SENATE RESOLUTION #3061

TITLE: A Resolution to Establish a Nuclear Engineering Program at

the University of Wyoming

DATE INTRODUCED: 10/03/2025

AUTHORS: Senators Lindsay, Shosh, and Smith

SPONSORS: UW American Nuclear Society, Young Americans for Liberty

(YAL); Senators Hansen and Robinson

1. WHEREAS, the purpose of the Associated Students of the University of Wyoming

- 2. (ASUW) is to serve our fellow students in the best manner possible; and,
- 3. WHEREAS, the School of Energy Resources (SER) and the School of Engineering have
- 4. already made great strides in educating the next generation of nuclear scientists, upon
- 5. offering a newly created graduate and postgraduate Nuclear Energy Science certificates
- 6. (2025), as reflected in Addendum F; and,
- 7. WHEREAS, Wyoming is self-identified as a leader in energy innovation, Governor
- 8. Mark Gordon stated that "Wyoming strives to meet the growing demand for energy and
- 9. support energy innovation (Gordon, 2025)," as reflected in Addendum A; and,
- 10. WHEREAS, the U.S. Department of Energy (DOE) has stated that "data center load
- 11. growth has tripled over the past decade and is projected to double or triple by 2028 [...]
- 12. to account for data center expansion and the rise of artificial intelligence (AI)
- 13. applications, domestic manufacturing growth, and electrification of different industries
- 14. (DOE, 2024)," as reflected in Addendum B; and,
- 15. WHEREAS, Wyoming currently has a nuclear power plant under construction that is
- 16. projected to create approximately 1,600 jobs during peak construction and sustain
- 17. around 250 jobs once operational (TerraPower, 2025)," as reflected in Addendum G;

- 18. and,
- 19. WHEREAS, national lawmakers have made significant progress in streamlining the
- 20. construction of nuclear power plants with the ADVANCE (Accelerating Deployment of
- 21. Versatile, Advanced Nuclear for Clean Energy) Act of 2024 (LOC, 2025) as well as the
- 22. Deploying Advanced Nuclear Reactor Technologies for National Security executive
- 23. order signed by the president of the U.S. (Trump, 2025) as reflected in Addenda J and
- 24. C; and,
- 25. WHEREAS, the Wyoming Energy Authority (WEA) states that Wyoming is the largest
- 26. producer of uranium in the United States and has maintained its status as a leading
- 27. uranium producer in the U.S. since the 1950s (WEA, 2021) as reflected in Addendum
- 28. E; and,
- 29. WHEREAS the University of Wyoming previously had a functioning experimental
- 30. reactor on campus, according to the Cowboy State Daily (2024), as 25 universities in the
- 31. United States now have (DOE, 2025) as reflected in Addendum I and B; and,
- 32. WHEREAS, F.E. Warren Air Force Base is slotted to replace and modify facilities to
- 33. transition from Minuteman III to Sentinel ICBM, which is projected to create 2,500
- 34. 3,000 temporary jobs during construction as reflected in Addendum H; and,
- 35. WHEREAS, the University of Wyoming School of Energy Resources has approved 6
- 36. Nuclear Energy Research Projects in 2025 (UWYO, 2025) as reflected in
- 37. Addendum F; and,
- 38. WHEREAS, previous resolutions such as ASUW SENATE RESOLUTION # 2988 have
- 39. supported expanding programs at the School of Engineering, as reflected in Addendum
- 40. K; and,
- 41. WHEREAS, a primary concern among the School of Engineering regarding the creation

- 42. of a Nuclear Engineering major is the significant capitol, and funding for staff and
- 43. maintenance, hence, why this resolution should be sent to the State Appropriations
- 44. Committee.
- 45. THEREFORE, be it resolved by the Associated Students of the University of
- 46. Wyoming (ASUW) Student Government supports the creation of a major in Nuclear
- 47. Engineering at the University of Wyoming; and,
- 48. THEREFORE, be it further resolved that this resolution, in coordination with the Vice
- 49. President of Governmental and Community Affairs, be sent to the State Legislature's
- 50. Appropriation Committee; and,
- 51. THEREFORE, be it further resolved that immediately upon passage of this legislation, a
- 52. copy of this resolution is sent to the Board of Trustees, the UW President, and relevant
- 53. members of the UW President's Cabinet.

