



UNIVERSITY OF WYOMING

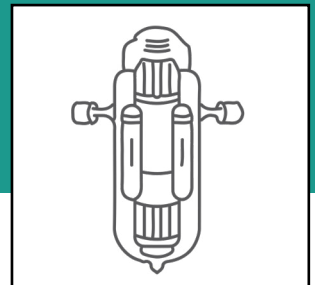
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**An overview of the regulatory
framework for nuclear microreactor
applications in Wyoming**



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NUCLEAR ENERGY RESEARCH CENTER WHITE PAPERS

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SYNOPSIS

Constructing and operating any nuclear generation facility is necessarily heavily regulated at the federal level under the provisions of the Atomic Energy Act of 1954 (“AEA”). The Nuclear Regulatory Commission (“NRC”) is primarily responsible for licensing nuclear facilities, including microreactors. See 42 U.S.C. § 2131. The NRC has two distinct frameworks for licensing nuclear power plants. See 10 C.F.R. § 50 (2022) (establishing a two-step process); and 10 C.F.R. § 52 (2022) (establishing a combined process). The combined licensing process was created by the NRC in 1989 “to improve regulatory efficiency and add greater predictability to the process.” See *Backgrounder on Nuclear Power Plant Licensing Process*, UNITED STATES NUCLEAR REGULATORY COMMISSION (June 7, 2021), <https://www.nrc.gov/reading-rm/doc-collections/fact-sheets/licensing-process-fs.html>. This combined process can provide additional regulatory advantages through the issuance of early site permits and standard design certifications. Current regulatory processes may be overly burdensome and less clear as applied to microreactors. See Denise Owusu et al., *REGULATORY AND LICENSING STRATEGY FOR MICROREACTOR TECHNOLOGY 2*, IDAHO NATIONAL LABORATORY (2018). Accordingly, the NRC is currently undertaking rulemaking to develop new regulations which would streamline licensing of advanced reactors. 85 FR 71002 (November 6, 2020).

Wyoming may be well-suited for the siting of nuclear facilities, including microreactors, due to its open spaces and its largely favorable state and local regulatory environment. Under state law, nuclear projects may require approval from the Industrial Siting Council approval and could be subject to county and city zoning laws. Accordingly, local buy-in is a critical aspect for the success of any nuclear facility project.

REGULATORY FRAMEWORK FOR NUCLEAR MICROREACTOR SITING IN WYOMING

A. Nuclear Regulatory Commission Jurisdiction Overview

The Nuclear Regulatory Commission (“NRC”) is primarily responsible for licensing and siting nuclear facilities.¹ See 42 U.S.C. § 2131. It was created by Congress in 1974 “to ensure the safe use of radioactive materials for beneficial civilian purposes while protecting people and the environment” and it “regulates commercial nuclear power plants and other uses of nuclear materials . . . through licensing inspection, and enforcement of its requirements.” *About NRC*, UNITED STATES NUCLEAR REGULATORY COMMISSION (Jan. 25, 2022), <https://www.nrc.gov/about-nrc.html>; see also *Energy Reorganization Act of 1974*, Pub. L. No. 93-438, 88 Stat. 1233 (creating the NRC).

The Atomic Energy Act of 1954 (the “AEA”) prohibits, with limited exceptions, operation of a nuclear “utilization or production facility” without a license from the NRC. See 42 U.S.C. § 2131. A utilization facility is defined as “any equipment or device, except an atomic weapon, determined by rule of the [NRC] to be capable of making use of special nuclear material in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public, or peculiarly adapted for making use of atomic energy in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public” or “any important component part especially designed for such equipment or device as determined by the [NRC].” 42 U.S.C. § 2014(cc). A production facility is either “any equipment or device determined by rule of the [NRC] to be capable of the production of special nuclear material in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public” or “any important component part especially designed for such equipment or device as determined by the [NRC].” *Id.* § 2014(v). Based on further NRC clarification, most nuclear power generation plants (including microreactors) are considered “utilization facilities,” while facilities that manufacture nuclear material would typically be “production facilities.” See 10 C.F.R. § 50.2.

¹The Environmental Protection Agency and Department of Energy also have regulatory authority over aspects of nuclear energy, including the development of environmental radiation standards and promotion of nuclear power. See *Governing Legislation*, UNITED STATES NUCLEAR REGULATORY COMMISSION (Sep. 10, 2021), <https://www.nrc.gov/about-nrc/governing-laws.html>; See 42 U.S.C. § 2022.

