

A National Energy Strategy for Canada: Golden Age or Golden Cage of Energy Federalism?

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Paper presented at the 2013 Annual Conference
of the Canadian Political Science Association
June 4-6, 2013, University of Victoria, BC

Abstract

In recent years, energy has climbed progressively higher on public, political and policy agendas in Canada at the federal, provincial and municipal levels alike. This has been fuelled by a number of factors, including increasing development of nonconventional resources, shifts toward renewable sources of electricity, and ongoing concern over the environment-energy interface. Against this backdrop, some premiers have called for a 'national energy strategy.' This runs counter to Canadian governments' tendency in recent decades to eschew 'national' approaches to energy. So why calls for a national strategy now? How likely are these calls to succeed?

Surprisingly, there has been relatively limited attention to energy in Canadian federalism scholarship. The literature has focused predominantly on social, health or broader economic and fiscal policies. Where energy has been addressed, it has often been done indirectly through the lens of environmental policy. This paper seeks to begin remedying this gap by developing the concept of 'energy federalism' and exploring current calls for a national energy strategy in the context of broader historical patterns of intergovernmental energy relations. Drawing on scholarship on intergovernmental coordination and the author's research on Canada-US policy relations, the paper develops an analytical framework to explore the nature and administrative underpinnings of intergovernmental policy relations. The paper then uses this framework and literature on Canadian energy policy (oil, gas and electricity), to identify four broad periods of energy federalism since Confederation: nationalist cooperative energy federalism (pre-1930), expansionist collaborative energy federalism (1930s to 1950s), competitive energy federalism (1960s and 1970s), and hyper-competitive energy federalism (since the mid-1980s). The paper argues that unless governments are able to move beyond the implicit norm of competition in contemporary energy federalism, current calls for a 'national energy strategy' are unlikely to meet with success.

A National Energy Strategy for Canada: Golden Age or Golden Cage of Energy Federalism?¹

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‘...if people put their differences aside and work towards a common goal and vision, results can be achieved. A truly national vision for energy that we can take to the rest of the world requires us to set our sights high. We can achieve this.’

Alison Redford, Premier of Alberta
Speaking to the Economic Club of Canada
Toronto, Ontario, November 16, 2011

‘This report emphasizes the need for all levels of government to collaborate to create a pan-Canadian energy strategy...’

The Standing Senate Committee on Energy,
the Environment and Natural Resources, July 2012

‘A Canadian Energy Strategy for the 21st century is needed. One that is pan-Canadian and collaborative. ... Tradition should not restrict our thinking.’
Energy Policy Institute of Canada, August 2012

For more than three decades, energy federalism in Canada has been heavily influenced – some would say cursed – by the Trudeau government’s National Energy Program (NEP) of 1980. Developed in the midst of the energy crisis of the time, the policy called for increased Canadian ownership and control in the energy industry, a two-price policy for energy resources with preferential pricing for Canadian consumers, restrictions on energy exports, and a host of other protective measures to enhance domestic energy security and independence from world markets. The NEP was demonized by western energy producing provinces – particularly Alberta – as an unjustified and unjustifiable intrusion of the federal government into a domain of provincial jurisdiction, and was denounced by the United States as an attack on American energy security and US energy companies’ operations in Canada. The NEP soured both federal-provincial and Canada-US energy relations and was ultimately undone, most notably by the Western Accord, which deregulated oil prices and opened the sector to international trade, and by the Canada-United States Free Trade Agreement (CUSFTA), which institutionalized free trade in energy between Canada and the United States, including explicit provisions against two-price policies and discriminatory export

¹ This paper has been submitted for publication in the 2013 edition of the *State of the Federation* series by Queen’s University and is currently in the ‘revise and resubmit’ stage. I would like to express my thanks to Christopher Gunter, doctoral candidate in Public Administration at the University of Ottawa’s School of Political Studies for his research assistance in support of this text. I am also grateful to participants at the State of the Federation 2012 Conference (November 29-December 1, 2012, Kingston ON), for their questions and comments on my presentation, which greatly strengthened the analysis. Thanks are also due to Rafael Aguirre Ponce (doctoral candidate in Public Administration at the University of Ottawa), Stephen Blank (2012-2013 Fulbright Visiting Research Chair in Governance and Public Administration, University of Ottawa) and David Runnalls (International Institute for Sustainable Development, Sustainable Prosperity and Centre for International Governance Innovation) for their comments on an earlier draft of this text. As always, any errors of fact or interpretation are mine alone.

restrictions. Despite the NEP's demise in practical policy terms, however, it has lived on in the minds of politicians, policy-makers and citizens alike. It established an implicit norm of competitive federalism in the energy sphere: provinces vigorously assert their dominance and defend their powers over energy, and they develop their respective energy policies in mostly autonomous ways. Ottawa, for its part, sticks closely to its knitting, intervening in energy or related areas in tightly circumscribed manners, knowing that provinces won't hesitate to challenge federal intervention as unconstitutional, either in political or judicial arenas. Since the NEP, therefore, national approaches in the energy sector have been verboten, anathema to the 'natural' order of energy federalism in the country.

Given this, growing interest and momentum in recent years for a national energy strategy – that sacrilege of energy policy ideas in Canada since the NEP – represent a near conversion of things energy in the country. When touted by Alberta, the province that has most often played the NEP card, the change is all the more striking. What led to this shift in intergovernmental relations in the energy sphere? Does it mark a turning point to a 'golden age' of energy federalism in Canada? What are the contours, promise and prospects of a 'national energy strategy'? This text seeks to answer these questions. It begins with a brief primer on energy policy-making in the twenty-first century, a field that is increasingly complex and challenging. Governments face four demanding policy imperatives when it comes to energy: markets, environment, security and social acceptability, what I refer to as the energy MESS. The text then develops the concept of 'energy federalism' in Canada. The division of powers in the Canadian constitution, along with the distribution of energy reserves, population and environmental impacts of energy, have tended to produce progressively greater north-south (Canada-US) energy ties over time, and, over the last three decades, intergovernmental relations that tend mainly toward competition, independence and conflict. Given the overarching emphasis on provincial primacy, autonomy and assertiveness in the energy sphere and the ever-present potential for hair-trigger conflict since the NEP, I characterize intergovernmental energy relations since the 1980s as 'hyper-competitive energy federalism'. As this section reveals, however, this hyper-competitive approach represents but a recent period in Canadian intergovernmental energy relations, with prior years often characterized by greater openness to and levels of cooperation and collaboration between and among federal and provincial governments.

