S&C ELECTRIC CANADA LTD.

Excellence Through Innovation

90 Belfield Road, Toronto, DN. M9W 1G4 Tel: 416-249-9171

Innovation OEB, 2300 Yonge Street, 27th floor Toronto, ON

22 January 2019

Dear Colleagues,

S&C Electric Canada Ltd. response to OEB's Innovation Workshop

S&C Electric Canada Ltd welcomes the opportunity to provide a response following your Innovation Workshop we attended last week. We found the Report of the Advisory Committee on Innovation to the OEB very useful, highlighting key areas that need to be addressed in regulatory policy development to support effective innovation and changes in the utility role.

We also welcome the work that the OEB is doing to introduce an Ontario Regulatory Sandbox, like the arrangements that have been adopted by Ofgem and the Singapore energy regulator. Speaking from the experiences of our team, we see the value in these opportunities to test new ideas in a relaxed but controlled regulatory environment.

S&C has been supporting the operation of electricity utilities in Canada for over 100 years, S&C not only supports "wires and poles" activities but has delivered over 8 GW wind and over 1 GW of solar globally, along with the deployment of other Distributed Energy Resources such as microgrids.

Based on our global experience, and that of others in the industry, we consider that three of the key priority areas to enable and support greater innovation by network utilities are the following:

- Rebalancing of operating and capital expenditure incentives to make utilities neutral between conventional or alternative solutions such as non-wires alternatives. This should enable utilities to adopt the most economic options and earn a return on more innovative solutions where these are more efficient.
- Regulatory policy relating the integration of DERs to electricity distribution networks. While such
 resources may provide benefits to customers and the energy system through more local generation
 and the provision of flexibility services, the integration of these resources are also likely to create
 additional costs. It is important to recognize the technical impact of significant levels of DER
 penetration on distribution grids. These can introduce system stability issues with regards to voltage
 and frequency, and cause challenges in terms of protection systems. For example, bi-directional
 protection will be needed for some parts of the distribution network.
- Funding for research and development will be very important given the extent of challenges ahead as part of the energy system transition and as distribution utilities evolve their business models and take on additional roles and responsibilities as they move towards Distribution System Operator type roles.

















We note that stakeholders at the workshop highlighted a difference between the OEB and IESO plans to address innovation. It is important that these roadmaps are harmonized and collaboration between all industry stakeholders is maximised.

We would be happy to meet you to discuss any of these points further.

















