Business Council for Sustainable Energy Comments on the Western Governors' Association 2025-2026 Chair Initiative on Energy Superabundance: Unlocking Prosperity in the West
November 2025

The Business Council for Sustainable Energy (BCSE) appreciates the opportunity to provide comments on the Western Governors' Association 20205-2026 Chair Initiative on Energy Superabundance: Unlocking Prosperity in the West. BCSE is a coalition of companies and trade associations representing the full range of commercially available technologies and services that provide clean, reliable, and affordable energy. Our membership spans energy efficiency, renewable energy, natural gas, and advanced fuels, among others.

Overview

The West, and the entire United States needs more energy. The Department of Energy states in its July 2025 report on grid stability[1] that there are significant risks to U.S. grid reliability from rising electricity demand – particularly driven by data centers and artificial intelligence (AI) - and aging infrastructure, indicating a pressing need for additional generation. The report warns of a 100-fold increase in blackout hours by 2030 due to insufficient generation to meet growth demand. Without action, the U.S. is putting its leadership in AI, manufacturing, and economic prosperity in jeopardy**.**

Energy planning in the West must navigate the tension between near-term needs and long-term objectives. On one hand, there is an urgent push to add capacity quickly to meet large loads. On the other, long-term investments in dispatchable and low-carbon resources such as geothermal, nuclear, and other emerging technologies are recognized as essential for the decades ahead.

BCSE has been forward leaning on meeting the energy challenges in the West. For example, on August 19, 2025, leaders from government, industry, and the utility sector gathered for the Energy Roundtable, hosted by the Business Council for Sustainable Energy and the Abundance Institute. The event focused on how states like Utah can meet the growing demand from advanced industries such as data centers and high-tech manufacturing.

BCSE provides comments below on meeting these energy challenges and we offer our assistance to work with Western governors to unlock prosperity through energy abundance in the West. For further information, please contact Lisa Jacobson, president of BCSE at ljacobson@bcse.org.

[1] https://www.energy.gov/sites/default/files/2025-07/DOE%20Final%20EO%20Report%20%28FINAL%20JULY%207%29.pdf

Aspects of Energy Production, Transmission, or Storage which Present the Greatest Opportunity for Achieving Energy Abundance

Across the Western United States, the greatest opportunities for achieving energy abundance lie in a flexible, technology-diverse portfolio that includes renewable generation, natural gas, advanced nuclear, geothermal, energy efficiency, demand-side flexibility, energy storage, and reducing waste.

The West has world-class solar, wind, and geothermal resources. These, paired with modernized natural gas which ensures adequate real and reactive power and emerging carbon management technologies, can deliver reliable and dispatchable low-carbon power.

Continued investment in the broad range of renewable energy, and clean energy technologies using an inclusive approach —including hydropower, biomass, biogas/renewable natural gas (RNG), geothermal, fuel cells, waste to energy and nuclear, etc.—ensures long-term reliability and growth as renewable deployment accelerates at relatively fast pace.

Expanding and upgrading the transmission network is essential to connect renewable-rich regions with load centers. While deployment of Grid-Enhancing Technologies (GETs**)**—such as dynamic line ratings, reconductoring, and digital substations—can increase transmission capacity faster and at lower cost than traditional buildouts.

Distribution system modernization is also essential for improving grid reliability and resilience, enabling the integration of renewable energy, and adapting to load growth and new energy demand.

Regarding storage, the rapid growth of utility-scale and distributed battery energy storage systems (BESS) will provide near-term flexibility. Long-duration storage technologies, including pumped hydro, emerging thermal or flow batteries, natural gas, and hydrogen, are critical to meeting multi-day needs and helping to balance real and reactive power.

Promoting waste reduction is an essential key to energy abundance. Encouraging or requiring end-users to partner with utilities or to independently reduce energy waste will reduce their energy costs directly and indirectly by reducing overall needed production and transmission investment. Contributing factors include declining technology costs, robust federal and state incentives, and the urgent need to serve surging demand from data centers, manufacturing, and electrification, while containing cost.