Referred to:	SWAC HOPE TAS	<u>SFRC</u>
Date of Passage: October 1	14, 2025 Signed:	Audan McCrurce
<u> </u>	(ASU	W Chairperson)
"Being enacted on	October 14, 2025 , 1 do he	reby sign my name hereto and approve thi
Senate action."	Yaula Medin	
	ASUW President	

ADDENDUM A

Govenor Gordon:

 $\underline{https://governor.wyo.gov/news-releases/governor-gordon-joins-governors-cox-and-little-to-ink-tri-state-energy-mou}$

Governor Gordon joins Governors Cox and Little to Ink Tri-State Energy MOU

April 29, 2025

Governor Mark Gordon (R-WY) joined Governors Spencer Cox (R-UT) and Brad Little (R-ID) in Salt Lake City today to sign a Memorandum of Understanding (MOU) establishing a cooperative framework among Utah, Wyoming and Idaho to pursue regional collaboration in energy policy. According to the freshly inked document, "The goal is to align energy-related efforts in order to strengthen energy resilience, foster innovation, attract investment, and advocate for shared priorities.

"In Wyoming, we continue to work tirelessly and collaboratively with our partners to meet the growing demand for energy and support energy innovation. This month marks a significant turning point for citizens and the industry," said Governor Gordon. "The President's Unleashing American Energy Emergency Orders removed the bureaucratic roadblocks of the previous administration, and gave us all the green light. Now we will roll-up our sleeves, coordinate with our neighbors and work collaboratively to ensure reliable, affordable energy is available to our citizens."

The basis of the non-binding MOU as outlined, is the recognition the three states share a unique geographic and economic landscape rich in energy resources, including fossil fuels, renewable energy sources, and the critical minerals essential for modern energy systems; and the States also participate in a common energy market, face common challenges related to energy production and distribution, grid reliability amid rising demand, environmental and economic impacts of energy transition, and volatile federal regulatory priorities.

The tri-state compact seeks to provide a framework for collaboration in seven key areas including: Policy Alignment, Coordination, Regulatory and Environmental Strategy, Federal Advocacy, Energy Resilience, Workforce Training and Development and Affordability.

Governor Gordon, known nationally and internationally as a staunch Wyoming energy industry advocate, recently returned from an international energy trade mission that included meetings with Japanese Prime Minister Shigeru Ishiba, Taiwan's Vice President Hsiao Bi-khim and the newly installed Ambassador to Japan George Glass.

"April is proving to be a very good month for Wyoming energy, our citizens and the nation," Governor Gordon said.

ADDENDUM B

Department of Energy:

 $\frac{https://www.energy.gov/articles/doe-releases-new-report-evaluating-increase-electricity-demand-data-centers}{\\$

WASHINGTON, D.C. — The U.S. Department of Energy (DOE) today announced the publication of the 2024 Report on U.S. Data Center Energy Used produced by Lawrence Berkeley National Laboratory. (LBNL) which outlines the energy use of data centers from 2014 to 2028. The report estimates that data center load growth has tripled over the past decade and is projected to double or triple by 2028. U.S. electricity demand is projected to account for data center expansion and the rise of artificial intelligence (AI) applications, domestic manufacturing growth, and electrification of different industries. DOE has anticipated this growing demand trend — it reflects robust industrial investments in America and national leadership on technology innovation. The Department continues to develop advanced technologies and leverage its resources to meet rising electricity demand in the United States while maintaining a reliable, affordable, and secure national energy system.

https://neup.inl.gov/infrastructure/university-research-reactors/

University	Reactor
Idaho State University	AGN
Kansas State University	TRIGA
Massachusetts Institute of Technology	Plate Fuel
North Carolina State University	PULSTAR
Ohio State University	Plate Fuel
Oregon State University	TRIGA
Pennsylvania State University	TRIGA
Purdue University	Plate Fuel
Reed College	TRIGA
Rensselaer Polytechnic	Critical Facility
Rhode Island Nuclear Science Center	Plate Fuel
Texas A&M University	TRIGA
Texas A&M University	AGN
University of California, Davis	TRIGA
University of California, Irvine	TRIGA
University of Florida	Plate Fuel
University of Maryland	TRIGA
University of Massachusetts at Lowell	Plate Fuel
University of Missouri- Columbia	Plate Fuel
University of Missouri S&T	Plate Fuel
University of New Mexico	AGN
University of Texas, Austin	TRIGA
University of Utah	TRIGA
University of Wisconsin	TRIGA
Washington State University	TRIGA

