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#### **NORTH AMERICAN ENERGY: AT LONG LAST, ONE CONTINENT**

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During 2005, energy relations among Canada, the United States, and Mexico officially assumed a significantly new outlook—under the broader umbrella of the North American Security and Prosperity Partnership (SPP). The SPP was established in March by direct order of North America’s three top leaders—Prime Minister Paul Martin of Canada, President George W. Bush of the United States, and President Vicente Fox of Mexico—at their Waco summit. While attracting little attention thus far, the new mechanism has set an ambitious agenda in many aspects of trilateral relations, including energy. Anyone seeking ways to cope with complex energy issues should look forward to the trilateral group’s next *Report to Leaders* due later this year.

SPP is still in its “proof of principle” stage, but it is pledged to operate *permanently* at the cabinet/ministerial level. In June, after 90 days of intense effort, its first report of about 100 pages<sup>1</sup> called out work plans and deadlines that already extend to the end of 2007. This inaugural document is understandably uneven, in that it covers fields that range from transportation, border security, financial services, and e-commerce, to energy and the environment. In the case of energy, however, I see unmistakable evidence of a new approach. And its clear implication is that trilateral cooperation in energy should be sufficiently well established now to survive changes in government within any of the partner nations, such as those that could come through elections within the next year.

By fits and starts since around the beginning of the 1990s, governments and energy practitioners in the three countries had been forging resilient trilateral bonds of “energy interdependence.” Some of those ties are physical, some are electronic, some are commercial, and some are institutional; but the total net result has been mutual benefit. Defying some earlier traditions, the governments of the three countries have therefore felt comfortable with increasing cooperation in this once contentious field, especially during the four years since the North American Energy Working Group (NAEWG) took shape with the blessing of top leaders.

There are readily perceived advantages from more convenient and reliable energy supply through networks that crisscross international borders (in both directions) on a *regional* basis. The arrangement also holds environmental rewards that satisfy the aspirations of each country’s citizens. It would be a counterproductive international provocation if a future government in any of the three countries tried to back out of the SPP; and—equally important—a move at this point to disrupt energy linkages that have developed would probably prove politically unpopular with citizens at large.

Problems still exist, but the most important fact is that energy issues are being addressed now in a different context. As odd as this may seem, the three *governments* are at last looking at energy *continentally*—something the private sector has found for a long time to make sense. By the end of this year, NAEWG has been assigned responsibility under SPP to publish an updated version of its “energy picture” of North America.<sup>2</sup> Among other things, the new edition of this jointly prepared publication (which itself represented an historic breakthrough when it appeared in 2002) will reflect the newly unified method of assessing “proved reserves” of oil and natural gas. It will take a broader and deeper look at the demand side of the energy balance. SPP modeling efforts for *all* of North American energy are supposed to follow by mid-2007. The result will be a computer-age tool

<sup>1</sup> *Security and Prosperity Partnership of North America: Report to Leaders*, June 2005, <http://www.spp.gov> (available in English, Spanish, and French versions, complemented by various issuances by the respective governments on their official Web sites). In Mexico, the partnership is known as *Alianza para la Seguridad y la Prosperidad* (ASPAN), and its status is being reported on the site of the Economics Ministry, <http://www.economia-snci.gob.mx>. Most of the features noted in this article can be found in the energy section of the report’s annex.

<sup>2</sup> North American Energy Working Group, *North America: The Energy Picture*, <http://www.eia.doe.gov/emeu/northamerica/engindex.htm>. The Spanish-language version is entitled *El Perfil Energético de América del Norte*. So long as the three countries used different ways of measuring energy production and use, different definitions for important energy terms, and different statistical approaches, it was awkward at best and misleading at worst to try to look at any situation continentally. This was the first official document in which the three countries used common units and transparent assumptions to assess the supply outlook for all energy forms in each country.

for governments and industries in deciding what to do and how to go about it in the future.

Without yielding individuality in their respective energy policies (which understandably reflect differences in federal structure, patterns of ownership, and fundamental national interests), the three governments are finally acknowledging openly that North America is a singularly useful geographical entity *within* which to analyze conditions *jointly* while continuing to make policy choices *separately*. I call this healthy new attitude “conscious continentalization.” Continentalization certainly does not apply at this point to all areas of the partnership; immigration policies and overall foreign relations are obvious exceptions. In respect to energy, however, continentalization simply involves recognizing a reality and thus assuming a fresh state of mind. It *resembles* “globalization” in that it had no single author or sharply defined birthdate. It *differs* in that accession to it has been a matter of broad national choice in each country. We more or less drifted into globalization, but continentalization in energy has evolved via a consensus that includes both the private and the public sector at various levels.