Measures Governors can take do to Maximize Energy Resources and Address the Growing Need for Infrastructure Across the West

Governors can accelerate deployment by leading coordinated regional planning and permitting reform that align energy, environmental, and economic development objectives.

Key actions include:

1. Streamline permitting and siting: Expand permitting capacity, modernize environmental review tools, and establish clear timelines to accelerate project delivery.
2. Expedite and prioritize review & approval of necessary state permits**:** States should ensure agencies are adequately resourced and staffed to expeditiously complete necessary consultations and permit reviews when needed for solar and storage projects.
3. Regional transmission planning coordination: Facilitate multi-state collaboration to identify priority corridors and ensure cost-allocation is equitable.
4. Enable demand-side flexibility: Promote programs and tariffs that allow customers and large loads to adjust consumption in real time, to defer costly infrastructure. This "tariff" would be a utility pricing structure that would give customers financial incentives to adjust electricity use, not a tax on goods.
5. Support public-private partnerships: Encourage "energy-as-a-service" and innovative contracting models that leverage private capital for public infrastructure needs.
6. Invest in workforce development**:** Address the "power, parts, and people" challenge by ensuring a skilled labor force for the energy transition.
7. Support energy waste reduction strategies: Employ proven energy waste reduction strategies to reduce consumers and businesses energy costs directly and indirectly.
8. Encourage appropriate gas/electric coordination: Better harmonize communication protocols, operations, and planning of gas and electric systems to improve overall system reliability.

Policies or Programs for Advancing Energy Resource Development

While there are effective policies and programs for advancing energy resource development, there are also some improvements that need to be made. Effective policies include

1. Tax incentives and clean energy credits that support a diverse mix of generation and storage. Tax incentives must be durable, and long-term to align the investment and planning horizon of energy and infrastructure projects.
2. State clean energy standards and integrated resource planning which create stable development signals.
3. Clear objectives for Integrated Distribution System Planning (IDSP) which is a comprehensive long-term planning approach to modernizing the electric grid. DSP can

lead to better investments and better incentive outcome measurement, grid modernization, stakeholder collaboration, and more sophisticated rate designs.

4. Demand-side technologies and rate structures that reduce peak demand and energy waste reduction programs that ease pressure on the grid and lower consumer costs.

5. Permitting reform efforts that shorten interconnection timelines and accelerate clean infrastructure.

BCSE suggests improvements for advancing energy resource development including the following:

1. Some federal energy tax credits still retain the transferability and direct pay features for public or cooperative utilities (e.g., section 30C credit for alternative fuel refueling property, Section 45 clean energy production tax credit (PTC) for projects that started construction prior to January 1, 2025, Section 45Q carbon capture credit, and Section 45U zero emission nuclear power production credit). However, further guidance is needed to make these processes easier to use.

2. Fast track ITC-eligible procurement and development: It is time for states to act now, while ratepayers can still benefit from the federal ITC, which currently offset up to 30% of project costs. With these incentives beginning to phase out, utilities and states should fast track procurement through IRP solicitations, or direct PPA “open calls” (or other solicitation mechanism) to lock in lower prices and deliver long-term value for ratepayers.

3. Expand eligibility for demand response and distributed resources, particularly for large data and industrial loads including in rate design.

4. Integrate forecasting, flexibility, and resilience metrics into state energy planning and procurement.

5. Increase federal and state coordination to align reliability, economic development, and climate goals.

6. Develop and implement flexible interconnection processes that can accelerate the deployment of distributed energy and front of the meter distribution connected resources.

Local, State, and Federal Policy Factors Which Significantly Contribute to the Ability to Develop Clean Energy Resources

At all levels of government, regulatory certainty is key to developing energy resources. At the local level zoning and land-use processes are used to determine where projects can be sited and

how quickly they proceed. While at the State level integrated resource planning, rate design, and permitting frameworks define how utilities recover costs and how private developers interconnect, encourage and incorporate energy waste reduction strategies into building and data center designs.

And regulatory certainty at the Federal level is critically needed in areas such as streamlining National Environmental Policy Act (NEPA) review timelines, interconnection standards, and transmission authorities which shape the pace of large-scale infrastructure deployment. Federal agencies like the Department of Energy (DOE), the Federal Energy Regulatory Commission (FERC), and the Department of Interior (DOI) can and should also align funding and permitting priorities to ensure the West can build projects at the speed required for economic growth.

