

Comments on HB 1491

Chairman Porter, and members of the committee, my name is Charles Gorecki. I am the CEO of the University of North Dakota (UND) Energy & Environmental Research Center, more commonly known as the EERC. The EERC is a nonteaching arm of UND, and under the auspices of the state of North Dakota, we are focused on providing practical pioneering solutions to the nation's vexing challenges at the nexus of energy and the environment.

The EERC is pleased to provide the following brief commentary regarding the opportunity surrounding hydrogen energy and the potential for North Dakota to play a substantial role in the design and proliferation of a hydrogen economy. Hydrogen energy, when utilized in fuel cells or even in internal combustion engines, can provide nonpolluting fuel for mobile sources, such as heavy trucks, automobiles, and farm equipment. Hydrogen can be generated from a variety of feedstocks, including North Dakota crops, North Dakota lignite, North Dakota natural gas, and even water. The EERC has historically worked closely with state, federal, and commercial partners in all of these arenas. However, at this time, needed improvements in the efficiency of hydrogen production, transportation, storage, and end use are all areas where research and development offer substantial promise.

The EERC was designated the National Center for Hydrogen Technology in 2004. At that time, there was substantial federally sponsored research on hydrogen. However, until recently, federal funding for hydrogen-focused research has substantially lagged. The EERC's portfolio has historically seen substantive work on hydrogen production from both renewable and fossil resources, as well as on hydrogen storage, transportation, and utilization platforms.

Having specific additional funds available via any or all of the legislatively funded research councils (Lignite, Oil & Gas, or Renewable) that could be used as leverage in anticipated federal research opportunities would be particularly helpful as the EERC strives to competitively secure federal funds designated for hydrogen research. Research opportunities typically have a requirement for matching nonfederal funds, and the lack of a mature hydrogen industry today challenges the EERC's ability to find those matching resources.

The EERC is well-positioned, and we would be delighted to help navigate the numerous opportunities that an emerging hydrogen economy might present to North Dakota. The proposed road map embodied in HB 1491 would allow for a strategic assessment of North Dakota's natural resources, existing infrastructure, and intellectual capital. Such a road map would facilitate prioritization of subsequent investments and policies to ensure North Dakota's role in the anticipated hydrogen economy.