Ms. Kelly Speakes-Backman  
**Acting Assistant Secretary for Energy Efficiency and Renewable Energy**  
United States Department of Energy

[Submitted via email: energysshed@ee.doe.gov]  
August 10, 2021

Acting Assistant Secretary Speakes-Backman and Colleagues,

Canada Grid is a nascent coalition of companies, labor unions and civil society groups committed to the mission of decarbonization via interregional transmission development and market integration across Canada, and between Canada and the United States. Our hope is to be a trusted, good-faith intermediary between American state and Canadian provincial governments, as well as federal administrations. We applaud your effort to underpin US federal energy policy development through the conceptual lens of ‘energysheds’, and respectfully appeal to you to extend this line of thinking beyond the Canadian-American border.

*Canada Grid’s Mission:*

Canada Grid launched in May of this year to inject independent thought leadership into the Canadian energy policy scene. To preserve our independence, we do not accept provincial utility or federal government money. This is because we aim to help governments realize the promise of interregional grid integration, and the need to provide their Crown or provincial monopoly utilities and regulators with a mandate to cooperate across jurisdictional boundaries in a newfound manner. Simply put, Canada Grid is seeking to break down silos in decision-making, and this extends to provincial relations with American states. It is time to collectively define, amongst the provinces and states, which market mechanisms will propel our shared grid and society towards carbon neutrality.

The development of a robust North American macro-grid and accompanying, efficient market mechanisms are the projects of the 21st century. Our nations have one of the most important trading relationships in global history. More than this, we are inextricably linked to each other culturally through our shared commitments to
democratic decision-making and the rule of law. The concept of an *energyshed* is one that we should define collectively as neighbors, friends, allies, and trading partners, to help us better govern our shared energy grid.

*The ‘Mighty Maple’ Tree Analogy:*

**To plan for our future grid, we must turn to nature for governance lessons.** Indeed, renewable energy technology allows us to harness the earth’s natural energy in a newfound manner. Take the maple tree for example – a common natural feature of the US northeast and eastern Canada. Trillions of interconnected cells enable the tree to stretch dozens of feet into the air and borough deep within the soil. These trillions of cells are linked together by a vast circulatory system. These tiny cells are analogous to clusters of community/localized distributed energy resources (DERs), but they are strengthened and nourished by the vascular system that is our macro-grid.

It is our contention that the governance of *energysheds* should aspire to strengthen both the development of localized DERs, but also the high-voltage grid across vast ‘catchment’ areas for renewable energy. Just as the tree draws sustenance from its roots and via its leaves, our society will benefit from a strong local marketplace for DERs as well as a high-voltage, meshed transmission network which enables resource adequacy, time-of-day interregional trade and seasonal resource balancing. **This would mimic the interplay between local and interregional watersheds.**

*Proposal for an East Grid Process:*

Working with American partners, Canada Grid is seeking to launch an initiative called ‘East Grid’, rallying the Northeast Power Coordinating Council (NPCC) jurisdictions and immediate Atlantic Canadian neighbors (we include Prince Edward Island and Newfoundland & Labrador in this grouping, even though they are not official members of NPCC) to work on:

1) deploying an open-source, transparently developed, cross-sectoral, comprehensive capacity expansion model to enable shared decision-making around infrastructure and decarbonization across the region;

2) conducting interregional planning for transmission to help accelerate renewable energy deployment;
3) developing a multilateral transmission procurement process; and
4) configuring market mechanisms which will enable economic dispatch across the entire East Grid zone.

It is our hope to replicate the East Grid process in the Canadian-American west. As such, we will be analyzing the prospects for a ‘West Grid’ process in the coming months. It is also our hope that the definition of energyshed and the governance mechanisms that flow from this concept will enable the East Grid process.

