



April 1, 2026

U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585-0001

To Whom It May Concern:

On behalf of the State of Nebraska, we are pleased to submit our response to the U.S. Department of Energy's Request for Information regarding the potential siting and development of a Nuclear Lifecycle Innovation Campus. Nebraska welcomes the opportunity to contribute to this important national dialogue and to explore how our state can support the nation's long-term nuclear energy, fuel cycle, and technology innovation objectives.

Nebraska has a long and demonstrated history of safe, reliable nuclear operations, supported by our public power utilities, robust regulatory environment, experienced workforce, and pro-business climate. The state's utilities have actively advanced nuclear innovation through the Great Plains New Nuclear Consortium, and our past experience with nuclear generation, used-fuel management, and decommissioning provides meaningful insights into full lifecycle considerations. These factors, combined with recent statewide siting assessments, position Nebraska well to participate in the evaluation of a Nuclear Lifecycle Innovation Campus.

We also recognize the importance of early engagement with federal partners, local communities, Tribal nations, industry stakeholders, and environmental organizations to ensure that any future development is safe, sustainable, and publicly supported. Nebraska remains committed to transparent collaboration as the Department of Energy continues to refine the objectives, requirements, and mechanisms associated with an Innovation Campus.

We appreciate the Department's leadership in advancing the next generation of nuclear technologies and welcome continued discussion regarding how Nebraska can support this national priority. Please contact us if additional clarification or information would be helpful.

Thank you for your consideration.

Sincerely,

Jesse Bradley, Director  
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## **Executive Summary**

Nebraska wishes to express strong interest in partnering with the U.S. Department of Energy to explore hosting a comprehensive Nuclear Lifecycle Innovation Campus (Innovation Campus). The state has a long history of safe, reliable nuclear operations, including Nebraska Public Power District's (NPPD) Cooper Nuclear Station, Omaha Public Power District's (OPPD) former Fort Calhoun Nuclear Station, and several additional nuclear research and industrial facilities. The three largest Nebraska public power utilities (OPPD, NPPD, and Lincoln Electric System) have jointly committed to evaluating next-generation nuclear energy deployment through the Great Plains New Nuclear Consortium, demonstrating both technical readiness and proactive, forward-leaning leadership.

Recent statewide siting analyses have identified multiple viable locations for new nuclear development, and Nebraska continues to invest in rigorous assessments to identify high-priority sites. While additional geological characterization would be necessary, particularly for functions related to deep borehole disposal, Nebraska offers a stable regulatory environment, an experienced nuclear workforce, supportive communities, and a pro-business climate that facilitates large-scale infrastructure projects. Additionally, Nebraska public power utilities have a strong relationship with the University of Nebraska for studies related to nuclear operations and with community colleges to develop and support workforce development.

Nebraska recognizes that public confidence, environmental protection, and responsible stewardship of the Ogallala Aquifer (also known as the High Plains Aquifer) are essential to any long-term nuclear initiative. The state plans to leverage existing regulatory capabilities, federal guidelines, targeted stakeholder engagement, and collaborative partnerships to ensure safety, transparency, and regulatory compliance across all Innovation Campus functions.

While Nebraska does not foresee significant statutory barriers, several challenges such as public perception regarding geological disposal, workforce capacity, and the need for coordinated investment, will require early alignment among federal, state, industry, and community partners, which is standard practice. Nebraska is ready to continue discussions with DOE to determine how shared responsibilities, risk allocation, and federal support mechanisms can enable the successful siting, construction, and long-term operation of an Innovation Campus. Nebraska is open for business; ready to take the opportunity for early alignment and future innovation.

## RFI Response

1. **State Interest:** What level of interest does your state have in hosting a comprehensive Nuclear Lifecycle Innovation Campus?

**Response:** Nebraska is highly interested in hosting an Innovation Campus (Innovation Campus) and is eager to participate in national efforts to advance nuclear energy and fuel cycle innovation. The state benefits from decades of safe, reliable nuclear operations from its principle commercial nuclear plants Fort Calhoun (owned by OPPD) and Cooper Nuclear Station (owned and operated by NPPD). In addition, the state has demonstrated continued commitment through the three largest utilities in the state joining with another large public power utility in Oklahoma to form the Great Plains New Nuclear Consortium whose stated purpose is to explore the deployment of 1,000 to 2,000 megawatts of new nuclear technology.

Nebraska is highly interested in supporting a broad range of fuel -cycle and nuclear -energy functions, including front end processes such as mining, fuel fabrication, enrichment as well as back-end processes such as staging of used nuclear fuel and the reprocessing of used nuclear fuel. The state could also accommodate complementary activities such as advanced reactor deployment, power generation, advanced manufacturing, and -collocated data centers, enabling integrated, -forward-looking solutions aligned with national goals for safety, security, stewardship, and -long-term fiscal responsibility. Nebraska remains open to continued discussions regarding long -term storage of nuclear -related waste. Nebraska's experience with used fuel management and decommissioning provides valuable insight into the importance of full lifecycle planning, and we welcome further evaluation of how Nebraska can contribute to a -long-term national solution. Nebraska continues to demonstrate our high level of interest in nuclear technology as shown with Legislative Resolution 329 recognizing January 2026 as Nuclear Power Month in Nebraska.

