CANADA-UNITED STATES ELECTRICITY RELATIONS: TEST-BED FOR NORTH AMERICAN POLICY-MAKING?^{1,2}

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1. INTRODUCTION

It is often said of North America that we are not the European Union, that we do not share joint political institutions, and that we do not make policy supranationally. The conventional wisdom holds that cross-border policy relations take place between discrete sovereign governments and that they focus mainly on coordinating domestic policies that generate undesirable externalities across borders or that could benefit from greater alignment to "level the playing field" for private sector interests. What is less explored is the possibility that – similar to cross-border economic relations, where the saying, "we don't trade things with one another so much as we 'make things' together"3 is in good currency – when it comes to cross-border policy relations, we "make policy" together in the absence of formal political integration. That we might do so is hardly surprising given the extent of economic integration and interdependence in North America and similar

policy approaches, challenges and opportunities across a range of sectors. With limited exceptions, however – and these, largely on a sub-national regional basis – we have little explored this terrain theoretically or empirically.

This essay takes aim at this issue, examining the emergence of "North American policy-making", a shift in the nature of cross-border policy relations from conventional intergovernmental exchanges to quasi-supranational approaches. This development represents a change in kind from traditional conceptualizations of cross-border policy relations, which classify them along a continuum from conflict through to independence and harmonization (Gattinger and Hale, 2010), to an approach that begins with *North America* as the relevant geographical starting point and unit of analysis in policy development.⁴

The aim here is not to suggest that all policy processes are heading in this direction. Clearly, domestic processes and conventional cross-border relations will continue to dominate policy-making on the continent. Rather, I aim to zero in on a new "species" of policy-making in North America, one that is unlikely to supplant its domestic counterparts, but may well gain greater traction, particularly where high levels of economic integration, cross-border interdependence and policy convergence prevail.

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This analysis, while focusing on the electricity sector, is likely to interest the broader community of policy-makers, practitioners, scholars and students of North American integration. It offers a somewhat different reading of predominant understandings of continental integration by challenging the claim that integration in North America is a process of *regionalization* – private sector-led economic integration, not *regionalism* – state-led political integra-

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tion (Capling and Nossal, 2009). It also calls into question the thesis that a common identity, common vision, sense of community or "we-ness" in North America is a prerequisite for deeper regional integration (Golob, 2002). The concept of North American policymaking is more in keeping with analyses proposing that political integration can occur in the absence of supranational institutions (McDougall, 2006). Of greatest significance, political integration may emerge as a "bottom-up" incremental process that need not be driven by formal federal-level initiatives. Instead, it may be born of pragmatism, shared interests and necessity in discrete policy fields, sub-fields and issue areas. Nonetheless, as will be discussed in the concluding section of this essay, attention must be paid to the politics of these processes and their democratic credentials. Expectations for openness, transparency, equity, engagement, and the like, must be attended to if North American policy-making is to become

more widespread and acceptable to the general public.

The case at hand is the electricity sector, which has witnessed a considerable degree of policy convergence over the last two decades and offers a number of fascinating but little-known instances of North American policy-making. To set the theoretical stage for the analysis, the following section distinguishes between policy convergence, cross-border policy relations and North American policy-making. The next explores policy convergence in the electricity sector over the last twenty years, paying particular attention to the drivers underpinning these developments, as they may hold the key to understanding why and where North American policy-making might emerge. Following this, the essay turns to cross-border policy relations and North American policy-making in the electricity sector in recent times, teasing out the factors that appear to be driving emergence of the latter. The primary focus of the analysis is on Canada-United States electricity relations given that they tend to be more developed than their US-Mexico counterparts, but Mexico and the southern electricity border will be considered where relevant. The concluding section discusses the implications of the foregoing analysis, notably the importance of exploring the politics and democratic characteristics of these processes. It argues that these considerations need to be attended to in a meaningful way if North American policy-making is to hold promise for the future.

2. DISENTANGLING POLICY CONVERGENCE, CROSS-BORDER POLICY RELATIONS AND NORTH AMERI-CAN POLICY-MAKING

Policy convergence, cross-border policy relations and North American policy-making are three separate but interrelated processes. The first refers to "the tendency of policies to grow more alike, in the form of increasing similarity in structures, processes and performances" (Drezner, 2001: 53). Policies can become more alike along a number of different dimensions: goals (the objectives of policy), content (formal expressions of policy), instruments (the tools used to pursue policy objectives), outcomes (implementation results) and styles (characteristic policy development processes) (Bennett, 1996). Policy convergence is a vibrant sub-field of comparative public policy, particularly because of increasing regional and global economic integration, technological change facilitating transnational communication, and the proliferation of policy problems transcending jurisdictional boundaries (climate change, health pandemics, species at risk, etc.). In the 1960s and 1970s, the "convergence thesis" - whereby policies would grow increasingly alike as a result of such forces – animated scholarship, but this has given way to more nuanced analyses in light of mounting empirical evidence that domestic factors (e.g., institutions, politics, policy legacies, culture, etc.) attenuate or mediate the forces of convergence (Ibid.).

The literature identifies five main factors that drive policy convergence.5 The first, economic integration and interdependence, generates pressures on jurisdictions to adopt similar policies to maintain their economic competitiveness through a process of regulatory competition (Holzinger et al, 2008; Holzinger and Knill, 2005; Knill, 2005). In North America, economic integration and interdependence can also drive convergence when business seeks a "level playing field" for operations, often expressed as the desire for governments to remove the "tyranny of small differences" in their respective regulatory frameworks (Doern and Johnson, 2006). Second, common domestic pressures, such as technological change, environmental threats, growing ethnocultural diversity, population aging and the like, can also propel convergence. But in this case, countries are not consciously adopting their counterparts' policies so much as they are independently developing similar policy responses to comparable issues (Banting et al, 1997; Knill, 2005).

Transnational communication, the third driver, encompasses a number of mechanisms based on information exchange and communication (Knill, 2005). With emulation, countries look to other jurisdictions for policy insight, "pinching ideas" from foreign counterparts in domestic policy development (Schneider and Ingram, 1997, as cited in Deleon and Resnick-Terry, 1998: 14; see also Bennett, 1991; and Howlett, 2000).6 This is distinct from policy diffusion, which refers to "successive adoptions of a policy innovation" by multiple governments (Bennett, 1991: 200). While it is similar to emulation, diffusion does not require conscious lesson-drawing on the part of states (Ibid.) nor does it involve formal or contractual commitments (Busch and Jorgens, 2005), as is the case with harmonization (see below). International organizations are often the transmission belts for policy diffusion, communicating innovative policy approaches throughout the international system. Elite networking, meanwhile, involves ongoing transnational communication processes between and among state and non-state actors (often functional policy specialists, experts and industry leaders) leading to the development of shared ideas and policy prescriptions (Bennett, 1991).