The next section of the chapter zeros in on the national energy strategy ideas of provincial, federal, industrial and nongovernmental actors. The text reviews key proposals put forward and argues that markets, the first M of the energy MESS, are the main driver propelling these plans. A number of fundamental changes in energy markets in North America have seriously called into question the north-south logic of energy economics in Canada and spurred significant interest in establishing east-west energy linkages. This section explores the promise and prospects of a national energy strategy and argues that while national approaches hold promise to strengthen governments' capacities to address contemporary energy policy imperatives, intergovernmental relations on energy of late suggest that Canada will not enter a golden age of energy federalism. The enduring features underpinning energy federalism, combined with the decades-long norm of hyper-competitive federalism in the sector, militate strongly against the development of comprehensive national approaches.

The paper concludes by assessing the long-term prospects for a national energy strategy, arguing that they rest fundamentally on how the concept is defined and, most importantly, the capacity of governments to think beyond the 'golden cage' of hyper-competitive energy federalism to more collaborative forms of intergovernmental energy relations. Rather than a comprehensive overarching 'energy deal' between the federal and provincial governments, I propose that

governments think instead in terms of a framework agreement on energy collaboration that would identify the rationale, principles and opportunities of energy collaboration in the country and support the development of the norm of intergovernmental collaboration in the energy field in Canada.

Energy Policy in the 21st Century: Making a MESS of Things

Energy policy-making has become ever-more challenging over the last number of decades.² It comprises four key policy imperatives which have layered progressively over one another over time. First, in the 1970s and 1980s, the policy focus of most western industrialized countries – Canada included – was on getting energy markets to work more efficiently and competitively, largely through deregulation and privatization. In the oil and gas sector, this process included price deregulation, introducing competition into various segments of the upstream and downstream markets, trade liberalization and the unbundling of various functions within energy firms to establish open, nondiscriminatory access to their services and facilities³ (see Plourde 2005). The electricity sector followed in oil and gas' footsteps in the 1990s, with greater competition introduced into those segments of the industry that could be operated under non-monopoly conditions, i.e., generation and wholesale/retail supply (Ibid). Second, in the 1980s/1990s, environmental considerations came increasingly to accompany the policy focus on energy qua energy markets. Mounting concerns over the environmental impact of energy exploration, production, transmission and consumption, generated new and intensified policy attention to such matters as biodiversity, ecosystem health, climate change, land use, and water quality and diversion. Given the transboundary nature of environmental matters, many of these issues were the subject of international agreements (e.g., the Canada-US Air Quality Agreement of 1991, the United Nations Convention on Biological Diversity in 1993, and the United Nations Framework Convention on Climate Change in 1994, followed by the Kyoto Protocol of 1997). In Canada, individual provinces have pursued environmental policies in relation to energy. These include, most recently, Ontario's Green Energy Act of 2009, Quebec and British Columbia's carbon taxes in 2007 and 2008 (respectively), Alberta's levies on large emitters in 2007 and provincial participation in the US-based Western Climate Initiative. The environment also formed the basis of a domestic intergovernmental agreement in 1998, the Canada-wide Accord on Environmental Harmonization, which lays out the objectives and principles underpinning governments' collaboration on pan-Canadian environmental issues⁴. Action on the energy-environment interface at the federal level has often focused on international treaties (e.g., UNFCCC and Kyoto), with limited action domestically beyond subsidies and voluntary measures to pursue the country's international climate change commitments (Jaccard and Rivers 2007). In recent years, the federal government has adopted a number of American regulations in the transportation sector (e.g., tailpipe emissions and mirroring US commitments at Copenhagen), and made some progress on regulations for coal-fired generation in the electricity sector.

Third, energy security concerns, while always an undercurrent of energy policy, came to both broaden and deepen at the turn of the century. In the United States, mounting reliance on foreign energy imports in the 1980s and 1990s, particularly for oil, prompted growing concern over the country's energy security. While Canada did not face these challenges to the same degree given its status as a net energy exporter, Canadian consumers are nonetheless vulnerable to energy price spikes and volatility, and some regions of the country are dependent on foreign oil imports for their

² For a more elaborate discussion of the energy policy MESS, see Gattinger 2012.

³ Privatization of Petro-Canada was only to follow in 1990.

⁴ Québec did not sign on to the agreement.

supply. In addition, the concept of energy security has broadened in scope following the terrorist attacks of 9/11. The attacks focused attention squarely on the security of critical energy infrastructure, both physical and cyber-security of pipelines, nuclear facilities, refineries, etc. Indeed, in the years following 9/11, Canadian energy facilities were identified by al-Qaeda as potential targets to disrupt American energy supply (Johnston 2008). Added to this were a number of smaller-scale domestic bombings of energy infrastructure in Alberta and British Columbia, which generated increased policy attention to critical energy infrastructure protection. The concept of energy security also broadened following the ‘great blackout’ of 2003, the largest power outage in North American history, which saw some 50 million Canadians and Americans lose power in the US Midwest, US Northeast and Ontario. In conjunction with the progressive application of information and communications technologies to the electricity grid (the so-called ‘smart grid’), attention to both physical and cyber-security in the electricity sector have also heightened. Attention to critical energy infrastructure protection has also intensified following recent revelations of sophisticated and systematic hacking efforts focused on energy firms and critical energy infrastructure in Canada and the United States, allegedly by the Chinese military (Sanger, Barboza and Perlroth 2013).

Fourth, energy policy-makers have increasingly to attend to the social acceptability of energy exploration, production, distribution and use. Energy policy and regulation used mostly to ‘hum along’ under the political radar, but over the last number of years, it is scarcely possible to open leading dailies or listen to the evening news without coverage of one or more stories of public opposition to energy projects of various descriptions. Not only has public opposition intensified, it has also grown considerably in scope. Opposition in the 1980s and 1990s could predominantly be characterized as NIMBYism (‘not in my backyard’), but in recent times, this has progressed to far more challenging forms of principled opposition, captured neatly by the acronyms BANANA (‘build absolutely nothing anywhere near anyone’) and NOPE (‘not on planet earth’). These forms of opposition cannot always – indeed rarely – be addressed by conventional responses in policy-makers’ toolkits (compensating affected parties, project relocation, etc.).