B. Licensing Nuclear Energy Facilities

The NRC has two distinct frameworks for licensing nuclear power plants. See 10 C.F.R. § 50 (2022) (establishing a two-step process); 10 C.F.R. § 52 (2022) (establishing a combined process). The combined licensing process was created by the NRC in 1989 “to improve regulatory efficiency and add greater predictability to the process.” *Backgrounder on Nuclear Power Plant Licensing Process*, UNITED STATES NUCLEAR REGULATORY COMMISSION (June 7, 2021), <https://www.nrc.gov/reading-rm/doc-collections/fact-sheets/licensing-process-fs.html>. The NRC is currently developing new requirements for the licensing and regulation of advanced reactors.

i) The Two-Step Licensing Process

Under the older two-step process and unless granted an exemption, an applicant must separately obtain both a construction permit and an operating license in order to operate a nuclear facility. See 10 C.F.R. § 50.10(b)-(c).²

The first step in the two-step process is to obtain a construction permit. See 10 C.F.R. § 50.23. “Construction” activities that require a construction permit include “the driving of piles, subsurface preparation, placement of backfill, concrete, or permanent retaining walls within an excavation, installation of foundations, or in-place assembly, erection, fabrication, or testing” which are for the purposes further defined in § 10 C.F.R. § 50.10(a)(1) but do not include those activities detailed in § 10 C.F.R. § 50.10(a)(2). As part of the process, all applicants must provide a “preliminary safety analysis report” that addresses the safety of both the proposed site and facility, including the facility’s preliminary design. See 10 C.F.R. § 50.34(a). Applicants must also submit a separate environmental report which addresses potential environmental impacts and which is used to aid the NRC in the preparation of an environmental impact statement under the National Environmental Policy Act. See 10 C.F.R. §§ 51.50, 51.14, 51.45; see also 42 U.S.C. § 4332. Opportunities for public notice and participation are required. Per 10 C.F.R. § 50.39, all application-related documents must be made available for public inspection, and, a public hearing with notice must be held on each construction permit application prior to issuance. See 10 C.F.R. § 50.58(b)(1). Once issued, construction permits expire if construction is not completed by the latest date stated in the application, unless an applicant shows good cause for an extension. See 10 C.F.R. § 50.55(a)-(b).

The second step requires applicants to further build on their construction permit application by applying for one of two classes of operating licenses.³ See 10 C.F.R. § 50.20. As part of the operating license process, applicants must submit a “final safety analysis report” expanding on the information provided in the preliminary report. See 10 C.F.R. § 50.34(b). In addition, microreactors are likely subject to additional safety feature analysis, testing and demonstration requirements which are required in applications for facilities “which differ significantly from light-water reactor designs that were licensed before 1997.” 10 C.F.R. § 50.43(e). Applicants also must submit a post-construction.

² The NRC may grant an exemption to any applicant if the exemption is authorized by law, will not unduly risk public health and safety or common defense and security, and at least one listed “special circumstance” listed under 10 C.F.R. § 50.12(a)(2) is present. See id. 10 C.F.R. § 50.12(a). A temporary exemption may be granted prior to a construction permit if the NRC finds that an exemption is proper under a four-part balancing test that considers environmental concerns, public needs, and viable alternatives. See id. 10 C.F.R. § 50.12(b).

³ “Class 104” operating licenses are issued for facilities engaged in research and medical applications of nuclear technology, while “class 103” operating licenses are required to operate commercial and industrial nuclear facilities. See 10 C.F.R. §§ 50.21–22. environmental report that updates the earlier report to the extent the information has changed or new information has become available. See 10 C.F.R. § 51.53(b). Public hearings are permitted, but are not required for the issuance of an operating license. See 10 C.F.R. § 50.58(b)(2).

ii) The Combined Licensing Process

The newer § 52 licensing process was created and provides optional early siting and design procedures to expedite the licensing process because projects were being completed over initial budgets, outside of their initial timelines or cancelled altogether. See Denise Owusu et al., REGULATORY AND LICENSING STRATEGY FOR MICROREACTOR TECHNOLOGY 2, IDAHO NATIONAL LABORATORY (2018).