Harmonization, the fourth driver, involves a similar process of explicit adoption of common policy frameworks. But in contrast to transnational communication, governments come together with the intent of mutually agreeing upon harmonized policy approaches (Bennett, 1991). Harmonization generates legal requirements for states to adopt analogous policies and arises due to interdependencies or externalities (economic, social, environmental, etc.) which propel states to cooperate (Holzinger and Knill, 2005; see also Bennett, 1991; and Knill, 2005).⁷

The foregoing drivers contrast with *imposition*,⁸ through which a state seeks to impose its policy approaches on foreign counterparts as a means of pursuing domestic objectives (e.g., national security, economic protectionism, trade liberalization, etc.). As Busch and Jorgens describe, "imposition occurs when external actors intentionally force nations to adopt policy innovations which they would not have adopted otherwise and do so by exploiting economic or political power asymmetries" (2005: 4). The tools of imposition range from "forceful coercion to economic and political conditionality", with the former including military intervention and economic sanctions, and the latter comprising economic or po-

litical reward, punishment or support (Ibid.). Clearly, in the contemporary North American context, the tools of imposition would fall into the latter category.

Policy convergence is related to, but distinct from, cross-border policy relations. While the focus of policy convergence is on the evolution of policies over time, the subject of cross-border policy relations is the character of relations between jurisdictions at a given point in time. Policies may converge as a result of ongoing cross-border policy exchanges (e.g., through harmonization processes), but these intergovernmental relations need not lead to convergence and can be animated instead by divergence and autonomy. As shown in Figure 1, divergent policy interests can result in open conflict. Governments may also develop their policies independently, without regard for the implications of their choices on foreign counterparts. The right-hand side of the figure brings us into the terrain of policy convergence, where policies may begin to become more alike. With parallelism, jurisdictions opt to adopt policies similar to those of their counterparts, while tailoring them to domestic conditions (political, economic, institutional, etc.). This is often the case in Canada-United States policy relations, where Canadian governments adopt the broad contours of American policy approaches given the high level of economic integration and interdependence between the two countries, but adapt them to local conditions. Coordination refers to governments' mutual adaptation of their policy frameworks: recognizing the potential repercussions of domestic policy choices on the other, they modify their policies in consequence. In the Canada-US context, these processes often take the form of "sensitized coordination", where Canadian governments endeavor to make their American counterparts aware of the benefits of modifying their policies to mitigate negative repercussions for Canada and Canada-US relations (Gattinger, 2005). With collaboration, jurisdictions work together to pursue common objectives. Harmonization, meanwhile, refers to cross-border policy relations as defined in the convergence literature: conscious efforts to develop common policy approaches.

Figure 1: Cross-border Policy Relations

Conflict------------Harmonization

|-- Parallelism --|-- Coordination --|-- Collaboration --|

Source: Gattinger and Hale, 2010

The phenomenon of North American policy-making goes a step beyond harmonization as conceived in analyses of policy convergence and cross-border policy relations in two important respects: the level of analysis and the place of sovereignty in the arrangements. With respect to the level of analysis, in North American policy-making, policy-makers deal with issues from a continental or regional perspective rather than from a country-level or state/province-level standpoint. Issues are analyzed primarily through a regional lens of North American interests, as opposed to individual jurisdictions' concerns. This approach is similar to but distinct from analyses of "borderlands", "cross-border regions" or "cross-border policy spaces" (see Brunet-Jailly, 2007; Konrad and Nicol, 2008; and VanNijnatten, 2006, 2010). While these approaches also explore policy-making through the lens of geographical units that do not necessarily coincide with domestic political boundaries, they differ from North American policy-making with regards to the place of sovereignty in the arrangements. Analyses of policy relations in borderlands or cross-border regions approach them predominantly as intergovernmental arrangements, i.e., relations between discrete sovereign governments.9 With the concept of North American policy-making, meanwhile, policy arrangements border on the supranational, with jurisdictions implicitly or explicitly pooling sovereignty in or delegating sovereignty to supranational organizations or processes. 10

As in the policy convergence literature, North American policy-making can occur at a number of different levels: from policy research and planning (information, data, metrics, etc.) to policy goals and objectives, to policy instruments. It should be said, however, that it need not be divorced from domestic policy and regulatory development – and in fact it can be quite reliant on domestic policy processes. As we shall see in the forthcoming discussion of the electricity sector, various dimensions of electricity policy and regulation are being developed through North American processes, but then formally entrenched in domestic policy frameworks afterwards. This is not a mere instance of policy harmonization, however: these policy development processes share more in common with supranational than intergovernmental approaches. Nonetheless, it bears reiterating that the aim here is not to suggest that North American policy-making has supplanted (or will supplant) traditional intergovernmental policy relations on the continent. Rather, a new species of policy development is emerging that warrants further investigation. In the electricity sector, one of the factors driving this development would appear to be policy convergence, which itself is driven by a number of factors, as discussed below.

3. POLICY CONVERGENCE IN THE ELECTRICITY SUPPLY SECTOR: SETTING THE STAGE FOR NORTH AMERICAN POLICY-MAKING¹¹

Canada and the United States have highly integrated and interdependent electricity supply systems, as the 14 August 2003 black-out – an outage that left some 50 million Canadians and Americans without power in Ontario and the Northeastern and Midwestern US – very visibly demonstrated. The systems also share similarity in their overarching policy objectives and frameworks: providing electricity that is reliable, affordable, accessible, and environmentally sustainable, through reliance on market forces where feasible. Virtually all jurisdictions in Canada and the US have unbundled their electricity supply systems into separate operators for generation, transmission, distribution, wholesale/retail sales and system operation, and have introduced competition into wholesale – and in some instances retail – power supply. The genesis of these policy changes can be traced to the influence of a number of factors, which individually and collectively have propelled policy convergence.

Until the 1990s, the electricity supply industry in both Canada and the US was regulated largely as a natural monopoly. The various segments of the industry- generation, transmission, distribution, and wholesale / retail supply – were often owned and operated by a single vertically integrated public or private utility. The economic paradigm of electricity as a natural monopoly was increasingly called into question in the late 1980s/early 1990s, however, as a result of advances in technology that permitted greater flexibility and diversity in power generation, the trend in a number of jurisdictions toward nondiscriminatory access to utilities' transmission systems for non-utility power companies, and policy transfer from other sectors such as natural gas and telecommunications, where experience with deregulation suggested that competition would produce benefits for consumers (Canada, 2003). Electricity restructuring has involved privatizing crown corporations, unbundling segments of the industry that lend themselves to market forces

(generation and wholesale/retail supply) from those considered to be natural monopolies (transmission and distribution), introducing competition into wholesale and retail power supply, and employing performance-based regulation in the regulated segments of the industry (Joskow, 2003).

The timing and pace of restructuring has varied both within and between Canada and the United States, with a number of jurisdictions – notably California and Ontario – facing significant political and economic obstacles and challenges in their efforts to reform their electricity industries. Nonetheless, the shift toward restructured electricity markets is undeniable. In Canada, given that provinces have constitutional jurisdiction over virtually all aspects of power supply – from generation, to transmission, to distribution and wholesale/retail power sales – electricity restructuring is predominantly a provincial affair. 12 All provinces, save Newfoundland and Labrador (policies under review) and Prince Edward Island (regulatory decision on open access transmission tariff pending), introduced competition into their wholesale electricity markets (Canadian Electricity Association, 2010). Few have implemented or plan to implement full open access at the retail level; Alberta is the only province to have full open retail access with market-based prices.13

In the United States, electricity market reform has stemmed from policy decisions at both the federal and state levels. The American federal government has been pivotal in the restructuring process given that it has broader powers in the electricity domain than its Canadian counterpart. In addition to jurisdiction over nuclear generation, international energy infrastructure, international trade and treaty-making, the American government also has jurisdiction over interstate electricity transmission (which, in contrast to the Canadian federal government, it exercises), hydropower licensing, the wholesale power market, reliability of the bulk power system, and mergers and corporate structure. State governments have jurisdiction over retail power sales, intra-state mergers, and planning and siting of intra-state electricity generation, transmission and distribution facilities.

