



Canadian
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Association

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Cross-Border Electricity Opportunities

Panel Remarks
by
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1. Introduction

- Good afternoon. Many thanks to Minister Carr and his officials for the invitation to be here today. It's a pleasure to be with you and other guests, in your home base and in the company of a key leader within the CEA family – Manitoba Hydro.
- For folks unfamiliar, CEA is the national voice and forum of the electric utility industry in Canada.
- Allow me to begin by commending Minister Carr, Secretary Moniz, and Secretary Coldwell for the spirit of collaboration, enthusiasm, and resolve which continues to animate this trilateral forum.
- In view of the dynamic transformations occurring in global energy markets, a strategic, cooperative approach to leveraging the continent's incredible energy potential is arguably needed now more than ever.
- And the opportunities for enhanced prosperity, security, and environmental performance are far more numerous when the three countries pursue them together, rather than in isolation.
- That fundamental premise was recognized more than 20 years ago with the sealing of an historic free trade agreement. It's encouraging to see that same vision and approach guiding our dialogue today.
- As part of this discourse, I've been asked to share some thoughts under the general theme of "cross-border electricity opportunities."
- My hope is that the discussion of these opportunities will underscore the indispensable and strategic importance of electricity as an enabler of broader public policy objectives – including key solutions which this forum is seeking to advance. The 'magic' of electricity underpins our citizens' quality of life, and is an anchor for the competitiveness of our economies.
- In particular, CEA is excited by the idea being championed by the new federal government in Ottawa of a North American agreement on clean energy and the environment.



- It is also my hope that CEA's recommendations today can help shape the substance of any such trilateral agreement, as it is pondered and fleshed out over the course of these sessions, next month's state visit between Prime Minister Trudeau and President Obama, and the North American leaders summit in May.

2. Background – Canada-U.S. Electric Integration

- I'm very mindful that our audience today is comprised of an impressive group of informed, engaged policymakers and diverse stakeholders from the rich energy community.
- Let me first offer a brief context for my remarks, by sharing a quick refresher on the deep level of integration between the Canadian and U.S. electric power systems.

Slide 1

- In terms of Canada's supply mix, note that more than 80% of our portfolio is GHG non-emitting. In many ways, electricity is Canada's "clean energy solution" – a theme which I'll return to shortly.

Slide 2

- Regarding major transmission interconnections, each province that borders the U.S. shares one or more linkages with its southern neighbours. Altogether, there are about three dozen Canada-U.S. interties.

Slide 3

- Here, another birds-eye view of the high-voltage North American grid.

Slide 4

- This slide illustrates the robust cross-border electricity trading relationship. In 2014 alone, the total value of Canada-U.S. trade exceeded \$3.5 billion (Canadian), and with more cooperation, I think this is an elevator that will only go up.



Slide 5

- And finally, Canada has historically been a major net exporter of power. In any given year, we sell 5-10% of our total electricity generation to the U.S.
- Simply acknowledging the reality of physical and market linkages in electricity between Canada and the U.S. is one thing.
- But it's critical to keep in mind that these linkages also translate into tangible benefits for Canadians and Americans. These include:
 - enhanced **reliability**, through operational efficiencies and supply diversity;
 - enhanced **affordability**, as efficient price signals and larger markets help to keep downward pressure on costs;
 - greater **emission reductions**, in particular, with imports from Canada helping to displace greenhouse gas emissions in the U.S.; and
 - support for **developing new renewable resources**, with a wonderful illustration of this right here in Manitoba, as Kelvin will speak to further.

3. Opportunities for Greater North American Cooperation

- With that background, I would like to touch on 6 tangible opportunities for deepening and multiplying the benefits associated with enhanced electric integration in North America.

i. First, increased clean electricity trade

- As de-carbonisation of the electric sector in all three countries moves into full swing, we have much more to gain on the emissions reductions front by working together.



- In this regard, CEA was delighted that the bedrock of President Obama's climate agenda – the Clean Power Plan or "CPP" – recognizes international, non-emitting electricity imports as an acceptable carbon reduction strategy.
- The CPP is an excellent springboard for future action, and we remain deeply engaged in implementation. This includes a project we're leading with other Canadian groups and a U.S. consulting firm to further explore options for U.S. states to use international clean energy imports.
- This study will be ready for release in April. We hope that it can help further inform some of the principles and goals in any future North American agreement.

ii. Second, streamlining the permitting process for cross-border transmission projects

- There are currently a half-dozen cross-border projects in various stages of development, all along the border – including here in Manitoba, as Kelvin will discuss further.
- A unifying feature of each project is that it will help bring online new sources of clean, non-emitting energy – not just in Canada, but in the United States as well.
- These projects are critical to ensuring that North America's clean energy potential is maximized, rather than left stranded.
- However, inconsistencies and undue delays in the permitting process inject uncertainty and risk. CEA has therefore urged government-to-government cooperation to streamline the permitting processes.