Taken together, these four policy imperatives – market, environment, security and social acceptability – the acronym MESS, constitute the complex multifaceted policy terrain facing energy policymakers in the twenty-first century. The question for policymakers is what kind of MESS they will make of energy policy: a mess in the sense of disorder and disarray (uncoordinated, ill-conceived policies) or a mess in the sense of a ‘mess hall’, a place where people come together to meet their shared needs (policy that identifies socially acceptable balance-points between market, environment and security imperatives)? The text will return to this question below when discussing the profile, promise, pitfalls and prospects of a national energy strategy for Canada.

Energy Federalism in Canada: From Cooperation and Collaboration to Competition, Conflict and Independence

Despite energy’s pivotal role in Canada – as industry comprising a substantial proportion of the domestic economy and exports, as motor for the manufacturing sector and economic competitiveness, as fuel source to conquer the cold of Canadian winters and meet the transportation needs of a vast and sparsely populated country, and as vehicle for province-building in fiscal and cultural terms – there has been relatively limited attention to energy in the literature on Canadian federalism. Indeed, the term ‘energy federalism’ does not form part of the federalism lexicon in Canada as a search of both Internet and scholarly databases attests.⁵ While there are a handful of

⁵ In addition, with the notable exception of this year’s volume of the *State of the Federation*, there has been only limited attention to energy since the inception of the series in the 1980s.

policy scholars from a variety of disciplinary backgrounds who focus all or a portion of their research on energy qua energy (e.g., Bruce Doern, Burkard Eberlein, Marjorie Griffin Cohen, Pierre-Olivier Pineau, Alistair Lucas, André Plourde, among others) and periodic bursts of scholarly interest in the energy sector – during the furor over the National Energy Program or the negotiation of the Canada-United States Free Trade Agreement, for example – scholarship on energy in Canada tends to treat it as a subset of or in connection to the environment, particularly climate change. Here, there is much more scholarship and scholars with dedicated research programs on environment or climate change, as well as systematic treatments of intergovernmental relations in the environmental sphere – including, notably, the term ‘environmental federalism’ (see, for example, Courchene and Allan 2010).

This section, therefore, begins to develop the concept of energy federalism, which is understood here in the relatively simple sense of the *character* or *dynamics* of federal-provincial and interprovincial relations in the energy field. I argue these relations are influenced by the institutional, political, geological, economic and demographic characteristics of the energy sector. Many of these features are enduring and slow to change (e.g., the division of powers in the constitution); others, meanwhile, can change rapidly (e.g., market conditions) with important influences on other features (e.g., politics). The combination of these factors and their various configurations over time shape the character of intergovernmental energy relations (conflictual, collaborative, competitive, etc.). To flesh this out, I begin below by sketching out the factors. I then develop a spectrum characterizing different forms of intergovernmental policy relations to explore the changing nature of federal-provincial and interprovincial energy policy relations over time.⁶

Energy federalism is shaped first and foremost by the constitutional division of powers in the field. It has been said that Canada has one of the most divided and decentralized constitutional arrangements for energy among Western industrialized countries (Doern and Gattinger 2003). Exploring these arrangements through the energy MESS framework developed above, however, reveals that this is predominantly the case when it comes to energy ‘markets’, but less so for environment and security imperatives, as well as for social acceptability when it involves aboriginal peoples. Indeed, the more that these considerations – particularly environmental, but also security and aboriginal peoples’ concerns – have become fundamental to energy policy-making, the more the federal and provincial governments are both central players in the energy field, and, as discussed below, the more that energy federalism has become multifaceted, multidimensional and complex. Nonetheless, energy policy-makers have tended to approach energy federalism in a competitive way, a point to which I return below.

When it comes to energy markets, the provinces are dominant players. They have constitutional jurisdiction over non-renewable natural resources and electricity within their boundaries, including exploration, development, management, royalties and intra-provincial energy trade and commerce. The federal government’s powers most closely related to energy markets derive from its jurisdiction over interprovincial and international trade and commerce (including foreign investment), international treaty-making, taxation, and energy development offshore and on frontier lands (including jurisdiction over the fisheries). It bears mentioning, though, that the federal government has truncated or devolved a number of its powers in these areas: with respect to offshore and frontier lands, it has negotiated agreements with provincial and territorial governments to delegate or co-manage regulatory authority and royalties, e.g., the Canada-Newfoundland Atlantic Accord and the Yukon Territory Agreement. And with the negotiation of the Canada-US Free Trade Agreement, it in effect used federal treaty-making power to liberalize international energy trade,

⁶ This analysis is admittedly preliminary, and will require significant elaboration and refinement in subsequent research.

thereby reducing its control over international energy flows. Since the National Energy Program, Ottawa has also been relatively hesitant to intervene in matters of interprovincial energy trade, limiting its role mostly to the regulatory review of energy infrastructure crossing provincial boundaries. Ottawa also intervenes in the energy sector via the federal spending power and equalization. With respect to the latter, whether or not (or under what circumstances and how) energy royalties or other provincial revenues in the energy sector are included in equalization formulae.

The federal government continues to retain a key role in the security dimension of the energy MESS, however, through its role in critical energy infrastructure protection and in nuclear safety, the latter via the Canadian Nuclear Safety Commission.⁷ It also plays a strong role when it comes to the development of energy resources on aboriginal lands given its jurisdiction over reserves and in instances where it negotiates land claims or other agreements (provinces, of course, can also be key actors in these arrangements).

The environmental imperative of energy policy arguably generates the greatest level of involvement of both provincial and federal governments in the energy sphere. Provinces have jurisdiction over the conservation of energy resources within their boundaries as well as intraprovincial environmental impacts of energy. The federal government has jurisdiction over transboundary environmental impacts, as well as fisheries, navigation and shipping, agriculture, criminal law and the power to legislate for peace, order and good government. Any single energy project is very likely, therefore, to trigger federal and provincial governments' involvement through their respective environmental powers. Recently, however, the federal government has reduced its environmental role in the energy sector by significantly reducing the number and range of projects requiring federal environmental assessment.