A generation ago, the North American energy relationship showed about as much conflict as it did cooperation. Then, during the 1990s, a coincidence of circumstances made freer contact in natural gas, electricity, oil, and refined petroleum products more attractive. The result is the world’s largest and most successful regional energy market. It offers a diverse set of advantages for each of the three countries. Continentalization can be consistent with the Mexican tradition that hydrocarbons in the ground are a patrimony of the people. It can operate through the respective federal systems of the United States and Canada—which have distributed the levers of energy policy among states and provinces along with the national government. It does not involve any sort of supranational energy council—or even a formal energy treaty. The three distinct systems have simply adapted. It represents a triumph of incrementalism in this instance.

I do not foresee a single, homogenized North American energy policy—and do not expect (or even advocate) uniform systems of ownership in energy resources. A lot of good can be accomplished *short* of such steps, through the more limited mechanisms that have developed. The Security and Prosperity Partnership institutionalizes the continental energy approach, particularly as reflected in the energy annex of its first report, which attracted little news media attention when it was released in Ottawa on June 27.

The relatively free energy market in North America is even bigger than the expanded European Union, and it does not need a “constitution” (or even an “energy charter” to prosper. Our three contiguous countries produce almost one-quarter of all the energy on earth. We consume an even larger fraction. We generate and use more than 30 percent of all of the world’s electricity. Yet we are sufficiently spread out and sufficiently diverse in the timing of both production and demand that we can operate like a remarkably efficient microcosm by regional exchanges of power, oil, petroleum products, and natural gas. Although plans are underway to bring in more liquefied natural gas (LNG) from elsewhere to complement production on this continent as demand rises, LNG is unlikely to account for more than 5 to 10 percent of what North America will be consuming in 2020. The regasified fuel will still have to be delivered to end users by the North American pipeline network—which crosses and recrosses our national borders.<sup>3</sup>

Three elements elevated the original SPP agreement above what otherwise might have been dismissed as ho-hum rhetoric:

1. The three-month deadline specified by the leaders for their cabinet secretaries to develop work plans (in agreed-upon English, Spanish, and French versions), with target dates and “benchmarks” for monitoring progress via concrete steps to reach respective goals;
2. The order for high-level trilateral consultations twice a year into the indefinite future; and
3. A requirement that national “stakeholders”<sup>4</sup> also be consulted along the way (thus providing unusual transparency and limiting the danger that plans would be purely bureaucratic).

In all, the dozen permanent, high-level working groups came up with about 300 items that they promised to address—and even announced a new Web site (<http://www.spp.gov>). This offers an unprecedentedly detailed opportunity for the interested public to

<sup>3</sup> For more detail on how the three countries viewed the future of natural gas in a transitional trilateral document released only a few months ago, see Joseph M. Dukert, “Yellow Alert for North America on Natural Gas,” *Occasional Contributions*, William E. Simon Chair in Political Economy, CSIS (March 2005), [http://www.csis.org.simonchair/0504\\_Dukert.pdf](http://www.csis.org.simonchair/0504_Dukert.pdf).

<sup>4</sup> The English term “stakeholders” poses difficulties in official translation. After the March 23 Waco announcement, an issuance from the Mexican president’s office used “*sectores interesados*” as an equivalent; some official documents at that time chose “*participantes*,” and the *Boletín Informativo* published by President Fox’s office on June 27 translated the word as “*actores relevantes*.” The energy annex of the *Report to Leaders*, on the other hand, seems to have settled on “*los participantes del sector*” or simply “*los participantes*.” The French version of the June 27, 2005, news release on the Canadian government Web site translates “stakeholders” as “*les responsables*.” At any rate, context in all three countries suggests an intention to embrace both the private sector and various levels of government below the national level. And the basic announcement posted on the new SPP Web site on June 27 mentions “roundtables with stakeholders, meetings with business groups and briefing sessions with legislatures, as well as with other relevant political jurisdictions.”

monitor progress of the multiple initiatives (in energy and all the other selected fields) and potentially to discomfit their respective governments if deadlines are missed or goals are not met. The press in Mexico has referred to SPP as NAFTA-Plus (*Tratado Plus de Libre Comercio*)<sup>5</sup>, and the Presidential Office there sees it as “a dynamic and permanent process,” whose plans as announced to date are “only the first step.”<sup>6</sup> As such, it merits applause and support from those who see continental cooperation as a positive development. The special caveat in respect to the energy sector is that such dramatic progress in trilateral cooperation still risks instant attack, because it arouses those who instinctively oppose closer continental ties.<sup>7</sup>

