# Ensuring Green Power Supplies in Ontario:

# Responding to Perverse Subsidies and Other Market Inequities

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# About the Canadian Institute for Environmental Law and Policy (CIELAP)

Founded in 1970, as the Canadian Environmental Law Research Foundation (CELRF), the Canadian Institute for Environmental Law and Policy (CIELAP) is an independent, not-for-profit professional research and educational institute committed to environmental law and policy analysis and reform. CIELAP is incorporated under the laws of the Province of Ontario and registered with Revenue Canada as a charitable organization. Our registration number is 11883 3417 RR0001. CIELAP advances the environmental agenda by undertaking the research and development of environmental law and policy which promotes the public interest and the principles of sustainability, including the protection of the health and well-being of present and future generations, and of the natural environment.

# **Executive Summary:**

Responding to concerns about future electricity supplies, the urgent need to improve Ontario's air quality and meeting Kyoto Protocol obligations, the Canadian Institute for Environmental Law and Policy (CIELAP) reviews the 2002 Ontario Legislature's <u>Select Committee On Alternative Fuels Final Report.</u> This paper explores the major government policy and legal strategies necessary to advance sustainable energy development, create jobs and protect the public interest in the newly opened electricity market in Ontario. Our research finds that a variety of institutional factors impede the adoption of low-environmental impact renewable energy in the Ontario market.

In order to take advantage of the emerging global market in alternative energy technologies, governments need to address the mounting barriers to the green power industry in Ontario. The recommended strategies suggested by the Ontario Select Committee are fundamental to create a level playing field and to prevent the distortion of competition that currently favours of the use of coal-powered electricity, contrary to climate protection and the principles of a free marketplace.

The following perverse government subsidies and market inequities urgently need to be addressed:

#### 1. Distorted Domestic Price Cap:

The Ontario government through the Market Power Mitigation Agreement imposes in effect a 3.8¢/kilowatt hour (kWh) domestic price cap on Ontario Power Generation's forecasted sales until its generation is reduced to 35 percent or until 2006. This price protection discourages long term contracts for renewables; the rate difference between renewable and traditional power is too great.

#### 2. Import Price Protection:

During peak demand, imported electricity receives a higher price because the Independent Market Operator offers risk protection against a decrease in the price between the pre-dispatched agreement and the real time price period. Ontario generations, including green power producers, are not protected from this significant risk.

#### 3. Lack of Real Time Pricing:

Ontario customers do not receive real time price signals for the cost of domestic and imported power. This prevents both households and industry from reacting with Demand Management Responses, forcing them to remain uncompetitive and to pay the premium for imported power, usually from polluting coal.

#### 4. Lower Transmission Connection Rate for Exports:

The Ontario Energy Board (OEB) artificially lowered the transmission rate for exported power from Ontario from \$4.85 per megawatt hour (MWh) paid by domestic consumers for the use of the wires, to \$1 per MWh if the power is exported. In effect, this lower transmission price for exports subsidizes coal-fired, large hydro and nuclear electricity since only large traditional generators have the production capacity necessary to export.

#### 5. Distorted Transmission Connection Rates:

New generators, including green power sources, must pay to upgrade the grid to be connected, while many existing traditional power generators have their connection costs covered by the rate base.

#### 6. Distorted Environmental Assessment:

Rather than making distinctions based on fuel sources, the Ontario Ministry of Environment's Environmental Assessment laws determine the rigor of the assessment process based upon different capacity thresholds, increasing the cost of renewable energy projects and conferring a financial benefit upon traditional sources. For example a 2 MW wind project requires a screening process whereas a 5 MW natural gas or oil project does not.

#### 7. No Net Billing:

Green power producers face an OEB imposed gross-billing approach to transmission rates that fails to recognize that connecting directly into local distribution systems avoids both operating and expansion costs to the transmission lines, and prevents consumers the benefits of "net-billing" - the use of suitable meters to buy and sell to the grid and only be billed for the difference - thus increasing the costs of green locally distributed power.

#### 8. Debt Financing and Insurance Liability caps for nuclear generators:

The nuclear industry in Ontario has been relieved of its debt through the stranded debt charge, subsidized for the costs of waste disposing and plant decommissioning, and benefited from limited insurance liability in the case of accident.

#### 9. Insufficient Incentives for Renewables:

Current renewable energy incentives such as the Federal Wind Power Production Incentive are insufficient to bridge the gap between the higher cost of producing and marketing renewable energy and the price paid for traditional power sources.

