BEFORE THE OHIO SENATE ENERGY AND PUBLIC UTILITIES COMMITTEE REGARDING HOUSE BILL 434 DECEMBER 6, 2022 INTERESTED PARTY TESTIMONY OF MICHAEL GOLDSTEIN, ESQ. DIRECTOR OF GOVERNMENT AFFAIRS AND DIRECTOR OF STRATEGIC ALLIANCES eGENERATION FOUNDATION AND eGENERATION ECONOMIC DEVELOPMENT CORPORATION

Chairman McColley, Vice Chairman Schuring, Ranking Member Martin, and distinguished members of the Senate Energy and Public Utilities Committee.

I present today to urge you to pass out of this committee by a unanimous positive vote, HB 434, which will create both an Ohio Medical-Isotope Economic Development Authority and an Ohio Medical-Isotope Economic Development Consortium. These two organizations will permit Ohio and the federal government nuclear agencies to collaborate in research and development of nuclear energy, energy which we as a state and a nation desperately require.

I appeared before this Senate Committee on June 10, 2015 in support of HCR 9, a resolution which passed the House and Senate. My testimony then, which is attached here, concerned the positive effect upon U.S. national security of commercialization of Liquid Core Molten Salt Reactor (LCMSR) technology by the United States, and the projected negative impact on our country should we fail to do so. It also explained why the State of Ohio should take a leadership role in getting this done.

The passage now of HB 434 will provide Ohio with the administrative structure to work with the federal government to make inexpensive energy abundant in the United States.

American private enterprise must commercialize Molten Salt Reactor (MSR) technology, a Generation IV American technology created at our Oak Ridge National Laboratory in the 1960s. A Molten Salt Reactor was built at Oak Ridge, and it ran successfully for four years on a variety of nuclear fuels. The basic research has been done.

LCMSRs provide only two products, but both are vital components of our national security: nuclear isotopes, and lots of inexpensive energy in the form of very high heat, much higher heat than is produced in a traditional light water reactor (LWR).

LCMSRs designed to run on Thorium fuel can provide both of these products in near perpetuity because we will never exhaust the Earth's supply of the LFTR's Thorium fuel. The production of medical isotopes and energy by a LCMSR comes without *any* CO2, and without *any* air pollution.

The LCMSR is a disruptive technology, in the sense that its commercialization will change everything. It will shake up the entire world economy. We are in a race with Russia and India, and especially China, to be the nation which provides the world with almost all of its clean, affordable energy in the future, and in amounts double, triple, 10 times the energy being produced today. Please review the attached article by Beth-Anne Schuelke-Leech, P.Eng, MBA, PhD, of The Ohio State University John Glenn School of Public Affairs on this issue.

American commercial development and deployment of the MSR is of the utmost urgency, and Ohio, as a leading state should bring the issue to the public. The General Assembly must pass HB 434 to enable this to happen. Thank you.