.S. federal legislation providing tax credits, grants, and loan guarantees for clean energy generation, manufacturing, and deployment, including production tax credits for advanced nuclear.
LCOE	Levelized Cost of Energy. The net present value of all costs (capital, fuel, operations, maintenance, decommissioning) of a generating facility over its lifetime, divided by the net present value of its total electricity output, expressed in \$/MWh.
LCOS	Levelized Cost of Storage. The analogous lifecycle cost metric for energy storage systems, incorporating capital, replacement, operating costs, and round-trip efficiency losses over the system's economic life.
Negative Wholesale Price	A condition in organized wholesale electricity markets where generators must pay the market to accept their output, occurring when supply exceeds demand and inflexible generators are unable or unwilling to curtail production.
NRC	Nuclear Regulatory Commission. The independent U.S. federal agency responsible for licensing, inspecting, and regulating civilian nuclear facilities and materials.
PUC	Public Utilities Commission. A state-level regulatory body with jurisdiction over rates, service quality, and resource planning of regulated public utilities. In Colorado, the Colorado Public Utilities Commission.
SMR	Small Modular Reactor. A nuclear reactor with an electrical output generally below 300 MWe, designed for factory fabrication and modular on-site assembly to reduce construction risk and capital cost.
Vitivoltaics	A specialized form of agrivoltaics combining viticulture (grape cultivation) with overhead photovoltaic installations, providing partial shading to grapevines while generating electricity.

5. Methodology

This analysis employs a mixed-methods approach combining the following analytical components:

- Legislative text analysis of HB26-1337 as introduced, examining the bill's operative provisions, authorization mechanisms, and regulatory directives against established principles of utility regulation and ratepayer protection.[1][56]
- Historical case-study review of nuclear construction projects, including Fort St. Vrain (Colorado), Vogtle Units 3 and 4 (Georgia), V.C. Summer (South Carolina), Olkiluoto-3 (Finland), Flamanville EPR (France), and the French Messmer Plan fleet.[2][3][4][5][6][7][8][9][10][11][12][13]
- SMR/advanced reactor cost and viability assessment, examining NuScale CFPP, Kairos Power Hermes, TerraPower Natrium, and X-energy Xe-100.[52][53][54]
- Techno-economic benchmarking using published LCOE and LCOS data from Lazard LCOE+ Version 18.0 (June 2025) and the U.S. Energy Information Administration Annual Energy Outlook 2025.[14][15]
- Financial market analysis of IRA-driven clean energy investment flows.[16][17][18][19]
- Xcel Energy integrated resource planning review, including the PUC-approved Clean Energy Plan Phase II (January 2024).[42]
- Wholesale electricity price analysis across U.S. ISOs and European markets.[20][21][22][23][36]
- Field-performance review of agrivoltaic deployments using peer-reviewed data.[24][25][26][27][28][29]
- Operational review of large-scale BESS deployments.[30][31][32][33][34][35]
- Water consumption analysis using NREL lifecycle data and NEI operating data.[40][41][45]
- Semi-quantitative risk assessment per ISO 31000:2018, evaluating likelihood and impact on a 1-5 ordinal scale.

All citations follow Chicago Manual of Style numbered endnote format with internet-traceable sources. Data sources are identified with sufficient specificity to permit independent verification.

6. Evidence Review

6.1 Colorado's Nuclear History: Fort St. Vrain

Fort St. Vrain was Colorado's first and only nuclear power plant, a 330 MWe high-temperature gas-cooled reactor (HTGR) located near Platteville in Weld County. The project was proposed on March 13, 1965, by Public Service Company of Colorado (PSCo) in partnership with General Atomic and the U.S. Atomic Energy Commission, which signed a three-way contract on November 1, 1965, to construct a 330,000-kilowatt nuclear electric plant.^[6] The application to construct was filed with the Atomic Energy Commission on October 20, 1966; the AEC issued its construction permit on September 18, 1968. The HTGR design used fissile uranium and fertile thorium microspheres dispersed within a prismatic graphite matrix, with helium as primary coolant. The construction cost reached approximately \$200 million in nominal dollars — approximately \$700 million in 2018 dollars, or approximately \$2.12 per installed watt in 2018 terms.^{[2][4][5]}

Initial testing began in 1972 and several years of design problem resolution followed. The first commercial electric power was generated in December 1976, with sustained commercial operation commencing in July 1979.^{[4][5][6]} The plant experienced persistent mechanical problems characteristic of first-of-a-kind engineering, including cracked steam generators, helium circulator bearing failures, and moisture ingress issues. During a maintenance program in 1988, cracks were discovered in the steam generators, causing the plant owners to terminate operations that same year. Nuclear operations permanently ceased in August 1989 after only approximately ten years of commercial service.^{[2][6]}

Fort St. Vrain became the first large-scale commercial nuclear plant in the United States to be decommissioned through a formal decommissioning process. The decommissioning cost approximately \$230 million in 2018 dollars.^[2] The NRC terminated the Part 50 license on August 5, 1997, and the site was released for unrestricted use.^{[3][4][5]} The site was subsequently repowered with natural gas combustion turbines, with phased additions in 1996, 1998, 2001, and 2009 bringing total output to just over 1,000 MW — more than triple the original nuclear unit's nameplate capacity.^[6]

Colorado therefore has direct institutional memory of nuclear construction risk, cost escalation, and premature decommissioning. Fort St. Vrain's outcome does not prove that all nuclear projects are doomed, but it does establish that Colorado has direct experience with the technical and financial risks associated with first-of-a-kind nuclear deployment in the state. The project suffered from engineering and reliability problems characteristic of prototype designs, operated commercially for only approximately ten years, and required costly decommissioning. HB26-1337 proposes a new nuclear development pathway under conditions that differ materially from those that prevailed in 1965 — higher construction costs, a more complex regulatory environment, a competitive wholesale electricity market, and the availability of proven, lower-cost clean energy alternatives that did not exist in 1965. These differences do not foreclose nuclear development, but they do raise the evidentiary bar for justifying a technology-specific support regime.

6.2 International and U.S. Nuclear Construction Experience

6.2.1 France's Messmer Plan

In March 1974, following the first oil shock, French Prime Minister Pierre Messmer announced an acceleration of France's nuclear program — the construction of 13 reactors totaling 13,000 MW for Electricite de France (EDF).^{[7][9]} The Messmer Plan did not create a nuclear program from scratch but boosted an existing industrial effort underway since 1957. By 1972, nuclear already provided approximately 15 TWh, representing roughly 11% of French electricity generation.^{[8][10]} France ultimately achieved 94% low-carbon electricity, with approximately 70 percentage points derived from nuclear generation.^[9]

The Messmer Plan succeeded due to a set of unique institutional conditions that have no parallel in U.S. regulatory frameworks: (a) a centralized, state-owned utility (EDF) operating as both buyer and builder of all generating capacity; (b) no competitive wholesale electricity market; (c) a standardized PWR design replicated at scale across dozens of sites; (d) a skilled nuclear workforce engaged in

continuous construction over two decades, yielding learning-curve efficiencies; (e) communities incentivized through the French local tax system; and (f) no environmental impact litigation comparable to U.S. NEPA requirements or NRC adjudicatory proceedings.[9][10][11] ; (g) a fossil resource poor country under duress due to the oil embargo of the time.

These preconditions do not exist in Colorado or anywhere in the contemporary U.S. regulatory environment. Colorado features investor-owned utilities subject to PUC rate review, competitive wholesale markets, federal NEPA review, NRC proceedings open to public intervention, a diverse generation fleet, and ample fossil fuels. The France analogy has significant structural limitations when applied to Colorado: it requires assuming the replicability of institutional conditions that are absent from the U.S. system. France's success demonstrates that nuclear can be built successfully under certain conditions — it does not demonstrate that a first-of-a-kind project in Colorado's regulated, market-based environment will achieve comparable results. HB26-1337 cannot replicate the specific institutional conditions that made the Messmer Plan's buildout unusually successful. Colorado would not be building a fleet of standardized reactors through a state-owned monopoly utility; it would be building a first-of-a-kind unit through a regulated investor-owned utility operating in a competitive market — the conditions that produced Vogtle's outcome.