The first best solution is for the Ontario government to implement the recommendations of the Select Committee Final Report, including a full legislative review regarding alternative fuels and conservation measures, by June 30th, 2003, a Renewable Portfolio Standard, a System Benefit Charge, a mandate for local distribution utilities to invest in energy efficiency, full consumer disclosure of the environmental impacts and benefits of all fuels, with net billing options. However, this endorsement is conditional upon a more appropriately narrow recognition of which renewable energy sources are to be considered "green" and able to participate in the proposed renewable portfolio standard as well as other consumer labeling and certification programs. In CIELAP's view, it is absolutely necessary to avoid consumer confusion about what is green power.

In the alternative, public interest strategies include launching a green power complaint regarding the anti-competitive conditions in Ontario's energy market under the federal Competition Act and the imposition of a "countervailing duty" based upon the US Trade Act (1974). It is important to expose and remove perverse subsidies and market inequities that reduce costs or distort revenue such that the returns from traditional energy sources are inflated beyond normal economic levels, representing a failure of both economic as well as environmental and social policy. CIELAP recommends that a request for a preliminary ruling about the merits of a complaint under the Competition Act be filed now to allow for a better articulation of green power issues to provincial and federal decision-makers, and to facilitate public input into the implementation of the Select Committee Report.

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#### 1.0 Introduction

In the spring of 2002, Ontario's electrical generation and retail system was opened to competition. This reform presents both challenges and opportunities for environmentally friendly alternative fuel sources to increase their presence in the generation and supply of electricity to consumers in Ontario and beyond.

Recognizing the challenges faced by alternative electricity, an all-political party legislative committee, the Select Committee on Alternative Fuel Sources, was formed in June 2001 with a mandate to investigate and recommend strategies to promote alternative energy in this newly competitive market. Such strategies were deemed necessary to facilitate fair competition in the electricity market. Without them "green power", including low-environmental impact wind, solar, small hydro and biomass fuels, would be forced to compete on an uneven playing field against traditional and polluting energy sources, resulting in a distortion of competition in this supposedly free market system.

Indeed, Canada lags far behind other industrialized nations when it comes to support for green power, especially in installed wind capacity. We only produced about 190 megawatts (MW, or 1000 kilowatts) of electrical capacity from wind energy in 2001, while Germany produced some 6,113 MW the US some 5,250 MW and Denmark some 2,297 MW. <sup>1</sup> In Germany alone the output of wind power is 36 times that of Canada. The Canadian Wind Energy Association believes that Canada could increase domestic production of wind energy to 10,000 MW by 2010. Why the discrepancies? A 2002 Parliamentary Working Group found that, in addition to the high costs of renewable technologies because of low manufacturing volumes and poor economies of scale, "conventional energy systems benefit from a range of long-standing government subsidies. Between 1970 and 1999, direct federal spending on fossil fuel based energy was \$40.4 billion. Similarly, over the past five decades, federal support of Canada's nuclear industry has exceeded \$16.6 billion".<sup>2</sup>

In effect, the existing market inequities and available subsidies make investing in renewable energy in Ontario very risky. This not only distorts competition between fuel sources but also furthers the dominant position of traditional energy sources, such as coal-fired electricity and high environmental impact hydro and nuclear power, that do not take into account their true environmental and public health costs.

Green Power advocates often argue that while renewables may appear more expensive than traditional energy sources, they are much more competitive when all the costs are counted, including particularly environmental costs. Therefore, it is believed that the imposition of any artificial regulatory mechanisms which reduce the competitiveness of

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<sup>&</sup>lt;sup>1</sup> Chair Julian Reed, Member of Parliament for Halton, Caucus Working Group on Environmental Technologies, Unlimited Potential - Capitalizing on Canada's Untapped Renewable Energy Resources, March 2002, see <a href="http://www.julianreed.parl.gc.ca/energy.htm">http://www.julianreed.parl.gc.ca/energy.htm</a>

<sup>&</sup>lt;sup>2</sup> Ibid at p. 4, referencing the 2000 <u>Report of the Commissioner of the Environment and Sustainable Development</u>.

green power are not only counter-productive in principle, but also aggravate the problem of relatively high social and environmental costs related to traditional energy production and consumption.