Energy federalism is also shaped by the distribution of reserves and energy production in the country (along with the technologies and infrastructure available to develop them), and the distribution of population and greenhouse gas (GHG) emissions. As shown in Table 1, established reserves, production, population and GHG emissions are variable and regionally concentrated throughout Canada, with the province of Alberta the dominant reserve-holder and producer of oil, followed by Saskatchewan and East Coast offshore (mainly Newfoundland and Labrador but also Nova Scotia). The largest natural gas reserves are found in Alberta, British Columbia and Saskatchewan; these provinces are also the major producers, followed by Newfoundland and Labrador and Nova Scotia. As discussed below, Canada also has vast reserves of unconventional natural gas (shale gas), but given environmental concerns over the hydraulic fracturing process used to develop this resource, large-scale development of shale gas is still in its infancy (Québec has placed a moratorium on shale development and there is also fierce opposition to shale development in Nova Scotia and New Brunswick). In the electricity sector, all provinces generate electricity for domestic consumption⁸ but they do so with varying generation sources (hydroelectricity, coal, nuclear, natural gas, etc.). As the table reveals, energy reserves and production tend to be at a distance from major population centres, i.e., reserves are predominantly in the west, north and east while major population concentrations are in the central provinces. This characteristic accentuates the differences in provincial GHG emissions, with major hydrocarbon producers emitting the highest volumes of GHGs either in absolute (Alberta) or per capita (Saskatchewan) terms.

⁷ The federal government has also historically promoted the nuclear industry through the crown corporation Atomic Energy of Canada Limited, portions of which have been privatized in recent years.

⁸ The exception is Prince Edward Island, which imports most of its electricity from New Brunswick.

The geological and demographic context in the energy sector has tended to produce north-south energy flows: the closest major population centres to which western energy producers ship their products have tended to be in the United States. This north-south orientation of energy markets has also been entrenched in policy with, notably, the 1961 National Oil Policy enacted by the Diefenbaker government and discussed below. In the electricity sector, provinces that export power also do so primarily in a north-south orientation. Although the 1960s, 1970s and 1980s saw periodic discussion between the provinces and Ottawa over developing a national power grid, such talks were ultimately unsuccessful owing largely to competitive political dynamics between provinces (Froschauer 1998). As such, electricity flows beyond provincial boundaries are predominantly south to US markets, with British Columbia, Manitoba, Ontario, Québec and New Brunswick the main exporting provinces.

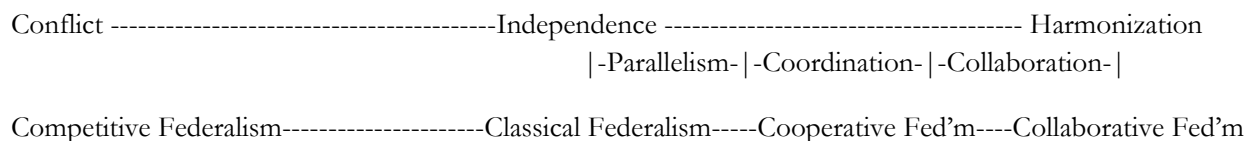
Energy federalism, therefore, particularly in the wake of the National Energy Program, has been characterized by provinces developing their respective energy policy frameworks – whether for electricity, oil or gas – in relatively independent ways and with little to no regard or reference to the policies of other governments, federal or provincial. Where there are direct interactions between provinces and/or between provinces and the federal government, they often tend toward conflict (political and judicial) over interpretation of federal and provincial jurisdiction in the energy field. Ironically, at a time when scholarship on Canadian federalism has traced the shift from classical to cooperative, competitive, constitutional, and more recently, collaborative federalism (see, for example, Simeon 2010), energy federalism seems to be stuck in a competitive groove in both federal-provincial and inter-provincial terms.

To explore this in greater detail, Figure 1 shows a spectrum of various policy relations between governments (either federal or provincial): from relations rooted in *conflict*, where interests diverge and there is open discord to *independent* policies, where governments develop their policies without regard for their potential consequences on counterparts (or vice-versa) to *harmonization*, where governments consciously develop common policy approaches. In between independence and harmonization, lie *parallelism*, which refers to governments adopting similar policy approaches to other governments but tailoring them to local circumstances, *coordination*, whereby governments consciously work to reduce spillovers or maximize compatibility between their policies, and *collaboration*, in which they work together to pursue common objectives.

As shown in the figure, these various policy relations map on to different forms of Canadian federalism identified in the literature. While different approaches to federalism are often used in a temporal sense to characterize historical periods in federal-provincial relations in toto (see Simeon 2010), I conceive of them here as varying kinds of relations between and among federal and provincial governments in individual policy sectors. As such, the spectrum does not present them temporally, but rather, according to the nature or character of intergovernmental relations. Seen through this lens, competitive federalism, often associated with the onset in the 1960s of federal-provincial conflict over constitutional roles and responsibilities with the key player Québec seeking greater powers and decentralization in the Canadian federation, can be conceived of as a more general species of intergovernmental relations characterized by conflict between Ottawa and the provinces or between the provinces themselves. Classical federalism, meanwhile, associated with the pre-depression, pre-welfare state period during which the powers of the federal and provincial governments were more balanced and there was lesser conflict between governments, is akin to policy relations of independence, where governments focus on working within their own spheres of constitutional jurisdiction. Cooperative federalism, associated with the postwar development of the welfare state up to the 1960s, led by the federal government with provincial participation, is situated

in between independence and harmonization, given its close relationship to ideas of parallelism and coordination. Collaborative federalism, meanwhile, with its focus on relationships between governments as equals working towards shared goals, falls to the right of the policy relations spectrum, which features coordination, collaboration and harmonization.

Figure 1: Spectrum of Intergovernmental Policy Relations and Approaches to Canadian Federalism⁹



Using this analytical framework, four broad periods of Canadian energy federalism can be identified since Confederation.¹⁰ The first is prior to the discovery and development of substantial oil and gas reserves in the country (in Turner Valley, Leduc and Redwater, Alberta, in 1930, 1947 and 1948, respectively), a period during which Canadian hydrocarbon production was limited mainly to coal produced in eastern Canada, the country imported most of its oil and gas from the United States, many provinces were focused on developing their respective electricity sectors and the federal government played a relatively strong role in energy via its efforts to develop national energy policies, particularly for coal. This period is also situated prior to the Natural Resources Act of 1930, which conferred natural resource rights on the Prairie provinces, whose governments did not possess jurisdiction over energy when they entered Confederation. Federal efforts to develop national policies for coal were focused on both national unity considerations (binding the country via energy ties) but also energy security concerns (ensuring that coal produced in eastern Canada would support the energy needs of western consumers) (McDougall 1982). Overall, the focus of policies was predominantly on the 'm' and first 's' of the energy MESS: markets and security. Environmental considerations were yet to emerge as central on the energy policy stage and social acceptability imperatives were also relatively less prominent.¹¹ Given these characteristics, this period can be termed one of *nationalist cooperative energy federalism*, in which the federal government played a relatively strong role through pursuit of national energy policies, generally with provincial support, and provincial governments with resource rights developed their internal energy policies rather independently (mainly electricity policy).