6.2.2 U.S. Modern Construction: Vogtle Units 3 and 4, and V.C. Summer

Vogtle Units 3 and 4 in Burke County, Georgia, are the only nuclear reactors completed in the United States in more than 30 years.[12] The Georgia Public Service Commission approved the project in 2009 at an estimated cost of approximately \$14 billion, with commercial operation of the two Westinghouse AP1000 reactors (each 1,117 MWe) planned for 2016-2017. Unit 3 entered commercial operation on July 31, 2023; Unit 4 followed on April 29, 2024. The final project cost exceeded \$36.8 billion — a figure inclusive of financing charges; the construction and capital cost across all four co-owners was approximately \$31 billion, with Georgia Power's 45.7% share implying a total capital cost of approximately \$23.8 billion to Georgia Power alone — making Vogtle the most expensive power plant ever constructed.[12][13] The project ran approximately seven years behind its original schedule.

The prime contractor, Westinghouse Electric Company, filed for Chapter 11 bankruptcy protection in March 2017 during construction, leaving Georgia Power to assume direct management. Georgia Power's approximately 2.7 million customers paid approximately \$1,000 per household before the reactors generated a single kilowatt-hour.[13] The resulting cost of electricity is approximately \$10,784 per installed kilowatt — compared with \$900 to \$1,500 per kilowatt for wind, solar, or natural gas generation.[13] Georgia ratepayers now carry among the highest electricity costs in the United States attributable to a single generating asset.

The concurrent V.C. Summer project in South Carolina provides an equally instructive case. Two AP1000 units were approved by the South Carolina Public Service Commission at an estimated cost of approximately \$11 billion, with construction beginning in 2013. The project was abandoned in July 2017 after approximately \$9 billion had been spent and no reactor had reached completion.[48][49] The prime contractor — the same Westinghouse — filed for bankruptcy during construction. SCANA Corporation's CEO Kevin Marsh and executive vice president Stephen Byrne were subsequently convicted of securities fraud for misrepresenting the project's cost and schedule status to investors and regulators.[48] A Westinghouse nuclear executive was also convicted in a related proceeding. South Carolina ratepayers continued paying surcharges for the abandoned project for years following cancellation. HB26-1337's R-04 risk — contractor bankruptcy during construction — is not a theoretical concern; it occurred simultaneously on both AP1000 projects under construction in the United States.

Together, Vogtle and V.C. Summer establish the empirical baseline for nuclear construction in the contemporary U.S. regulatory and market environment: cost overruns exceeding 100%, schedule delays of seven or more years, contractor bankruptcy during construction, fraud at the executive level in one case, and asymmetric risk transfer to captive ratepayers who bear construction costs while utility shareholders retain profits. HB26-1337 proposes this model for Colorado — an investor-owned utility constructing nuclear generation with ratepayer cost recovery — under conditions substantively identical to those that produced both outcomes.

6.2.3 European Cautionary Examples

Olkiluoto Unit 3 in Eurajoki, Finland, is a 1,600 MWe European Pressurized Reactor (EPR) built by AREVA and Siemens for operator Teollisuuden Voima Oyj (TVO). Construction began in August 2005 with a planned 56-month schedule and an estimated cost of EUR 3 billion. The reactor did not achieve commercial operation until April 2023 — a construction duration of approximately 199 months, more than 3.5 times the original schedule. The final cost ballooned to approximately EUR 11 billion, exceeding the original estimate by more than 260%.[50] The project was plagued by design changes during construction, quality control deficiencies in concrete and welding work, disputes between AREVA and TVO, and regulatory holds imposed by Finland's STUK authority. AREVA's losses contributed to the French nuclear group's eventual restructuring and absorption into EDF.

Flamanville Unit 3 in Normandy, France, is an identical EPR design being constructed by EDF on French soil. Construction began in December 2007 with a planned commissioning date of 2012 and an initial cost estimate of EUR 3.3 billion. As of 2026, the reactor has not yet achieved sustained commercial operation, and cost estimates have escalated to approximately EUR 13.2 billion — a fourfold increase.[51] The project encountered defective steel forgings in the reactor pressure vessel, welding defects requiring extensive rework, and a workforce unfamiliar with nuclear-grade construction techniques after a two-decade hiatus in French reactor construction. The Flamanville experience is particularly instructive: even France — the historical exemplar of nuclear construction success — cannot currently build reactors on time or on budget when the institutional conditions of the Messmer era no longer prevail.

6.2.4 Small Modular Reactors: The Commercial Track Record

HB26-1337's proponents have publicly emphasized that the bill targets small modular reactors (SMRs) and advanced reactor designs, not the GW-class light water reactors that produced the Vogtle and V.C. Summer outcomes. This argument must be addressed directly, because it represents the bill's central defense against the historical cost evidence.

No SMR has achieved commercial operation in the United States. The most advanced U.S. SMR project — NuScale Power's Carbon Free Power Project (CFPP) in partnership with the Utah Associated Municipal Power Systems (UAMPS) — was terminated by mutual agreement on November 8, 2023.[52] The project, which would have deployed six 77 MW NuScale VOYGR modules at Idaho National Laboratory for a total of 462 MW, was the only U.S. SMR project with an NRC-approved design certification. Its target power cost escalated from \$58/MWh at inception to \$89/MWh in January 2023, and the project could not achieve sufficient municipal subscription at the revised price to remain commercially viable.[53][54] The CFPP's cancellation is directly relevant to HB26-1337: if the only NRC-certified SMR design in the United States could not attract enough buyers at \$89/MWh — a price already below Lazard's nuclear LCOE floor of \$141/MWh — the commercial viability of SMR generation in competitive U.S. wholesale markets remains undemonstrated.

Other advanced reactor projects remain pre-commercial. Kairos Power is constructing a fluoride salt-cooled high-temperature reactor demonstration (Hermes) in Oak Ridge, Tennessee, but it is a 35 MWth test reactor, not a commercial power plant. The TerraPower Sodium sodium-cooled fast reactor in Kemmerer, Wyoming, broke ground in June 2024 but is not expected to achieve commercial operation before the early 2030s. X-energy's Xe-100 HTGR has no active construction site in the United States. None of these designs has a commercial operating track record, a validated construction cost, or a demonstrated capacity factor.

This paper's scope exclusion of NRC Part 53 licensing pathway details is not an evasion of the SMR argument. Rather, it reflects the evidentiary standard appropriate to a position paper: this analysis evaluates technologies against demonstrated commercial performance, not projected cost curves for designs that have not yet generated a commercial kilowatt-hour. HB26-1337 commits real ratepayer dollars today based on projected performance of technologies with no commercial track record. The NuScale CFPP cancellation demonstrates that even the most advanced SMR project in the United States could not survive contact with actual market economics. Proponents who argue that HB26-1337 is different because it targets SMRs must account for the fact that the only NRC-certified SMR design was abandoned precisely because its costs were uncompetitive — and it was a first-of-a-kind project in

an isolated location with federal cost-sharing, advantages a Colorado commercial project would not have.

6.3 Levelized Cost of Energy: Nuclear vs. Alternatives

Lazard's LCOE+ Version 18.0, published in June 2025, shows that unsubsidized utility-scale solar PV and onshore wind have been the most cost-competitive forms of new-build electricity generation for ten consecutive years.[14] Lazard notes that its analysis represents a point-in-time estimate and is not a forecasting tool; the figures cited here reflect current unsubsidized relative cost ranges, not permanent market verdicts. The unsubsidized LCOE range for utility-scale solar PV is approximately \$24-\$96/MWh; for onshore wind, approximately \$27-\$73/MWh. Nuclear new-build LCOE remains substantially higher on a current unsubsidized basis, with Lazard's 2025 estimates ranging from approximately \$141-\$221/MWh. At midpoint estimates (solar ~\$60/MWh, nuclear ~\$181/MWh), nuclear is approximately three times more expensive on a current unsubsidized basis — and does not achieve cost parity with unsubsidized solar or wind even when accounting for IRA production tax credits.

