

LFC Requester: _____

AGENCY BILL ANALYSIS

SECTION I: GENERAL INFORMATION

Check all that apply:

Original Amendment
 Correction Substitute

Date February 25, 2025
 Bill No: HM 36

Sponsor: Rep. Dixon and Rep. Brown **Agency Name and Code** EMNRD 521
Number: _____
Person Writing Samantha Kao
Short Title: Study of Nuclear Energy Benefits and Costs **Email** samantha.kao@emnrd.nm.gov
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SECTION II: FISCAL IMPACT

APPROPRIATION (dollars in thousands)

Appropriation		Recurring or Nonrecurring	Fund Affected
FY26	FY27		

(Parenthesis () Indicate Expenditure Decreases)

REVENUE (dollars in thousands)

Estimated Revenue			Recurring or Nonrecurring	Fund Affected
FY26	FY27	FY28		

(Parenthesis () Indicate Expenditure Decreases)

ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY26	FY27	FY28	3 Year Total Cost	Recurring or Nonrecurring	Fund Affected
Total						

(Parenthesis () Indicate Expenditure Decreases)

SECTION III: NARRATIVE

BILL SUMMARY

Synopsis: HM36 details New Mexico’s history with the nuclear energy industry. Language acknowledges the adverse impacts uranium mining has had on generations of New Mexicans while also noting that the state is currently home to several facilities focused on nuclear energy research, enrichment, and storage. HM36 also points out that new efforts are underway to identify safer and more efficient ways to produce and transport nuclear energy and points to federal funding that University of New Mexico received in 2022 to research next-generation nuclear energy, including small modular nuclear reactors. The memorial requests that the University of New Mexico:

- Study the costs and benefits associated with the development of the state’s nuclear energy industry,
- Make recommendations for statutory and rule changes needed to support the operation of a safe and productive nuclear energy industry in the state,
- Report its findings and policy recommendations to the appropriate interim legislative committee that studies issues related to energy, and
- Transmit a copy of this memorial to the president of the University of New Mexico.

FISCAL IMPLICATIONS

None for EMNRD.

SIGNIFICANT ISSUES

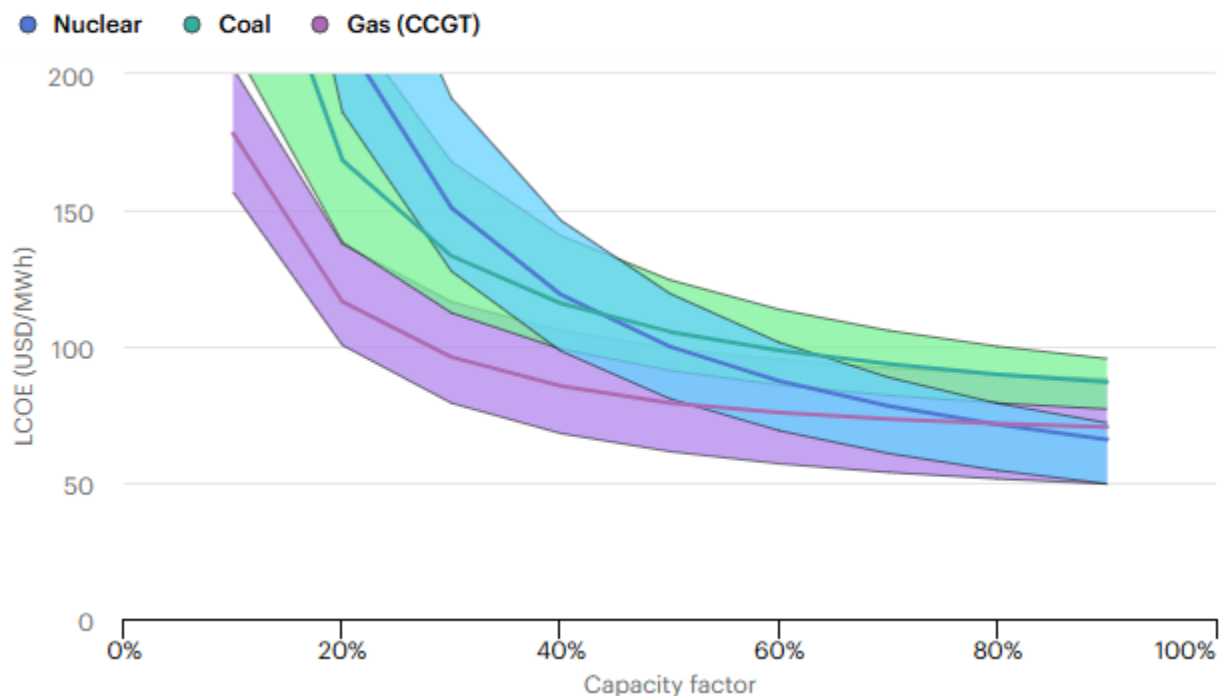
EMNRD generally supports the commissioning of any comprehensive study that supports New Mexico’s and the United States’ current and future energy objectives. A definition of what the House of Representatives considers the “nuclear energy industry” in the memorial would be helpful in refining the scope of this study. For example, “nuclear energy industry” could include uranium ore mining, milling and enrichment facilities; development of both small-scale and large-scale nuclear reactors; electric grid upgrades to distribute power generated by nuclear reactors; and/or potential development of a national long-term spent nuclear fuel waste repository similar to the Yucca Mountain Nuclear Waste Repository.