Nebraska is uniquely positioned to host a full-spectrum Nuclear Lifecycle Innovation Campus due to its unified public power system, central logistical location, demonstrated nuclear experience and co-operation with neighboring States, and willingness to support both front-end and back-end fuel cycle activities.

2. **Proposed Sites Within the State:** What specific sites within your state would you propose for hosting a Nuclear Lifecycle Innovation Campus, and why are they viable and suitable for the necessary functions?

**Response:** A statewide, multi-criteria siting study authorized by the Legislature and funded by the Nebraska Department of Economic Development identified multiple locations with strong potential to host Small Modular Reactors (SMR). These locations were evaluated using criteria such as access to transmission infrastructure, availability of developable land, proximity to transportation corridors, and environmental considerations. The report is included within the appendix of this submission. A second -phase analysis is now underway which is refining these results to identify the highest -priority candidate sites for further evaluation and licensing.

While the identified sites should not be viewed as prequalified for all Innovation Campus functions, many exhibit characteristics that align well with a broad range of nuclear -energy and fuel -cycle activities. Several locations offer robust access to electric transmission, suitable land availability, existing industrial infrastructure, and strong community interest in energy -related development. For functions involving deep borehole disposal or other geologic considerations, additional detailed geotechnical and environmental studies would be required.

Nebraska is committed to continuing systematic siting work and coordinating closely with DOE, federal partners, and local stakeholders to validate site suitability. This includes incorporating refined geologic assessments, security and transportation requirements, and the evolving functional scope of the Innovation Campus. The state stands ready to work collaboratively with DOE and industry partners to determine which sites are most appropriate for specific campus functions and long--term development needs.

3. **Potential Private Sector Partners:** Which private sector partners does your state anticipate working with to develop these Nuclear Lifecycle Innovation Campuses?

**Response:** Nebraska is prepared to collaborate with a wide range of private sector partners to support the planning, development, and operation of an Innovation Campus. The state has already held preliminary discussions with several companies active in advanced nuclear technologies, fuel cycle services, related industrial capabilities and construction. These include, but are not limited to fuel cycle companies such as Orano USA and SHINE Technologies reactor developers such as TerraPower, Westinghouse, GE Hitachi, X-Energy, Hadron, and OKLO, and Nebraska headquartered Kiewit Corporation who brings extensive engineering and construction expertise. NPPD, OPPD, University of Nebraska representatives, and members of Nebraska's Legislature have benchmarked Orano's used fuel reprocessing and conversion facilities in France to increase technical and social economic knowledge. These early engagements indicate strong interest from industry in exploring opportunities within Nebraska, particularly as the state evaluates potential sites and begins to define the functions that could be supported at the campus.

Nebraska actively continues to explore additional partnerships to support the advancement of an Innovation Campus and will expand outreach as DOE further clarifies the scope and objectives of the Innovation Campus. The state is engaging with companies across the nuclear energy, advanced manufacturing, and technology sectors to ensure that the campus benefits from a diverse set of capabilities and expertise. Nebraska is working closely with public power utilities, regional economic development organizations, and academic institutions to support a coordinated and collaborative approach to industry participation.

As planning progresses, Nebraska will continue to expand outreach to qualified companies and will work with DOE to engage partners that align with federal expectations for safety, security, innovation, and long-term stewardship.

4. **Site Infrastructure Requirements:** What infrastructure and resources can your state provide or support at the proposed site(s) to meet the requirements of all Innovation Campus functions?

**Response:** Nebraska can support a wide range of infrastructure needs required for an Innovation Campus through coordinated efforts among state agencies, local governments, public power utilities, and private sector partners. The state offers strong baseline capabilities while also having clear pathways to develop additional infrastructure as project requirements are refined.

Nebraska's public power model provides safe, reliable, and affordable electricity with access to high-voltage transmission corridors near several candidate sites. This framework enables responsive grid planning, early integration of nuclear load forecasts, and coordinated infrastructure expansion. Water availability, treatment capacity, and long-term water planning will be evaluated during site selection, and Nebraska is prepared to work with local natural resource districts to ensure that water access meets both operational needs and sustainable stewardship goals.

Transportation infrastructure is well established across much of the state, including Interstate 80, multiple auxiliary corridors, and extensive freight rail networks. These systems can support heavy haul transport, and site-specific needs such as local roadway improvements or specialized secure transport routes can be addressed through coordinated state–federal planning. Nebraska has a strong record of successfully permitting and constructing major industrial and energy infrastructure, and the state can leverage its permitting experience, interagency coordination frameworks, and early project definition work to support timely development.

Nebraska's higher education and workforce training systems—including the University of Nebraska and a network of community colleges—offer engineering, technical, and craft skilled pipelines that are well suited to support advanced nuclear development. OPPD and NPPD have dedicated teammates to workforce development internally and with the youth of Nebraska. The state is prepared to scale specialized training programs in partnership with federal and industry partners to ensure workforce readiness for all campus functions.

Nebraska's central location makes it a key transportation hub, anchored by Union Pacific's Overland Route and Bailey Rail Yard—the world's largest—as well as Burlington Northern's coal corridor. Interstate 80 connects the eastern and western U.S., while state highways and expressways provide vital north–south connections.