ADDENDUM C

Executive Order:

https://www.whitehouse.gov/presidential-actions/2025/05/deploying-advanced-nuclearreactor-technologies-for-national-security/



22581

Vol. 90, No. 102

Thursday, May 29, 2025

Presidential Documents

Title 3-

Executive Order 14299 of May 23, 2025

The President

Deploying Advanced Nuclear Reactor Technologies National Security

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered:

Section 1. Background. The United States faces a critical national security imperative to ensure a resilient, secure, and reliable energy supply for critical defense facilities designated under section 8240–1(c) of title 16, United States Code, and other mission capability resources. Advanced computing infrastructure for artificial intelligence (Al) capabilities and other mission capability resources at military and national security installations and national laboratories demands reliable, high-density power sources that cannot be disrupted by external threats or grid failures. These facilities and resources' vulnerability to energy disruption represents a strategic risk that must be addressed.

Advanced nuclear reactors include nuclear energy systems like Generation III+ reactors, small modular reactors, microreactors, and stationary and mobile reactors that have the potential to deliver resilient, secure, and reliable power to critical defense facilities and other mission capability resources. However, despite its promise, such technology has not been utilized in the United States at the scale or speed necessary to meet the Nation's urgent national security requirements, while our adversaries are rapidly exporting and deploying such technology around the world.

The Federal Government must utilize its full authority to accelerate the secure and responsible development, demonstration, deployment, and export of United States designed advanced nuclear technologies to bolster readiness of United States designed advanced nuclear technologies to bolster readiness and enhance American technological superiority. Additionally, the United States must further enhance our ability to export our nuclear technology to our allies and commercial partners, strengthening our shared ability to combat reliance on foreign adversaries through the use of safe, secure, and safeguarded nuclear technologies. Therefore, we must unleash the domestic nuclear industrial base and position American nuclear companies as the partners of choice for future energy growth throughout the world.

Sec. 2. Policy. It is the policy of the United States to:

- (a) ensure the rapid development, deployment, and use of advanced nuclear technologies to support national security objectives, such as the protection and operation of critical infrastructure, critical defense facilities, and other mission capability resources;
- (b) enable private sector investment, innovation, development, and use of advanced nuclear technologies in the United States, recognizing their benefit to national security, by aligning incentives across the Federal Government to fully leverage federally owned uranium and plutonium resources declared excess to defense needs, related nuclear material, supply chain components, and research and development infrastructure; and
- (c) coordinate regulatory efforts across the Department of Defense and the Department of Energy, ensuring that these agencies optimize resources and risk allocation in accordance with their respective missions sets.

 Sec. 3. Deployment and Use of Advanced Nuclear Reactor Technologies at Military Installations. (a) The Secretary of Defense, through the Secretary of the Army, shall establish a program of record for the utilization of nuclear

ADDENDUM D

Cowboy State Daily:

https://cowboystatedaily.com/2024/03/23/urban-myth-busted-there-was-a-tiny-working-nuclear-reactor-at-uw-50-years-ago/

By all accounts pieced together from archived records provided by the NRC, the Atomics International-built reactor that Dr. Ryan got with the NSF grant was packaged up at the New Jersey campus of Rutgers University and shipped across the country to UW, where it was given a home in what is still the engineering building.

ADDENDUM E

Wyoming Energy Authority:

https://wyoenergy.org/portfolio/uranium/

Uranium in Wyoming

Wyoming has been a significant producer of uranium since the 1950s, when uranium exploration and development was spurred following World War II and with the announcement of President Eisenhower's "Atoms for Peace" program in 1953. In total, Wyoming has produced upwards of 250 million pounds of yellowcake, a uranium concentrate powder that can be refined into nuclear fuel, maintaining its status as the largest producer in the United States.

ADDENDUM F

University of Wyoming:

https://www.uwyo.edu/news/2025/03/six-nuclear-related-reseach-proposals-selected-for-funding-from-uw-school-of-energy-resources.html

The University of Wyoming's School of Energy Resources (SER) has selected projects for funding after considering faculty-led proposals on nuclear-related research aimed at advancing Wyoming's full fuel cycle and building continued capacity in the nuclear energy sector.