The Energy Policy Act of 1992 empowered the Federal Energy Regulatory Commission (FERC) to mandate non-discriminatory open access transmission and to order wholesale wheeling. ¹⁴ FERC moved forward with these authorities in the subsequent years, first

with Order No. 888 in 1996, which mandated that electricity market players have access to utilities' transmission facilities on a non-discriminatory basis and required the latter to functionally unbundle their wholesale power operations from their other business components (generation, transmission, distribution, etc.). This included the determination of separate rates for wholesale generation, transmission and system control services. FERC also issued Order 889 mandating that utilities create or be part of electronic information systems to share information about available transmission capacity with transmission customers. Order 592 updated the Commission's policy on mergers given a spate of industrial restructuring underway in the new regulatory context. These Orders were followed by subsequent measures to stimulate the creation of Regional Transmission Organizations (RTOs) and Independent System Operators (ISOs), through which contiguous transmission operators collaborate to put in place a single system providing nondiscriminatory open access to transmission lines in the wholesale power market. At the subnational level, adoption of retail competition has been very uneven across the US. As of May 2008, eighteen states along with Washington DC had opened their retail markets to competition, two had introduced competition for large customers, and four had repealed, suspended or indefinitely delayed restructuring (Edison Electric Institute, 2011). States with open retail access or large customer access at or close to the Canada-US border include Oregon, Illinois, Michigan, Ohio, Pennsylvania, New York, New Hampshire and Maine (Ibid.).

A number of drivers have underpinned these policy shifts in Canada and the US. First, as noted above, electricity sector liberalization was stimulated by governments observing emerging practices in other countries and jurisdictions. In the Canada-US context, the restructuring experience of Texas was influential for some provinces (e.g., Alberta and Ontario), but policy diffusion was also underpinned by the activities (publications, workshops, working groups, etc.) of international organizations, notably the Organization for Economic Cooperation and Development (OECD) and the International Energy Agency (IEA). Second, as mentioned above, technological change permitting greater flexibility and diversity in generation (e.g., the combined cycle gas turbine), was a parallel development across jurisdictions that enabled competition to be feasibly introduced into the sector.

Third, economic integration and interdependence have propelled (and been propelled by) similar policy choices in Canada and the US. The countries' electricity systems are interconnected to permit cross-border trade and, as discussed further below, to enhance electricity reliability on both sides of the border. Canada and the United States trade increasing volumes of electricity with one another (see Table 1). Between 1990 and 2009, the total volume of electricity trade more than doubled, from 32 to 68 terawatt hours. Exports from five provinces account for the vast majority of Canada's power sales to the United States: British Columbia, Manitoba, Ontario, Québec and New Brunswick (Statistics Canada, 2011). Alberta, Saskatchewan and Nova Scotia also export power to the US, but volumes tend to be much lower than those of the other five provinces, and in the case of Alberta and Nova Scotia, power exports are a recent development, dating to 1996 and 2008, respectively (Ibid.). In terms of imports, while volumes vary from year to year, British Columbia, Ontario, Québec and New Brunswick tend to import the greatest volumes of power from the US (Ibid.).15

Table 1: Canada-United States Electricity Trade, 1990-2009 (selected years), tetrawatt hours

Year	Canadian Exports to US	Canadian Imports from US	Total Volume
1990	16	16	32
1995	11	2	43
2000	49	13	62
2005	42	19	62
2009	51	17	68

Sources: United States Energy Information Administration, 2011a. Note: Electricity trade data are not available from this source for years prior to 1989.

1 tetrawatt hour = 109 kilowatt hours.

The growth in electricity trade over the last decade and half suggests that Canada-US electricity market integration is a relative-ly recent phenomenon. However, examining integration through the lens of electricity reliability reveals that Canadian and American electricity market interdependence dates back much further than this. Because electricity cannot readily be stored, consumption

and production must be balanced at all times on the grid. As a result, electricity reliability is a primary concern in the sector, and one means of enhancing it is to connect contiguous electricity systems. As discussed in the following section, the Canadian and American power grids have been interconnected to enhance reliability on both sides of the border for decades. In recent years, electricity reliability has come to be managed through a North American policy process.

This high level of economic integration and interdependence has stimulated policy convergence where neighboring jurisdictions seek interoperability and pursue common objectives (e.g., reliability). It has also opened the door to strong American influence – imposition as a driver of convergence – on Canadian electricity restructuring, particularly when it comes to competition in the wholesale power sector and regional transmission arrangements. FERC's Order 888 established a "reciprocity requirement" which obliged Canadian transmission entities to provide American power marketers with non-discriminatory open access to their grids in order that Canadian power exporters could obtain a license from the Commission to participate in the American wholesale power market. Canadian utilities have tended to comply with this requirement (Pineau et al., 2004), with British Columbia and Quebec the first to introduce transmission rates modeled on the FERC tariff (IEA, 1999).

The influence of FERC on provincial electricity regulation has been substantial. In Québec, for example, there was no domestic interest in opening the electricity market to competition because prices were low in relation to neighboring jurisdictions; nonetheless, the province restructured its electricity sector in order to ensure continued access to the American marketplace (Bernard, 1999). Hydro-Québec, the province's vertically-integrated public utility, created TransÉnergie, a new transmission division, in order to become a FERC accredited wholesale power marketer (Bernard, 2000). The province also created an energy regulatory body, the Régie de l'énergie, to regulate transmission and distribution rates and conditions in order to comply with FERC requirements (Simard et al., 2006). Although on a national basis, electricity export volumes are quite small for exporting provinces (see footnote 15), they can represent significant proportions of electricity generated. In 2009, for example, power exported to the US represented ten percent or more of provincial generation for the five main exporting provinces: British Columbia (11%), Manitoba (27%), Ontario (11%), Québec (10%) and New Brunswick (14%) (author's calculations based on Statistics Canada, 2011).

Imposition can also extend to provincial membership in cross-border transmission organizations. Given the transmission interties between Canada and the United States, Manitoba Hydro, for example, is a member of the Midwest Independent Transmission System Operator (Midwest ISO), which encompasses transmission systems in a dozen states including North Dakota, Minnesota, Wisconsin, Illinois, Indiana and Michigan. For its part, British Columbia aimed to take part in RTO West, a Regional Transmission Organization proposed in the early 2000s, which encompassed a number of Western states. The energy minister of the day noted that the move was undertaken "to satisfy the US Federal Energy Regulatory Commission, which has been pressing utilities in North America to separate the transmission from the generation components of their businesses" (Kennedy, 2002, as cited in Cohen, 2007).

