



An NRCan View on Electricity Trade Between Canada and the US

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Mark Corey, Energy Sector

Shared continent

Shared values

Free trade relationship governed by the NAFTA

Most integrated trading relationship in the world

Canada largest, most secure supplier of all forms of energy to the US



A couple key distinctions between Canada and US

Both are federal systems where provinces/states manage energy resources within their own borders

Key Canadian federal authorities

- International trade and commerce (e.g. National Energy Board regulation of international power lines)
- Issues of national interest (e.g. climate change)

But NEB somewhat different than FERC

NRCan is a science-based department and lead agency for federal energy policy

large, interconnected machine...

The grid is our largest piece of shared infrastructure

Canadian lines have a north-south orientation

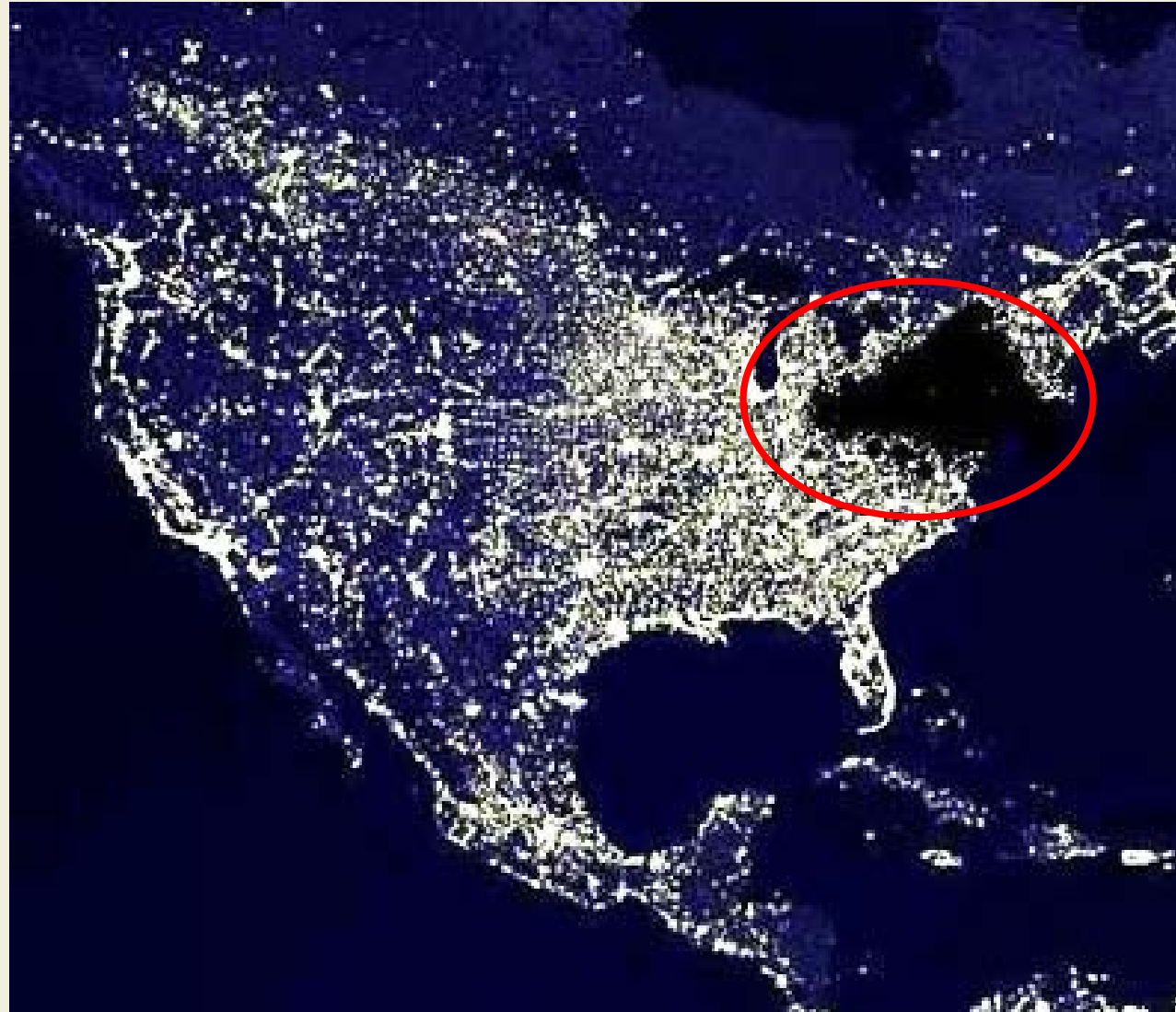
Facilitates seamless trade across jurisdictional borders with different market structures and rules