Cost Barriers Which Inhibit Energy Resource Development and Ideas on How Funding or Support for Energy Resource Development Can Be Improved

Energy resource development centers on high initial capital investment, significant expense and complexity of grid integration and transmission infrastructure, and financial risks stemming from supply chain issues, interest rate fluctuations, and policy uncertainty. Cost barriers include:

1. High upfront capital costs for transmission and dispatchable generation.
2. Uncertain or delayed permitting that increases project financing risk.
3. Rising costs for interconnection and materials due to supply chain constraints.
4. Cost to reduce waste is often made by private entities that do not benefit directly from reducing investment in energy production.

Western states could make important improvements to help developers reduce the risk of these cost barriers including:

1. Expand low-interest federal financing tools (loans, guarantees, and grants) for grid and storage projects.
2. Incentivize digital-first upgrades like GETs that deliver near-term capacity at lower cost.
3. Support public-private financing mechanisms that blend public support with private capital for infrastructure upgrades and waste reduction.
4. Encourage regional cost-sharing for multi-state projects to ensure equitable investment.
5. Ensure benefit for energy production savings to private entities that invest in waste reduction.

Obstacles to Developing Nuclear Energy in the Western United States

Governors can support deployment of nuclear energy through advanced reactor demonstration partnerships, streamlined licensing coordination, and education efforts on nuclear safety and benefits. Governors can support regional cooperation and coordination between organizations such as the Western Governors Association, the Natioanl Association of State Energy Officials (NASEO), and the National Association of Regulatory Utility Commissioners (NARUC).

Factors that impact nuclear development include:

1. High capital costs, lengthy licensing processes, and uncertain timelines.
2. Limited water availability, seismic conditions, and public acceptance challenges.
3. Financing risk for first-of-a-kind (FOAK) advanced reactor projects.

- Absence of near-term market mechanisms that value the reliability attributes of advanced nuclear.
- Workforce and supply-chain limitations specific to reactor construction and fuel supply.

Challenges and Barriers to Transmission Expansion

Challenges and barriers to transmission expansion involve a complex mix of regulatory, economic, and community-related obstacles. These issues collectively lead to significant delays, often stretching project timelines to a decade or more, and are a primary impediment to integrating renewable energy sources and ensuring grid reliability.

Some of the technical challenges include Integration of inverter-based resources and maintaining reliability across diverse topographies. Regulatory barriers include **c**omplex multi-jurisdictional permitting, overlapping state and federal reviews, and limited agency capacity.

Financial barriers to transmission expansion involve **u**ncertain cost allocation and long payback periods for large-scale lines. And market barriers involve fragmented planning processes and a lack of mechanisms that value regional transmission benefits.

Some potential solutions to these challenges to transmission expansion may include adopting standardized regional planning frameworks; expanding use of grid enhancing technologies (GETs) and digital twin technologies to unlock existing capacity. GETs can be both hardware and software that improves the capacity, efficiency, and reliability of power grids. Another improvement to reduce barriers to transmission expansion would be to encourage federal-state cooperation on corridor identification and cost-sharing models, better load forecasting, better load management programs and incentives.

Approaches and Technologies Supporting Energy Storage and Barriers to Deployment

While storage technologies are crucial for grid stability and the integration of energy sources like wind and solar, significant barriers remain.

Storage technologies include utility-scale and distributed batteries, long-duration technologies, pumped hydro, hydrogen-based storage, natural gas energy storage, and hybrid renewable-storage projects. Modular resilience assets are also available such as microgrids and fuel cells near critical infrastructure. Some barriers to deployment of energy storage include lengthy permitting, supply-chain costs, and lack of market products that compensate for duration and resilience, and the need for consistent interconnection standards and siting processes. Energy storage costs are also often made by private entities that do not benefit directly from reducing investment in energy production.