Given the common policy trajectory of Canada and the US from regulating electricity as a natural monopoly to the restructuring of electricity markets, the two jurisdictions' policy objectives, instruments and regulatory approaches have converged at broad levels. All states and the vast majority of provinces have competitive wholesale power markets (and in some instances industrial open access) and have unbundled the various segments of the industry (either via separate organizations or through functional unbundling within a single organization). There remains considerable diversity at the retail end of the business, however, with only one jurisdiction in Canada and a minority in the US having adopted full retail competition.

There is also considerable diversity in the industrial structure of the electricity supply industry within and between both countries in regards to size, generation profile and ownership structure. As one would expect, the American power sector is much larger than its Canadian counterpart, with 1,010 gigawatts of generation capacity in 2008, compared to Canada's 128 gigawatts in the same year (United States Energy Information Administration, 2011b). Fuel sources for the industry also differ significantly, with coal playing a much larger role in the US fuel mix: nationally, close to half in 2010 (45%), with natural gas (24%), nuclear (20%), and hydro (6%) accounting for most of the rest (Edison Electric Institute, 2011). Re-

gional fuel mixes differ across the country, with the Pacific coast (Washington, Oregon and California) relying more heavily on natural gas, hydro, nuclear and non-hydro renewables with very little coal in the mix (37%, 36%, 12%, 11% and 4% for each source, respectively) while in most of the rest of the country, roughly half (in some regions more than two-thirds) of electricity is generated from coal, with natural gas and nuclear comprising most of the rest (Ibid).¹⁶

In Canada, meanwhile, in 2009, over half of the national electricity fuel mix was made up of hydro (63%), with the remainder accounted for primarily by conventional steam and nuclear (17% and 15%, respectively) (Canadian Electricity Association, 2010). Fuel mixes differ sub-nationally, with hydro accounting for almost all electricity generated in British Columbia, Manitoba, Newfoundland and Labrador, and Québec; conventional steam powering most of Alberta, Saskatchewan, New Brunswick and Nova Scotia; and nuclear being the largest power source in Ontario, followed by hydro and conventional steam (Ibid.).

As regards ownership structure, the private sector is a much stronger player in the American electricity industry. In 2010, over two-thirds of electricity customers (69%) were served by shareholder-owned electric companies and affiliates, followed by electric cooperatives (13%), municipal systems (11%), energy service providers (4%) and other providers (4%) (Edison Electric Institute, 2011). This stands in contrast to Canada, where the majority of large electric companies are publicly-owned, with the private sector a minority owner of electricity facilities. The private sector is limited primarily to smaller-scale generation and provision of services to the industry as a whole (e.g., information and generation / transmission/distribution technologies, ancillary services, power marketing, etc.). Provincial crown corporations - either a single entity with its business unbundled into different divisions or separate public organizations for generation, transmission and system operation - operate in all provinces save Alberta, whose ownership structure is predominantly private. Public electricity utilities at the municipal level are the norm across Canada.

4. BILATERAL ELECTRICITY RELATIONS IN THE 21ST CENTURY: CROSS-BORDER POLICY RELATIONS AND THE EMERGENCE OF NORTH AMERICAN POLICY-MAKING

Over the last two decades, Canada-US electricity policy relations have tended mainly toward policy parallelism, coordination and collaboration, owing to the shared interests and electricity interdependence between the two countries, notably in terms of crossborder trade and electricity reliability. While some observers decry the extent of American influence on Canadian electricity regulation, notably FERC's role in electricity sector restructuring (see Cohen, 2006, 2007; Froschauer, 1999; and Van den Hoven and Froschauer, 2004), open conflict between the two countries has not been a feature of bilateral policy relations in contemporary times. Rather, FERC requirements in the wholesale power sector have been espoused by Canadian jurisdictions in a process akin to parallelism as defined earlier in this article, i.e., adopting the broad contours of counterparts' policies and tailoring them to domestic conditions (political, economic, institutional, etc.). Nonetheless, it remains the case that FERC - for good or for ill - has directly influenced Canadian electricity policy and regulation.

Bilateral policy coordination in the electricity sector is commonplace, and, as noted earlier, it can often be characterized as sensitized coordination (Gattinger, 2005). American jurisdictions often pursue a policy path of independence vis-à-vis Canada. Canadian officials in line departments and agencies and at the Canadian embassy in Washington then work to sensitize American officials and legislators to the advantages of coordinating American policy with Canadian interests. In the energy-environment domain, for example, American initiatives to promote renewable electricity generation via Renewable Portfolio Standards (RPSs) have drawn concern from the electricity sector in Canada. Where RPSs define renewable electricity in terms that discriminate against non-domestic electricity or against certain renewable energy forms (specifically largescale hydro), they can intentionally or unintentionally reduce the competitiveness of Canadian power in US markets. The genesis of this challenge partly owes to the differing generation profiles of the Canadian and American electricity sectors: as noted above, while hydroelectricity accounts for a substantial proportion of Canadian generation, it is a much less prevalent source of power in the United States. It also owes to an American aversion to large-scale hydro given past projects associated with environmental, social and economic damage in the country (e.g., loss of or damage to terrestrial or aquatic habitat due to water diversion and flooding, reduction in industrial potential of fisheries, etc.). In the absence of a strong hydropower lobby in the US, the presence of strong domestic (non-hydro) renewable lobbies or the desire of American governments to use RPSs to spur domestic job creation and economic growth, American policy-makers are not always inclined to take the interests of Canadian hydropower producers into account when developing RPS guidelines.

On the RPS file, Canadian governments have advocated the position that US programs should treat electricity imports in the same manner as domestically-generated power (e.g., Côté, 2002; Kergin, 2003) and have enjoyed some success in this regard. For example, when a federal RPS was the subject of Congressional attention in the early 2000s (the RPS provision was ultimately not passed by Congress), the Canadian government succeeded in having hydroelectric power "zeroed out" from the RPS calculation (i.e., hydroelectricity imports would not be counted as renewable but they would not be included in the total volume of electricity used to calculate the percentage of renewable power generated). While this fell short of full recognition of Canadian hydro in RPSs, it at least reduced the discriminatory effects of excluding hydro entirely from the policy framework. At the state level, Canadian officials have worked to arrive at similar arrangements.

The two countries also routinely collaborate on electricity matters. The Clean Energy Dialogue (CED) announced in January 2009 by American President Barack Obama and Canadian Prime Minister Stephen Harper "commits senior officials from both countries to collaborate on the development of clean energy science and technologies that will reduce greenhouse gases and combat climate change" (The White House, 2009). Electricity figures quite prominently in the CED, whose work focuses on three main areas of activity: clean energy technology (predominantly carbon capture and storage), clean energy research, development and deployment (including energy efficiency labeling and the energy demand of buildings), and the electricity grid (modernizing and "greening" the grid). While the considerable fanfare accompanying the CED's announcement seems to have exceeded its real level of activity and

accomplishments to date, the initiative evidences interest in a number of significant collaboration and coordination activities. These include information exchange, joint projects to pursue common energy objectives and the development of compatible regulatory regimes (e.g., joint conferences, bilateral legal frameworks for cross-border projects, the pursuit of coordinated regulatory approaches, etc.). In addition, as noted below, a number of the CED's aspirations are suggestive of a North American policy-making approach. It remains to be seen whether this will be realized in practice as the work of the group proceeds.