To the extent that the news media and general public in all three countries have even become aware of SPP, some may remain skeptical. Initial accounts of the Ottawa announcement focused on SPP’s *security* aspects and barely mentioned energy. In a “news” sense, that was understandable. The security paragraphs are more dramatic, looking ahead to the use of “smart cards” and “biometric identification.” The June 27 report also pledged *joint* assessments of all critical border crossings (such as roads and bridges), and the three countries are committed now to an integrated program that distinguishes “trusted travelers” from both run-of-the-mill border crossers and “high-risk” individuals. The countries will share relevant information about the movement of people and goods trilaterally in real time. Canada and the United States will add a second pilot site where cargo and travelers moving on land between them can be pre-cleared. And the United States and Mexico will allow customs and immigration officials to operate on each other’s territory at two international airports—Cancun and Atlanta. The goal is steadily to increase the number of airports where continental immigration and customs formalities can be expedited for North American passengers, baggage, and cargo before takeoff.

Less has been made of the *prosperity* sections of SPP, even apart from energy, but we should hear more about them as the target dates for various accomplishments approach. By mid-2006, a “North American Steel Strategy” is to be implemented. An “Automotive Partnership Council of North America” is also being established to recommend how to fully integrate the auto sector on the continent. By no later than next year we are supposed to see a coordinated *continental* strategy aimed at combating the counterfeiting of branded goods and intellectual piracy.

I leave it to others to evaluate most of those working groups. As for energy, I have plowed through the postings on the new Web site (which was repetitious and less than user friendly when inaugurated, although it has improved somewhat), and I have checked the official related sites in each country. Ample evidence exists of “thinking continentally” in the energy field.

All this did not happen (and could not have happened) in 90 days simply as a result of the March 23 summit. The road to this point in energy has been under construction for more than a decade and a half, and much of it was paved since 2001 by the patiently self-effacing North American Energy Working Group. NAEWG had to rely on mid-level technocrats with less clout, but in most other ways it prefigured the SPP approach by four years. In fact, several targets in the SPP energy work plan are basically reaffirmations of ongoing NAEWG projects, which can continue now under more steam. Still, the totality of the new report changes the atmosphere for the future. Following is a critical summary.

- The parties have established a framework for action to follow up on what NAEWG depicted recently as a “North American natural gas vision.”<sup>8</sup> A document with this title that went up simultaneously (but also with little fanfare) on government Web sites in the three countries in February 2005 admits (without saying so openly) that all three countries face some rough going over the next half dozen years or so in matching supply and demand. This is critical, because natural gas is a logical “bridging fuel” to a more-distant energy future, when dependence on oil (and fossil fuels in general) can be reduced appreciably. The SPP decided that the *Natural Gas Vision* document should be made available more widely in print to subnational government entities, nongovernmental organizations (NGOs), and interested individuals, and by June 2006 the three countries are committed to gauge how such “stakeholders” feel in regard to various gas issues—including major new pipeline projects and badly needed receiving terminals in Canada, the United States, and Mexico for LNG. No more than a year after that (i.e., by mid-2007) a Web site will be dedicated to the open posting of regulatory changes on gas as they occur or are proposed. That site will carry other gas industry information as well, and it is supposed to allow a continuing interactive electronic consultation with stakeholders on resulting issues and needs.

<sup>5</sup> Blanche Petrich, “Seguridad común, acuerdan México, EU y Canadá,” *La Jornada*, June 28, 2005.

<sup>6</sup> “Presentación del Primer Reporte de los Secretarios y Ministros a los Mandatarios de México, Estados Unidos y Canadá sobre la Alianza para la Seguridad y la Prosperidad de América del Norte (ASPAN),” *Boletín Informativo de la Oficina de la Presidencia para las Políticas Públicas*, June 27, 2005.

<sup>7</sup> In Canada, for instance, an NDP member of the House of Commons (Peter Julian) lashed the whole SPP plan immediately as “flawed”; see <http://www.vivelecanada.ca/article.php/2005062718042177>. In Mexico, retired diplomat Francisco Correa Villalobos, who had once been North American director in the country’s Foreign Ministry, issued a statement even before the first SPP report was issued challenging its practicality, wisdom, and fairness; see Blanche Petrich, “Acuerdo Mexico-EU-Canada iguala a migrantes con narcos y terroristas,” *La Jornada*, June 26, 2005.

<sup>8</sup> North American Energy Working Group, Experts Group on Natural Gas Trade and Interconnections, *North American Natural Gas Vision: January 2005*, <http://www.pi.energy.gov/pdf/library/NAEWGGasVision2005.pdf>.

