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SOCIETY  
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BEHIND EVERY GREAT ENGINEER.

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### **Follow up – A Call to Action: A Canadian Roadmap for Small Modular Reactors**

The Ontario Society of Professional Engineers (OSPE) would like to provide additional context to its letter sent on January 7, 2019, congratulating the Canadian Nuclear Association (CNA) for publishing the Canadian Roadmap for Small Modular Reactors (SMRs).

OSPE supports Adaptive Phased Management (APM) of spent nuclear fuel. The APM component of Canada's spent fuel management program is very important, as it provides the industry with sufficient time to develop sustainable fuel recycling technology. This technology will ensure the new SMRs will provide a sustainable, low-emission energy source that minimizes the production of long-lived fission product isotopes.

As you know, SMRs require far larger amounts of fissile isotope inventory compared to our current thermal reactor designs. Spent fuel is an excellent source of fissile isotopes, provided a sustainable technology for fuel recycling is developed. SMRs that can convert natural fertile isotopes like U238 and Th232 into fissile isotopes are also important so that a sufficient source of fissile isotopes is available to power all types of nuclear reactors.

Nuclear energy is a key component together with renewable energy sources to meet our greenhouse gas reduction goals across the whole economy by 2050. Ensuring a sustainable source of sufficient fissile isotopes is key to meeting our international commitments to climate change mitigation.

Sincerely,

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