iii. Third, electrification of transportation

- For starters, Canada, the U.S., and Mexico already boast one of the most integrated automotive supply chains in the world.
- Transportation is also the second largest GHG emitting sector in each of the three countries, representing some 25% of the carbon footprint in Canada.
- What's more, there's already a strong foundation of policy action to build upon. This includes federal government commitments to deploy electric vehicles in



federal fleets and charging stations in federal parking lots. It also includes exemplary sub-national partnerships, such as the Pacific Coast Collaborative, which is planning an electric vehicle corridor from California to British Columbia. No doubt there is opportunity to extend that highway into Mexico as well.

- Whether it's fuel savings, reduced emissions, or greater energy security, electrifying transportation reinforces my earlier theme about electricity being a strategic enabler of broader social and economic gains.

iv. Fourth, innovation and R&D

- Many continental energy challenges should push us to pool our collective intellectual, creative powers --- in our respective national laboratories, businesses, governments, and other public institutions.
- Where appropriate, CEA encourages Canada, the U.S., and Mexico to leverage opportunities for joint innovation and R&D projects, as part of the next chapter of our cooperation on energy and environmental issues.
- Possibilities abound for shared efforts – whether through exploration of alternative supply technologies, storage, grid monitoring and modelling, or next-generation power transformers, to name a few.
- A potential vehicle for joint action here is Mission Innovation. Launched on the margins of the UN climate conference in Paris, this holds significant promise for coupling government support and spurring private sector investment in clean energy technology.
- Of note, our three countries are all founding members of this global partnership, and we suggest that synergies be explored between action through this trilateral forum and Mission Innovation.

v. Fifth, clean electrification in remote communities

- While all three countries have very different geographies, they're all home to communities in remote, isolated areas. In many instances, these are communities of indigenous peoples – whose circumstances are often challenging, to say the least.



- Our new federal government attaches a high priority to this policy space.
- Life in these communities often means reliance on diesel fuel to keep the lights on. An important yardstick of North America's ability to transition to a cleaner energy future will be ensuring this future is also shared by our citizens living in remote areas.
- Their citizenship makes them no less deserving of the benefits of a low-carbon lifestyle and economy than the rest of us!
- CEA therefore strongly encourages Ministers to ensure that your ongoing engagement includes action on clean energy solutions for remote and indigenous communities – whether through greater deployment of low-emitting and renewable resources; creation of micro grids; or even the simple exchange of best practices related to such efforts.
- And here again, we see how electricity can serve as a strategic and positive force for public good.

vi. Finally, security threats

- I'd be remiss if I didn't say a quick word on the need for sustained vigilance on grid security and reliability.
- It's no secret that physical and especially cyber threats facing our energy systems and power grids are growing in number and becoming more sophisticated. The recent cyber event on the electric grid in Ukraine, for example, illustrates the gravity of threats facing critical infrastructure sectors.
- CEA strongly believes that greater sharing of threat and technology information – *between* and *among* sectors and governments – is our first line of defence towards securing the integrity of our systems.
- CEA encourages Ministers to discuss ways how their collaboration can induce greater information sharing. Again, there is fertile ground;



- This includes the commitment to a new federal cyber policy review in Canada, which we hope will emphasize and promote strengthened international partnerships through forums such as these.
- Likewise, U.S. legislation passed in December included provisions for electric grid emergency consultation and information sharing between the U.S., Canada, and Mexico.
- CEA applauds these measures.
- We also need to deepen our commitment to the viability of the North American Electric Reliability Corporation or “NERC.”
- NERC is an exceptional success story for cooperation, and is set to become even more compelling, as Mexico is further integrated into the fold.

In Closing

- So there you have it.
- Six cross-border opportunities which CEA would respectfully argue represent attainable, value-added deliverables for this forum to act upon – including through a new potential agreement on clean energy and the environment.
- Let me conclude by speaking of the need for, and the value of, a consistent price on carbon.
- This undoubtedly represents a heavy political lift. However, it arguably holds the greatest promise for effective action in this space.
- CEA has consistently advocated that an economy-wide and continent-wide price on carbon has the greatest potential to maximize emission reductions at lowest cost.
- We fully recognize the political challenges associated with pricing carbon in one country – let alone three countries! Still, we hope that the next phase of trilateral



action can signal interest and attention in this regard, if only aspirational to begin with, including initiatives at the sub-national level.

- I hope my remarks have provided a sense not only of where there is excellent potential for greater electric integration and cooperation in North America. But also, a recognition that electricity can play an enhanced strategic role in enabling much broader public policy objectives, and advancing common social and economic well-being, for all of our peoples.
- Thanks again for this opportunity, and I look forward to your views and advice.