- The North American Electric Reliability Council (NERC) is a mixed public-private organization that has operated for decades. It regularly encourages specific but *voluntary* steps by those in all of Canada's provinces and the United States who generate, transmit, and distribute electricity—with the intent of making the interconnected grids more efficient and dependable. In recent years, Mexico's government-controlled power system has established a loose association with NERC. Furthermore, recently adopted U.S. legislation permits the *enforcement* in the United States of rules agreed upon by a planned successor to NERC. In February 2004, the bilateral Electric Reliability Oversight Group had been set up to develop principles under which sanctions for violations could be handled internationally. Now, SPP has given this effort a strong nudge. Under its aegis, the bilateral group held the latest in a series of public-private workshops in Toronto on June 22, and this time it was to mull over an actual draft of such principles in anticipation of potential action. SPP is forming a special subgroup to coordinate U.S.-Canadian guidance on enforcement of electricity reliability rules, and its first report noted that Mexico will join the group for the time being as an observer. But the SPP report went even further. It added that all three countries “need to coordinate efforts on transmission provision and access, as well as market design and investment issues that impact the North American markets.” To this end, a trilateral meeting among the three countries (including “stakeholders”) is slated before the end of this year.
- Mexico will also participate as an observer in a scientific and technical initiative aimed at boosting the economic and environmentally acceptable production of useful fuels and lubricants from Canada's extensive oil sands. Those oil sands now account for more than a million barrels a day of refined products, and they have a potential output three or four times that great sometime during the next decade. These “synthetics from nature” require specialized refinery treatment, but they also offer a different (and, in some respects, superior) range of products from ordinary crude oil. A report will be developed by January 2006 focusing on steps in market development and infrastructure that are judged to be necessary to take advantage of them in the middle to long term. By June 2006 this is supposed to help lead to a fuller outline of future fuel options for North America as the mix develops among conventional and unconventional sources. Finally, by mid-2007, the parties promise a fuller evaluation of results from pilot plant efforts to collect the carbon dioxide released in oil sands operations and to use this CO<sub>2</sub> to enhance the production of traditional crude oil from U.S. and Canadian wells as their output tapers off.
- Cooperative activities will not be limited in terms of energy sources, nor will they be restricted to energy *supply*. Through NAEWG, performance requirements and labeling have already been standardized for such commonly used equipment as refrigerators, freezers, air conditioners, and some types of motors. All three countries have adopted efficiency programs along the lines of the long-successful Energy Star effort. Now, SPP promises (by January 2006) a “*collaborative work program*” [emphasis added] that will involve further activities “focused on promoting energy efficiency in North America.” Renewable energy is not overlooked either, although hydroelectricity is the only form that promises statistically significant output for a long time to come. The potential for photovoltaics, wind generators, and geothermal systems varies a lot among the three countries (and even within each one, regionally), but discussions are scheduled between now and January to see if there can be some specific bilateral and/or trilateral cooperation on those sources.
- Collaboration in nuclear power matters has also been put on a timetable. This may be because a new round of nuclear power plants is gaining fresh support, even from environmental specialists who may have opposed them in the past. Reactors using new technology are being seen as a means of reducing undesirable emissions (including carbon dioxide), while improving energy security by limiting reliance on fossil fuels. A nuclear experts subgroup is being created within NAEWG. It will follow the SPP pattern of establishing a “cooperative work plan” by June 2006 with a promise to act on it within 12 months after that by developing a follow-on round of tangible initiatives. More surprising is a deliberate (if vague) effort to strengthen “North American collaboration in the hydrocarbons sector,” through a series of trilateral workshops. This section was reportedly introduced by Mexico, which usually has been the most reluctant to discuss oil and gas at all because of constitutional limitations. Thus, this might be little more than a “feeler” to acquire much-needed technology in extreme deepwater drilling, although it could also be a sign that Mexico senses growing value in taking a continental perspective on all forms of energy—so that hydrocarbons simply cannot be left out.
- Mutual confidence has developed steadily over four years among members of NAEWG, and rapport has followed among officials of the partner governments who are primarily responsible for regulating energy at the national level—Canada's National Energy Board (NEB), the U.S. Federal Energy Regulatory Commission (FERC), and Mexico's far-newer *Comisión Reguladora de Energía* (CRE). Representatives of those three bodies have been meeting jointly every four months for some time now to talk over issues that affect cross-border energy projects. They do not expect to make the rules of the game uniform across their three very different countries, but they do aim at what they themselves call “conscious parallelism” whenever and wherever they think it can satisfy separate interests and circumstances. The SPP

report does not mention that these trilateral regulators' meetings were already taking place, but it formalizes the arrangement. This is a very unconventional international *entente*, so it makes little difference that NAEWG did not get to share the credit. The significant fact is that "higher ups" have now "sprinkled holy water" on the idea, so we can be fairly sure it will continue—and continue to be watched by anybody being regulated. Indeed, a more general pledge of the SPP report is that a broad "regulatory cooperation framework" will be developed by 2007 to enhance existing modes of cooperation and encourage new ones among regulators of the three countries in *all* fields.