The second period coincides with the discovery and development of oil and gas reserves in Alberta and other jurisdictions beginning in the 1930s, and the extension of natural resource rights to all provinces. These changes saw growing provincial intervention and independence in the energy

⁹ This spectrum of policy relations was developed based on Canada's international policy relations. It first appeared in Gattinger, 2005 and was subsequently revised in a very fruitful collaboration with Geoffrey Hale (see Gattinger and Hale 2010).

¹⁰ The factual information in this section draws primarily on Doern and Toner, 1985; Froschauer, 1999, and McDougall, 1982. The depiction and description of each of the four periods is my own and is admittedly brief. Each period will need to be refined and further elaborated in subsequent research.

¹¹ This is not to say that social acceptability played no role whatsoever. There was significant contention in Ontario, for example, around early hydroelectric development in the Niagara region, which mainly supplied power to firms on the American side of the border rather than Ontarian industry and citizens. Nonetheless, the scope, frequency and intensity of public opposition to individual energy projects were far lesser. Indeed, major energy developments were often greeted positively by citizens eager to avail themselves of energy for lighting, heating, transportation and the like.

domain, including public ownership of select industry subsectors and growth in provincial regulation to manage energy resource development. This period also saw continued intervention of the federal government to address issues of energy security and components of energy in the 'national interest'. This includes the 1946 Atomic Energy Control Act, which established federal jurisdiction over nuclear energy, and the creation of Atomic Energy of Canada Limited in 1952 to develop and market the country's CANDU reactors. Given growing energy production in the country (oil, gas and electricity), national policies and approaches to energy focused less on this period on Canadian energy independence, and more on growth of the industry via infrastructure development and exports. The federal government enacted the Pipelines Act in 1949, which conferred authority over interprovincial and international oil and gas pipelines to the federal government. Ottawa also created the National Energy Board (NEB) in 1959 to regulate interprovincial and international energy flows and infrastructure. This was a recommendation of the 1957 Borden Royal Commission on Energy, which analyzed the interplay between domestic and international energy markets. In addition to recommending creation of the NEB, the Commission also advised that the federal government divide Canada into two markets for oil, a recommendation concretized in the 1961 National Oil Policy. Henceforth, oil from western producers would meet Canadian demand in the west and in the east up to the Ottawa Valley, and imports would meet demand in markets east of this point, in what came to be known as the Borden Line (see McDougall 1982). In the electricity sector, Ottawa enacted the 1963 National Power Policy, which supported power development via exports to the US.

In keeping with the first period in energy federalism, one of the characteristics of this subsequent stage was the political interest in and openness to exploring and enacting national approaches to energy on the part of both federal and provincial governments. This is not to say that discussions weren't contentious – they were often very heated – but rather, that they were politically acceptable discussions to undertake. The National Oil Policy was one expression of this, as were interprovincial discussions beginning in the 1950s and facilitated by Ottawa, over the development of a national electricity grid. As noted previously, these discussions were ultimately unsuccessful and the federal government enacted the National Power Policy to support power exports. Nonetheless, the norm of hyper-competitive federalism characteristic of the post-NEP period was yet to emerge. Instead, there was much more in the way of collaborative federalism (or at least attempts to collaborate) in the energy sphere: federal and provincial governments related more as equals in this second period than they did in the first. Prairie provinces got their natural resource rights and intergovernmental relations were based more on negotiation than on hierarchically-driven federal leadership. Indeed, when it came to oil and gas, Doern and Toner note that the 1940s to the early 1970s were 'marked by a reasonable consensus of values between the federal and provincial governments over the management of Canada's growing oil and gas reserves. The overriding objective of energy policy was to encourage oil and gas production and to stimulate the growth of the domestic petroleum industry.' (1985, 67). But this period, which can be termed one of *expansionist collaborative energy federalism*, was not to last.

The 1960s began to see greater conflict between the federal and provincial governments over energy, with more assertive provinces – notably Québec – staking and reinforcing their constitutional powers in the energy sphere. The nationalization of electricity in Québec, emblematic of the *maître chez nous* dictum of the Quiet Revolution, saw a much more territorial dynamic on the part of provinces, as well as a growing link between energy and province-building. This was not only the case in Québec, where electricity and Hydro-Québec became intimately tied with cultural identity and provincial autonomy, but also in other jurisdictions, many of which undertook a series of energy

mega-projects, notably the enormous electricity builds of the 1960s and 1970s. Provincial coffers were also increasingly benefiting from energy royalty revenues.

When the energy crises of the 1970s hit and world prices for oil and gas soared, the stage was set for explosive conflict between Ottawa and the western producing provinces and between eastern and western Canada. As Doern and Toner note, post-1973, 'government-industry and inter-governmental political conflict became much more prevalent' (1985, 67). The federal government sought to protect eastern consumers from world prices and enhance Canadian energy security with domestic production. Western producers went along up to a point, but as Ottawa's demands began to cut further and further into profits and royalties, western tolerance withered. Tensions ran particularly high between Ontario and Alberta, with Alberta even threatening to cut off gas exports to the east and Ontario announcing in 1973 that it would test the constitutionality of the threat. As the energy crisis deepened, Ottawa, intent on shielding eastern Canada from world oil prices, brought in the National Energy Program in 1980. This policy was a bridge too far for western producing provinces, which characterized the program as unwarranted federal intervention into a sphere of provincial competence, given the Program's direct impact on provincial capacities to develop, manage and raise revenue from their energy resources. Alberta successfully challenged the constitutionality of the federal government's export tax on natural gas (Chalifour 2010, 179). Given these dynamics, this period can be term one of *competitive energy federalism* – not only between Ottawa and energy producing provinces, but also, between producing provinces in the west and consuming provinces in the east.¹² The period was only to end in the mid-1980s when the last of the NEP measures was rolled back and the Canada-US Free Trade Agreement, which institutionalized free trade in energy, was negotiated. The period also included constitutional amendments in 1982 granting provinces the power to levy indirect taxes on their natural resources.

