

30 November 2018

To Whom it May Concern,

Interest in the Development Power to Gas Prototypes

The University of Waterloo is at the forefront of innovation and is home to transformational research and inspired learning. The University of Waterloo is pleased to offer this letter in support of Bruce County and local partners in their initiatives to demonstrate leadership in hydrogen technologies, large-scale energy storage and a move toward transformative change in decarbonizing the economy. Located in the heart of Canada's technology hub, we are growing a network of global partnerships that will shape the future by working beyond disciplines and building bridges with industry, institutions and communities. Our people and partners take us beyond the lives we're living today, to find solutions to the global challenges that lie ahead. Creating change that goes beyond the status quo and is felt around the world.

Consistently ranked Canada's most innovative university, the University of Waterloo champions a culture of curiosity, exploration, risk-taking, entrepreneurship, global stewardship and leadership. We bring bold ideas inspiring innovations with global impact today and in the future. With increased renewable energy sources and zero emissions vehicles (ZEVs) will integration of electrical power systems can be developed. The objective is to develop transition technologies towards a lower emission electrical power grid that is fully integrated with ZEVs. Dr. Michael Fowler's research will demonstrate how power generation systems can operate more effectively while also providing hydrogen energy storage through 'Power-to-gas', as well as hydrogen for fuel cell vehicles. Dr. Fowler has over 40 publications for 'Power to gas' and will contribute to the development of hydrogen in systems. This research program will on the development of electrochemical storage systems hydrogen electrolyzers and fuel cells as well as for efficient energy storage for use in microgrid energy storage systems. Thus research is overall enabling technology for a transition to a green 'hydrogen economy' into Canada with less emissions.

The University of Waterloo welcomes the opportunity to participate in this important endeavour as we believe their work may offer important solutions in the advance of clean energy systems.

Sincerely,



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