HB36 directs the University of New Mexico to study the costs and benefits of developing the state’s nuclear energy industry and formulate policy recommendations based on this research. Nuclear power plants currently provide some of the cheapest firm-generating baseload service on a levelized cost basis (LCOE). According to the International Energy Agency (IEA), the median LCOE for nuclear power in the U.S. was \$71 per MWh vs. \$110 for coal at a 7% discount rate¹. Moreover, the typical capacity factor for nuclear power plants was 92%² vs. 57%³ for combined cycle natural gas plants, making nuclear competitive with natural gas on an LCOE basis (see cost curves below).

¹ International Energy Agency (IEA). [Projected Costs of Generating Electricity 2020](#).

² U.S. Department of Energy (2020). [What is generation capacity?](#) Office of Nuclear Energy.

³ U.S. Energy Information Administration (2023). [Natural Gas Combined Cycle Power Plants Increased Utilization with Improved Technology](#). Today in Energy.



Source: International Energy Agency (IEA)

As of 2021, the United States led the world in installed nuclear generating capacity with 95 GWs deployed on the grid accounting for 19% of national electricity generation. Today, nuclear power plays a significant role in serving New Mexico’s baseload. As of 2024, PNM and El Paso Electric owned rights to 288 and 622 MWs of Palo Verde Nuclear Generating Station (PVNG) capacity in Arizona, respectively. PNM’s 2023 Integrated Resource Plan listed these 288 MWs of capacity as part of its “most-cost effective” generating portfolio through 2043⁴.

Under current technology, any new nuclear plants built in the state would place a large load in a single place on the grid. Utilities in New Mexico currently face significant hurdles interconnecting such large loads, frequently requiring expensive upgrades to transformers, lines and other infrastructure⁵. Meanwhile, emerging industries in data centers that support artificial intelligence as well as advanced manufacturing and oil and gas increasingly demand large amounts electricity to power their endeavors. State-specific research into the feasibility of small modular nuclear reactors (SMRs)⁶ deployed as safe, co-located generating resources with large loads could provide insight into whether SMRs could support economic development in New Mexico while protecting ratepayers from the high costs associated with large load interconnection and enhancing electric grid reliability.

Drawbacks to Nuclear Power

Although nuclear generation can serve baseload electricity demand cost-effectively and without the carbon emissions associated with alternatives (such as coal or natural gas), uranium mining and nuclear waste storage/disposal pose other environmental challenges. Nuclear power plants are also capital intensive and take 7-10 years to build on average. Because of this, the true cost of

⁴ Public Service Co. of New Mexico (2023). [Integrated Resource Plan 2023](#). Table 69. Pg. 210

⁵ See New Mexico PRC docket no. 24-00257-UT regarding Grid Readiness and Economic Development.

⁶ Liou, J. (2023). [What are SMRs?](#) International Atomic Energy Agency.

nuclear power is highly dependent on capital market conditions (eg interest rates) and can be subject to significant cost inflation.

PERFORMANCE IMPLICATIONS

None for EMNRD.

ADMINISTRATIVE IMPLICATIONS

None for EMNRD.

CONFLICT, DUPLICATION, COMPANIONSHIP, RELATIONSHIP

TECHNICAL ISSUES

OTHER SUBSTANTIVE ISSUES

ALTERNATIVES

WHAT WILL BE THE CONSEQUENCES OF NOT ENACTING THIS BILL

The University of New Mexico will not research the costs and benefits of nuclear power on behalf of the state legislature. The University of New Mexico will not provide policy recommendations to the interim legislative committee studying energy issues.

AMENDMENTS