As the scope and phasing of the Innovation Campus is defined, Nebraska will work collaboratively to identify the precise infrastructure investments required, including any federal support for specialized nuclear facilities, geotechnical investigations, transportation security upgrades, or advanced safeguards systems. The state is committed to providing a stable development environment, ensuring regulatory clarity, and aligning infrastructure planning with federal expectations for safety, security, and long-term operational resilience.

**5. Regulatory Framework and Licensing Support:** How would your state approach regulatory oversight for the Nuclear Lifecycle Innovation Campus?

**Response:** The Nebraska Department of Water, Energy, and Environment, (NDWEE) provides statewide leadership for water, energy, and environmental regulation and will apply this experience to support the development and operation of an Innovation Campus. Nebraska

maintains a long-standing partnership with the Nuclear Regulatory Commission (NRC) as an Agreement State, enabling the state to implement consistent, transparent, and timely oversight aligned with federal requirements. Nebraska will work with our industry partners to leverage their experience with the licensing process for fuel reprocessing.

Nebraska supports right-sized regulations that maintain robust safeguards while avoiding unnecessary administrative burden. The state will coordinate across relevant agencies to ensure predictable permitting processes, clear communication with project developers, and efficient regulatory review. Nebraska is committed to maintaining strong collaboration with federal regulators, including DOE and the NRC, to ensure that all campus activities meet the highest standards of safety, environmental protection, and regulatory compliance. A number of our potential industry partners, such as SHINE Technologies, have been actively engaged with the NRC for the past few years regarding the licensing of their Innovation Hub facilities.

6. **Legislative and Policy Requirements:** Are there any federal or state statutes, regulations, or policies that need to be amended or enacted to facilitate the development and operation of a Nuclear Lifecycle Innovation Campus in your state?

**Response:** A more comprehensive review and evaluation of Nebraska law would be required to ensure there are no significant barriers beyond the examples included here. Nebraska joined the Central Interstate Low-Level Radioactive Waste Compact (Compact) in the early 1980s however, Nebraska formally withdrew from the Compact in 1999 with the passage of LB 530. However, obsolete statutes still remain on the books that inform how the state of Nebraska should carry out its duties to the Compact and the handling of nuclear waste. Remaining statutes include: Nebraska Revised Statue 81-11599.02, Neb. Rev. Stat. 81-15,100—81-15,101.02.

Further, 81-15,101.03 titled Decommissioned nuclear reactor; waste; storage or disposal; waste from outside region; acceptance, states: (1) No low-level radioactive waste produced as a result of decommissioning a nuclear reactor shall be stored or disposed of at the facility until the department has determined that such facility is designed to safely store or dispose of such waste. (2) Unless an emergency exists, no waste shall be accepted from outside the Central Interstate Low-Level Radioactive Waste Compact region without prior approval by the Legislature. No agreement entered into pursuant to an emergency situation shall extend beyond six months unless a continuation of the agreement is approved by the Legislature.

As DOE provides additional clarity regarding the specific functions, regulatory pathways, and long-term stewardship expectations associated with the Innovation Campus, Nebraska will continue to assess whether any targeted policy updates or administrative adjustments may be beneficial. The state remains committed to working closely with federal partners to ensure that all regulatory requirements are met and that any future legislative needs are addressed in a timely and coordinated manner.

Ongoing coordination among the Executive and Legislative branches and state agencies will ensure a comprehensive approach as Nebraska moves forward. Legislative support will be critical moving forward.

7. **Timeline for State Support:** What is your state's proposed timeline for providing regulatory approvals, infrastructure development, and community agreements to support the Nuclear Lifecycle Innovation Campus?

**Response:** Nebraska is prepared to advance discussions and regulatory processes in a timely and coordinated manner. However, the state recognizes that the scope and complexity of an Innovation Campus requires additional definition before a specific timeline can be established. Key factors include the level of federal involvement, the sequence of project phases, the functions to be included at the selected site, and the requirements associated with environmental and geologic evaluations. Assuming reasonable resolution of these factors, SHINE Technologies, for example, plans to move a portion of its used nuclear fuel recycling development activities into the State within the first year after selection (likely at the University of Nebraska campus) and is working to have an operational used nuclear fuel recycling pilot facility online in the early 2030's. Nebraska intends to work closely with DOE to outline a phased approach that identifies early planning milestones, permitting needs, infrastructure assessments, and community engagement activities. The state is committed to providing efficient regulatory reviews and to coordinating efforts among relevant agencies to avoid unnecessary delays once project parameters are defined.

As DOE clarifies its expectations, Nebraska will be able to refine projected timelines for approvals, infrastructure development, and agreements with local communities and Tribal nations. The state remains ready to collaborate with federal partners to establish a clear and achievable schedule that supports safe and responsible progress across all stages of campus development.

8. **Anticipated Public and Stakeholder Concerns:** What challenges do you anticipate within your state to any of the Nuclear Lifecycle Innovation Campus functions (e.g., from environmental groups, local communities, Tribal nations, or political entities), particularly for sensitive activities such as reprocessing, plutonium handling, or waste disposal?

**Response:** The primary anticipated concern within Nebraska involves the Ogallala Aquifer and public perceptions of potential impacts from activities such as deep borehole disposal. Given the Aquifer's importance to the state's agricultural and economic systems, Nebraska expects that any proposal involving geologic disposal or subsurface activities will receive careful scrutiny from community members, Tribal nations, environmental organizations, and other stakeholders. Even if future geologic analyses indicate minimal risk, we recognize that concerns regarding long-term environmental protection and water stewardship are likely to remain significant.