The cost of constructing a new combined-cycle natural gas turbine (CCGT) has reached a ten-year high, with LCOE ranging from approximately \$45-\$74/MWh.[14] This does not make nuclear more competitive; it makes renewables-plus-storage increasingly attractive relative to both gas and nuclear. Battery energy storage system costs showed sharp declines in 2025, driven by global oversupply of lithium-ion cells and increases in cell energy density. The Lazard LCOS for utility-scale lithium-ion storage returned to approximately 2020 levels, with four-hour duration systems achieving costs that make solar-plus-storage competitive with dispatchable gas generation on a firm capacity basis.[14]

The U.S. Energy Information Administration's Annual Energy Outlook 2025 reaches similar conclusions: solar PV and onshore wind with their respective tax credits remain the lowest-cost new-build resources in every U.S. region analyzed. Advanced nuclear with its PTC achieves lower costs than without credits but remains uncompetitive relative to renewables receiving comparable incentives.[15]

The critical comparison is not merely LCOE but deployment speed. Utility-scale solar and wind projects can be permitted, constructed, interconnected, and generating electricity within 12-24 months of development initiation. Battery storage projects achieve similar timelines. Nuclear power requires 10-15 or more years from initial planning through licensing, construction, and commercial operation — as demonstrated by every Western nuclear project completed in the past two decades. HB26-1337's 2040 construction-start goal acknowledges this: a project beginning construction in 2040 would not generate electricity until approximately 2050-2055. During the intervening 25 years, renewable and storage technologies will continue their cost decline trajectories, and substantial clean generation capacity can be deployed at a fraction of nuclear's cost.

6.4 Inflation Reduction Act, Clean Energy Investment, and the Xcel IRP Conflict

Credit Suisse estimated in September 2022 that the IRA would drive over \$800 billion in public climate spending, with total public plus private financing reaching approximately \$1.7 trillion over ten years.[16][17] The Rhodium Group Clean Investment Monitor, published in August 2024, documented that actual clean energy investment in the two years following IRA enactment totaled \$493 billion — a 71% increase over the preceding two-year period.[18] Utility-scale solar investments increased 56% and energy storage investments increased 130% over the same baseline. These are documented capital flows, not projections.

The U.S. Department of the Treasury's place-based analysis confirmed that IRA-driven investments disproportionately benefit economically disadvantaged counties and designated energy communities — precisely the rural areas where nuclear proponents claim new plants would create employment and tax revenue.[19] Solar and wind projects are already delivering these economic development benefits, without the 15-year lead time and construction risk inherent in nuclear development.

The IRP conflict: HB26-1337 directly conflicts with Xcel Energy's existing PUC-approved resource plan. Xcel Energy — the only Colorado investor-owned utility exceeding the bill's 500,000-customer threshold, serving approximately 1.5 million electric customers — filed its Clean Energy Plan Phase II,

which was approved by the Colorado Public Utilities Commission in January 2024 (Docket No. 23A-0232E).[42] That plan calls for 6,100 MW of new generation and storage capacity and approximately \$12-13 billion in capital investment through 2040, with zero nuclear generation included. The plan represents the utility's own least-cost, least-risk analysis of how to meet Colorado's clean energy obligations. HB26-1337's mandate that Xcel solicit nuclear site proposals overrides the utility's PUC-approved integrated resource planning process — requiring expenditure of ratepayer funds on a resource category that Xcel's own planning process did not identify as cost-competitive or necessary. The ratepayer impact of HB26-1337 must be evaluated at both the study phase and the construction-commitment phase. The bill authorizes up to \$20 million in ratepayer-funded site and design studies. Spread across 1.5 million Xcel customers, this represents approximately \$13.33 per customer (author's calculation based on customer count from [42]). However, this per-household figure obscures the bill's true risk: the study phase is the on-ramp to construction commitment, and the bill contains no cost cap, no performance guarantee, and no opt-out mechanism for ratepayers once a project advances. At Vogtle's realized cost of \$16.5 million per installed MW, a single 1,117 MW AP1000-class unit would cost approximately \$18.4 billion — representing approximately \$12,267 per Xcel customer, or roughly ten years of an average Denver household's monthly electric bill.

6.5 Grid Reliability and Firm Capacity: Addressing the Dispatchability Argument

A central argument for HB26-1337 is that Colorado needs firm, dispatchable, carbon-free generation to maintain grid reliability as coal retires. Nuclear power's approximately 93% fleet-wide U.S. capacity factor is a genuine technical strength — it is why nuclear provides approximately 18-20% of U.S. electricity generation from only about 9% of installed capacity. This paper acknowledges this advantage directly. The policy question is not whether nuclear produces reliable power when operating, but whether the cost, risk, timeline, and alternatives make nuclear the appropriate choice for Colorado's specific circumstances.

Colorado's firm capacity needs can be met through a portfolio of alternatives that do not carry nuclear's construction risk, timeline, or water intensity:

- Long-duration energy storage (LDES): various technologies are under demonstration with operation expected in the next 1-2 years. Iron flow (SRP Project New Horizon, 10-hour discharge), vanadium redox, organic redox, and zinc-bromine batteries are entering commercial deployment with 25-year design lives and no thermal runaway risk.[32][35] These technologies directly address the multi-hour storage gap that 4-hour lithium-ion batteries do not fill.
- Enhanced geothermal systems (EGS): The U.S. Department of Energy's Enhanced Geothermal Shot initiative targets EGS at \$45/MWh by 2035. Colorado's geothermal resources are substantial and untapped. EGS provides firm, weather-independent generation with a land footprint comparable to natural gas.
- Regional transmission and grid interconnection: Colorado's participation in Western Energy Imbalance Market (WEIM) and potential expansion to Southwest Power Pool (SPP) provides access to geographic and temporal diversity across the Western Interconnection, reducing the firm capacity requirement that must be met by local dispatchable generation.
- Demand response and efficiency: Colorado's commercial and industrial load provides substantial demand response potential that can substitute for firm capacity during peak periods at a fraction of the capital cost of new generation.

Critically, integrated resource planning — the PUC-supervised process through which Xcel's 2024 Clean Energy Plan was developed and approved — is the appropriate mechanism to evaluate whether firm capacity needs require nuclear or can be met by this portfolio. Xcel's plan, reviewed by independent PUC staff and subject to public comment, concluded that firm capacity needs through 2040 could be met without nuclear. HB26-1337 substitutes a legislative mandate for this evidence-based regulatory process.

6.6 Negative Wholesale Electricity Prices

The IEA's Electricity Mid-Year Update 2025 documented that negative electricity prices are becoming increasingly common in organized wholesale markets worldwide.[20] In Europe, the share of hours with negative wholesale day-ahead prices reached 8-9% in the first half of 2025 in Germany, the Netherlands, and Spain.[21] In the United States, CAISO curtailed 3.4 million MWh of utility-scale wind and solar output in 2024 — a 29% increase over 2023 — with solar accounting for 93% of all curtailed energy.[22] The Berkeley Lab ReWEP Tool documents similar patterns emerging in SPP and ERCOT as wind penetration increases.[36]

Negative prices carry a specific implication for nuclear economics. Nuclear plants operating at 90%+ capacity factors — the economic model on which nuclear LCOE calculations depend — would be forced to generate into negatively priced hours, effectively paying the market to accept their output. Unlike solar and wind (near-zero marginal cost, can be curtailed with minimal penalty) and unlike battery storage (which arbitrages price differentials by charging during negative-price hours), nuclear plants have high fixed costs and limited ramping capability. A nuclear plant that reduces output to avoid negative prices destroys its own capacity factor and, consequently, its LCOE. The solution to variable renewable intermittency is storage and grid flexibility — not additional inflexible baseload that exacerbates the price depression it cannot avoid.

6.7 Agrivoltaics: Dual-Use Land Deployment

The opportunity cost of ratepayer capital allocated to nuclear development extends beyond direct financial comparison to the productive agricultural and energy co-benefits available through agrivoltaic systems already operating in Colorado[29]. Agrivoltaics are relevant to HB26-1337 because they demonstrate a concrete, near-term alternative deployment of the investment capital and land that nuclear development would otherwise require.

6.7.1 Rice Cultivation (Japan)

Okada et al. (2025), published in the Journal of Photonics for Energy, studied a dual-axis sun-tracking PV system installed three meters above a rice paddy in Nagano Prefecture, Japan.[24] Rice yields reached 85% of conventional paddies in the second year following shading optimization, and harvested rice met Japan's highest grain quality standards. Annual PV production was approximately 43,995 kWh at 961.4 kWh/kW specific output. The estimated 20-year unsubsidized electricity cost was approximately 27 yen/kWh — roughly equivalent to Japan's prevailing household rate.