- Finally (although this item happened to appear first among the energy initiatives listed in the June report), responsible parties in governmental research and development have been put on notice that NAEWG's efforts to expand research and development (R&D) collaboration also have deadlines. The R&D areas listed in the report to be considered for cooperative efforts go from the immediate (an energy-efficient eco-housing project dubbed *La Casa Nueva*) through the intermediate (a North American Clean Coal Initiative) to the very long term (such as methane hydrates, which are a theoretical source of almost inexhaustible natural gas but are still many years away from being available commercially). Representatives of the three governments have agreed to develop more specifics on R&D over the next year, especially looking for circumstances where public-private partnerships make sense. And the greatest promise may rest in one almost casual assertion in this part of the SPP report. It says that the three countries will "Continue development of new *legal instruments* to enable further science and technology cooperation *involving financial transfers and intellectual property*" [again, emphasis added].

These forms of institutionalization are still fairly thin. No dedicated budget seems to exist; there is no permanent staff or headquarters (unless one counts the several new public Web sites as "virtual headquarters"); and much of what is being promised consists of more paper and studies. Yet several features of SPP suggest more than political window dressing:

1. All working groups are mandated to meet twice a year from now on.
2. SPP met its first deadline, producing the required series of what the leaders' initial announcement called "implementation dates" to "permit a rolling harvest of accomplishments." Published target dates will be easy to keep track of, and it will be noticed if early ones are missed.
3. NAEWG has not been superseded, but strengthened.
4. Unlike some of the earlier NAEWG activities, the frame of reference is no longer country by country but continental overall—even though some actions are primarily bilateral at the moment and many (such as the development of additional infrastructure to exchange gas and electricity) will actually be more narrowly *regional* in their immediate scope.

It is not as if evidence were lacking for solid accomplishments in North American energy cooperation already. The three countries are far, far closer together in energy today than they were a generation ago. Consider trade statistics, starting with oil. U.S. imports of petroleum from Canada and Mexico (combined) more than doubled between 1978 and 1990, and they almost doubled again during the 1990s. By early this year, they had risen another 15 percent beyond what they were in 2000.<sup>9</sup> Besides, petroleum products such as gasoline and diesel oil are refined in the United States and shipped in appreciable quantities to *both* Canada and Mexico.

Continental electricity trade increased by 50 percent from 1978 to 1990, and by 2000 it was nearly three times what it had been in 1978. The balance of trade in electricity fluctuates from year to year, but direction is less important than volume because much of this trade can be assumed to be opportunistic for the sake of reliability and economics of the moment. As a recent NEB report notes, "Although usually accounting for most of Canada's electricity exports, some hydro-based provinces were net importers in 2003–2004, due to low water levels."<sup>10</sup> Energy interdependence has costs as well as benefits. In August 2003, untrimmed trees in Ohio and some unprepared utility control personnel blacked out most of the northeastern United States, and a substantial part of Canada lost power along with it. Nevertheless, two points about that episode are worth mentioning:

1. The mutual trust about sharing electricity that has built up between Canada and the United States was witnessed by the fact that there was very little finger pointing across the border. Instead, there was a prompt agreement to investigate the causes jointly.
2. The results of that investigation came with a recommendation that there should be some way of *enforcing* decisions about reliability requirements that are reached by consensus. SPP obviously agreed, the U.S. Congress finally acted, and

<sup>9</sup> Statistics derived from various publications of the Energy Information Administration (EIA) of the U.S. Department of Energy and updated as of its *Monthly Energy Review*, June 2005, tables 3.3e and 3.3f.

<sup>10</sup> National Energy Board, *Outlook for Electricity Markets, 2005–2006: An Energy Market Assessment* (Calgary, Alb.: NEB, June 2005), p. 3.

an international solution is in the offing.

The most dramatic rise in continental energy exchanges has been in two-way natural gas trade across the northern and southern U.S. borders. It went from 885 billion cubic feet in 1978 to just under 1.5 trillion cubic feet in 1990 and to almost 3.7 trillion cubic feet in 2000. Last year it reached 4.4 trillion cubic feet.<sup>11</sup> Canada supplies about one-sixth of all the natural gas used in the United States, but the United States still *exports* gas to Mexico—because it makes sense geographically to do so if borders can essentially be ignored. Mexico’s own gas production has not kept up with its surging demand for that fuel. Its increasing requirements are based on rapid population growth, industrialization, rising aspirations in living standards, and a pledge (which Mexico is keeping diligently) to switch the bulk of its electricity generation away from heavy, high-sulfur oil to clean gas.