While recent public meetings associated with the SMR siting study indicated strong interest in exploring new nuclear development in several regions, Nebraska understands that support may vary by community and by the specific functions proposed for the Innovation Campus. Additional concerns may arise related to the transportation of nuclear materials, long-term stewardship responsibilities, and clarity around federal versus state roles.

Historically, an attempt to site a low-level waste disposal facility in the state was unsuccessful. In the late 1980s, Boyd County, Nebraska was proposed as the site for a low-level radioactive waste facility under the Central Interstate Compact. Despite significant financial

incentives offered to the community, local residents opposed the project due to concerns about agricultural impacts and environmental risk. Their sustained resistance, combined with actions taken by state leadership, led to extensive delays and regulatory scrutiny.

Ultimately, Nebraska denied US Ecology's license application in 1998 after residents presented evidence that challenged the project's technical basis. The denial triggered litigation, and a federal court concluded that Nebraska had acted in bad faith. The state settled the case in 2005, paying \$145.8 million, which was the last of Nebraska's involvement in the Compact.

Lessons learned from the failed attempt to site a low-level waste facility will be applied to address these issues through transparent, data-driven communication and early, sustained engagement with affected communities, Tribal nations, local leaders, and environmental groups. The state recognizes that building and maintaining public confidence will require careful coordination with DOE and federal regulators, timely information sharing, and a commitment to ensuring that safety and environmental protection remain central to all planning efforts.

9. **Stakeholder Engagement Strategy and Cooperation Mechanisms:** What is your state's plan to engage stakeholders- including political entities, local communities, Tribal nations, environmental groups, and industry partners - to ensure timely public acceptance and compliance with regulatory frameworks for all Nuclear Lifecycle Innovation Campus functions?

**Response:** Nebraskans have consistently demonstrated strong support for nuclear energy activities within the state, bolstered in large part by the sustained public outreach efforts of NPPD and OPPD. The safe and transparent execution of plant operations, including the transition of used fuel to dry storage and ongoing decommissioning work, has further reinforced this broad public confidence, particularly among communities in closest proximity to the facilities.

Nebraska recognizes that early, transparent, and sustained engagement will be essential to building trust and ensuring timely acceptance of the Innovation Campus. The state intends to implement a structured engagement strategy that brings together local communities, Tribal nations, political leaders, environmental organizations, industry partners, and federal agencies in a coordinated and consistent manner. Example outreach materials from the SRM siting study can be found in the appendix.

Nebraska will conduct early outreach to communities near potential sites to share information, understand local priorities, and identify concerns that may influence project planning. It is imperative to get ahead of misinformation at the beginning. This approach includes clear, accessible communication materials; public meetings; and ongoing opportunities for dialogue as site assessment work progresses. The state is committed to respecting Tribal sovereignty and will pursue government-to-government consultation with Tribal nations that may be affected by campus activities or associated infrastructure.

To support stakeholder confidence, Nebraska will emphasize data-driven communication, transparent presentation of technical findings, and reliance on established regulatory processes. This includes close coordination with DOE, the NRC, and other federal partners to ensure that information shared with the public reflects consistent safety, environmental, and regulatory

expectations. Nebraska plans to leverage its existing networks among local governments, public power utilities, and regional economic development organizations to help facilitate timely and constructive engagement.

Nebraska is partnering with the Advanced Nuclear Coalition (ANC), a non-profit organization with the charter to educate, promote, and advocate for new nuclear technology. ANC has been working since 2021 to provide education and information outreach regarding advanced nuclear and the entire nuclear lifecycle in cooperation with federal and state entities, utilities, higher education institutions, members of the nuclear industry. To date, these efforts have been undertaken without federal financial support. Financial support for stakeholder engagement should be included as part of a federal commitment to nuclear lifecycle management.

The state anticipates that cooperation mechanisms may include formal advisory groups, technical briefings, structured public-comment processes, and joint state-federal outreach initiatives tailored to the specific functions proposed for the Innovation Campus. Nebraska will continue refining this strategy, with the goal of fostering informed participation, addressing concerns proactively, and ensuring that stakeholder input meaningfully informs planning and decision-making.

Nebraska has a strong history of regional collaboration, including application for the Nebraska-Iowa-Missouri Clean Hydrogen Hub. Continued partnerships with neighboring states will support the innovation campus by strengthening transportation corridors, such as roadway, rail and water access, and expanding transmission infrastructure. These proven collaborations benefit all parties and will remain central to the innovation campus's development.

**10. HLW Management, Treatment, Storage and Disposal:** How would your state implement the management of material requiring long term management?

**Response:** NPPD and OPPD have a strong record of safely managing used fuel with trusted partners like Orano USA. Nebraska is committed to ensuring that all activities associated with the Innovation Campus meet the highest standards of environmental protection, radiological safety, and long-term stewardship. The state will maintain a rigorous permitting and oversight framework, leveraging existing programs at the NDWEE and other relevant agencies to ensure full compliance with federal and state regulations.