Below, we make comments divided amongst the six defined categories as requested:

1. **Concept and Definition:** Our core proposition is that *energysheds* be conceived of in a cross-border manner. The wind does not stop blowing at the border, nor does the sun cease shining or rivers stop flowing. In fact, some of the most promising ‘catchment’ areas for renewable energy resources could be developed in a binational manner, whether this is the wind and solar resources of the plains and prairies, geothermal resources of the Rocky Mountains, or the Great Lakes or offshore wind resources we share. There is historical precedence for this mindset, if we take the Canadian-American hydro developments along the Saint Lawrence River or the Columbia River Treaty as examples. Importantly, *energysheds* may stretch beyond the reach of any individual regional transmission organization or independent system operator. In the case of the proposed East Grid zone, there are eight independent balancing authorities implicated in two countries.

2. **Tools and Analyses:** The proposed set of tools for the East Grid process as enumerated above should provide a sound governance model for states and independent system operators. It is of vital importance that the proliferation of community DERs not be overlooked in discussions around the governance of the macro-grid. Bigger is not always better. As well, the grid is not a panacea. Clean energy electrons are precious resources. In some instances, bioenergy resources should be considered in the place of electrification, such as for the electrification of heating in rural and remote communities.
3. **Planning and Operations**: It is vital that resources can be dispatched in a multidirectional manner across an *energyshed* to guarantee our collective energy security. This calls for interregional planning processes **conducted in a cross-border manner**, managed directly by state and provincial government administrations with inputs from local and national industry, labor and civil society organizations. More robust inputs from civil society, community and regional planners into these technical planning processes is integral to guaranteeing better outcomes on energy justice, diversity, equity, and inclusion.

4. **Resilience**: The larger the catchment area for renewable resources, the larger the *energyshed* – the larger the energyshed, the more we can enhance resilience and guarantee reliability. We are mutually interdependent after all, like the cells of a maple tree. If we are to more than double our dependence on electricity for primary energy use in our society by 2050 as many studies predict, we must be able to dispatch electrons from neighboring regions during times of peak demand. The future vision, for example, is that offshore wind from New York can power Toronto homes on the coldest winter days; Nova Scotia wind power can flow to Vermont when local solar power is unavailable; and a robust region-wide and competitive approach to energy efficiency means water-heaters and dishwashers can flip off automatically in Québec when Massachusetts is facing a heatwave.

5. **Energy Justice, Diversity, Equity, and Inclusion**: Combatting climate change is the great challenge of our time. It connects the apartment-dwelling elite of Manhattan to the rural Cree communities along the shores of Hudson Bay. Our energy systems also connect these disparate pockets of our society. Creating a level of social consciousness across the Canadian-American border is a pressing task for Canada...
Grid. We intend to use alternative communications means to connect with citizens and ratepayers. Keeping costs affordable for all is paramount to our shared economic prosperity, but so is consciousness around environmental preservation, resource conversation and the need to cooperate across communities on infrastructure development. Achieving the vision for regional cooperation and commercial success above in a way that creates solid, middleclass jobs and helps achieve greater societal equity is also a prime objective of Canada Grid.

6. **Other Information**: The East Grid process is substantiated by an interview and analytical process consulting with over 30 key stakeholders in the eight separately operated balancing areas making up the eastern Canadian and northeastern U.S. electrical system. Conducted by Canada Grid’s parent organization, The Transition Accelerator in cooperation with the Regulatory Assistance Project and Raab Associates, the process found that there was significant support for the creation of a regional collaborative process that will focus sequentially on regional resource planning and investment opportunities, and then market design and operations harmonization. For more information on this important study, please consult: [https://transitionaccelerator.ca/assessing-the-feasibility-of-a-regional-neda-collaborative/](https://transitionaccelerator.ca/assessing-the-feasibility-of-a-regional-neda-collaborative/)

**Summary**

In working together, we contend that Canadians and Americans can decarbonize faster, cheaper and more reliably. The inter-regional governance structures of the continental northeast, most notably the NPCC and the New England Governors-Eastern Canadian Premiers forum, provide a base for collaboration on the further development of this *energyshed*. Canada Grid looks forward to being a trusted ally in the implementation of governance mechanisms that catapult the East Grid *energyshed*, and other cross-border ones defined in the future, towards a net-zero future.

Cordially,

[Signature]

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The Transition Accelerator