Under this process, applicants can obtain early nuclear power site approval by applying for an early site permit. See <https://www.nrc.gov/reactors/new-reactors/large-lwr/esp.html>. An early site permit must specify site and design characteristics and will detail whether the applicant is granted a limited work authorization. See 10 C.F.R. § 52.24(b)-(c). Once issued, these permits are valid for ten to twenty years, but may be extended if an application for a construction permit or combined license is filed before the expiration date. See §§ 52.26(a)-(b), 52.91. As part of the early site permit process, applicants must submit a site safety analysis report addressing a site's safety in light of its surroundings and inherent characteristics, an environmental report addressing the potential site specific environmental impacts and the NRC must issue an environmental impact statement and provide for public notice and hearing. See 10 C.F.R. §§ 52.17.51.50(b), 52.18, 52.21.

An applicant may also obtain early approval of a facility's design with a standard design certification. See 10 C.F.R. §§ 52.41-63; Owusu et al., *supra* at 5. An application for a standard design certification "should provide an essentially complete nuclear plant design, with the exception of some site-specific design features." *Backgrounder on Nuclear Power Plant Licensing Process*, UNITED STATES REGULATORY COMMISSION (June 7, 2021), <https://www.nrc.gov/reading-rm/doc-collections/fact-sheets/licensing-process-fs.html>. The applicant must demonstrate and provide assurances in the application that the applicant will be able to adhere to the proposed design. See 10 C.F.R. § 52.47. The standard design certification application must also include a final safety analysis report. See 10 C.F.R. § 52.47(a). While a hearing is not required, the NRC must provide an opportunity for public comment before issuing a standard design certification. See 10 C.F.R. § 52.51(a). Once issued, the duration of a standard design certification is 15 years, but may be extended if an application for an operating license or a combined license is filed before the expiration and references the certification. See 10 C.F.R. § 52.55(a)-(b).

A combined license allows applicants to obtain a construction permit and an operating license simultaneously. See 10 C.F.R. § 52.71-110; Owusu et al., *supra* at 4-5. Most of the requirements are the same as those for the two-step process; however, a few are unique. See 10 C.F.R. § 52.77-80. Significantly, the applicant must provide reasonable assurances that the final design will conform to the design the NRC approves. See 10 C.F.R. § 52.79(a)(4)(iii). Applicants may reference an early site permit or standard design certification to ease their requirements. See 10 C.F.R. § 52.79(b), (d). In the absence of an early site permit or standard design certification, applicants must generally adhere to the requirements of the two-step process. See 10 C.F.R. § 52.79; § 50; *Backgrounder on Nuclear Power Plant Licensing Process, supra*. Prior to issuance of the combined license, a public hearing with notice is required. See 10 C.F.R. § 52.85.

Combined licenses are issued by the NRC pursuant to the provisions of 10 C.F.R. § 52.97(a). A combined license may contain any terms and conditions deemed appropriate by the NRC, and shall identify inspections, tests, analyses, and acceptance criteria ("ITAAC") needed to ensure that the facility will be operated in accordance with the combined license. See 10 C.F.R. § 52.97(b)-(c). After issuance, a licensee must notify the NRC of the date it intends to first load fuel with at least 270 days' notice, and the NRC must provide at least 180 days' public notice of the same in the Federal Register. See 10 C.F.R. § 52.103(a). Members of the public may request a hearing before the loading of fuel, but can only prevent operation of the plant if the hearing results in a determination that the plant will not meet the acceptance criteria. See *id.* In any case, the licensee may not operate the facility until the NRC finds that the acceptance criteria listed in the license are met. See 10 C.F.R. § 52.103(g). The duration of a combined license is, at most, forty years from the date such a finding is made. See 10 C.F.R. § 52.104.

iii) NRC Rulemaking for the licensing and regulation of advanced reactors

The NRC is currently undergoing rulemaking to develop new regulations for the licensing and regulation of advanced reactors. The new rule takes a “technology-inclusive” approach and “includes the appropriate use of risk-informed and performance-based techniques, to provide the necessary flexibility for licensing and regulating a variety of advanced nuclear reactor technologies and designs.” Proposed Rule, Risk-Informed, Technology-Inclusive Regulatory Framework for Advanced Reactors, 85 FR 71002 (Nov. 6, 2020). The initial comment period for the proposed rule closed on November 5, 2021 but was reopened for comment period on November 8, 2021. The deadline for comments were extended until August 31, 2022. 86 FR 61718