Since 1995 Mexico and the United States have more than doubled the number of their gas interconnections—to 15. Canada and the United States have even more active gas delivery points (21), but those also have far greater individual carrying capacity. NAEWG’s *North American Natural Gas Vision* supports earlier findings by the National Petroleum Council and a host of private energy analysts that domestic gas production will have to be complemented in the future by more LNG imports. Receiving facilities are being built or expanded in Canada, the United States, and Mexico, but some have run into local opposition, with instances where even a few hundred voters can block a decision by a state or country or continent that it is safe and desirable to proceed. In the United States, however, the pivotal authority is still the Federal Energy Regulatory Commission, and the same legislation that gave teeth to future rules on reliability in electricity supply confirmed that FERC should have the final word on where LNG terminals may be built in the United States. On June 30, FERC had already approved two new terminals (one at Fall River, Massachusetts, and another straddling the Texas-Louisiana border), but turned down a third (in Rhode Island) on safety grounds as plans then stood.<sup>12</sup> Earlier in June the commission authorized another in Texas, and in recent months it has acted favorably on four more (three in Texas and one in Louisiana).<sup>13</sup> Meanwhile, the NEB is considering proposals for three LNG terminals in the Maritime Provinces of Canada (two in Nova Scotia, one in New Brunswick)<sup>14</sup>; and Mexico is either building or about to launch construction on a number of terminals for both its Gulf and Pacific coasts. In all cases, the gas from overseas will either feed into existing pipelines or relatively short extensions of them, and in the case of one in Nova Scotia it has already been announced that it will thus serve both Canadian and U.S. markets.<sup>15</sup>

The strong physical energy links that now connect Canada, the United States, and Mexico are not going to weaken. There is a “ratcheting” effect when pipelines and power lines are put in place that begins to give people a new sense of adequate and reliable supply. Doing without them is not easy. The results of next year’s election in Mexico could conceivably slow new initiatives, but the continental framework—epitomized by SPP—can no longer be ignored.

How did we come this far? It was not a coup by junior officials, nor was it a partisan or ideological political plot. Indeed, the underlying changes were not even “planned” in any ordinary, coordinated sense. Since 1990, each of the three countries has changed governments (*and* ruling parties) more than once, yet there has been continuity in the move toward energy interdependence and the emergence of a continent-wide market as the center of attention for both government and industry. It sounds deterministic, but the fact is that conditions were just ripe.

NAFTA eliminated tariffs and nontariff barriers to energy trade, but there were other indispensable factors. Market pricing became fundamental, even to government-controlled energy producers such as Pemex, when the possibility and desirability of multiple sourcing arose. Electricity was acknowledged as a commodity, and new regulatory approaches in both gas and electricity divided the functions of production, long-distance delivery, and distribution for each of these energy sources conceptually—so that competition and arbitrage can take place instantaneously across vast distances by electronic means. This can cause prices to converge toward marginal cost, and it simultaneously makes supply more reliable through backstopping across a large area. Natural gas temporarily became the fuel of choice for generating electricity to such a degree that the two energy sources (and, to some extent, the capacity of pipelines and power lines to transport them) became interchangeable in the marketplace as supply and demand fluctuated for each.

Throughout the negotiations on NAFTA, it was generally agreed—publicly, at least—that the area of energy in Mexico was “off the table.” Actually, it never was. Energy is too intimately associated with the national interests of each of the three parties to dismiss, if only from subliminal consideration. It is odd that so many analysts of international relations failed to notice this. Although energy is scarcely mentioned in the NAFTA text, the diplomats involved were certainly aware that the fossil-fuel resources of Mexico and Canada gave each country additional bargaining power—regardless of whether or not it would ever be utilized. At least some of the negotiators also realized that the Canada-U.S. Free Trade Agreement (CUSFTA)—which helped

<sup>11</sup> EIA, *Monthly Energy Review*, June 2005, table 4.3.

<sup>12</sup> FERC press release, June 30, 2005.

<sup>13</sup> FERC press release, June 15, 2005.

<sup>14</sup> “LNG Poised to Become Large Part of Atlantic Canada’s Energy Mix,” Associated Press, July 3, 2005.

<sup>15</sup> “Anadarko Advances LNG Project with Transportation Agreement,” Business Wire, June 30, 2005.

set the stage for NAFTA—owed some of its most powerful language to the way long-term interests found mutual benefit in the energy chapter hammered out earlier for CUSFTA.<sup>16</sup>

It was fortuitous, but surely not entirely coincidental, that over a period of only a few years (*under successive presidents*, which is important to observe), Mexico reinterpreted its *statutory* definitions of such terms as “basic petrochemicals,” “strategic,” and “public service” and took a variety of related actions unilaterally. Its government allowed the private sector to handle some aspects of electricity and gas services, and it established an independent body of energy regulators. There was nothing like a *quid pro quo*, but each of these actions (taken in Mexico’s own interests) made it gradually easier to encourage allowable investments and technical assistance in the energy sector from foreign sources for mutual benefit. In a side agreement, the three NAFTA partners also established the Council for Environmental Cooperation (CEC) with a staff of about 80 people in Montreal, and that action too has energy implications—since a high percentage of undesirable emissions and other environmental effects come from the production, delivery, and application of energy. Like NAEWG, the Council for Environmental Cooperation is largely unpublicized, and—so far as I could tell—was not mentioned in the latest SPP report. As a former senior adviser to the CEC, however, I know that its Secretariat has done some valuable work in the energy realm—for instance, in measuring and evaluating the environmental effects of electricity generation and trade.