The fourth period begins in the mid-1980s following the conflict over the National Energy Program. While one might have expected that the demise of the NEP and the coming into force of CUFTA would bring peace to the energy federalism landscape and a return to collaboration and cooperation, what has occurred instead is entrenchment of the norm of competition in intergovernmental energy relations. Provinces assert and reassert their dominance in the energy sphere, develop their respective energy policies relatively independently from one another, and the federal government treads lightly in the energy field, ever-wary of raising provincial hackles over energy. Ottawa has even circumscribed its jurisdiction in the energy sphere, not only through CUFTA, but also through such measures as the Atlantic Accords with Nova Scotia and Newfoundland and Labrador to enable these provinces to tax offshore revenues as if they were the owners and sharing regulatory authority through joint regulatory boards. Even still, provinces remain quick to 'remind' Ottawa – sometimes loudly – of their constitutional dominance in the energy domain. This dynamic has been particularly evident as environmental considerations have ascended on the energy policy agenda. Relations between Ottawa and the provinces are often heated, with the latter arguing – either politically or through the courts – that federal policies must not hamper provincial capacities to develop their energy resources. Through the courts, this includes Ontario challenging federal jurisdiction in the nuclear sphere in 1993 and Hydro-Québec taking the federal government to court in 1997 over the constitutionality of federal environmental protection measures (Chalifour, 2010, 180, 184). Politically, these dynamics were most famously on display in 2002 when then Alberta Premier Ralph Klein spoke out publicly and unexpectedly against Prime Minister Jean Chrétien's Kyoto targets for Canada at a press conference on a Team Canada trade mission. Politics

¹² The popular bumper sticker of the time in Alberta, 'Let the eastern bastards freeze in the dark,' vividly captures this point.

aside, such conflicts have given rise to much debate and analysis over the legal scope of federal jurisdiction in the climate change sphere (see, for example, Chalifour 2010; Elgie 2010, and Green 2010). This period, which extends to the present, can be characterized as *hyper-competitive energy federalism*.

But can intergovernmental relations in the energy sector move from a hyper-competitive approach, which eschews national energy initiatives, to one that embraces them in the form of a national energy strategy? The next section turns to this question.

A National Energy Strategy for Canada: Golden Age or Golden Cage of Energy Federalism?

Over the last few years, numerous public, private and nongovernmental organizations at both federal and provincial levels have advocated for the development of a national energy strategy. This is a remarkable change in the Canadian energy federalism scene, which has systematically shunned national approaches to energy since the 1980s. What accounts for this turn of events? What are the profiles of these various proposals? What are their promise and prospects? This section explores these topics, arguing that market dynamics – the first letter of the energy MESS – are the primary driver fuelling the turn to national energy strategies. Of note, these proposals tend to be aspirational or principles-based, rather than proposals for comprehensive policy harmonization in the energy sphere. And while they hold great promise to strengthen governments' capacities to address their collective and respective energy policy MESS, the prospects that a national energy strategy (or strategies) will be realized are not yet clear. Indeed, early signs suggest that Canada is unlikely to enter a Golden Age of energy federalism.

An appreciation of the transformation in North American energy markets is essential to understanding why national approaches to energy have gained currency. The last three to five years have seen fundamental change in the North American energy scene: the discovery of massive reserves of unconventional oil and gas (shale oil and shale gas), along with the technological developments permitting their economic recovery (hydraulic fracturing and horizontal drilling), have transformed the energy picture in North America. The United States has proved oil reserves of 25 billion barrels, but a total of 220 billion barrels of technically recoverable resources (United States Energy Information Administration 2013). In natural gas, the potential is even more striking: the US has 305 trillion cubic feet of proved reserves and over 2 quadrillion (2,000 trillion) in technically recoverable resources. In Canada, the picture is not as dramatic, particularly for oil, given the country's longstanding proved and unproved reserves. These are mainly in the oil sands, which have over 170 billion barrels of proved reserves, with a total of 320 technically recoverable (Ibid). The figures for natural gas, owing in large part to the potential of unconventional gas, are substantial: the country has 70 trillion cubic feet of proven gas reserves (see Table 1), with another quadrillion to two quadrillion technically recoverable (United States Energy Information Administration 2013).

The so-called 'shale revolution' in the United States has significantly changed the Canada-US energy picture: the United States has gone from being a net importer of natural gas (virtually all from Canada) to the very real possibility of becoming a net gas exporter. A similar change is under way for oil: even though the US will continue to import oil, it may be able to significantly reduce its oil imports. The country halved imports since 2006 and a February 2013 Citigroup report projects it can eliminate imports from Middle Eastern and hostile suppliers within five years (Soloman, 2013). The International Energy Agency predicts that the United States will become the largest oil producer in the world by around 2020 and that its dependence on oil imports will decline from 50% of consumption to less than 30% by 2035 (International Energy Administration 2012, 76). The US is also projected to become a net exporter of natural gas by 2035 (Ibid). The US Energy Information

Administration has put forward similar projections, including a projected decline in net imports of natural gas from Canada between now and 2040 (United States Energy Information Administration 2012). From a Canadian perspective, this begins to call into question the size and viability of the US as an export market for energy.

In oil, the challenge is especially daunting: given increased shale oil production and constrained refinery capacity in the US, the price of a barrel of oil in the US (West Texas Intermediate) is selling at a discount from its European counterpart (Brent). Historically, the price spread between the two markers has been a few dollars, but it has increased significantly since the end of 2010 to between \$10 and \$20, or even higher (YCharts 2013). Canadian crude oil faces a 'double discount': that between WTI and Brent, but also the price spread between Western Canadian Select (the price marker for oil in western Canada) and WTI. This spread has more than doubled from an average of just under ten dollars in 2009 to \$21 in 2012 (Baytex 2013), hitting a whopping \$42.50 in December 2012 (Els 2013). The WTI/WCS discount owes to increased US oil production and lack of sufficient pipeline capacity from western Canada to refineries on the gulf coast – it is the rationale for TransCanada's Keystone XL pipeline. The spread is also driven, increasingly, by competition between oil sands crude and crude from the Bakken shale oil basin in North Dakota, Montana and Saskatchewan. Bakken oil is lighter, sweeter and far easier and less expensive to produce and refine than oil sands crude; given its geographic location, it can also be an obstacle to crude from the oil sands accessing pipelines into the US market (Els 2012).