Actions to address these barriers might include:

1. Fund pilot and demonstration projects.
2. Create state-level incentives for storage paired with renewables and critical infrastructure.
3. Support market rules that value long-duration storage and resilience attributes.
4. Shared benefits for energy production savings to private entities that invest in peak - reducing technologies.

Support Multiple uses of Public Lands

The Bureau of Land Management (BLM) has a statutory mandate to manage public lands for a variety of uses, such as energy development, grazing, recreation, and timber harvesting, while also ensuring resources and ecosystems are maintained for the future. Multiple-use management supports local communities by creating jobs through commercial, recreational, and conservation activities.

To better support the multiple use of public lands Governors and federal agencies can:

1. Establish collaborative land-use mapping that identifies low-conflict zones for energy development.
2. Promote dual-use approaches such as agrivoltaics, pollinator-friendly solar, or co-locating microgrids with conservation areas.
3. Enhance early tribal and community consultation to balance conservation, cultural, and energy goals.

Federal Permitting or Regulatory Reforms to Facilitate Energy Abundance

Federal permitting and regulatory reforms are needed to facilitate energy abundance and there is a growing bipartisan consensus on the need to modernize outdated systems to meet surging electricity demand. Current discussions center on various legislative proposals being considered in Congress. BCSE has been advocating for permitting reform which would include the following among others:

1. Create predictable, time-limited permitting schedules for projects with demonstrated system benefits.
2. Empower a single federal coordinating office for multi-agency reviews.
3. Expand "fast-lane" approvals for grid-enhancing and digital technologies.
4. Align NEPA, FERC, and DOE processes to enable parallel—not sequential—reviews.
5. Develop pre-permitted energy corridors for both transmission and storage projects.

Important Contributors to Unleash Energy Abundance in the West and BCSE Case Studies

There are several key contributors Western Governors may draw upon as they look to expand energy development in the West. These key contributors include State energy offices, utilities, independent developers, tribal governments, RTOs/ISOs, federal agencies (DOE, FERC, DOI), state and local code authorities, research institutions, and community organizations, as well as private sector leaders such as BCSE members who are investing in data centers, manufacturing, and clean firm technologies.

Case studies to highlight include:

1. Hybrid renewable-storage deployments that reduce curtailment.
2. Use of GETs to unlock existing grid capacity.
3. Public-private microgrid projects enhancing resilience in remote areas.
4. Energy-waste successes.
5. State distribution system planning and grid modernization as found in the NC Clean Energy Tech Center's annual analysis.

The Business Council for Sustainable Energy is Eager to Participate in the WGA Energy Initiative.

BCSE is a coalition of companies and trade associations representing the full range of commercially available technologies and services that provide clean, reliable, and affordable

energy. Our membership spans energy efficiency, renewable energy, natural gas, and advanced fuels, among others.

BCSE members are available to Western governors and have the following areas of expertise:

1. Integration of clean energy portfolios and firm generation, including low-carbon natural gas with carbon management technologies, such as carbon capture and sequestration (CCS). BCSE member's CCS demonstration projects illustrate how this technology can reduce emissions by up to 95% and permanently store carbon emissions underground, *aligning with Western states' climate goals.*
2. Energy waste and demand-side management.
3. Permitting, interconnection, and financing solutions.
4. Transmission and storage policy.

BCSE can provide case studies, data, and member expertise to inform workshops and regional planning sessions.

Conclusion and Additional insights

BCSE supports the Western Governors Association for exploring ways to unleash energy abundance in the West to meet growth demand, maintain its leadership in artificial intelligence, and accommodate the onshoring of manufacturing and economic prosperity.

Energy abundance in the West will be achieved through a dual-track strategy:

1. Accelerate near-term deployment of commercially available technologies—renewables, natural gas, fuel cells, storage, GETs, energy-waste reduction, and demand-side tools—to meet immediate load growth; and
2. Invest in long-term innovation—advanced nuclear, geothermal, hydrogen, and carbon management—to ensure lasting capacity and resilience.

This comprehensive approach will allow Western states to maintain affordability, reliability, and competitiveness while advancing clean energy leadership for decades to come. BCSE looks forward to working with the Western Governors' Association to rise to the challenge in this critical time.