While the effort to quantify externalized environmental and public health costs is ongoing, there are a number of direct government approved subsidies and market inequities that can be currently relied upon as evidence of the uneven regulatory playing field for green power, including the following:

- > Distorted Domestic price cap
- > Inequitable Import price protection
- > Lack of real-time pricing
- **>** Lower transmission rate for exports
- > Distorted transmission connection rates
- > Practical barriers inhibiting the use of Net Billing
- > Distorted Environment Assessments
- > Debt relief and insurance liability caps for nuclear generators
- > Direct government subsidies of \$16 billion to nuclear power since 1953.
- > Inadequate provision for nuclear decommissioning and waste storage
- > Insufficient Incentives for Renewables

Given the requirement for effective competition and the urgent need to address climate change and smog pollution, an effective and timely government response to the recommendations of the Select Committee is critical. It is imperative that the current market inequities and the subsidies that favour traditional polluting energy sources are recognized and that appropriate measures are taken to effectively address the situation. Perverse subsidies are contrary to the principles of sustainability because they reduce costs or distort revenue such that the returns from traditional energy sources are inflated beyond normal economic levels, representing a failure of both economic as well as environmental and social policy.

In an October 2002 joint press release from the Ontario Minister of the Environment and the Minister of Energy, the government indicated that it would entertain the Select Committee's recommendation to establish a Renewable Portfolio Standard (RPS). The RPS would require electricity generators and retailers to offer a percentage of renewable low environmental-impact electricity, and the government will respond in detail at the end of the calendar year.<sup>3</sup> Interestingly, the Ontario government is also on record as requiring the closure of all 5 provincial coal-fired generators by 2015, although this commitment appears to be uncertain.<sup>4</sup> This paper examines the nature of the currently available subsidies and existing market inequities, and explores some of the various government policy choices and private legal options available to protect the public interest by removing barriers to green power development and to ensure sustainable energy development.

<sup>&</sup>lt;sup>3</sup> See, http://www.ene.gov.on.ca/envision/news/2002/100101.htm

<sup>&</sup>lt;sup>4</sup> Hansard, September 30, 2002.

#### 1.1 Select Committee Recommendations

A blueprint to address the existing inequities has already been provided in the recommendations from the Select Committee. CIELAP, with many green power industries and other advocates, welcomes most of the recommendations, including the Renewable Portfolio Standard<sup>5</sup>, the System Benefit Charge<sup>6</sup>, the mandate for local distribution utilities to invest in energy efficiency<sup>7</sup>, the full consumer disclosure of the environmental impacts and benefits of all fuels<sup>8</sup>, and the "net-billing" options that allow local green power producers to buy and sell power while only being billed for the net-amount of power used<sup>9</sup>. Net-metering laws would greatly benefit many green power providers that tend to be smaller and decentralized. Furthermore, consumers would benefit from this additional choice in electricity supply.

CIELAP remains concerned, however, about the broad definition of "renewable energy" adopted by the Select Committee to include all biomass and hydropower without environmental impact distinctions<sup>10</sup>. All feasible hydro upgrades of existing generation sites or other existing water control structures with underdeveloped water power potential are recommended for "accelerated approval by July 1, 2004", despite growing environmental and climate change concerns<sup>11</sup>. To its credit the Committee did recommend that Environment Canada's Ecologo Guidelines on the definition and certification of "renewable low environmental impact electricity" should form the basis of any Ontario standard.<sup>12</sup> But if an inaccurate and overly broad definition of renewable power is adopted by Ontario and other provinces, this would allow high environmental-impact hydro dams to participate in the RPS quota program and consumer labeling and certification programs, thereby defeating the very purpose of an RPS in the provision of environmental leadership and a market advantage for alternate sources such as solar, wind and hydrogen fuel cells.

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<sup>&</sup>lt;sup>5</sup> Akin to energy efficiency standards for vehicles and appliances, a Renewables Fuels or Portfolio Standard, would require a certain percentage of fuel sols in Canada or in Ontario be from agreed renewable sources. The European Union currently requires at least 5.75% of fuel sold in Europe be from renewables. In Texas the legislated RPS will see electricity companies supplying 2,000 MW of new renewables by the end of 2002, seven years ahead of schedule, see A. Herzog et al 2001, Renewable Energy: A Viable Source. Environment 43(10):8-20 as cited in Julian Reed, supra fn 1, p. 7.

<sup>&</sup>lt;sup>6</sup> Select Committee on Alternative Fuel Sources, *Final Report* (Toronto: Legislative Assembly of Ontario, 2002) at 15 [hereinafter *Alternative Fuel Sources Report*] "The Committee believes that the establishment of a system benefit charge, consisting of a nominal charge of 0.1 c/kWh on consumers' electricity bills to support renewable energy programs would positively complement the establishment of an RPS."