Nebraska's regulatory approach emphasizes transparency, data-driven decision-making, and early coordination with federal partners, including DOE and the NRC. The state will require operators to implement robust environmental monitoring, maintain comprehensive safety programs, and demonstrate adherence to all applicable safeguards and material-control requirements. Nebraska's longstanding oversight of nuclear and non-nuclear industrial facilities provides a strong foundation for evaluating and enforcing compliance with environmental and radiological standards.

For more complex functions such as enrichment, reprocessing, and waste handling, Nebraska will work closely with industry partners and federal regulators to ensure that risk assessments, emergency preparedness planning, and long-term stewardship measures are developed and implemented safely and effectively. The state recognizes the importance of public confidence

and will prioritize timely communication of safety and environmental information to local communities, Tribal nations, and other stakeholders.

Nebraska remains committed to protecting its natural resources and ensuring that all Innovation Campus activities are conducted with careful consideration of environmental quality, worker safety, and long-term sustainability.

**11. State-Specific Limitations:** What state-specific limitations- regulatory, political, environmental, geologic, or community-based- might hinder the development of any of the Nuclear Lifecycle Innovation Campus functions outlined in Section II of this RFI?

**Response:** Nebraska is committed to ensuring that all materials requiring long-term management at the Innovation Campus are handled safely, transparently, and in full compliance with federal and state requirements. The state expects operators to adhere to established DOE and NRC guidelines governing the treatment, storage, and disposition of high-level waste and other long-lived materials. Each operating entity will be required to develop comprehensive material-management plans that address inventory controls, safety measures, emergency preparedness, and responsibilities across the complete lifecycle.

Because of the Ogallala Aquifer's critical importance to Nebraska's agricultural economy, communities, and natural resources, the state will apply heightened scrutiny to any activity that may involve subsurface operations or long-term waste storage. Nebraska will require robust scientific evaluation, independent technical review, and transparent public communication to ensure that all decisions reflect the best available geologic and environmental data. The protection of the Ogallala Aquifer will remain a central factor in all siting and permitting decisions related to long-term material management.

Financial assurance will be a core component of Nebraska's oversight approach. Operators will be required to demonstrate adequate resources for long-term stewardship, decommissioning, and environmental monitoring, consistent with federal models for ensuring long-term safety and accountability. Nebraska anticipates ongoing coordination with DOE to clarify federal roles and national strategies for high-level waste, as well as to identify pathways for materials not intended for permanent storage within the state.

Throughout this process, Nebraska will prioritize environmental protection, public confidence, and long-term stewardship, working closely with DOE, federal regulators, local communities, Tribal nations, and other stakeholders to ensure that all high-level waste activities are conducted with the utmost care and transparency.

**12. Environmental and Safety Stewardship:** What strategies will your state employ to ensure environmental stewardship and radiological safety across all Nuclear Lifecycle Innovation Campus functions, particularly for activities such as enrichment, reprocessing, and waste disposal?

**Response:** Nebraska recognizes several state-specific factors that may pose limitations for certain functions of an Innovation Campus. The most significant consideration involves the Ogallala Aquifer. Because the Aquifer is vital to Nebraska's agricultural economy, communities, and natural resources, any activities involving subsurface operations, particularly geologic

disposal, would require extensive scientific evaluation, transparent communication, and careful regulatory review. Even where technical analyses indicate minimal risk, public perception of potential impacts may influence the feasibility and pace of development.

In addition, Nebraska acknowledges that workforce availability may limit how quickly specialized nuclear or fuel-cycle activities can be scaled. Although the state benefits from strong academic and technical training institutions, growth in advanced nuclear operations will require sustained coordination among state, federal, and industry partners which is why in 2023 the Nebraska Legislature passed LB 568 to establish a working group of representatives from the legislature, state and community colleges system, as well as nuclear and hydrogen industry to create a pipeline of skilled workers.

Finally, Nebraska understands through experience that aligning diverse stakeholders, including local communities, Tribal nations, environmental organizations, and public power utilities, will require time, clarity about federal roles, and sustained engagement. These factors may affect the sequencing or implementation of certain highly sensitive functions within the Innovation Campus.

**13. Transportation Corridors:** What intra-state and interstate transportation corridor challenges exist in your state for the secure movement of nuclear materials?

**Response:** Nebraska serves as a major transportation corridor. which includes interstate transportation (I-80), auxiliary highways and expressways, and a robust rail infrastructure. Being centrally located, Nebraska can serve as a central node for national nuclear material transport.

Upgrades to local roadways and supporting transportation infrastructure may be necessary to accommodate the secure movement of nuclear materials and equipment and will be coordinated with the Nebraska Department of Transportation

Nebraska benefits from extensive rail infrastructure. Two of the four Class I railroads have extensive infrastructure in Nebraska. Union Pacific's operations are centered on the world's largest rail classification yard in North Platte. (Bailey Yard) Union Pacific's coal corridor passes through Nebraska creating the opportunity for redundant rail access to sites in Nebraska. The state's rail network includes high-capacity, triple-tracked main lines that provide robust freight mobility across Nebraska.

**14. Proposed Agreement Framework:** What type of agreement should be employed to support the development and operation of the Nuclear Lifecycle Innovation Campus - such as cooperative agreements, contracts, financial assistance mechanisms, loan guarantees, or voluntary agreements under the DPA?