Following a competitive review process, six innovative projects were selected to receive funding, with each project aligning with SER's strategic goals and addressing critical areas within the nuclear energy landscape.

https://www.uwyo.edu/uw/degree-programs/nuclear-energy-certificate.html

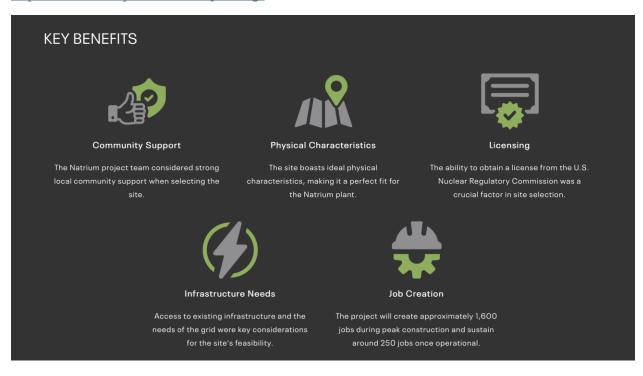
POWER THE FUTURE: UNLOCK A REWARDING CAREER IN NUCLEAR ENERGY SCIENCE

Are you ready to be part of the next wave of energy innovators? The nuclear energy science certificate at the University of Wyoming offers a unique opportunity to dive deep into one of the most critical and transformative fields in modern energy. Whether you're just starting your academic journey or advancing your expertise, this program prepares you to power the future of energy. From understanding advanced reactor designs to gaining hands-on experience through internships and research, you'll be equipped to shape the future of nuclear energy. Join us in Wyoming and help lead the charge toward a more sustainable, energysecure world.

ADDENDUM G

TerraPower:

https://www.terrapower.com/wyoming/



ADDENDUM H

Air Force:

https://www.afgsc.af.mil/Sentinel/Project-Information/

Temporary Workforce Hubs and Centralized Laydown Areas

- Establish temporary workforce hubs for up to 2,500-3,000 employees (during peak construction periods) in the vicinity of Great Falls and Lewistown, MT; Kimball, NE; and Minot, ND.
- Establish temporary construction laydown areas of about 13 acres throughout the missile fields.
- Use workforce hubs and laydown areas for 2–5 years.

ADDENDUM I



Image A: "Dr. Victor Ryan in the small control room of the tiny nuclear reactor he brought to the University of Wyoming and was kept in the basement of the old engineering building. (Courtesy Greg Ryan)" Obtained from Cowboy State Daily.

ADDENDUM J

Library of Congress (LOC)

https://www.congress.gov/118/bills/s870/BILLS-118s870enr.pdf

TITLE II—DEVELOPING AND DEPLOYING NEW NUCLEAR TECHNOLOGIES

- Sec. 201. Fees for advanced nuclear reactor application review.
- Sec. 202. Advanced nuclear reactor prizes.
- Sec. 203. Licensing considerations relating to use of nuclear energy for nonelectric applications.
- Sec. 204. Enabling preparations for the demonstration of advanced nuclear reactors on Department of Energy sites or critical national security infrastructure sites.
- Sec. 205. Fusion energy regulation.
 Sec. 206. Regulatory issues for nuclear facilities at brownfield sites.
 Sec. 207. Combined license review procedure.
 Sec. 208. Regulatory requirements for micro-reactors.

ADDENDUM K

Passed 23-0-0

SENATE RESOLUTION # 2988

TITLE: Support of Adopting the Quantum Information Scien

Engineering Master's Degree Program

DATE INTRODUCED: XX/XX/2024

AUTHOR: First-Year Senator Shosh

SPONSORS: Senator Keasling, Gomelsky, Schliebe, Gundling, First-Year

Senators Hargett, Morales, Director of Policy and Analysis

Meester

1. WHEREAS, the purpose of the Associated Students of the University of Wyoming

2. (ASUW) is to serve our fellow students in the best manner possible; and,

3. WHEREAS the Quantum Information Science & Engineering

4. (QISEE) Master's Degree Program will expand the majors available for

5. graduate students in the School of Computing, Astronomy & Physics, and Electrical

6. Engineering and Computing programs; and,

7. WHEREAS, the QISEE Master's degree program will be a postgraduate program that

8. focuses on the theoretical and practical aspects of quantum computing and

quantum information processing with more specific descriptions found in Addendum A;and,

11. WHEREAS, The Master of Science in QISEE program consists of two years of

12. coursework, 30 credits, and an accepted thesis; and,

13. WHEREAS, the proposed launch date for these programs is Fall 2024; and,

14. WHEREAS, the program follows the general track outlined by Addendum B, though

15. sequencing and specific courses may differ based on specialization tracks or allow

16. for content-specific course selection/substitution flexibility; and,