Canada and the US also collaborated extensively following the August 2003 power outage, establishing a bilateral task force to investigate the cause of the blackout and recommend how to decrease the possibility of such outages in the future. Collaboration between Canadian and American officials on electricity reliability has been ongoing following the release of the task force's final report. As discussed below, the establishment of the North American Electricity Reliability Corporation as the body responsible for developing and enforcing reliability standards marked an important turn towards North American policy-making in this area.

It is to this turn that that the paper now shifts its attention. Specifically, it explores three instances of North American electricity policy-making: electricity reliability and the unique role of the North American Electric Reliability Corporation (NERC), planning for renewable generation and transmission expansion via the Western Renewable Energy Zones Initiative, and a number of electricity objectives and activities of the Clean Energy Dialogue.

THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION: NORTH AMERICAN POLICY-MAKER EXTRAOR-DINAIRE

As noted earlier, because electricity cannot easily be stored, power consumption and production must be balanced at all times on the grid. As a result, electricity reliability is a core objective for the electricity supply industry. It is pursued in part by connecting contiguous electricity systems, including those crossing the Canada-US border. The bilateral reliability framework for the bulk power system (generation and transmission) has been developed and managed by the North American Electric Reliability Council (NERC, renamed the North American Electric Reliability Corpora-

tion in 2007, as described below), an electricity industry organization formally established in 1968 following a major power outage in Ontario and the Northeastern United States in 1965. Canadian, American and (to some extent) Mexican electric utilities, generators, transmission systems, system operators and the like are members of NERC regional coordinating bodies, which join contiguous electricity generators and transmission systems for reliability purposes. Until the mid-2000s, NERC developed voluntary reliability standards that regional councils tailored to local circumstances and to which regional council members were expected to adhere. There were no penalties for failure to comply with standards, and no regulatory backstop underpinning the process. The 2003 blackout—the largest in North American history—led to significant changes in this framework, transforming it into a veritable North American process of regulatory development, compliance and enforcement.¹⁷

As noted previously, following the blackout, Canada and the United States established a joint working group to investigate the cause of the outage and recommend how to decrease the possibility of such blackouts in the future. While in the early hours following the blackout, fingers were pointed across both sides of the border as to the party ultimately responsible for the blackout, it became clear as the work of the group proceeded that the problem originated in the United States and compounded rapidly into a system-wide outage spanning both countries. The Task Force's investigation revealed that the blackout was largely preventable and that failure of a number of electricity sector players to comply with basic NERC standards (e.g., vegetation management around power lines and adequate workforce training) was a strong contributing factor. The Task Force's final report called "first and foremost" for reliability standards to be made mandatory, with significant penalties for failure to comply (United States-Canada Power System Outage Task Force, 2004).

Following this, the Canadian and American governments created the Bilateral Electric Reliability Oversight Group to "consult on the establishment of an international reliability framework and monitor its operation to help identify issues related to international aspects and options for resolution of those issues" (Bilateral Electric Reliability Oversight Group, 2005). The Group was comprised of representatives from the US Department of Energy, FERC, and the Federal-Provincial-Territorial Electricity Working Group of the

Canadian Council of Energy Ministers. One of the important issues animating its discussions was how to avoid positioning FERC as the sole authority developing, monitoring and enforcing reliability standards as this would amount to extraterritorial application of American regulation in Canada (and eventually Mexico). As such, the Group recommended the creation of an international non-government electricity reliability organization and developed a number of principles to guide its creation (governance, appointments, approval processes, funding, etc.). This then fed into the US Energy Policy Act of 2005, which called for the creation of an Electric Reliability Organization (ERO) to develop and administer mandatory and enforceable reliability standards under the oversight of the FERC. The legislation called for the ERO to gain recognition from relevant state authorities in Canada and Mexico. In the wake of this legislation, the NERC significantly reformed its governance structure to expand the range of electricity sector interests represented in the organization and to ensure members of its Board of Trustees, the body that formally approves reliability standards, would not be in a conflict of interest in fulfilling their role. The organization successfully applied to the FERC and Canadian regulatory authorities to become the new ERO and incorporated as a not-for-profit organization under a new name, the North American Electric Reliability Corporation.

The organization is arguably the closest Canada and the United States come to having a truly binational organization, i.e., one whose operations are virtually supranational. The Corporation has a membership and governance structure that integrates Canadian and American interests in standards development, and the ambit of its purview is North America. There is a formula for calculating the number of Canadian representatives that sit on the NERC Board of Trustees (at time of writing, two of eleven Trustees are to be Canadian), but Trustees do not serve in their capacity as Canadian or American citizens, who represent the interests of their country of origin. Rather, they "are expected to serve the public interest and to represent the reliability concerns of the entire North American bulk power system" (North American Electric Reliability Corporation, 2009; emphasis added). Reliability standards are developed by the NERC Standards Committee through a bottom-up, industry-led consensus-based process. Committee membership includes representation from all segments of the industry, with balanced country representation based on net energy for load (NEL, a measure of the size of the sector). Members of the Committee are elected by the segment they represent. When standards are developed, they must be supported by a two-thirds majority with a quorum of at least seventy-five percent of members. Despite the larger number of American participants in absolute terms, Canadian experience to date in NERC processes has been favorable, with Canadian interests being served well by the process.

NERC has signed MOUs with Canadian provincial regulators and the National Energy Board to recognize it as the ERO in Canada, and provinces have developed a process for the adoption of NERC standards based on their individual regulatory context. In Saskatchewan, for example, where there is no electricity regulator as a matter of provincial policy, the provincial utility (SaskPower) has developed a series of steps for reviewing and adopting the standards. In Alberta, standards are submitted to the Alberta Electricity System Operator, which in turn sends them to the Alberta Utilities Commission, which has the opportunity to remand them. In Ontario, meanwhile, standards are submitted to the Independent Electricity System Operator, which forwards them to the Ontario Energy Board. The standards are deemed to be approved if the OEB does not give notice that it disapproves or is remanding them within a certain period of time.¹⁸

NERC has developed over 100 reliability standards, which have been submitted to the FERC and Canadian regulators for approval. To date, no standards have been rejected or remanded and only very limited – arguably insignificant – modifications have been made by domestic regulators. British Columbia, for example, has a policy against nuclear power. While it adopted the NERC standards that apply to the nuclear sector in order to maintain uniformity across the industry, it inserted a mention of its stance on nuclear energy into the standard for the province. Alberta, for its part, inserted the names of relevant provincial electricity sector organizations into its standards for clarity, but did not modify the substance of the rules. Meanwhile, in Québec's adoption process, the province translated the standards into French.

NERC also has the legal authority to monitor and enforce standards and does so largely via agreements delegating this authority to NERC's eight Regional Entities, which are themselves composed of organizations from all segments of the industry in Canada, the

US and a portion of Baja California. Three Regional Entities cross the Canada-US border: the Western Electricity Coordinating Council (which includes British Columbia and Alberta, and runs through more than a dozen American states down to Baja California), the Midwest Reliability Organization (which includes Saskatchewan and Manitoba), and the Northeast Power Coordinating Council (which includes Ontario, Québec, New Brunswick and Nova Scotia). Each of these bodies in turn has developed its own compliance, monitoring and enforcement programs, and undertakes electricity planning and coordination for their regions. Like NERC, Regional Entities crossing the Canada-US border have developed governance structures integrating Canadian and American interests, and they approach decision-making and their operations from a predominantly regional - not intergovernmental - perspective. Although parochial interests will emerge in the decision-making processes of Regional Entities, like NERC, the fiduciary responsibility of their boards is to the region.