In sum, oil from the Canadian oil sands sells at a substantial discount to both US and world prices and is increasingly landlocked in a hydrocarbon-rich North America. Even if the Obama administration approves the Keystone XL pipeline – which has turned out not to be, as Prime Minister Stephen Harper famously quipped, a 'no-brainer' – it is not clear that this would entirely address the market challenges facing oil sands in North America or capitalize on market opportunities elsewhere. Oil sands crude would still face the discount between WTI and Brent if it persists, and may continue to face stiff competition from oil from the Bakken and other shale oil formations in the US. It also faces stiff political opposition in some quarters of the United States, and potential regulatory challenges in the form of low carbon fuel standards in jurisdictions like California.

So where will oil sands oil go if the opportunities to go south begin to weaken? The main alternative market opportunities are east to eastern Canadian markets, refineries and export markets, and west to British Columbia tidewater for export to Asian markets. Both of these options are currently being pursued: west via Enbridge's Northern Gateway pipeline proposal and Kinder Morgan's proposal to expand an existing pipeline into British Columbia, and east via reversals of Enbridge's Line 9 pipeline between Sarnia and Montreal, which would shift from carrying imported crude from international markets to transporting western Canadian crude to Ontario and Quebec. Discussions are also underway between Alberta, Québec and New Brunswick to explore the possibility of shipping oil sands crude to refineries not only in Québec but also the east coast. Overall, these market dynamics are shifting the historic vertical north-south flows of energy from Canada to the United States and generating greater industrial and political interest in horizontal east-west flows within and beyond Canada. In natural gas, the situation is less dire given the location and markets of Canadian producers, but the US is nonetheless shifting from consumer to competitor for Canadian gas producers, and Canadian shale gas production in northeastern BC in the Horn River formation, has yet to secure infrastructure to the west coast for export (Lawrence 2013).

Those advocating for a national energy strategy do so against this backdrop. Ideas to develop national approaches to energy emerged as early as 2007, when provincial premiers in the Council of

the Federation laid out a plan for development of what they called a 'shared vision' for energy (Council of the Federation 2007). The Premiers laid out the economic opportunities and importance of energy to the country, but also the challenges to its responsible development in environmental and social terms. Their 'shared vision for Canada's energy future' was comprised of three planks: 'secure, sustainable, reliable and competitively-priced supply,' 'a high standard of environmental and social responsibility,' and 'continued economic growth and prosperity' (Ibid, 3). Premiers identified a 'seven point action plan' to work towards this vision, including energy efficiency/conservation; research and technology development; cleaner energy sources; safe, efficient and environmentally responsible transportation and distribution networks; streamlined regulation; labour force development, and greater participation of the provinces and territories in international energy negotiations. Since this time, there has been a growing chorus of voices advocating for national approaches to energy, using increasingly tactical language: from the provinces somewhat lofty sounding 'shared energy vision' in 2007, to national energy 'frameworks' and 'strategies' in recent years. A flurry of reports advocating national approaches to energy were issued in 2012 by legislative, industry, environmental and labour organizations (e.g., Blue-Green Canada 2012; Canadian Council of Chief Executives 2012; Canadian International Council 2012; Energy Policy Institute of Canada 2012; Standing Senate Committee on Energy, the Environment and Natural Resources 2012; Tides Canada 2012a, 2012b).

Many of these reports have been crafted following comprehensive multi-year consultation, dialogue and consensus-seeking processes. The Winnipeg Consensus Group, a multisectoral and multistage initiative, is one of the more interesting of these initiatives, as it brought together representatives from a wide range of the think tank, industry and environmental communities to discuss national approaches to energy (see Winnipeg Consensus Group 2010). Spearheaded by the Business Council of Manitoba, the Canada West Foundation and the International Institute for Sustainable Development, the process began in 2008 with an unprecedented meeting of major Canadian think tanks on the topic of energy. The group included a range of research institutes (e.g., the National Roundtable on the Environment and the Economy), business groups (e.g., the Canadian Council of Chief Executives) and environmental organizations (e.g., the Pembina Institute), which met for a series of 'dialogues' to craft consensus around key planks of a 'Canadian clean energy strategy' for submission to policy leaders. Tides Canada undertook a similar process in the environmental community, as did the Standing Senate Committee on Energy, the Environment and Natural Resources. The Energy Policy Institute of Canada, for its part, is comprised of major energy producing and consuming corporations and was formed for the express purpose of advocating for a national energy framework and strategy.

The bevy of reports – many of which were published over the summer of 2012, just in time for the Council of the Federation meeting in Halifax – are remarkably similar in the broad strokes of their recommendations. The majority of recommendations focus on the first imperative of the energy MESS: markets. These include fostering technology, innovation and research; the need for energy infrastructure; regulatory streamlining and reform; market diversification; and labour force development and jobs. Many proposals also focus on the second imperative of the energy MESS, environment, with the topics of increasing energy efficiency and conservation; support for renewable, green or cleaner energy; and addressing climate change. In keeping with Canada's long-standing status as an energy exporter, there has been limited attention to energy security in the form of security of supply, although reliability, affordability and critical infrastructure/cybersecurity have been addressed in a number of documents. Social acceptability is mentioned in virtually all plans, with some calling for greater attention to energy literacy, and the involvement of aboriginal peoples

and individual Canadians, in energy development in the country. Of note, no reports call for comprehensive energy policy harmonization: recommendations are mainly centred on areas of policy that could benefit from federal-provincial and interprovincial collaboration¹³.

Given the extensive and broad-based interest in developing a national approach to energy and the similarity in the main thrust of recommendations coming forward from economic, social, environmental, governmental, and opinion leaders, one might expect the idea of a national energy strategy would have legs. In principle, national collaborative approaches hold great promise for Canadian governments to address their respective and collective energy MESS. They also hold the potential to strengthen a key industry of the Canadian economy, both in its own right as direct contributor to jobs, GDP and trade, but also as a platform for competitiveness, efficiency and growth of other industrial sectors, and a key contributor to Canadians' standard of living.