C. Other Federal Siting Requirements and Considerations

i) Nuclear Regulatory Commission Site Evaluation

The NRC has issued “Reactor Site Criteria” to guide its decisions in the siting of nuclear reactors. See 10 C.F.R. § 100.1(a) (2022). In determining site suitability, the NRC evaluates population density and use characteristics, the likelihood of potential accidents and the harm that would result from accidents and the physical characteristics of the site, including seismology, meteorology, geology and hydrology. See 10 C.F.R. § 100.20, 100.21, 100.23. Of particular note, sites must have a “population center distance” of at least one and one-third times the distance from the reactor to the edge of the low population zone. 10 C.F.R. § 100.21(b); see also § 100.3 (defining “population center distance” as “the distance from the reactor to the nearest boundary of a densely populated center containing more than 25,000 residents”). Wyoming may be especially well-suited to meet these population requirements due to its population being the smallest of all states and its low population density. See 10 C.F.R. § 100.21(a)-(b); *Historical Population Density Data (1910-2020)*, United States Census Bureau (Apr. 26, 2021), <https://www.census.gov/data/tables/time-series/dec/density-data-text.html>. Only four of Wyoming’s municipalities have a population of more than 25,000 as of 2022. See *10 Largest Cities in Wyoming*, <https://worldpopulationreview.com/states/cities/wyoming>

ii) The National Environmental Policy Act (NEPA)

The National Environmental Policy Act (NEPA) requires any federal agency to prepare an Environmental Impact Statement (“EIS”) for federal actions that “significantly affect[] the quality of the human environment.” See 42 U.S.C. § 4332(2)(C). Such actions include an agency’s decision whether to issue or deny a permit or other site specific authorization. An EIS requires an agency to take a “hard look” to address a proposed action’s potential environmental impacts for the proposed action and potential alternatives to the action; in particular, the EIS must evaluate how the short-term uses of the environment relates to long-term environmental quality and productivity, and any irreversible uses of resources that would be made by the proposed action and alternatives. See *id.*

The NRC licensing process incorporates an extensive regulatory scheme related to EIS requirements. See 10 C.F.R. § 51. Certain actions automatically require an environmental impact statement, including the issuance of construction permits, ESPs, and combined licenses. See 10 C.F.R. § 51.20(b)(1)-(2). Preparation of an EIS is assisted by the above-described environmental reports generated by applicants as part of the licensing process. See 10 C.F.R. § 51.14 (stating that environmental reports are submitted by applicants “in order to aid the [NRC] in complying with [the EIS requirements] of NEPA.”). If NRC determines that no EIS is needed, NRC rules permit any party to the proceeding to “take a position and offer evidence on the aspects of the proposed action within the scope of NEPA.” See 10 C.F.R. § 51.104. In addition to the NRC EIS requirements, any other federal agencies taking an action related to a nuclear microreactor project must also comply with the NEPA process. For example, a project seeking Department of Energy funding will likely require NEPA compliance. See <https://www.energy.gov/lpo/environmental-compliance>.

iii) Other Federal Environmental Laws

Federal environmental laws including the Clean Air Act, Clean Water Act, and Endangered Species Act may apply to the siting, licensure, and permitting of microreactor facilities. Although the NRC has primary responsibility for licensing nuclear facilities, any development will therefore involve consultation with other agencies including the United States Fish and Wildlife Service (USFWS), the Environmental Protection Agency, and state air and water regulatory agencies. 16 U.S.C. § 1536(c)(1). These laws could require

additional permits or exemptions or limit the places where new facilities could be developed. For instance, while the Clean Air Act no longer regulates radionuclides in facilities licensed by the NRC, other facilities including DOE facilities and microreactors integrated into industrial systems remain subject to EPA's national emissions standards for hazardous air pollutants. National Emission Standards for Radionuclides Emissions from Facilities Licensed by Nuclear Regulatory Commission, 60 Fed. Reg. 46206-01, 46208 to 46210 (Sept. 5, 1995); 10 C.F.R. §§ 61.90-.96. The existence of a threatened or endangered species could require the USFWS to conduct a biological assessment of impacts and could require project developers to undertake mitigation actions or seek an exemption prior to receiving a permit from the NRC. See *Endangered Species Act (ESA): The Exemption Process*, Congressional Research Service (2017), Corn, Cody & Wyatt