In sum, NERC undertakes the substantive "work" of regulatory development. Relevant authorities confer the force of state authority on the standards at the back end of the process. While this aspect of reliability standards development might suggest that the process remains an intergovernmental harmonization approach, a strong argument can be made to the contrary: while Canadian and American regulatory authorities have delegated regulatory authority to NERC and therefore remain the *de jure* regulatory authorities, NERC is the *de facto* standards creator. In NERC's own words, "Although both U.S. and Canadian governmental entities have the power of review and audit of NERC, NERC and the industry have the freedom to write [their] own rules and standards" (NERC, 2010: n.p.).

THE WESTERN RENEWABLE ENERGY ZONES INITIATIVE: NORTH AMERICAN POLICY RESEARCH AND PLANNING

The Western Renewable Energy Zones (WREZ) Initiative is an intriguing instance of North American policy-making at the level of policy research and planning. The Initiative involves participation of multiple organizations, notably the Western Governors' Association, its energy arm, the Western Interstate Energy Board, and the Western Electricity Coordinating Council, one of NERC's eight Re-

gional Entities (see Table 2). It emerged primarily in response to the need to increase renewable energy production and transmission in the Western Interconnection given the growth of Renewable Portfolio Standards in US states, notably California's, which calls for 33% renewable power in the state by 2020. The Initiative involves four phases: the first to identify the zones with greatest potential for renewable electricity development in the Western Interconnection, the second to explore transmission requirements to bring these sources onto the grid, the third to identify electric service providers' preferred zones and to coordinate procurement schedules among those having interest in the same zones, and the fourth to coordinate the review of transmission siting applications across the region.

While the WREZ by no means replaces federal, state or provincial level legislative, policy and regulatory processes necessary to develop renewable energy, it is undertaking a comprehensive process of research and planning at a level that begins with the needs of the region as a whole as the starting point for analysis. As it notes, "The WREZ is looking across the Western region for the best renewable resources regardless of landownership or jurisdictional boundaries" (Western Governors' Association, 2010: n.p.; emphasis added). The process utilizes a common methodology of technical, environmental, economic and financial measures to identify the most promising areas for renewable electricity production. A single methodology is also employed for modeling the transmission infrastructure needed to bring these resources - which are often located at a distance from existing transmission systems - to electricity markets. As such, while the WREZ takes pains to underscore that it "is not intended to impinge on the legal authority or replace the regulatory role or requirements of any local, state, provincial, tribal or federal agency" (Western Governors' Association, 2009: 4), one of its main aims is to "[g]enerate reliable information for use by decision makers that supports the cost-effective and environmentally sensitive development of renewable energy in or near certain identified renewable energy zones, as well as the conceptual transmission plans needed to deliver the renewable energy to load centers" (Western Governors' Association, 2010: 4).

The Initiative has organized its work with an overall Steering Committee, which includes state governors, western premiers, public utility commissioners and federal energy and regulatory officials; a Technical Committee composed of industry experts, envi-

ronmental groups and government agencies responsible for operational management; and three stakeholder-based working groups to identify the renewable zones (Zone Identification and Technical Analysis working group, ZITA), to categorize the zones based on environmental considerations (Environment and Lands working group, E&L), and to model generation and transmission to bring renewable generation to the grid (Generation and Transmission Modeling working group, G&TM). The ZITA working group has studied the potential for developing wind, solar, geothermal, biomass and hydropower resources using available state, provincial and federal data, and categorized the potential of these resources into primary (those with the greatest potential in the short-term: solar, wind, geothermal and Canadian hydro) and secondary (smaller-scale: biomass and American hydro) sources. The group has then narrowed these down to "Candidate Study Areas" with the most cost-effective, high potential renewable resources, and has further refined these to "Qualified Resources Areas", those with sufficient generation potential to justify transmission construction to bring their power resources to the grid (1,500 MW potential within 100 miles of the grid). The E&L group has identified areas for exclusion from study based on statutory, regulatory and environmental considerations (e.g., national and sub-national parks, wildlife habitat, sensitive ecosystems, etc.). The resulting "hub map" of this analysis shows the relative generation potential of Qualified Resource Areas across the Western Interconnection using circles, each sized in proportion to an individual area's annual generating potential. Of note, many of the hubs cross state and state-provincial boundaries, including the Canada-US border and the US-Mexico border. These QRAs are then further winnowed down based on wildlife sensitivities to identify the ultimate Western Renewable Energy Zones.

Table 2: Regional Organizations, States and Provinces Involved in the Western Renewable Energy Zones Initiative

Organization	Membes	Mandate
Western Governors' Association	19 states and 3 US-Flag Pacific Islands States: Alaska, Wash- ington, Idaho, Montana, North Dakota, Or- egon, Wyoming, South Dakota, California, Nevada, Utah, Colorado, Kansas, Nebraska, Ari- zona, New Mexico, Texas, Oklahoma, Hawaii	Identifying issues that affect the West across a wide range of policy fields (natural resources, environment, economic development, etc.) Developing policy, joint projects and advocacy on behalf of the West
Western Interstate Energy Board	12 states and 3 provinces (Associate Members) States: Washington, Idaho, Montana, Oregon, Wyoming, California, Nevada, Utah, Colorado, Nebraska, Arizona, New Mexico Provinces: British Columbia, Alberta, Saskatchewan	Energy arm of the Western Governors' Association Cooperation on energy matters among states, provinces and American federal government to strengthen the region's economy and well-being
Western Electricity Coordinating Council	Electricity sector players (all industry segments) from 14 states, 2 provinces and the northern portion of Baja California States: Washington, Idaho, Montana, Oregon, Wyoming, South Dakota, California, Nevada, Utah, Colorado, Nebraska, Arizona, New Mexico, Texas Provinces: British Columbia and Alberta	Reliability of bulk electricity system in the Western Interconnection Ensuring open and non- discriminatory transmis- sion access Resolution of transmis- sion access disputes Coordination of mem- bers' operating and plan- ning activities Regional Entity of the North American Electric Reliability Corporation (NERC)

Sources: websites of each organization.

THE CLEAN ENERGY DIALOGUE: NORTH AMERICAN POLICY-MAKING BARK BUT NO BITE?

As noted above, the Clean Energy Dialogue has been framed by the Canadian and American federal governments as an exercise in collaboration between the two countries. Nonetheless, several aspects of its work suggest that some of its activities might encompass North American policy-making as defined here, notably in terms of policy research and planning (information and metrics). For example, the CED's Action Plan recommends the development of a North American Carbon Atlas using "integrated efforts by the United States and Canada to better analyze and map out CO, sources and geological storage opportunities" (Canada, 2009: 3). This was followed up with a Declaration of Intent for Cooperation in Energy, Science and Technology that expanded the Atlas's purview to Mexico and that included the use of common methodologies for CO, sources, reservoirs and storage estimates (Canada, 2010). As the CED's second Report to Leaders notes, "[t]he objective is to foster and enhance data gathering and information sharing on carbon sources and sinks among the three countries to support a uniform geographical information system" (Canada, 2011b). While these initiatives verge on North American policy-making in that they examine CCS potential from a continental perspective and aim to create a common information and metrics base for CCS development, it remains to be seen whether the potential of such processes will be realized. For example, despite the CED objectives for a continental carbon storage atlas, some Canadian and US metric development processes seem to be progressing along separate and unconnected tracks: Alberta has a stand-alone process underway for developing monitoring, verification and accounting (MVA) measures, as does the US Department of Energy.