<sup>&</sup>lt;sup>7</sup> Ibid, p. 18 and p. 21

<sup>&</sup>lt;sup>8</sup> Ibid, p. 17.

<sup>&</sup>lt;sup>9</sup> Ibid, p. 17

Ibid, p. 67: Renewable sources may include "wind, solar, biomass, run of river hydraulic, new hydraulic power from existing dams, and earth energy".
 Ibid, p. 30 "...New hydraulic power capacity in Ontario shall be recognized by the Ontario government

<sup>&</sup>lt;sup>11</sup> Ibid, p. 30 "...New hydraulic power capacity in Ontario shall be recognized by the Ontario government as new renewable power". But see Philip Raphals, <u>Restructured Rivers</u>, <u>Hydropower in the Era of Competitive Markets</u>, Helios Centre, International Rivers Network (publisher), May, 2001, www.irn.org <sup>12</sup> Ibid. p. 13.

The good news is that the Ontario government, the Select Committee and the green power industry and advocates all agree that action needs to be taken to support renewables in the new open electricity market. The timing to address the inequity between renewable and non-renewable sources couldn't be better. According to Industry Canada, and given the pending implementation of the Kyoto Protocol, there is an emerging \$500 billion global market for emission reduction technologies. Ontario and Canada could position themselves to capture this market, without relying upon high environmental impact hydro dams and nuclear power. The Select Committee found that within a supportive policy framework Ontario could be a leader in alternative and renewable power. <sup>13</sup>

Recent CIELAP research confirms that Ontario has the capacity to replace the 5 coal plants with a combination of energy efficiency and green power development, provided that the price of green power can become competitive: <sup>14</sup> Although industry estimates vary from producer to producer, the current range of price estimates (based on 2001 data) is from 9 to 12 cents per kWh for wind power, with 10 cents per kWh being an often quoted figure. This price is expected to decrease further with an increased scale of building turbines begins locally and costs drop. Note that this is not the social cost of wind, but the actual price that producers name when asked what price they would require in order to arrange financing, complete estimates, construct and operate wind farms and generate a satisfactory return to capital. Again, because of the threshold effect in place with wind power, very little power may be available before this price of 10 cents per kWh, but once this threshold is crossed over 15,000 GW of electricity can become available. Some producers have indicated a willingness to provide wind power at a lower cost by 'bundling' forms of renewable energy together to create a mix of assets that would have a lower average price, closer to 8 ¢/kWh.

Given the tremendous economic, health and environmental benefits of green power, the federal and provincial governments would be advised to level the playing field and provide the same support and enthusiasm to the emerging green power sector that it supplied in the past for the conventional energy sector. Allowing for a phase-in of higher energy prices for traditional fuels would encourage Ontario industry and consumers to become more disciplined, and competition would be improved if more accurate price signals are used and more control taken over electricity expenses.

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<sup>&</sup>lt;sup>13</sup> Idid, p. 7.

<sup>&</sup>lt;sup>14</sup> Christine Elwell and Edan Rotenberg, "<u>Green Power Opportunities for Ontario</u>", Toronto: Canadian Institute for Environmental Law and Policy, 2002, at 6 [*Green PowerOpportunties*], see www.cielap.org the technical potential for new and renewable electricity – wind, small hydro, biogas — in Ontario is more than 20,000 GWh per year. At least 5,000 GWh per year of this potential could be developed by 2012. When combined with the efficiency potential, this is enough to completely replace electricity from coalfired power plants in 2001, p. 13 and see Alternative Fuels Sources Report, supra fn, 6, p. 46 where the Committee recommends closing the OPG Atikokan and Thunder Bay coal-fired generation stations by July 2005.

#### 1.2 Alternative Public Interest Strategies

If the government fails to show the leadership necessary to create a true open market, then the public interest might best be served by other solutions. These include developing legal strategies domestically under the federal Competition Act, or in cooperation with green power interests in Ontario and neighbouring US jurisdictions, which could expose the current Canadian anti-competitive situation and offset the "perverse subsides" under US domestic trade law. Unfortunately however, our preliminary research indicates that green power interests will not likely be successful in challenging the current anti-competitive climate in Ontario's electricity generation and retail market under the federal Competition Act. In short, the law that regulates anti-competitive conduct is not likely applicable to the very regulators and government ministries that create or allow the anti-competitive situation in the first place. Alas, green power is faced with yet another regulatory, albeit this time federal in origin, barrier to fair conditions for competition.