**Response:** Nebraska is open to a range of agreement structures that will support the development and long-term operation of an Innovation Campus. Financial assistance in the form of loan guarantees and grants should be an integral part of the development of an Innovation Campus. The appropriate framework will depend on the scope of federal involvement, the distribution of responsibilities between federal and non-federal partners, and the specific functions that DOE intends to pursue at the site.

The state is prepared to consider cooperative agreements, contracts, financial assistance mechanisms, loan guarantees, or voluntary agreements under the Defense Production Act. Nebraska believes that a cooperative agreement or a structured partnership model may provide the most flexibility for early planning activities, shared responsibilities, and coordinated investment. As project details become clearer, additional mechanisms such as loan guarantees or targeted financial assistance could help support private sector participation and long-term infrastructure development.

Nebraska is the only all-public power state. Nebraska's public power utilities deliver low rates, responsibly invest in infrastructure to keep service and reliability high, and prioritize customers. Governed locally by elected boards and council members ensuring decisions carefully reflect local needs and impacts. Public/Private partnerships will be a keystone to the development of an Innovation Campus.

Nebraska welcomes continued dialogue with DOE to determine which agreement type or combination of instruments will best support cost sharing, risk management, and the long-term sustainability of the Innovation Campus. The state is committed to working collaboratively to establish a framework that provides clarity, protects public interests, and enables successful project execution.

**15. Technology and Industry Partnerships:** What experience, interest, or concern does your state have regarding specific technologies for the Nuclear Lifecycle Innovation Campus?

**Response:** Nebraska has longstanding experience with nuclear power generation, research reactor operations, (Hallam Sodium Graphite Demonstration Reactor) and in situ uranium recovery, (Cameco's Crow Butte facility) which provides the state with a practical understanding of nuclear technologies and their associated regulatory and environmental considerations.

Used nuclear fuel is safely stored at both NPPD's Cooper Nuclear Station and OPPD's Fort Calhoun Station, and these activities have helped Nebraska develop familiarity with material handling, long term storage practices, and decommissioning requirements. Additionally, NPPD and OPPD have partnered with an industry partner to investigate the innovative potential for the recovery of value from used nuclear fuel and high level waste by extracting value from the emanating decay energy.

Long-time partnerships with Nebraska utilities and the University of Nebraska can be expanded further to support innovation. The University of Nebraska system, heavily involved through the National Strategic Research Institute (NSRI), focuses on nuclear detection, forensics, defense, and medical countermeasures. Key projects include developing radiation-protective drugs, advanced nuclear sensors for warfighters, and analyzing national nuclear policy, backed by a \$500 million Department of Defense contract.

The Nebraska Center for Energy Sciences Research (NCESR) researches materials for advanced nuclear energy, including high-temperature resistant metals, leveraging unique expertise in bio-inspired surface engineering.

University of Nebraska Medical Center (UNMC) researchers have received tens of millions in funding, particularly for developing therapeutics to treat Acute Radiation Syndrome (ARS) in military personnel and civilians.

The state will work with a broad range of technology developers and industry partners who can support the objectives of an Innovation Campus. Nebraska will foster new and continued engagement with companies involved in advanced reactors, fuel cycle services, and nuclear technology manufacturing. The state also recognizes that certain emerging technologies may require additional research, specialized expertise, or enhanced regulatory coordination, and Nebraska is prepared to work collaboratively with industry partners, DOE and federal regulators to ensure that all proposed technologies meet safety, security, and environmental expectations.

Nebraska will continue to explore new partnerships as innovation evolves in the nuclear field. . The state intends to remain flexible and responsive to evolving industry needs while maintaining a strong focus on responsible stewardship and public confidence.

**16. Secondary Waste Management:** How would your state assist in managing, storing, and disposing of secondary waste streams generated by Nuclear Lifecycle Innovation Campus activities?

**Response:** Nebraska expects that organizations operating within the Innovation Campus will be responsible for the safe handling, storage, and disposal of secondary waste streams generated by their activities. A comprehensive plan to encompass all waste generated on-site will be developed with the organizations responsible and the State. Additionally, should reprocessing be incorporated into campus operations, the operator will be obligated to provide on-site storage of used fuel as a necessary component of safe and compliant reprocessing activities. These responsibilities will include development of site-specific waste management plans, implementation of appropriate safeguards and controls, and adherence to all state and federal requirements for environmental protection and radiological safety.

The NDWEE will conduct permitting and compliance oversight to ensure that secondary waste management practices meet applicable standards. This will include review of waste characterization, monitoring programs, and long-term management strategies. Given the importance of the Ogallala Aquifer, Nebraska will apply careful scrutiny to any waste streams that may have potential interactions with groundwater systems and will require operators to demonstrate that protective measures are in place to prevent environmental impacts.

Nebraska anticipates that coordination with DOE may be necessary for certain specialized or sensitive waste streams, particularly those that require federal expertise or access to national disposal pathways.

**17. Government Furnished Data/Technology/Equipment:** What government-furnished data, technology, or equipment (e.g., reactor designs, reprocessing technologies, safeguards systems) would your state require to support the Nuclear Lifecycle Innovation Campus functions?

**Response:** Nebraska anticipates that operators within the Innovation Campus will be responsible for securing the technologies, equipment, and systems necessary for safe and

effective operations in coordination with the Innovation Campus management. However, the state recognizes that certain advanced nuclear functions may benefit from federal support, particularly in areas where specialized technologies or safeguards systems are not readily available through commercial channels. Federal support will be an important aspect of ongoing development in the management of the back end of the fuel cycle to reduce the amount of waste required to go into a permanent repository.