D. State of Wyoming Siting Requirements

Congress, within its constitutional limits, can preempt state law in three ways: by expressly stating its intent to do so, by legislating a field so heavily that there is no room for other law on a matter, or in a case when compliance with state and federal law is impossible. See *id.* See *Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm'n*, 461 U.S. 190, 203-04 (1983). The United States Supreme Court has stated that despite the Atomic Energy Act's comprehensive nature and considerable licensing and siting authority delegated to the NRC, it does not fully abrogate state authority over the siting of nuclear reactors on cost, need and reliability grounds. See *Pacific Gas*, 461 U.S. at 223. Wyoming has attempted to address potential preemption issues with its advanced nuclear reactor legislation, stating that the statutes "shall apply only to the extent that those provisions do not interfere with, contradict or duplicate any requirements" of the NRC. See Wyo. Stat. § 35-11-2101(e)(2022). Future amendments to Wyoming's industrial siting laws may be necessary to avoid preemption as the NRC revises its licensing regulations for advanced reactors.

i) Industrial Siting Council

In Wyoming, a permit from the Industrial Siting Council ("ISC") is required before constructing any "facility." *Id.* § 35-12-106(a). A "facility" is defined as "any industrial facility with an estimated construction cost of at least [\$96,900,000] . . ." which such number is to be adjusted by the ISC over time. See Wyo. Stat. Ann. § 35-12-102(a)(vii) (2022). While no regulations by the ISC directly state the current cost threshold for requiring a permit, the ISC's webpage provides that permits are required for "[f]acilities with an estimated construction cost of \$253,878,000 or more." *Industrial Siting Division*, WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY, <https://deq.wyoming.gov/industrial-siting-2/>. "The [ISC] reviews the socio-economic and environmental impacts of industrial facilities before issuing a permit for construction. Emphasis is placed upon social-economic impacts." *Siting Council*, WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY, <https://deq.wyoming.gov/industrial-siting-2/council/>. Under current rules, a microreactor would seemingly only require a permit from the ISC if it met the cost threshold. See *id.*; §§ 35-12-106(a), 35-12-102(a)(vii); *Industrial Siting Division*, *supra*.

Some facilities require a permit regardless of construction cost. See § 35-12-102(a)(vii). These include certain waste incineration or disposal facilities, facilities that dispose of hazardous wastes, commercial radioactive waste management facilities, and wind turbine and solar facilities. See *id.* "Commercial radioactive waste management facility" is defined as "any facility used or intended to be used to receive for disposal, storage, reprocessing or treatment, any amount of radioactive wastes *which are generated by any person other than the facility owner or operator, or which are generated at a location other than the location of the facility* . . ." Wyo. Stat. Ann. § 35-11-103(d)(v) (2022) (emphasis added). This definition appears to exclude nuclear power plants with onsite storage and would apply only to radioactive waste facilities accepting externally generated waste. See *Id.* The definition of "facility" was amended in both 2010 and 2020 to require all commercial wind and solar generation facilities to obtain an ISC permit regardless of cost. See 2010 Wyo. Sess. Laws 222 (amending the definition to include wind generation facilities); 2020 Wyo. Sess. Laws 331-32 (amending the definition to include solar generation facilities).

ii) House Bill 131, 2022 Legislative Session

In early 2022, Wyoming passed H.B. 131, 66th Leg., 2022 Budget Sess. (Wyo. 2022). The bill amends the requirements for authorization of onsite storage of high-level radioactive waste. See *Id.* A former version of the statute required that onsite storage be authorized on a case-by-case basis by the DEQ. See Wyo. Stat. Ann. § 35-11-1506(e) (2020). As amended, the statute now authorizes onsite storage without review if the

following requirements are met: 1) spent nuclear fuel is stored at the site of a nuclear power generation facility; 2) the facility is licensed by the NRC; 3) the operator submits a report detailing the jobs and taxes that the facility will create, and the benefits that nearby communities will receive; and 4) all documents the operator exchanges with the NRC are provided to the DEQ, the local government where the facility is located, and made available to the public. See Wyo. Stat. Ann. § 35-11-1506(e) (2022). This amendment lessens the regulatory hurdles for nuclear facilities to store waste before moving it to a permanent location. See *Id.*

The bill also contains provisions favorable to new nuclear technology. See Wyo. H.B. 131. It does this by substituting the term “small modular reactor” with “advanced nuclear reactor” and giving the latter term a broader definition. See *id.* The definition of “advanced nuclear reactor” includes any nuclear reactor “that is an improvement over nuclear reactors placed in service before January 1, 2021 and has a license issued by the [NRC].” Wyo. Stat. Ann. § 35-11-2101(d)(iii) (2022).