This tentative conclusion about the inability of the <u>Competition Act</u> to provide a remedy does not detract from our recommended strategy of filing a complaint under the Act and causing the federal Competition Bureau to take a position in writing. Based in part on the 2000 findings of the federal Office of the Auditor General, Commissioner of the Environment and Sustainable Development, the complaint should be able to show that perverse energy subsidies persist<sup>15</sup>. If successful under the <u>Competition Act</u>, the barriers to green power and climate protection could begin to be addressed within a Canadian legal framework.

However, if unsuccessful, there are at least two options that could proceed simultaneously. First, amendments to the <u>Competition Act</u> could be sought to facilitate complaints in such a situation. Second, even if the complaint is unsuccessful domestically, it could be used to build the case for friendly US green power interests under US trade law. The US "subsidy complaint" might maintain that a countervailing duty is required on US imports of electricity from Ontario to address the government regulatory barriers to green power and the financial subsidies to traditional and polluting fuels sources. Ironically, this puts environmentalists in the position of calling for true competition from pro-market governments. The on-going Softwood Lumber dispute provides an apt analogy that we take up below.

The appeal of launching a competition and/or subsidy complaint based either on domestic law or on international treaties is that such a complaint can be initiated by green power interests without relying upon governments to take the lead in legal proceedings. One can only lament about the lack of sound government policy to address the market inequities and ensure sustainable energy development for so long before alternative public interest strategies become urgent.

<sup>&</sup>lt;sup>15</sup> Report of the Commissioner of Environment and Sustainable Development (2000) see www. oagbyg.gc.ca/environment.

The purpose of this paper is to provide background information on the Ontario electricity system, itemize at least some of the apparent perverse subsides and market inequities, and explore a few of the policy and legal options available to address them, at least in the short term. The best solution, of course, would be for governments to do the right thing and level the playing field now. Indeed, the Select Committee's <u>Final Report</u> recommended that the government undertake a full legislative and regulatory review to consider amendments regarding alternative fuels and energy, including energy efficiency and conservation by June 30<sup>th</sup>, 2003. In particular, the Committee recommended that a Renewable Portfolio Standard be legislated by this date, based upon a stakeholder RPS Task Force final report due by March 1, 2003. It is recommended that a request for a preliminary ruling about the merits of a complaint under the <u>Competition Act</u> be filed now in order to better articulate green power issues for provincial and federal decision-makers and allow more public input into this process.

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<sup>&</sup>lt;sup>16</sup> Alternative Fuel Sources Report, supra fn 6, p. 13.

<sup>&</sup>lt;sup>17</sup> Ibid, p. 16 The Ontario government shall also commit to developing a carbon tax based on the carbon content of the fuel consumed in conjunction with an RPS, with a target implementation date of July 1, 2005.

# 2.0 Background

In 1999, the provincial government restructured Ontario Hydro, creating Ontario Power Generation (OPG), to inherit the province's existing generating capacity and Hydro One to control its wires. In May 2002, competition was introduced in the generation and retailing sectors of this market while the province maintained its monopoly over transmission lines. Despite the promise of competition, anti-competitive conduct also emerged. Green power investment and development has been particularly vulnerable to this conduct; through various subsidies to traditional energy and other market inequities, the new market has denied green power an equal competitive opportunity, despite the promises otherwise.

## 2.1 Description of the Electricity System

The electricity delivery system in Ontario is composed of two main parts: the long-haul, high voltage "transmission wires" and the lower voltage "distribution wires". The Independent Electricity Market Operator (IMO), established by the Electricity Act (1998), controls the high voltage transmission part. This grid connects with high-voltage grids in neighboring provinces and US states at junctions called "interties". The IMO controls imports and exports of Ontario electricity across these boundaries. Transmission of electricity across the Ontario grid to other jurisdictions is referred to as "wheeling".

The lower-voltage distribution system is usually controlled and operated by the Local Distribution Company (LDC), which is most often a municipal utility, such as Toronto Hydro. It is currently controlled and operated by Hydro One in rural areas. This distribution grid feeds all residential and most end-use commercial customers, although some wholesale and large Industrial/Commercial/Institutional customers are connected directly to the high-voltage IMO transmission grid. Most electricity generators connect to the IMO grid, but some smaller and local ones may connect directly into the distribution grid instead. Distributed generation is small scale localized power generation that provides power at or closer to the point of use as opposed to a central generation station. Generators and Wholesale Consumers who connect into the distribution grid rather than the IMO-controlled grid are referred to as "embedded generators". The Toronto Renewable Energy Co-operative is an example of distributed generation by an embedded generator. With a combination of energy efficiency and green power provided by local distribution generation systems, a sustainable energy future is possible.