Many of the cooperative ventures in energy that took place during the late 1990s came from the private sector, as the three governments merely chose to set better conditions for free enterprise and then step back. It was only in 2001 that a new set of leaders reentered the game by establishing the North American Energy Working Group. NAEWG has proved its worth through subgroups that stay in close touch, and it will be helpful if the SPP initiative makes their work more transparent through greater contact with stakeholders.

There have also been shocks to the system along the way—such as the 9/11 terrorist attacks, the regulatory debacle in California, the dishonesty of some energy traders such as Enron, lingering economic uncertainties, high and volatile energy prices arising from exogenous factors, and sharp disagreements within North America about such sensitive matters as the Kyoto Protocol, Iraq, and immigration policies. Fortunately, federalism can be a positive as well as an occasionally divisive force. Part of the power of the evolving North American energy regime comes from regional meetings that regularly bring together U.S. and Mexican governors or U.S. governors and the premiers from adjacent Canadian provinces. Provincial and state legislators also hold cross-border meetings. Many of these groupings now have energy committees. They all should take an interest in the activities and prospects for cooperation through SPP.

What happens next? It depends largely on whether the press and interested public insist that “goals” and “milestones” be taken seriously—while also suggesting additional concrete actions. Here is a short list of my own.

- The continental automobile sector has already been integrated to a large degree, but creation of the Automotive Partnership Council of North America gives an added forum through which to speed up the earliest practical introduction of vehicles that can offer sharply higher fuel mileage—with or without the increase in corporate average fleet efficiency (CAFE) standards that a majority of the U.S. Congress continues to fend off. Because North America exports autos to the world, this could have global effects as well—curbing the appetite for oil in developing countries such as China, which has helped send world petroleum prices soaring. One SPP work program scheduled for publication by January 2006 is supposed to include “undertaking activities focused on...improving vehicle fuel efficiency,” and it should be scrutinized for precisely that element.
- Mexico has long boasted that about 95 percent of its citizens have access to electricity, but if this is so it means that more than 5 million people there are still unconnected to the grid. In fact, however, this is probably also still true for many of Canada’s isolated “first nation” communities and even U.S. Native Americans in some remote areas that are difficult to serve by power lines. Although certain forms of small-scale renewable energy (e.g., solar arrays and wind turbines of limited output) are uneconomic in most circumstances, “distributed generation” seems logical for this application. Creating demand for a large number of small-scale renewable units in such an organized way would bolster a potentially important industry that still needs subsidies of some type to survive, and it would lower unit costs for the future while helping a specific segment of society in each country. That would strengthen the macroeconomies of all eventually. It should be a topic at the SPP discussions on renewables promised by January.
- Because energy and environmental goals are so intertwined, the SPP Working Groups in these two areas should maintain close contact. The most practical way to ensure this would be to “cross pollinate” two *existing* groups—the CEC and the NAEWG—by giving each one formal representation in the deliberations and activities of the other. With good will and luck, that might head off some clashes over the siting of new energy facilities such as pipelines, power

<sup>16</sup> For an account of how this took place, see Joseph M. Dukert, *Creation and Evolution of North America’s Gas and Electricity Regime: A Dynamic Example of Interdependence* (Ann Arbor, Mich.: UMI Dissertation Services, 2005), pp. 153–162.

lines, and LNG receiving stations.