With respect to the electricity grid, the activities of the CED speak to the highly integrated and interdependent nature of the power sector in North America. The overall aim of the group is "to realize a reliable, adequate and secure *North American electrical system* – which will support a cleaner energy portfolio while providing cost effective energy solutions to consumers" (Canada, 2009: 5; emphasis added). The CED seeks to pursue this multi-faceted objective by "greening electricity supply", "expanding and modernizing the grid" including through "smart grid" technologies (the application of more sophisticated information and communications

technologies to the electrical system), advancing understanding of power storage opportunities, "investing in workforce development" and "engaging in public outreach" (Ibid.). The extent to which these objectives will be approached from a continental perspective remains to be seen. The CED's Second Report to Leaders identifies several areas of progress, e.g., collaborative work on labor force planning, joint research on energy storage potential, and joint events on key issues like smart grid. But the extent to which a North American policy approach might emerge is not yet clear. With respect to smart grid, for example, a forum held in early 2011 to stimulate bilateral discussions on the topic fell somewhat short of bilateral – much less binational. Owing to travel budget restrictions in the US, only a handful of American participants were in attendance.

In the area of energy research and development, the CED also includes a number of aims indicative of a North American approach to policy-making, including "a joint [technology] roadmap to identify technology and associated research, development and deployment pathways that would help reduce greenhouse gas emissions by 2050" (Canada, 2010: n.p.). Along with a collaboration framework for joint research, the roadmap is intended to "[h]elp create a single North American market for clean energy technologies" (Ibid.: 4; emphasis added) and is in keeping with the CED's observation that the two countries would "benefit from a shared vision for a low-carbon North America" (Ibid.: 4). If this effort to map out a joint technology strategy moves forward and a "shared vision" of a low carbon future gains traction, these activities may offer fruitful empirical terrain on which to explore North American policy-making at the level of policy research and planning. At present, however, it is not clear how much progress will be made on this agenda item.

4. NORTH AMERICAN POLICY-MAKING: FLASH IN THE PAN OR SHAPE OF THINGS TO COME?

This essay has explored the emergence of North American policy-making in the electricity sector. Whether this practice is emerging in other policy fields is an empirical question beyond the scope of this paper, but we can consider here whether it is merely a flash in the pan or if it might be the shape of things to come. To address this question, we need to proceed in two stages. We first might determine whether electricity is sui generis, in which case the phenomenon is not likely to be found in other policy fields. Second,

we may consider if the electricity sector is *not* unique – but rather a test-bed for North American policy-making – whether the practice is likely to gain traction on the continent.

On the first point, a persuasive argument can be made that electricity might be a unique case: it possesses a number of characteristics that militate strongly in favor of North American approaches. The question of reliability alone – the need to balance generation and consumption in real-time on a complex multilayered grid spanning international boundaries – is arguably an exceptional requirement, making the sector unique vis-à-vis other policy fields. The intricate engineering, communications and technical specifications that must be addressed in order to pursue reliability mean that, at the end of the day, it can really only be addressed via North American policy approaches. Policy shifts towards renewable power generation likewise militate in favor of continental approaches, given the technical and geographic realities of integrating renewables into the grid. Nonetheless, it is not unimaginable that North American approaches to policy-making could emerge in other policy sectors.

This empirical question deserves research attention. The case of electricity may offer some helpful guideposts for places to begin looking for North American policy-making. A number of drivers seem to underpin the phenomenon in the electricity sector: policy convergence, economic and infrastructure integration and interdependence, and common challenges and opportunities. This could clearly apply to many policy sectors: environment, transportation, security, other energy sub-sectors, etc. Some electricity issues and objectives (reliability, integrating renewables, development of the smart grid, etc.) are not uniquely Canadian or American. They are challenges and opportunities common to both jurisdictions which in some instances can possibly be pursued on a regional basis. This is particularly the case for reliability, but is arguably also the case for other issues such as smart grid, where large investment decisions and the introduction of new technologies and approaches could be most effectively pursued on a North American basis. In cases such as these, where infrastructure or other capital investments are substantive and long-term (obviously for electricity, but also clearly for other energy subsectors or areas like transportation), regional approaches may more readily emerge. In these contexts, at a minimum, cross-border regional or continental planning could do a superior job of efficiently and effectively allocating scarce resources – resources which are all the more scarce in the challenging economic and fiscal contexts of recent times.

On the second point, whether North American policy-making is likely to gain traction, a few considerations can be advanced. First and arguably of primary importance, is the politics of these processes. While the case of electricity reliability almost certainly offers the most advanced instance of North American policy-making on the continent, it is not without its weaknesses. For example, FERC places significant priority on electricity reliability and is very assertive on the file, staffing up substantially for this function and working closely with the industry, actively monitoring and feeding into the development, implementation and compliance monitoring of NERC standards. In contrast, Canadian regulators have a different regulatory style, traditionally taking a "hands-off" approach to the development of standards, leaving it to industry players to craft the details of what regulators will then enforce. To the extent that FERC increasingly involves itself in NERC's activities, NERC's putatively North American approach to policy-making may become progressively skewed toward the interests and positions of the American federal government. This is clearly problematic and could derail North American policy approaches. Here, the Canadian electricity sector has a strong ally in its American counterpart – neither party wishes for FERC to overtake, supersede or absorb NERC. Making common cause with other relevant stakeholders at the federal and state levels will be essential if FERC becomes so muscular on this file that it risks transforming a North American policy-making process into a process of policy convergence through imposition.

These considerations also speak to the need to attend to the governance of North American policy-making arrangements. On this point, the experience of the Western Renewable Energy Zones Initiative is interesting as it suggests that the process may be most feasible where there is an "institutional fit" or geographical congruence between political, administrative and sector-specific organizations. As shown in Table 2 in the previous section, the three main regional organizations involved in the WREZ – the Western Governors' Association, the Western Interstate Energy Board and the Western Electricity Coordinating Council – have overlapping memberships. This enables the relevant political, administrative and sector-level players to address the development of renewable energy on a regional basis in a relatively seamless fashion. An initia-

tive of this scale and scope would be difficult to pursue elsewhere on the continent, given that no other electricity region offers such "symmetric layering" of membership in relevant organizations.

