TESTIMONY OF DAVID HOGUE IN SUPPORT OF SB 2159 HOUSE ENERGY AND NATURAL RESOURCES COMMITTEE COTEAU AB; 9:00 AM

4 March 14, 2025

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Good morning Chairman Porter and members of the House Energy and Natural
Resources Committee. My name is David Hogue. I am a North Dakota state senator
representing District 38, which includes northwest Minot and the city of Burlington. I
appear before your committee to seek support for Senate Bill 2159.

10 SB 2159 is a bill that would authorize the North Dakota energy and environmental research center ("EERC") to study nuclear energy. It authorizes study by 11 12 removing a prohibition against EERC studying nuclear energy that is found in section 15-11-40(4) of the North Dakota Century Code. SB 2159 is a companion bill to HB 13 14 1025, which your committee passed on a 13-0 Do Pass recommendation to the House floor on January 17, 2025. HB 1025 is the bill that establishes a study committee to 15 consider the advisability and desirability of encouraging the development of nuclear 16 energy within the state of North Dakota. 17

The inspiration for SB 2159 comes from the work of the interim Energy Development and Transmission Committee ("EDT"). The EDT was given a full range of study subjects during the last interim, including a broad directive to study the development of nuclear energy within the state of North Dakota. As we began our study of all EDT's assigned studies, we realized that the Committee could not fully devote the necessary time to adequately study the potential for development of nuclear energy in

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the state of North Dakota. We toured the Coal Creek plant owned and operated by
Rainbow Energy near Center, North Dakota. We visited the EERC in Grand Forks and
reviewed the projects that the EERC is working on. We also toured the Dakota
Gasification plant owned by Basin Electric. Finally, we arranged for an informal tour of
Xcel's nuclear facility in Monticello, Minnesota. The Xcel tour was a highly informative
review of the facility and its integration with the community of Monticello.

We came to a consensus that the study of nuclear energy must be on North
Dakota's energy development agenda and that the complexity and rigors of nuclear
energy development required a study all its own that should be on-going, akin to other
standing interim committees, such as the Water Topics Overview Committee.

So the committee submitted HB 1025 for consideration. One of the subjects of
proposed study was to consider many of the impediments to studying nuclear energy.
We quickly identified the EERC prohibition in statute as a major impediment. SB 2159
removes that impediment. We expect to get study expertise from the private sector.
We also would encourage study from the EERC, one of the nation's premier energy
research centers.

One question that may arise with this proposal is why now? Why study the development of nuclear energy in North Dakota? We have abundant (but not infinite) supplies of coal, natural gas to generate electricity well into the 21st century. Furthermore, nuclear energy is considerably more expensive than coal generation or natural gas generation, so what's the point?

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Well, I would ask a counterguestion: when will the war on coal end, and will be 1 2 the outcome? We do know there are consistent efforts in Europe, the West, and other locations to decarbonize electricity generation. We also know that our base load power 3 demand is expanding at unprecedented rates. I have visited with one electric 4 distribution cooperative in the northwest quadrant of our state who informs that its 5 6 baseload demand has doubled in the last ten years, and the distribution cooperative expects another doubling in the next ten years. I've also seen a report that electricity 7 8 energy demand will increase six times faster than overall energy demand.

9 Spending by tech giants on AI is also contributing to rising electric energy
 10 demand. Some data centers are consuming as much energy as nuclear power plants
 11 generate.

We often are told that China continues to make massive investment in coal fired generation plants, so why should the United States unilaterally "disarm" from coal fired generation. But the truth is China is pursuing an "all of the above" energy policy. Of the 60 nuclear plants under construction around the world today, 45 of them are in China. All of these include the so-called "fourth generation" nuclear reactors, those that avoid use of long fuel rods and cope with extremely high temperatures without melting. China strategy is to reduce its dependence on imported oil and natural gas.

As many of you know, big tech is bringing nuclear power back to prominence as well. Microsoft will spend \$ 1.6 billion to bring a Three Mile Island nuclear reactor back on line and purchase its power for 20 years. Microsoft expects to consume 6 times the electricity is projected in 2020.

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Of course, the Vogtle nuclear plant is Georgia gives the industry pause. That reactor cost \$35 billion, more than double the initial estimate. That, one expects, is an anomaly related to the absence of efficient manufacturing and construction processes.

In Wyoming, Terra Power, an SMR startup backed by Bill Gates, has broken
ground on its first plant in Wyoming in August of 2024. There are more SMRs planned
or under construction in the United States than anywhere else in the world, owing in
large measure to the tech industry.

8 Mr. Chairman, if we are going to study the desirability of developing nuclear 9 energy, why should we do so with one of our arms tied behind our back? We should 10 authorize the EERC to study nuclear energy if it so desires.

Chairman Porter and committee members, I urge a do pass recommendation onSB 2159.