- The establishment of a Nuclear Experts Group within SPP raises the possibility of continental cooperation in North America's first new generation of power reactors for decades. Canada has its own exportable reactor designs, and the comprehensive new U.S. energy bill offers special incentives to the first group of new U.S. systems based on inherently safer units. It would be a "hard sell" to Congress (and perhaps even to the pro-nuclear Bush White House), but it would be in U.S. self-interest to offer some kind of "equivalent treatment" (perhaps via USAID funds) to a new Mexican nuclear project. One or more additional units might most easily be collocated with the two Laguna Verde reactors Mexico has operated for years. More nuclear capacity would reduce Mexico's growing demand for either natural gas or oil as generating fuels, and this would benefit the hydrocarbon outlook for all three countries.
- Although it is sure to be another political hot potato (in Mexico), the follow-up to NAEWG's *North American Natural Gas Vision* will be remiss if it does not pay special attention to one of the four policy avenues the original document said governments should address; namely, "Removing restrictions on foreign investment [to] foster the development of gas supplies and the growth of natural gas infrastructure." This is one case in which an apparent slippage in an SPP deadline might be helpful. Language that seemed to call for a trilateral workshop of stakeholders by June 2006 to address the gas vision may be reinterpreted as meaning that separate workshops should be held before then in each country. In practical political terms, holding the subsequent three-nation discussions after both the Mexican and U.S. elections would give participants a much clearer idea of what may be legislatively attainable.
- Petroleum refining capacity is in short supply in all three nations, and the situation is exacerbated by our growing reliance on heavy crudes such as Mexican Maya and the products of Canadian oil sands. The Venezuela of Hugo Chavez has become a less reliable supplier but has occasionally indicated a willingness to divest itself of Citgo in the United States because of national budget problems. If Chavez is not just bluffing to satisfy his anti-American vanity, Mexico might wish to reconsider becoming a prospective purchaser—either exclusively or as part of a joint venture. Pemex and Shell for some years have split the ownership of specialized refining facilities at Deer Park, Texas. Buying Citgo and either adapting or expanding its refining facilities appropriately for integration into Pemex would undoubtedly require a new government-backed debt issue, but the Mexican Congress has recently shown a greater willingness to recognize that its national oil company needs to operate more like a conventional major if it is to survive and grow (as the country's needs require).<sup>17</sup> The value of an acquisition of Citgo by Pemex would include noneconomic factors for national and continental energy security that may be hard to quantify but are nevertheless real and substantial.
- According to the basic fact sheet on the SPP Web site, each country "will report back to its private sector *and legislatures*" [emphasis added]. Since SPP stresses *input* from "stakeholders," it seems incongruous that the federal legislators of all three countries have themselves not become more deeply involved already. Yet, amazingly, there has never been a formal trilateral representative meeting of these parliamentarians. Bilateral conferences involving all three countries are held in tandem with some regularity, but if my perception of "continentalization" is accurate (certainly in energy, but probably in other fields as well), it is surely time for three-way discussions of North American issues to take place among federal legislators. Canada, which has been the most reluctant partner in respect to legislative trilaterals, is reported at one point in the SPP deliberations to have suggested also that private-sector "stakeholders" ought to come together on their own annually in a field like energy. And in fact the three national organizations within the World Energy Council may well gather this fall to discuss the opportunities and challenges represented in SPP. But federal legislators are overdue in becoming better able to look at issues within a fully continental framework.
- North America is unlikely to become fully "energy independent" for the foreseeable future because its conventional onshore oil resources have already been tapped so intensively, but the best chance of expanding domestic supplies of both gas and oil may lie in the very deep waters of the Gulf of Mexico. Now that agreement has been reached on territorial claims for mineral exploitation there, SPP could investigate the feasibility of undertaking the technological and economic challenges cooperatively. At the very least, an official study is in order, along the lines of NAEWG's *North American Natural Gas Vision* and the now-pending examination of Canada's oil sands.

In particular, the North American "regime" in respect to gas and electricity has become second nature to suppliers and consumers. I call this aspect of continental energy a "virtual" regime. The "players"—whether in the private sector, at some level of government, or even beyond the shores of North America—sense that it exists, and I have coined a new term to describe

<sup>17</sup> David Luhnow, "Pemex to Keep More of Its Revenue," *Wall Street Journal*, June 30, 2005, p. B-6. As this CSIS paper is being written, however, a presidential veto is still a possibility because of congressional failure to provide alternative government income through compensatory changes in other taxes.

it. It is “metanational”—grounded in elements that lie both within and beyond the nation-states involved. All interact.

The precise future will be affected by changes in public and private perceptions of complex, disparate policy goals that always have to be balanced against one another. It surely will be affected by the give-and-take of three different brands of federalism. Alberta and Ontario disagree about many aspects of energy policy. The energy perspectives in Oaxaca and Baja California differ markedly from one another. Nor do California and Texas see eye-to-eye on much that has to do with energy. So it is really remarkable that we have come as far as we have—and as quickly as we have—in developing energy cooperation among the three quite different countries of North America.

Continentalization—the theme of this article—makes all three countries ever more sensitive to each other’s energy problems, as well as to the potential advantages of collaboration. Interdependence makes us all less vulnerable to the most damaging energy problems and more capable of anticipating them. It helps us to resolve difficulties if and when they arise. It is driven by self-interest on the part of each country, and it will continue to depend on actions by both the public and private sectors. Most of all, it requires that we *think* about it.

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