6.7.2 Sheep Grazing and Soil Quality (United States)

Kochendoerfer et al. (2025) in Agricultural Systems documented sheep grazing within an 18 MW solar facility in New York, finding an optimal stocking rate of 8 sheep per hectare that simultaneously maintained herbage quality and controlled vegetation overgrowth — reducing solar O&M costs.[25] Andrew et al. (2025) in Frontiers in Sustainable Food Systems found organic matter, predicted soil protein, and active carbon were all significantly higher at grazed solar sites compared with non-grazed controls across 28 sites in the northeastern United States.[26]

6.7.3 Colorado and Regional Deployments

Colorado State University's vitivoltaics project at the Orchard Mesa Research Station near Grand Junction installed single-axis tracking solar panels above chardonnay grapevines, funded by the Colorado Department of Agriculture.[27] Preliminary results show reduced vineyard water consumption and moderated canopy temperatures. Jack's Solar Garden in Longmont operates 3,276 panels generating 1.2 MW DC with cultivation of vegetables, herbs, and native grasslands under elevated panels.[29] The Kansas Sky Energy Center received approval for a 159 MW utility-scale installation with integrated sheep grazing and native grass restoration. These deployments demonstrate that agrivoltaic systems offer Colorado a proven pathway to deploy clean generation on agricultural land while preserving — and in some cases enhancing — agricultural productivity.

6.8 Large-Scale Energy Storage Demonstrations

6.8.1 Salt River Project (Arizona)

Salt River Project (SRP) operates approximately 1,300 MW of energy storage, including 1,100 MW of battery storage across eight facilities and approximately 200 MW of pumped hydro.[30][31] The Sonoran Solar Energy Center pairs 260 MW of solar with 1 GWh of battery storage for Google's Mesa data center campus. SRP inaugurated 340 MW/1,360 MWh of BESS capacity ahead of Arizona's 2024 summer peak season, demonstrating that utility-scale storage is operationally mature and dispatchable during peak grid stress.

In October 2025, SRP and ESS Inc. announced Project New Horizon: a 5 MW/50 MWh iron flow battery LDES pilot at SRP's Copper Crossing Energy and Research Center.[32] The project evaluates non-lithium LDES technologies offering 10-hour discharge capability and a 25-year design life — directly addressing the perceived limitation that lithium-ion batteries cannot provide multi-hour storage. Iron flow batteries use earth-abundant materials with no fire risk and no supply-chain dependence on cobalt or lithium.

6.8.2 Defense Innovation Unit

The Defense Innovation Unit's Extended Duration for Storage Installations (EDSI) program awarded contracts to CellCube (vanadium redox flow), DD Dannar (mobile power systems), and Redflow (zinc-bromine flow batteries with microgrid integration) for military base energy resilience.[35] DOE and PNNL deployed a 277 kWh lithium-ion system at Ellsworth Air Force Base for mission-critical resilience, receiving the 2024 Air Force Community Partnership Award.[33][34] If the U.S. military considers battery storage mature enough for mission-critical installations where power interruptions have direct national security consequences, the argument that storage is unproven for civilian grid reliability is without empirical foundation.

6.9 Water Consumption: A Structural Constraint in Colorado

Colorado's water constraints represent an additional barrier to nuclear development that HB26-1337 does not acknowledge. The NREL operational water consumption analysis (Macknick et al., 2011) identifies nuclear power plants with recirculating cooling towers — the only viable cooling technology for an arid, landlocked state — as consuming a median of 672 gallons per MWh (consumption, not withdrawal; water not returned to source).[40] For comparison, solar PV consumes approximately 26 gallons per MWh (primarily panel washing), and wind consumes approximately zero.[40]

The Nuclear Energy Institute confirms an operational range of 400-720 gallons per MWh for consumptive water use (water not returned to source) at U.S. nuclear plants using recirculating cooling towers.[41] This figure must be distinguished from water withdrawal, which is much higher but includes water returned to the source. For planning purposes the relevant metric is consumptive use, because Colorado's prior-appropriation doctrine allocates rights based on the volume permanently removed from the stream system. Once-through cooling systems have lower consumptive use per MWh but require large adjacent surface water bodies with sufficient flow to absorb thermal discharge — a condition that does not exist at likely Colorado inland siting locations, which are the only sites practically available given population and transmission constraints. Hybrid dry-wet cooling can reduce consumptive use by 30-50%, but at significant capital and efficiency penalties. The 672 gal/MWh NREL median for recirculating cooling therefore remains the appropriate planning assumption for a new Colorado inland facility unless a specific hybrid cooling design is specified and costed. A single Vogtle-class unit (1,117 MWe at 93% capacity factor) would consume approximately 5.2 billion gallons of water annually at this median — representing a new senior water right of that magnitude in basins already under adjudication pressure.[40][45]

Under Colorado's prior-appropriation doctrine, a new nuclear plant would require securing senior water rights sufficient to meet this demand. In the South Platte, Arkansas, and Colorado River basins — where HB26-1337 site selection would most likely focus — new appropriations of this magnitude face multi-decade adjudication timelines and direct competition with agricultural, municipal, and

environmental claimants. This water-rights acquisition risk is unaddressed in HB26-1337's text and could independently delay or prevent project completion regardless of NRC licensing outcomes.

A renewable pathway produces the opposite outcome. Replacing Colorado's thermal generation with solar and wind would reduce power-sector water consumption by approximately 97%, freeing billions of gallons annually for higher-value agricultural and municipal uses. In a prior-appropriation state where water scarcity is an economic constraint on agriculture and municipal growth, this differential is not merely environmental — it is a legal, economic, and planning consideration of the first order.

7. Findings

The evidence reviewed in this paper supports the following findings:

- Colorado's sole nuclear experience (Fort St. Vrain) was a commercial failure.** The 330 MWe HTGR operated for only approximately 10 years (1979-1989) before persistent mechanical problems rendered it commercially unviable, ultimately requiring \$230 million in decommissioning costs. The site's economic value was realized only through conversion to natural gas generation.[2][3][4][5][6]
- France's Messmer Plan succeeded under institutional conditions that do not exist and cannot be replicated in the United States.** The plan's success depended on a centralized state-owned utility, no competitive electricity market, a standardized PWR design replicated at scale, continuous construction over two decades, and no environmental litigation comparable to U.S. NEPA/NRC processes. These conditions do not obtain in Colorado.[7][8][9][10][11]
- The only new nuclear construction completed in the United States in more than 30 years (Vogtle) exceeded its budget by approximately 163% (\$14 billion to \$36.8 billion) and its schedule by approximately seven years,** while its prime contractor filed for bankruptcy during construction. The concurrent V.C. Summer project was abandoned after \$9 billion was spent, with the utility's CEO subsequently convicted of securities fraud.[12][13][48][49]
- European nuclear construction (Olkiluoto-3, Flamanville EPR) demonstrates identical patterns of cost and schedule escalation** even in countries with prior nuclear construction experience. Olkiluoto-3 took 199 months versus a planned 56 months; Flamanville's cost escalated from EUR 3.3 billion to approximately EUR 13.2 billion.[50][51]
- No SMR has achieved commercial operation in the United States.** The only NRC-certified SMR project (NuScale CFPP) was cancelled in November 2023 when costs escalated from \$58/MWh to \$89/MWh and the project could not attract sufficient subscribers at the revised price.[52][53][54]
- Solar and onshore wind have been the lowest-cost forms of new-build electricity generation on an unsubsidized basis for 10 consecutive years,** per Lazard LCOE+ Version 18.0 (June 2025). Nuclear LCOE is approximately three times higher than solar at midpoint estimates (\$181/MWh vs. \$60/MWh).[14]
- Xcel Energy's PUC-approved Clean Energy Plan (January 2024) provides for 6,100 MW of new clean generation with zero nuclear, at approximately \$12-13 billion in capital investment.** HB26-1337 overrides this evidence-based least-cost plan by mandating nuclear solicitation.[42]
- Battery energy storage costs have declined sharply, with LCOS returning to 2020 levels in 2025,** and utility-scale storage is deployed at gigawatt-hour scale. SRP alone operates approximately 1,300 MW of storage. Non-lithium LDES technologies (iron flow, vanadium redox, zinc-bromine) are entering commercial deployment for 10+ hour duration applications.[14][30][31][32][35]
- Negative wholesale electricity prices (8-9% of hours in major European markets; 3.4 million MWh curtailed in CAISO in 2024) demonstrate that inflexible baseload generation faces structural market disadvantages.** Nuclear plants operating at 90%+ capacity factors would generate into negatively priced hours, undermining their own economics.[20][21][22]
- Nuclear power consumes a median of 672 gallons of water per MWh (recirculating cooling, NREL 2011),** compared with approximately 26 gallons for solar PV and approximately zero for wind. A single Vogtle-class unit would require approximately 5.2 billion gallons annually — a new senior water right of that magnitude in Colorado's prior-appropriation basins faces multi-decade adjudication. A renewable pathway would reduce power-sector water consumption by approximately 97%.[40][41][45]
- HB26-1337's \$20 million ratepayer-funded study authorization is not trivial merely because it is smaller than a full construction budget. A state-directed study process can create path**