H.B. 131 provides numerous benefits to advanced nuclear reactors. For example, unlike most states, Wyoming taxes electricity generated from nuclear reactors. See Wyo. Stat. Ann. § 39-23-103 (2022). Wyo. Stat. Ann. § 39-23-105(c) exempts “advanced nuclear reactors” from the tax until 2035 and may continue to be exempt after that year if they generate at least 80% of their electricity with uranium mined in the United States. Wyoming also has laws designed to prevent the retirement of coal-fired generation plants. See Wyo. Stat. Ann. §§ 37-3-117-118, 37-2-134 (2022). These provisions are relevant in that they make retrofitting coal-fired plants with other technologies, including nuclear, more difficult by preventing utilities from recovering associated costs through their rates. See *id.* These laws, however, do not apply to utilities that retrofit coal-fired facilities with “advanced nuclear reactors.” See §§ 37-3-117(f), 37-2-134(a)(ii)(A). Microreactors would presumably be considered “advanced nuclear reactors,” enabling them to enjoy these favorable exemptions. See § 35-11-2101(d)(iii).

iii) Local Laws/Zoning

Each county’s board of county commissioners in Wyoming is given zoning powers and may regulate the location and use of buildings “[t]o promote the public health, safety, morals and general welfare of the county . . .” Wyo. Stat. Ann. § 18-5-201(a) (2022). County zoning authority is limited in that counties may only zone “in the unincorporated area of the county,” and no powers given to a county may limit the zoning authority of a city or town. See Wyo. Stat. § 18-5-201(a).⁴ Zoning at the county level may be particularly significant given the NRC’s siting requirements, which restrict the ability to site nuclear facilities near large populations. County zoning codes only apply to “the unincorporated area[s] of [counties],” which may be more likely to be proposed sites due to their lower population. See Wyo. Stat. § 18-5-201(a).

Wyoming’s cities and towns are also given zoning powers. See Wyo. Stat. Ann. § 15-1-601 (2022). The powers given to cities and towns are more specific than the general powers given to counties, allowing them to regulate building size, how much of a lot may be occupied, sizes of open spaces, population density, and building use. See *id.* Wyo. Stat. § 15-1-601(a)(i). In general, all regulations are to be made in accordance with a “comprehensive plan” and must pursue several objectives, including “promot[ing] the general health and welfare.” *Id.* § 15-1-601(d)(i)(C). Depending on the proposed location for projects, either county or city zoning regulations could apply.

⁴ County zoning regulations have played a significant role in the siting of energy projects in Wyoming in recent years. For example and in 2020, the Albany County Planning and Zoning Commission considered passing significant amendments to setback requirements to avoid the construction of a new wind facility in the county. See Camille Erickson, *Albany County Declines to Recommend Sweeping Wind Energy Regulations, For Now*, CASPER STAR TRIBUNE, https://trib.com/business/energy/albany-county-declines-to-recommend-sweeping-wind-energy-regulations-for-now/article_f5f054a2-b345-5aec-8597-03de62e383d8.html.

CONCLUSION

Siting a microreactor or other nuclear facility in Wyoming will implicate laws and regulations at the federal, state, and local levels. The federal licensure process is by far the most time consuming and burdensome. Because state and local law is preempted by NRC's regulation and issuance of a license to construct and operate, the state has little power to control or accelerate that process. See 42 U.S.C. §§ 2131-2142; § 50; § 52. This licensing process could create barriers to nuclear projects through its length and cost and may also create opportunities for legal challenges. While the NRC is undertaking rulemaking related to the licensure of advanced reactor technologies, it is currently unclear whether those efforts will improve compliance costs or delays.

Wyoming has recently passed new legislation to encourage siting of advanced reactor technologies. The combination of these efforts with its rural character may create a favorable environment for early deployment of microreactor technologies. Projects in Wyoming would have to comply with the provisions of the industrial siting act and any city or county zoning regulations that were not otherwise preempted by state or federal law.