But is a return to collaborative federalism, along the lines of the expansionist collaborative energy federalism of the 1930s to 1960s a possibility? At time of writing, it is far from clear. The summer 2012 Council of the Federation meeting and the intervening months have underscored the challenges of moving beyond hyper-competitive energy federalism. Discussions between the premiers on moving a national energy strategy forward got bogged down in competitive dynamics between Alberta and British Columbia over the Northern Gateway pipeline, with BC Premier Christy Clark refusing to participate in a working group mandated to further the provinces' national energy strategy discussions (Council of the Federation 2012). Rather, Premier Clark used the Council meetings as a platform to underscore BC's five conditions for support of the Northern Gateway pipeline: concluding the environmental review, using top-notch marine oil-spill response, deploying world-class prevention techniques for oil spills on land, proper consultation and involvement of aboriginal peoples, and equitable sharing of revenues based on risks (CBC News 2012a, 2012b).

The federal government, for its part, has been all but silent on the topic of a national energy strategy. While the Harper government identified natural resource development as a key plank in its 2012 Budget (Canada 2012) and has been active on some dimensions of energy – most notably, evaluating the Chinese National Offshore Oil Company (CNOOC) takeover of Alberta-based Nexen corporation, slowly moving forward on GHG regulations for large emitters, advocating in the United States for approval of the Keystone XL pipeline – it has not engaged with the provinces as a group on energy matters. Rather, its approach to the provinces has tended to be piecemeal and based on bilateral deals, with, for example, federal investments in carbon capture and storage research in Alberta and loan guarantees for Newfoundland and Labrador's development of the Muskrat Falls hydroelectric project. It has also further circumscribed its role in energy development by significantly reducing the scope of federal environmental assessments, transferring resource responsibilities to the Northwest Territories and commencing discussions with Nunuvut for energy devolution.

In sum, it would seem Canada is far from entering a golden age of energy federalism. But is the country doomed to remain in the 'golden cage' of hyper-competitive energy federalism or can governments develop the norm of collaboration necessary for national approaches to energy?

Looking Forward: Are We Prisoners of the (Recent) Past?

While the current political context does not bode well for development of a comprehensive national energy strategy, the market dynamics reorienting energy economics from north-south to

¹³ A few reports, mainly from the business community, call for a federal policy on climate change – either a national climate change plan or a price on carbon (see, for example, Canadian Council of Chief Executives 2012 and Winnipeg Consensus Group 2010).

east-west are unlikely to dissipate. The changing energy picture in North America will continue to influence Canada-US energy relations – and in turn domestic intergovernmental energy relations – for years to come. In addition to this first M of the energy MESS, the other three energy imperatives (Environment, Security and Social acceptability), are all also likely to generate greater and sustained interest in national approaches to energy, be it for putting a price on carbon that applies throughout the country, effectively addressing current and emerging threats to the physical and cyber-security of energy infrastructure, or strengthening government capacities to pursue socially acceptable energy resource development. These contemporary, complex and multifaceted challenges, combined with the context of shared and sometimes overlapping jurisdiction in the energy sphere, are precisely the characteristics that call for collaboration. As Simeon notes of collaborative federalism, ‘...the pervasive interdependence of governments faced with common policy problems means that neither level, on its own, can fully address them’ (2010, 409). But will governments be able to move beyond the ‘golden cage’ of hyper-competitive energy federalism to do so?

The longer-term prospects for a national energy strategy will ultimately rest upon the willingness of federal and provincial governments to shift from hyper-competition to a more collaborative approach. This is a major change in orientation to be sure and the challenges of moving in this direction should not be underestimated. Competition can enable provinces to develop their resources in diverse ways reflective of local circumstances, but it militates strongly against national policy approaches – whatever their inherent merits might be. Prevailing norms of provincial primacy and assertiveness can blind policy-makers and citizens alike to shared energy interests across the country, serving instead to reinforce and accentuate differences and conflict. As such, instead of shooting for a comprehensive ‘energy deal’ between the federal and provincial governments, those advocating for a national energy strategy might do well to think instead in terms of a *process* and a *framework* that supports building and strengthening the norm of collaboration.

Specifically, rather than a ‘national energy strategy’ along the lines of the National Forest Strategy, which included specific objectives, measures and actions, a framework agreement along the lines of the Social Union Framework Agreement, might represent a more fruitful approach. A framework agreement, outlining rationales, principles and opportunities for collaboration, would have the advantage of beginning where it matters most: developing the norm of collaboration. This could be underscored in its nomenclature, by, for example, selecting a name like the Energy Collaboration Framework Agreement. The federal government might support this process as convener – not dominator – and could try to reduce incentives for inter-provincial competition and zero-sum thinking by, for example, establishing a set of principles guiding use of the federal spending power in the energy field, ideally in collaboration with the provinces.

Given the importance of social acceptability, the Agreement would also need to attend to the democratic characteristics of energy federalism, ensuring that governments move beyond solely executive approaches towards meaningfully incorporating non-governmental actors in the process. In the case of energy, the numerous reports on national approaches to energy are testament to the interest of the think tank, business, labour and environmental communities in energy discussions, and represent a strong foundation upon which Canadian governments can build. Non-governmental participation will need to move beyond these groups, however, to more fully incorporate aboriginal participation, but also individual Canadians. To this end, governments could draw on the experiences of previous intergovernmental agreements that incorporated societal participation, e.g., the Canada Forest Accord, National Forest Strategy and the Canada-Wide Accord on Environmental Harmonization (see Simmons 2008).

A framework approach would have the advantage of facilitating ‘variable geometry’ – greater levels of collaboration in some areas (and perhaps even between subsets of the full set of Canadian governments), and lesser in others. Such a process could begin by collaborating where wins can more readily be had (e.g., labour shortages and labour force development, regulatory coordination) in order to develop momentum, experience and appetite to take on more challenging files. Where collaboration proves too challenging in the short-term, governments can at a minimum share their experiences, using the ‘laboratory’ of federalism to identify best practices on shared policy challenges.

What will be imperative, though, is ensuring that all four dimensions of the energy MESS are addressed in the process. When it comes to market considerations, it will be important to balance potential east-west reorientations of energy flows with the realities of existing north-south flows, infrastructure and interdependencies. Environment and security also need to be thought of in both domestic and continental terms. Arguably of greatest importance is the meaningful involvement of Canadians – including aboriginal Canadians – in these processes.

While it is unlikely that Canada will ever enter a ‘golden age’ of energy federalism, the imperatives and opportunities of energy policy are such that governments should seriously consider breaking with tradition and move beyond hyper-competitive energy federalism.

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