dependence, normalize a technology-specific policy preference, and advance a project toward a future construction commitment without requiring the legislature or regulator to confront the full downstream risk at the outset. The study authorization is therefore problematic as structured — not because information-gathering is inherently wrong, but because HB26-1337 contains no cost cap, no performance guarantee, and no ratepayer opt-out mechanism once a project advances. The relevant question is not whether \$20 million is small in isolation, but whether public funds should be used to create a nuclear-specific pipeline before Colorado has demonstrated that such a project is least-cost, least-risk, and financeable on reasonable terms. Combined with the bill’s 2035/2040 site and construction timelines, the study authorization creates stranded-cost risk without any binding cost cap, performance guarantee, or ratepayer opt-out mechanism. Section 3(2)(b) of the bill directs the commission to approve the \$20 million expenditure, removing regulatory discretion at precisely the point where independent judgment is most needed.[1][56][61]

8. Risk Analysis

The following semi-quantitative risk assessment evaluates the principal risks to Colorado ratepayers under HB26-1337, assessed per ISO 31000:2018 using a 1-5 ordinal scale for both likelihood and impact. Composite risk scores (Likelihood x Impact) are classified as: 1-4 Low, 5-9 Moderate, 10-14 Elevated, 15-19 High, 20-25 Extreme.

Risk ID	Risk Description	Likelihood (1-5)	Impact (1-5)	Risk Score (LxI)	Mitigation Available
R-01	Nuclear construction cost overrun exceeding 100% of approved estimate, based on empirical rates at Vogtle (163%), Olkiluoto-3 (260%), and Flamanville (300%)	5	5	25 — EXTREME	None under HB26-1337. No cost cap or ceiling provision exists in the bill text.
R-02	Schedule delay exceeding 5 years beyond planned commercial operation date, consistent with all Western nuclear projects completed since 2000	5	4	20 — EXTREME	None. HB26-1337 contains no schedule accountability mechanism or penalty for delay.
R-03	Ratepayer exposure via CWIP-style cost recovery during construction, requiring consumers to pay for generating capacity before it produces electricity	4	5	20 — EXTREME	Legislative prohibition of CWIP — not included in HB26-1337; the bill authorizes PUC approval of cost-recovery mechanisms without specifying prohibitions on pre-completion recovery.
R-04	Contractor bankruptcy during construction, as occurred with Westinghouse at Vogtle (2017) and V.C. Summer (2017), where the prime contractor filed Chapter 11 mid-project	3	5	15 — HIGH	Performance bonds and completion guarantees. Not addressed in HB26-1337.
R-05	Technology obsolescence: renewable-plus-storage costs decline further during 15-year nuclear development timeline, rendering the nuclear asset uneconomic before completion	5	4	20 — EXTREME	Technology-neutral procurement. Directly contradicted by HB26-1337's nuclear-specific mandate.

R-06	Stranded study costs: \$20 million in ratepayer-funded studies produce no actionable project due to siting opposition, NRC licensing failure, or unfavorable economics	4	3	12 — ELEVATED	None. HB26-1337 Section 3(2)(b) directs the commission to approve the \$20 million expenditure without conditioning approval on demonstrated project viability.[61]
R-07	Spent fuel storage liability with no federal permanent repository: on-site ISFSI required indefinitely, imposing security, insurance, and decommissioning costs with no disposal pathway	5	4	20 — EXTREME	None. Federal spent fuel policy (Yucca Mountain) remains legislatively frozen. Fort St. Vrain spent fuel required special shipment to Idaho National Laboratory.
R-08	Negative wholesale price exposure: inflexible nuclear baseload generates into negatively priced hours, reducing revenue and undermining capacity-factor economics	4	4	16 — HIGH	None under current wholesale market design. Nuclear plants cannot economically curtail without degrading their LCOE.

The aggregate risk profile reveals that HB26-1337 exposes Colorado ratepayers to substantial financial risk with no commensurate mitigation without considering risk of water impacts. Six of eight identified risks score 15 or above, placing them in the High or Extreme classification on the 25-point ISO 31000-aligned scale. Five risks — construction cost overrun (R-01), schedule delay (R-02), CWIP-style ratepayer exposure (R-03), technology obsolescence (R-05), and spent fuel liability (R-07) — score 20 or above, indicating extreme risk levels. No risk scoring above 12 has an identified mitigation mechanism within the bill's text.

The bill contains no construction cost cap or ceiling. It contains no performance guarantee tying cost recovery to demonstrated plant performance. It contains no ratepayer opt-out mechanism permitting the PUC to halt cost recovery if project economics deteriorate. It contains no requirement to compare nuclear project costs against alternative resource portfolios. Section 3(2)(b) of the bill directs the commission to approve the \$20 million study expenditure without conditioning approval on demonstrated project viability or the availability of water — removing regulatory discretion at precisely the point where independent judgment is most needed.[56][61] This risk allocation structure mirrors the Georgia model that produced Vogtle's multi-billion-dollar outcome — proposed for a state with one-tenth of Georgia Power's customer base.

A responsible legislative framework for clean energy procurement would require technology-neutral competitive solicitation, binding cost caps with ratepayer off-ramps, prohibition of CWIP-style pre-completion cost recovery, independent construction monitoring with public reporting, and mandatory comparison against contemporaneous renewable-plus-storage alternatives. HB26-1337 contains none of these safeguards.

9. Conclusions

The evidence reviewed in this paper demonstrates that HB26-1337 is not a neutral planning measure — it is a technology-specific policy intervention that would create public exposure to significant cost and schedule risk before Colorado has demonstrated that nuclear is the least-risk path to firm clean power. The bill proposes to commit Colorado ratepayers to a nuclear-specific study and development pathway without the cost caps, decision gates, and ratepayer safeguards that should accompany any capital-intensive, long-lead resource commitment. The state should preserve optionality for future nuclear technologies, but should do so through technology-neutral planning rather than a nuclear-specific mandate. In its current form, the bill advances a policy preference faster than the evidence justifies, and

at the expense of the deployment speed and cost advantages of solar, wind, storage, and agrivoltaic systems that are already operating in the state.

Fort St. Vrain's limited commercial life, Vogtle's cost growth from \$14 billion to \$36.8 billion, V.C. Summer's abandonment and associated fraud convictions, the NuScale CFPP cancellation, and the cost and schedule escalation at Olkiluoto-3 and Flamanville together constitute a consistent pattern across projects in the contemporary Western regulatory and market environment. Every nuclear construction project completed or abandoned in the United States or Western Europe since 2000 — a comparison set that includes Vogtle, V.C. Summer, Olkiluoto-3, and Flamanville — exceeded its original budget by more than 100% and its original schedule by five or more years. These are not anomalies from a larger distribution; they are the full set of available datapoints from the regulatory and market environment most analogous to Colorado's. The burden of proof lies with proponents of HB26-1337 to explain why Colorado would achieve materially different results — and the bill offers no such explanation.

The Messmer Plan demonstrates that nuclear can be built successfully at scale — under institutional conditions that do not exist in the contemporary U.S. regulatory framework. Colorado would not be building a fleet of standardized reactors through a state-owned monopoly utility; it would be building a first-of-a-kind unit through a regulated investor-owned utility in a competitive market — precisely the conditions that produced Vogtle's outcome.