Access to government furnished data, including technical analyses, safety evaluations, and geologic information, will be valuable during early planning and site-specific assessments. Nebraska also sees benefit in federal assistance related to materials control and accounting systems, nonproliferation safeguards, and specialized monitoring technologies that support high reliability operations across the fuel cycle.

Collaboration with DOE national laboratories may provide additional expertise in areas such as reactor technology development, waste form characterization, transportation security, and long-term material stewardship. Nebraska is prepared to work closely with DOE to determine which federal resources can most effectively support the safe planning, development, and operation of the Innovation Campus.

The state welcomes ongoing dialogue with DOE to clarify the availability of government furnished technology and to ensure that federal support is aligned with the needs of campus operators and the requirements of federal regulations.

**18. International Export Capabilities:** How will your state support the development of infrastructure and policies to support international exports of advanced reactors, nuclear fuels, isotopes, and technologies from the Nuclear Lifecycle Innovation Campus?

**Response:** Nebraska is prepared to support the development of the infrastructure and policies needed to enable international exports of advanced reactors, nuclear fuels, isotopes, and related technologies that may be produced within an Innovation Campus. The state offers a favorable business environment, established engineering and construction capabilities, and supportive economic development networks that can help foster the industrial base required for export-oriented activities.

Nebraska recognizes that any export of nuclear technologies or materials must be conducted within a clearly defined federal framework. Federal leadership will be essential in areas such as export controls, nonproliferation requirements, and international licensing processes. The state intends to coordinate closely with DOE and other federal agencies to ensure that Nebraska's role aligns with national policies and obligations.

As the functional scope of the Innovation Campus becomes more defined, Nebraska will evaluate what additional state level actions may be appropriate to support export related activities. This may include partnering with educational institutions, public power entities, and industry to strengthen workforce readiness and industrial capacity. Nebraska is committed to creating a stable regulatory and economic environment that supports responsible participation in global nuclear technology markets.

**19. Constraints and Inhibiting Factors:** What potential barriers or impediments could affect the successful siting and operation of a Nuclear Lifecycle Innovation Campus in your state, considering all nuclear functions?

**Response:** Nebraska recognizes several factors that could influence the successful siting and long-term operation of an Innovation Campus. The most significant constraint involves public concern regarding potential impacts to the groundwater quality and availability. Because groundwater is essential to Nebraska's agricultural economy, drinking water supplies, and natural resources, any activity involving subsurface operations or long-term material management will require rigorous scientific evaluation, consistent regulatory oversight, and early engagement with communities and Tribal nations. Even in cases where technical assessments indicate minimal risk, public perception may influence the feasibility or timing of certain campus functions.

Nebraska also acknowledges that the scale and complexity of an Innovation Campus will require coordinated planning among federal partners, state agencies, local governments, public power utilities, private industry, and environmental organizations. Aligning expectations across such a diverse stakeholder group may present challenges and could affect project timelines, especially for functions that involve sensitive materials or multistage federal approvals.

Workforce limitations may also present a constraint, particularly for highly specialized fuel cycle or advanced nuclear technologies. While Nebraska benefits from strong academic institutions and workforce training systems, developing and sustaining the level of expertise needed for complex nuclear operations will require continued collaboration with DOE and industry.

Finally, certain functions that involve geological disposal, reprocessing, or other sensitive activities may face higher levels of regulatory scrutiny, public interest, or siting constraints. Nebraska is committed to working with DOE to identify which elements of the Innovation Campus are most compatible with the state's environmental, regulatory, and stakeholder landscape.

**20. Unaddressed Considerations:** What additional issues should DOE consider in implementing a successful Nuclear Lifecycle Innovation Campus in your state?

**Response:** Nebraska encourages DOE to consider several additional factors that may support the successful development and long-term implementation of an Innovation Campus within the state. First, Nebraska would benefit from greater clarity regarding federal roles, responsibilities, and long-term commitments across the full lifecycle of the campus. This includes federal expectations for oversight, technical support, transportation planning, and long-term material management. Clear guidance in these areas will help the state plan effectively and engage stakeholders with consistent and reliable information.

Second, Nebraska notes the importance of strong federal communication and coordinated public outreach. Given the sensitivity surrounding certain nuclear fuel cycle activities and the significance of the Ogallala Aquifer to the state, effective communication strategies will be essential to building and maintaining public confidence. Collaboration between DOE, state agencies, local communities, and Tribal nations will be critical to ensuring transparent and balanced information sharing.

Third, Nebraska believes that access to federal research capabilities, including support from national laboratories and technical experts, will be important for site evaluation, technology assessment, and long-term stewardship planning. These resources can help ensure that decisions are informed by the best available science and that operators have access to the expertise needed for complex nuclear functions.

Finally, Nebraska encourages DOE to consider how federal financial tools, regulatory frameworks, and partnership models can help reduce early-stage risks and support long term sustainability. Clear federal guidance and stable policy frameworks will help Nebraska, local partners, and private industry plan investments and commitments with confidence.