This seemingly "happy coincidence" for the WREZ speaks to the relative lack of planning for institutions in North America - often expressed as "shallow governance" or light institutionalization (e.g., Clarkson, 2008; Ayres and Macdonald, 2006; Pastor, 2011). While minimal institutionalization may have been appropriate in the early years of NAFTA, the range of issues that need to be addressed in North America (notably security, environment, competitiveness and infrastructure renewal) are increasingly exposing the weaknesses of continental governance arrangements. As Blank notes in relation to the freight transportation sector, "At the end of the day, the NAFTA negotiations never strayed beyond the notion of three separate national transportation systems. The agreement provided no commitment to a 'North American freight transportation system' and created no institutional arrangements to monitor transportation requirements, identify emerging problems and suggest possible ways of responding to them..." (Blank, in press). Even domestically, governance arrangements can be lacking. A recent evaluation of the Clean Energy Dialogue notes that the federal government needs to "consider ways to enhance the level of engagement with provincial partners" (Canada, 2011a). Given provincial constitutional primacy in the energy domain, one would have thought provincial involvement would go without saying. The evaluation also notes the need to "clarify, document and communicate the roles and responsibilities of all key players involved" (Ibid.). In brief, governance and institutions matter: if North American policy-making is to be the shape of things to come, it will require an appropriate level of institutional support. This suggests the need for greater research and political attention to national and sub-national governance arrangements.

Third, the democratic underpinnings of these processes need to be attended to. Comprehensive federal-level initiatives regarding North American integration (e.g., the Security and Prosperity Partnership and the more recent Beyond the Border initiative) have been criticized for lacking openness, transparency and meaningful opportunities for civil society involvement. While business is often at the table, places for NGOs, individual citizens, consumer groups, etc., are often not set, or opportunities for participation are relatively

limited or critiqued as tokenism. This may very well represent the largest stumbling block to North American policy-making. Thinking about "issues in North America" as "North American issues" will involve a paradigmatic change in thinking for some. Without informed publics, transparency, and opportunities to engage meaningfully in North American policy processes, public opposition to such practices may be substantial. The rationale, benefits, costs and potential outcomes of such processes need to be communicated and mechanisms for public involvement put in place.

Such considerations will have a great influence over the future of North American policy-making: will it be a flash in the pan or is it the shape of things to come? Either way, the phenomenon is likely to interest observers of North American integration. It runs counter to the conventional wisdom that North American integration is primarily a process of private sector-led economic integration underpinned by standard cross-border policy relations where governments focus on domestic – not continental – interests. It also challenges the thesis that a common identity, common vision or sense of community on the continent is a prerequisite for deeper regional integration. Rather, it suggests that political integration can emerge as a "bottom-up" incremental process which need not be driven by formal overarching federal-led initiatives. Instead, it may reflect pragmatism and necessity in discrete policy fields, sub-fields and issue areas. As noted above, however, if North American policymaking is to be the shape of things to come, questions of process, politics, governance and public involvement must be addressed.

ENDNOTES

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² This essay forms part of a broader research study examining Canada-United States energy and energy-climate change relations in the post Canada-United States Free Trade Agreement period. The project has received funding from the Standard Grants Program of the Social Sciences and Humanities Research Council of Canada.

³ To the best of my knowledge, this expression was coined by Stephen Blank in the 1990s.

⁴While the focus of this paper is primarily on Canada and the United States, the term "North America" is utilized given that some of the processes studied here include Mexico (e.g., Baja California in the Western Renewable Energy Zones Initiative and in the North American Carbon Storage Atlas initiative of the Clean Energy Dialogue) and others are likely to do so in a more significant way in the future (e.g., a more active Mexican involvement in the North American Electric Reliability Corporation given growing interest in expanding cross-border electricity infrastructure and trade along the US-Mexico border).

⁵ As noted above, the literature also explores factors conditioning or mediating the extent of convergence. But for purposes of this analysis, which looks primarily to explain the factors propelling bilateral electricity policy and regulatory convergence as a means of better understanding the conditions under which North American policy-making might emerge, only the drivers will be considered.

- ⁶The process of emulation is also referred to as "policy transfer" in the literature (see, for example, Knill, 2005).
- ⁷ Although harmonization is often associated with agreements reached in international institutions (see Holzinger and Knill, 2005), this is not always the case when it comes to policy convergence in North America, where harmonization processes often occur outside of formal institutions (e.g., via presidential-prime ministerial summits or initiatives like the Security and Prosperity Partnership).
- ⁸ Imposition has also been referred to as "convergence through penetration" (Bennett, 1991) and as "domination-based convergence" (see Howlett, 2000).
- ⁹One possible exception would be VanNijnatten's concept of "integration", which refers to "the most intensive form of cross-border interaction, [involving] the adoption of objectives and similar actions or policies to implement them under the auspices of [a] cross-border agreement or organization" (2006: 11). However, even here, these "integrative mechanisms" appear to be primarily intergovernmental in nature (e.g., the Great Lakes Basin Water Resources Compact).
- ¹⁰ On the distinction between intergovernmental and supranational approaches, see Kaiser and Prange (2002).
- ¹¹ This section draws on Monica Gattinger with Valerie Manouk (2010).
- When it comes to electricity, the federal role is limited to the permitting process for electricity exports, cross-border electricity infrastructure, environmental regulation, and regulation of nuclear power. In principle, the federal government could regulate interprovincial electricity trade. But it has shied away from this area of jurisdiction, presumably to avoid generating conflict with the provinces, which guard ever-vigilantly against federal intervention in the energy sector, notably in the wake of the National Energy Program.
- ¹³ Ontario planned to implement full retail access with market-based prices. But as a result of supply uncertainties and skyrocketing electricity prices in the summer of 2002, the government issued re-

bates to power consumers and instituted a price cap for residential and other low volume customers. As such, the province now has a "hybrid" system, with consumers choosing between regulated rates from utilities or services from electricity retailers. A number of other provinces have implemented or plan to implement partial retail access (e.g., British Columbia and New Brunswick put in place open access for industrial users). In most provinces, however, retail rates continue to be regulated.

14 "Wheeling" refers to the use of a utility's transmission system by another entity to sell power (to "wheel it") to a third party.

15 While trade volumes have increased over the last two decades and can represent important sources of supply and export revenues on a regional basis (e.g., in New England/Québec/New Brunswick, along the west coast, etc.), when figures are rolled up nationally, they are still negligible in comparison to the percentage of electricity consumed from domestically generated sources. In 2008, for example, Canadian demand for electricity stood at 549 terawatt hours and the country imported 23 terawatt hours of power from the US (United States Energy Information Administration, 2011a; 2011b): this accounted for only 4.2 percent of domestic demand. With American demand at 3,906 terawatt hours in 2008 and imports at 56 terawatt hours (Ibid.), the corresponding figure for the US was a mere 1.4 percent. These figures reflect domestic production/consumption patterns: both countries' electricity supply systems tend to generate sufficient quantities of electricity to satisfy domestic demand with little to spare for export. Canadian electricity exports decreased in the early part of the past decade, for example, as a result of tightening supply conditions in a number of provinces, while increases in imports from the United States were mainly the result of trade flows capitalizing on time-of-use differences between the two countries (Konow, 2004).

¹⁶ New England, the Middle Atlantic and West South Central regions depart from this, with their generation profiles dominated by natural gas and nuclear (Edison Electric Institute, 2011).

¹⁷ It should be mentioned that the industry had been calling for the shift to mandatory enforceable reliability standards with a regulatory backstop since the 1990s, but it was not until the 2003 black-

out that this issue found its way firmly onto policy and legislative agendas.

¹⁸ Before the creation of the mandatory reliability standards framework, Ontario's Energy Policy Act of 1998 contained a provision stipulating that NERC standards automatically be incorporated into provincial electricity regulation as mandatory. The province has since revised this approach as described above.

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