Meanwhile, the technologies that HB26-1337 implicitly defers — solar, wind, battery storage, and agrivoltaics — are already operating in Colorado at commercial scale[29], declining in cost, and delivering clean energy without construction risk, spent fuel liability, or ratepayer captivity. The IRA has driven \$493 billion in clean energy investment in two years, disproportionately benefiting the rural and energy communities that HB26-1337 claims to serve. Xcel Energy's own PUC-approved plan provides for 6,100 MW of clean generation with zero nuclear, at costs the utility's planners assessed as least-cost and least-risk.

The current evidence does not support advancing HB26-1337 in its current form. The bill should be either amended to include the ratepayer protections identified in Section 10, or substituted with technology-neutral clean energy procurement legislation that allows nuclear to compete on its merits alongside other zero-carbon resources.

10. Recommendations

- **Do not advance HB26-1337 in its current form.** The Colorado General Assembly should not enact legislation mandating ratepayer-funded nuclear development without cost caps, performance guarantees, technology-neutral competition, or ratepayer opt-out mechanisms. The bill creates a nuclear-specific support regime before the technology, financing structure, site constraints, and water supply requirements have been resolved — exposing captive ratepayers to asymmetric risk without the safeguards that should accompany any capital-intensive, long-lead resource commitment.
- **Require technology-neutral procurement.** Any future clean energy procurement legislation should mandate competitive solicitation among all low-carbon resources — including solar, wind, battery storage, geothermal, and nuclear — evaluated on total lifecycle cost, including water usage, with explicit ratepayer risk allocation, per the least-cost/least-risk standard applied in utility integrated resource planning.
- **Prohibit pre-completion ratepayer cost recovery for nuclear construction.** Any future nuclear procurement legislation should explicitly prohibit Construction Work in Progress (CWIP) or analogous pre-completion cost recovery mechanisms. The Vogtle and V.C. Summer precedents demonstrate that CWIP transfers construction risk entirely to ratepayers while insulating utility shareholders.
- **Establish binding cost caps and ratepayer off-ramps.** Any nuclear cost recovery authorized by legislation should include a binding construction cost ceiling, a schedule accountability

mechanism with financial penalties for delay, and an explicit ratepayer opt-out provision allowing the PUC to halt cost recovery if project economics deteriorate.

- **Redirect proposed study funds to technology-neutral assessment.** The \$20 million in ratepayer-funded studies proposed by HB26-1337 should be redirected to a technology-neutral clean firm resource assessment encompassing long-duration energy storage, enhanced geothermal systems, advanced nuclear (if demonstrated competitive), and firm renewable-plus-storage configurations.
 - **Include agrivoltaics as a resource category in utility planning.** The Colorado PUC should be directed to require investor-owned utility integrated resource plans to include agrivoltaic dual-use land deployment as a distinct resource category.
 - **Require independent risk assessment before authorizing nuclear cost recovery.** The General Assembly should mandate an independent risk assessment, conducted per ISO 31000:2018 by a qualified third-party entity with no financial interest in the project, before authorizing any ratepayer cost recovery for a proposed nuclear energy project.
 - **Prioritize regional grid interconnection and transmission expansion.** Colorado should prioritize participation in regional transmission organizations to maximize the value of variable renewable generation, reduce curtailment risk, and enable access to geographic and temporal diversity across the Western Interconnection.
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Prepared by Energy Systems Analysis | Approved by Chief Technical Officer

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April 29, 2026

To: Chairperson Valdez and Members of the House Energy and Environment Committee

From: Prof. Thomas Albrecht, University Distinguished Professor, Director, Nuclear Science & Engineering Center, Colorado School of Mines

Re: Strong Support for HB26-1337 Facilitating Nuclear Energy Development

Dear Chairperson Valdez, Vice-Chairperson Velasco, and Committee Members:

My name is Thomas Albrecht. I live near Pine, Colorado. I am a professor of chemistry, Director of the Nuclear Science & Engineering Center, and have a research group focused on many aspects of nuclear energy at the Colorado School of Mines. Mines is the only university in the State that grants degrees in Nuclear Engineering and Radiochemistry, and I teach courses within these programs. I am writing today as a citizen of Colorado in strong support for HB26-1337 Facilitating Nuclear Energy Development. This bill provides a much-needed framework for utilities and the people of Colorado to understand whether nuclear energy is the right choice for our State.

Nuclear Energy is experiencing a renaissance with the development of small modular reactors (SMRs) that can be constructed much more rapidly and at much lower costs than traditional reactors. These reactors are also passively cooled. This means that no external power sources or human intervention are needed to keep the reactor core cool. We have several ideal locations for housing such reactors at sites that have previously or currently host natural gas or coal plants because costly power transmission lines are already in place. We also have locations where substantial parts of the populations have a working knowledge of nuclear power and an understanding of the inherent safety of these reactors from their time in the military. This is especially true in the Colorado Springs area.

The current situation is that the State lacks the regulatory framework needed to advance nuclear power in a timely manner. Bill HB26-1337 rectifies this problem. The rest of the world is rapidly advancing SMRs including in our immediate neighbor Wyoming where Terrapower is building the Natrium reactor. Colorado also has considerable uranium resources to power these reactors.

Advanced reactors offer a small footprint, massive power output, power grid stability, and low CO₂ emissions that are unmatched by any other power source and are a responsible path forward for our State. Thus, I urge you to vote yes on HB26-1337.

Sincerely,



Thomas E. Albrecht, Ph.D.

11722 South Elk Creek Rd.

Pine, CO 80470

thomas.albrecht@mines.edu



TO: House Bill Sponsors:
Committee Chair Representative Alex Valdez
Representative Ty Winter

Vice Chair Representative Elizabeth Velasco
Members of the House Energy and Environment Committee:
Representative Carlos Barron
Representative Ken DeGraaf
Representative Lori Goldstein
Representative Jamie Jackson
Representative Junie Joseph
Representative Amy Paschal
Representative Manny Rutinel
Representative Scott Slaugh
Representative Lesley Smith
Representative Jenny Willford
Representative Dan Woog

FROM: The Colorado Renewable Energy Society (CRES)
DATE: April 14, 2026
RE: **HB26-1337** – “Concerning Facilitating the Development of Nuclear Energy Projects in the State”

After reviewing the bill, CRES strongly urges the committee to vote NO on HB26-1337

CRES offers these reasons for concern:

1. Following last year’s unfortunate passage of HB25-1040, which shockingly classified nuclear energy as “clean,” HB26-1337 would move Colorado further down a dangerous and slippery slope. 1040 stretched credulity when it defined nuclear power as clean on the narrow basis that nuclear power plants do not emit greenhouse gases. Hundreds of citizens, including CRES, made it clear at hearings that **nuclear is the exact opposite of clean, because it produces deadly, high-level nuclear waste products that remain dangerously radioactive for tens of thousands of years.**

2. In addition to Colorado’s toxic history of reckless uranium mining tail piling contamination radioactive fires and water contamination at the Rocky Flats Nuclear Weapons Plant, Colorado has had an expensive experience with a nuclear power plant - the Fort St. Vrain High Temperature Gas-Cooled Reactor, 40 miles north of Denver. The reactor was shut down in 1989 due to mounting ratepayer impacts caused by safety and operational problems after only ten years online. The total decommissioning cost was \$230 million in 2018 dollars. For 37 years, **St. Vrain’s 15 tons of high-level radioactive wastes have been stored in 244 cannisters**, protected by guards with machine guns. The wastes will ultimately need to be transported out of Colorado to be deeply buried for tens of thousands of years in underground storage that has not yet been identified.

3. If 1337 becomes law, an investor-owned utility could trigger a request that would **require the Public Utilities Commission to obligate captive ratepayers to waste up to \$20 million** to pay for nuclear studies, siting, design, and other activities. Like HB25-1040 before it, HB26-1337 is intended as a stepping stone that is easier for legislators to swallow than the ultimate objective here of constructing new nuclear power plants in Colorado. The taxpayer dollars spent by the passage of this bill would create a “sunk cost fallacy,” allowing nuclear proponents to argue that the money spent to date is wasted unless plants are built.