21. **Additional State Information:** Please provide any additional information about your state's capabilities, policies, or prior experience with nuclear or related projects (e.g., energy, defense, industrial development) that supports its suitability to host a Nuclear Lifecycle Innovation Campus.

**Response:** Nebraska stands out as the nation's only state served entirely by public power, meaning every electric utility is community-owned, nonprofit, and focused on providing reliable, affordable energy rather than generating profits for shareholders. This unique model ensures that decisions about energy generation, infrastructure, and rates are made locally, with accountability to the customers who depend on the service. Nebraska's public power system has long been recognized for its commitment to reinvesting in communities, maintaining strong infrastructure, and supporting economic growth across the state.

Nuclear activity in Nebraska began in 1958 with the 75-Megawatt Hallam sodium-graphite reactor, developed through a partnership between Consumers Public Power District and the U.S. Atomic Energy Commission. The reactor became the world's first commercial sodium-graphite plant in 1963 but was shut down and decommissioned after 14 months due to technical issues. Nuclear development continued with the construction of two additional plants: a 500-Megawatt pressurized water reactor that operated from 1973 until its decommissioning in 2016, and Cooper Nuclear Station, an 800-Megawatt boiling water reactor that began operation in 1974 and is licensed through 2034, with a 20-year extension under review to allow operation through 2054.

A research reactor was built at the Omaha Veterans Affairs Medical Center in January 1959 as part of Eisenhower's "Atoms for Peace" program. It operated as a national laboratory until 1965 and was permanently shut down in 2001.

The University of Nebraska offers a diverse set of capabilities that would strengthen an Innovation Campus. Its nationally recognized biomedical research enterprise, drug discovery and development expertise, and direct support of federal radiation countermeasure programs, including efforts related to radioprotectants, demonstrate the University's readiness to integrate immediately into Innovation Campus activities. The University also maintains robust capabilities in nuclear energy, encompassing workforce development, applied research, and partnerships with leading nuclear industry organizations. Ongoing engagements include collaborative work with Orano on nuclear fuel disposition and with an SMR developer focused on meeting the emerging power requirements of data centers.

**22. Financial responsibility, Cost Sharing, and Assurances:** Describe how your state would approach cost-sharing and risk allocation for the development, operation, and closure of a Nuclear Lifecycle Innovation Campus.

**Response:** Nebraska has not yet established a detailed partnership structure for cost sharing related to the development and long-term operation of an Innovation Campus. The state anticipates that federal leadership will be essential in defining an overall framework for financial responsibility, risk allocation, and long-term stewardship commitments, particularly for functions involving sensitive nuclear materials or long-term environmental obligations.

At this stage, Nebraska does not expect to rely on significant direct taxpayer funding for the development of the campus. However, the state may consider targeted incentives or limited financial tools that support private investment and encourage participation from qualified industry partners. Nebraska intends to evaluate these options carefully to ensure that any state level participation protects public interests and aligns with long term fiscal responsibility.

Nebraska also anticipates that private operators will bear primary responsibility for the costs associated with facility construction, operations, decommissioning, and long-term environmental monitoring. The state supports financial assurance mechanisms that ensure adequate funding is available throughout the entire lifecycle of each facility. This may include requirements modeled on existing decommissioning trust fund structures or similar federal approaches that guarantee long term oversight and environmental protection.

While the ultimate goal of the RFI is to secure a permanent repository for nuclear waste streams to address the federal obligation, a major component of the process is to reduce the volume of waste through recycling of used fuel. There is an expectation of support from DOE to be part of the funding scheme. Loan guarantees, grants and direct funding should all be considered to reach the end goal of the RFI.

Nebraska welcomes continued dialogue with DOE to develop a clear and predictable cost sharing framework that supports early project development, encourages private sector participation, and ensures that long term responsibilities are met without imposing undue burdens on state resources or taxpayers.

**23. Revenue Sources and Cost-Recovery Approaches:** What approaches would your state consider to ensure that beneficiaries of the Nuclear Lifecycle Innovation Campus (for example, reactor operators, fuel cycle companies, data center operators, utilities) contribute appropriately to the costs of long-term waste management, decommissioning, and environmental monitoring?

**Response:** Nebraska intends to explore revenue and cost recovery approaches that ensure the entities benefiting from the Innovation Campus bear appropriate responsibility for long term waste management, decommissioning, environmental monitoring, and other lifecycle obligations. The state does not expect these responsibilities to fall on solely on Nebraska taxpayers and will prioritize mechanisms that appropriately assign costs to operators and commercial and public beneficiaries

Nebraska views the NRC's decommissioning trust fund model as an effective example of how long-term obligations can be funded in a predictable and reliable manner. Similar approaches, including dedicated financial assurance instruments, capitalized trust funds, or operator funded long term stewardship accounts, may be applied to campus operations. These tools can help ensure that adequate resources are available for post operational oversight and environmental protection without requiring future state appropriations.

The state will consider additional cost recovery mechanisms as campus functions are better defined. These may include fees or assessments on participating entities that reflect the scale and nature of their activities, or other structures that allocate costs based on proportional benefit. Nebraska intends to work closely with DOE to align cost recovery expectations with federal requirements and to ensure that all obligations are clearly assigned, durable over time, and financially sustainable.

Nebraska remains committed to supporting a responsible and fiscally sound structure that ensures long term stewardship while fostering private sector participation and innovation.