All this requires substantial real-time coordination

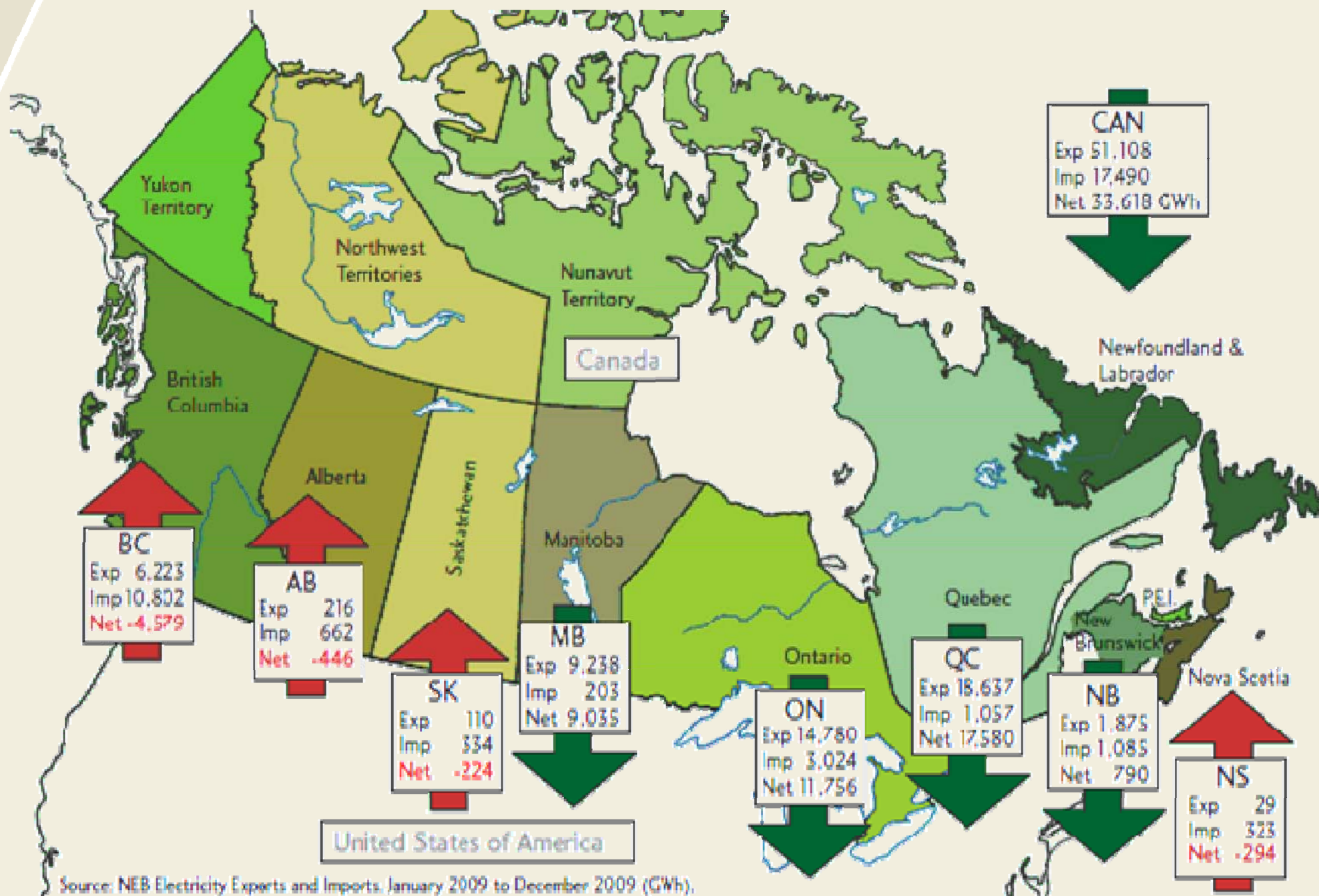


rare...

Events on one side
of the border can
impact the other
2003 blackout
underscored mutual
dependence
But, integration
provides flexibility to
absorb impacts
Rarity of these
events shows the
benefits of
integration and
coordination



Electricity trade is bi-directional...



Source: NEB Electricity Exports and Imports, January 2009 to December 2009 (GWh).



electricity can further shared interests...

- Meeting demand with clean electricity at reasonable prices for consumers
- Maintaining the reliability and security of critical infrastructure
- Ensuring the environmental sustainability of the North American electrical system



overcome a number of obstacles...

Need for new transmission infrastructure

Workforce challenges

Trade barriers

Public opposition to required new builds

Uncertain regulatory process

Some closing thoughts

Resource mix between two countries highlights potential for environmental gains from trade

New technologies changing the game in the sector

- Smart grid
- Energy storage
- Electric vehicles

Significant renewable energy potential in both countries

- Need to think regionally about how to develop these sources, e.g. Atlantic Energy Gateway