4. The bill requires the Colorado Energy Office to dedicate valuable time and energy to this hazardous enterprise. The office should not be required to participate in an objective that would result in the **creation of new radioactive legacies in the state.**

5. Because the final objective of this stealthy one-small-bill-after-another approach by the nuclear industry is to build nuclear power plants in Colorado, **it is important to answer the question NOW, not later, whether such plants in Colorado would actually make any sense. The answer is a resounding NO.**

6. **The most recent nuclear power plants constructed in the U.S. have been outrageously expensive.** Vogtle Units 3 and 4, which employed the much-touted Westinghouse AP-1000 standardized design, were completed seven years behind schedule at a cost of \$36.8 billion—more than two-and-a-half times their original budget. Their capital cost was \$17,000 per kilowatt—this is nearly ten times the cost of a utility-scale solar plant with battery storage. As a result, Georgia Power ratepayers saw a 23.7% increase in their electric bills.

7. The claim that SMRs (300 MW in size or less) will be cheaper per kilowatt has no merit, because they lose the economy-of-scale benefit that caused reactor sizes to reach 1100 MW in the first place. **The one SMR design approved by the Nuclear Regulatory Commission, NuScale, which was scheduled to be built in Idaho, was finally canceled because its projected capital cost had risen to \$20,000 per kilowatt and was still going up.**

8. The claim that SMRs would reduce waste ignores the recent findings by Stanford engineers that **SMRs would increase the waste by a factor of 2 to 30 compared to conventional reactors,** depending on the design. The primary reason for this is a physical phenomenon called neutron leakage.

9. **Nuclear power plants take far too long to build.** They require about 15 years from concept to completion—assuming they are not abandoned due to large cost overruns, as have often occurred. This compares to one-to-two years for solar and wind projects. While a nuclear plant is under construction, many new solar and wind plants could be built instead at much lower cost, and avoid a huge amount of air pollution and climate change emissions.

10. Given our water-stressed state and the looming crisis on the Colorado River, the last thing legislators should be considering is helping to develop nuclear power, which is **even more water-intensive than coal and gas generating stations.**

10. **Consider what will happen when a new nuclear power plant finally arrives late to the party.** Xcel Energy is planning to provide 80% of its electricity from solar and wind in just the next four years. A decade from now, that can easily be over 90%. Because nuclear power plants incur so much debt, U.S. utilities operate them 24 hours per day, 7 days per week to pay off that debt. When a new nuclear plant comes on line, it will duplicate the power already provided by solar and wind, causing those already paid-for plants to be curtailed. But you might ask, what about occasional dark lull periods when solar and wind resources are low? Because a nuclear plant always runs at full power, it cannot increase its output and fill those gaps. **The bottom line is that an expensive new nuclear power plant in Colorado would be hopelessly obsolete by the time it would finally be completed.**

We strongly urge the committee to get us off this slippery slope now, avoid needlessly wasteful spending of Colorado taxpayer dollars, and protect Colorado ratepayers from the inevitable future rate hikes that nuclear power plants would bring by voting **NO** on this bill. **No studies are needed** because we already have the benefit of seeing what environmental and ratepayer problems that nuclear has already brought to so many places in this country, including Colorado.

For additional information, we have included our **Position on Nuclear Power** on the final page.

Thank you for your consideration of these views, and our recommendation to reject this bill.

Sincerely,

Vincent P. Calvano
CRES Policy Committee
Colorado Renewable Energy Society

About CRES:

CRES is a Colorado nonprofit corporation established in 1996. CRES creates environmental, social, and economic benefits for Colorado by promoting energy efficiency and renewable energy of all types. CRES advocates for a carbon-neutral Colorado powered by 100% renewable energy, and is engaged in promoting energy efficiency, demand side management, beneficial electrification, and the full breadth of renewable energy development in Colorado's communities. CRES also advocates for ways to achieve Colorado's emissions reduction targets.

CRES educates and assists the state's consumers, businesses and communities to advance renewable energy and energy efficiency in a manner that supports the economy and the environment. CRES membership includes approximately 350 individual and business members interested in renewable energy and energy efficiency. The organization reaches more than 6,000 email subscribers and sponsors educational programs attended by hundreds.

CRES works on behalf of consumers, small businesses, and communities throughout the state to promote the expeditious transition from fossil fuels to renewable energy.



The Colorado Renewable Energy Society's Position on Nuclear Power Updated April 2026

Guiding Principle: CRES recognizes that addressing climate change is an urgent issue. This requires transitioning to zero-carbon energy sources in the safest, most cost-effective, and fastest way possible.

Background

As the last coal plants in Colorado shut down, nuclear power proponents are campaigning to replace them with nuclear reactors. An [advisory committee](#)¹ for the City of Pueblo recommended that Xcel replace its Comanche 3 coal plant with an “advanced nuclear power plant.” At the same time, the nuclear power industry is promoting the deployment of new reactors to power large data centers. Likely in response to nuclear power industry lobbyists, the Colorado State Legislature recently passed a bill falsely redefining nuclear as a “[clean energy resource](#).”²

Summary

While there may arguably be some states where new nuclear power could be evaluated as an option for the supply of carbon-free electricity, the State of Colorado, which is blessed with large, low-cost solar and wind resources and an electric grid that is already rapidly decarbonizing, is not one of them. In this position paper, CRES explains the various issues associated with nuclear power with special emphasis on the three reasons why new nuclear power plants would be a poor fit for Colorado’s electricity needs: 1) high capital cost, 2) long deployment time, and 3) lack of flexibility in a grid that is increasingly powered by variable renewables.

The Changing Energy Landscape

Most existing nuclear power plants were built in the 1970s and 1980s, and these plants can be credited with significantly reducing carbon and air pollution emissions from the electricity sector. At the time these plants were built, nuclear power was the only viable option for providing zero-emissions electricity in regions with limited new hydropower resources. However, the energy landscape has changed dramatically since the heyday of nuclear power. While the cost to build new nuclear power plants has greatly increased, we have witnessed dramatic reductions in the costs of solar, wind, and batteries. Wind and solar power plants with battery storage now have about one-tenth the capital construction cost in \$/kW as a new nuclear power plant. In addition, at a time of

¹ Mark Jaffe, “Only a nuclear reactor can make Pueblo ‘whole’ after Xcel Energy closes last coal-fired plant, local group says,” *The Colorado Sun*, January 8, 2024, <https://coloradosun.com/2024/01/08/pueblo-nuclear-reactor-comanche-station/>

² Parker Yamasaki, “Nuclear power is officially a clean energy source in Colorado. Not everyone is pleased.” *The Colorado Sun*, April 2, 2025, <https://coloradosun.com/2025/04/01/hb-1040-nuclear-energy-colorado-designation/>

accelerating climate change when urgent action is needed, solar and wind power plants can be built at least five times faster than a nuclear power plant.

Colorado's Previous Experience with Nuclear Power

Colorado's only experience with nuclear power, the Fort St. Vrain high-temperature gas-cooled reactor, was unfortunately not a good one. Completed seven years behind schedule, the reactor began commercial operation in 1979 and was shut down in 1989 after only ten years of operation due to mounting ratepayer impacts caused by safety and operational problems. It took 3 years to decommission the plant at a [cost](#)³ (in 2018 dollars) of \$230 million, which, like the \$700 million of plant costs, was incurred by Xcel ratepayers. For 37 years, St. Vrain's 15 tons of high-level radioactive wastes have been stored in 244 canisters in a [special facility](#)⁴ protected by armed guards. These wastes will ultimately need to be safely transported out of Colorado to be deeply buried for tens of thousands of years in underground storage that has still yet to be identified.

The experience with uranium mining has been similarly negative. The Schwartzwalder mine above Ralston Creek left a legacy of severe groundwater contamination and the requirement for continuous remediation of water feeding Ralston Reservoir. The reservoir supplies roughly 1.3 million people in the Arvada and neighboring areas, and the cost of remediation is borne by the State of Colorado. The tragic increase in cancer cases in the Navajo Nation associated with uranium mining operations and uranium tailings is well known. It is no wonder that Colorado energy experts were dismayed when the 2025 Colorado legislature passed House Bill 25-1040, which egregiously reclassified nuclear energy as "clean."

CRES's Perspective on New Nuclear Power

Beyond the issue of highly radioactive waste products that require thousands of years of storage, CRES believes new nuclear power investment in Colorado is a terrible choice for new electric generation on our grid for three primary reasons:

1. High Cost

The newest nuclear power plants have come at an exorbitant cost that burdens ratepayers for decades. The latest U.S. reactors to come online, Vogtle Units 3 and 4 in Georgia, which employ the much-touted Westinghouse AP-1000 standardized design, were completed seven years behind schedule at a cost of [\\$36.8 billion](#)⁵—more than two-and-a-half times their original budget. Their capital cost was \$17,000 per kilowatt, which is nearly ten times the cost of a utility-scale solar plant with battery storage. As a result, Georgia Power ratepayers were hit with an unprecedented 23.7% increase in their electric bills.

Nuclear industry promoters have argued that so-called small modular reactors, or SMRs, (classified as 300 MW or smaller in size) will reduce the cost of nuclear power. This claim not only has no merit, but it contradicts basic engineering design principles because these concepts lose the

³ The Nuclear Decommissioning Collaborative, "Fort St. Vrain," <https://decommissioningcollaborative.org/fort-st-vrain/>

⁴ U.S. Nuclear Waste Technical Review Board, "Department of Energy-Managed Spent Nuclear Fuel at Fort St. Vrain, Revision 1, June 2020, <https://www.nrc.gov/docs/ML2210/ML22107A007.pdf>

⁵ Margaret Walker, "Were rate hikes, Vogtle to blame for Georgia Power customers' service disconnections?," *The Telegraph*, March 28, 2025, <https://www.macon.com/news/environment/article301776774.html>

economy-of-scale benefit that caused reactor sizes, like the Vogtle units, to reach 1100 MW in the first place. Of course, a small reactor will be cheaper to build than a large one, but it will cost much more per unit of energy delivered, and that is the cost that matters. The one SMR design approved by the Nuclear Regulatory Commission, NuScale, which was scheduled to be built in Idaho, was finally [canceled](#)⁶ because its projected capital cost had risen to \$20,000 per kilowatt and was still going up.

Because nuclear power plants contain nuclear fuel and radioactive waste, they must be protected by armed guards from terrorist attacks. Having many small reactors spread across the country would greatly increase the number of sites that must be protected. There are many new SMR concepts being pursued. Because most of these depart from the design that has been used for decades, there is a high probability of unanticipated issues resulting in construction delays and cost overruns. Finally, researchers at Stanford University and the University of British Columbia compared three different SMR designs to conventional large reactors and concluded that their smaller size results in a larger percentage of neutron leakage, which [increases the volume of nuclear waste by factors of 2 to 30](#).⁷ For all of these reasons, SMRs are not a viable solution to the high cost of nuclear power.

2. Long Deployment Time

The total [time from concept to operation](#)⁸ for new nuclear power plants is about 15 years—assuming they are not abandoned due to large cost overruns, as have often occurred. This compares to 1-to-2 years for solar and wind projects. While a nuclear plant is under construction, many new solar and wind plants could be built instead at much lower cost and thus avoid a huge amount of air pollution and climate change emissions. In a Fall 2025 article titled [The Next Nuclear Renaissance?](#),⁹ the conservative Cato Institute concluded:

The problem is not so much that money will be wasted on large numbers of uneconomic facilities. Rather, it is the opportunity costs of the time and human resources that are consumed by nuclear power and not available to other, quicker, more cost-effective and less financially risky options. We appear now to be facing serious risks from climate change, and there will not be a second chance if we fail to tackle it because too many resources are being consumed by an option—new nuclear—that will not work.

3. Lack of Flexibility

Nuclear power proponents argue that because nuclear plants run 24 hours a day, they can fill in the gaps when solar and wind are not available. But let's take a closer look at that claim. Xcel plans to provide over [80% of its electricity from solar and wind](#)¹⁰ by 2030. Although Colorado is very sunny year-round, grid operators must be prepared for occasional “dark lull” periods of several days or

⁶ Ivan Penn and Brad Plummer, “Nuclear Energy Project in Idaho is Canceled,” *The New York Times*, November 8, 2023, <https://www.nytimes.com/2023/11/08/business/energy-environment/nuclear-energy-idaho-nuscale.html#:~:text=>

⁷ Lindsay M. Krall, et al., “Nuclear waste from small modular reactors,” *Proceedings of the National Academy of Sciences*, May 31, 2022, <https://www.pnas.org/doi/full/10.1073/pnas.2111833119>

⁸ “We Need Solar and Storage to Address the Energy Emergency,” Solar Energy Industries Association, February 4, 2025, <https://seia.org/blog/we-need-solar-and-storage-to-address-the-energy-emergency/>

⁹ Steve Thomas, “The Next Nuclear Renaissance?,” *Regulation*, Cato Institute, Fall 2025, <https://www.cato.org/sites/cato.org/files/2025-09/regulation-fall-2025-1.pdf>

¹⁰ “Colorado proposal adds unprecedented renewable energy and storage,” *Between the Lines*, Xcel Energy, September 19, 2023, <https://stories.xcelenergy.com/stories/Colorado-proposal-adds-unprecedented-renewable-energy-and-storage>

more when local solar and wind resources are limited by the weather. Xcel Energy plans to burn stored natural gas in low-cost combustion turbines during these brief periods.

Now imagine if new nuclear power plants come onto the grid in 15 years. Like all nuclear plants in the U.S., they will need to be run at full power 24 hours a day to sell enough electricity to pay off their large debt. That means they cannot vary the power they provide to the grid. (Although it is theoretically possible to add molten salt thermal storage to a reactor power plant, this would further increase the already high capital cost and introduce reliability issues.) So, when an occasional dark lull occurs and solar and wind power drop off, the utility won't be able to boost nuclear plant output because it will already be operating at full power. Furthermore, because a new nuclear plant will duplicate power already being provided by solar and wind, it will cause that renewable electricity to be wastefully curtailed.

The bottom line is that an inflexible, baseload nuclear power plant, of the type that was developed for our 20th century electric grid, is exactly the wrong type of plant to support our modern 21st century smart grid. It would be hopelessly obsolete by the time it is finally completed.

Conclusion

CRES opposes the use of any taxpayer or ratepayer funds to support new nuclear power plants in Colorado or nuclear power plant studies because these plants are highly unlikely to provide timely, economic, reliable, carbon-free power. Instead, CRES believes that funds should be invested in the rapid harnessing of Colorado's abundant, low-cost solar and wind resources, together with end-use energy efficiency, storage, demand response, and transmission. These proven solutions address the urgent need to immediately and cost-effectively reduce both carbon and air pollution emissions.

Re: **HB26-1337 Nuclear Energy Projects** – April 17, 2026

To: House Bill Sponsors: Representative Alex Valdez and Representative Ty Winter
Members of the **House Energy and Environment Committee**: Representatives Alex Valdes, Elizabeth Velasco, Carlos Barron, Ken DeGraaf, Lori Goldstein, Jamie Jackson, Junie Joseph, Amy Paschal, Manny Rutinel Scott Slaugh, Lesley Smith Jenny Willford, Dan Woog

Thank you for your good work towards reducing the pollution in our communities and towards meeting emission goals to reduce climate change impacts on our neighbors.

I advocate for the reduction of emissions that are causing our communities to be polluted in the vast Denver/Front Range Severe Ozone Pollution Area, and for the reduction of emissions from burning fossil fuels that cause climate change and contribute to the Severe Ozone Pollution.

I also advocate for the least expensive and safest energy sources for our community.

As a private citizen I urge you to vote against HB26-1337:

1. I believe that all renewable options for sources of energy are safer, less costly, and less risky than nuclear energy.
2. We should not spend any taxpayer money studying a dangerous industry that has proven to create disasters for some communities.
3. The costs to make safe the physical plant of a nuclear reactor are extortionary in today's geopolitical and terror realities. Trained armed guards, anti-bomb and anti-drone capabilities and measures are extraordinarily expensive and would place unneeded safety risks for any community.
4. The costs to make the physical plant safe of a nuclear waste storage facility are almost as extortionary in today's geopolitical and terror realities. Trained armed guards, anti-bomb and anti-drone capabilities and measures are extraordinarily expensive and would place unneeded safety risks for any community. The costs to store the nuclear waste will be incurred for 1000's of years.

Sincerely,

Ted Wells
President ClimateUnified.org