<sup>&</sup>lt;sup>18</sup> Ontario Energy Board, "Preparing for the New Electricity Market" Online: <a href="http://www.oeb.gov.on.ca">http://www.oeb.gov.on.ca</a> (March 2002).

<sup>&</sup>lt;sup>19</sup> See www.theimo.com

<sup>&</sup>lt;sup>20</sup> See TREC, Canada's first renewable energy co-operative, www.windshare.ca

Currently, Ontario's three largest electricity generators are nuclear (44% of total generation), primarily large hydro (27%), and coal (21%). Currently, renewables account for 0.7% of the market share. A plan to replace the use of coal needs to meet peak demand, either by providing electricity that can be brought on and off line incrementally or by reducing the peak load. Ontario winds generally tend to be strongest in the afternoon and in winter, coinciding directly with peak demand times. <sup>22</sup>

Alternative Fuel Sources Report, supra fn. 6 at p. 6.
 Green Power Opportunities, supra fn. 14, p. 12.

# 3.0 Current Subsidies And Market Inequities

The Select Committee recognized the many challenges renewables face yet believes that "[n]ew renewable energy sources should be utilized to improve air quality in Ontario and across North America, and to replace traditional sources of generation". Allowing energy prices to reflect their true costs is a necessary end-state. Yet the difficulties associated with internalizing the environmental and human health costs associated with the production and use of traditional fuels are well known. The use of coal as an energy source can acidify lakes, cause harmful smog, and change the climate. This type of fuel source has real human impact, and yet the costs are not reflected in the price of electricity and no compensation is paid to the victims who are, in effect, all of us. While the effort to quantify these external costs is on-going, there are nevertheless a number of direct examples of perverse government subsides and market inequities that can be relied on as evidence of the uneven regulatory playing field for green power. These include:

- Distorted Domestic price cap
- ➤ Inequitable Import price protection
- ➤ Lack of real-time pricing
- ➤ Lower transmission rate for exports
- Distorted transmission connection rates
- > Practical barriers inhibiting the use of Net Billing
- ➤ Distorted Environment Assessments
- > Debt relief and insurance liability caps for nuclear generators
- ➤ Direct government subsidies of \$16 billion since 1953.
- > Inadequate provision for nuclear decommissioning and waste storage
- ➤ Insufficient Incentives for Renewables

#### 3.1 Power Price Controls

To facilitate the transition to electricity competition, the Ontario government negotiated the Market Power Mitigation Agreement. Under its terms, 90% of Ontario Power Generation's (OPG's) forecast domestic sales are limited to an average of 3.8¢/kWh, (1000 watts or 1.35 horsepower for one hour) with excess revenues to be rebated to

<sup>&</sup>lt;sup>23</sup> Alternative Fuel Sources Report, supra fn.6 at p. 12 where it was noted that in developing a policy framework "that the relative cost of different energy sources be considered".

<sup>&</sup>lt;sup>24</sup>Coal generators have not faced any liability for the huge health and environmental costs of their toxic emissions, or faced any criminal charges for the huge number of Ontarians who die each year due to air pollution. The Ontario Medical Association estimated that air pollution kills 1,900 Ontarians per year and costs \$9.9 billion in health care and absenteeism. Ontario Power Generation's coal-fired power plants are directly responsible for a significant portion of the air pollution, GHG, acid rain and other toxic emissions in Ontario, emitting: 23% of Ontario's sulphur dioxide and 14% of Ontario's nitrogen oxides emissions – key ingredients in smog and acid rain; 23% of Ontario's mercury emissions – mercury builds in the ecosystem, including food sources and can lead to serious health problems; 19% of Ontario's carbon dioxide emissions – a key greenhouse gas, see "The Illness Costs of Air Pollution in Ontario", www.oma.org.

Ontario consumers. The amount of this rebate is reduced gradually as OPG reduces its generation to 35% of Ontario's overall generation capacity or until the  $4^{th}$  anniversary of competition in Ontario. This currently has the effect of limiting revenue on about 75% of forecast Ontario consumption (2001 numbers) to  $3.8 \ensuremath{\phi}/kWh$ . In other words, the Ontario government has imposed a 3.8  $\ensuremath{\phi}/kWh$  domestic price cap on OPG supplied power until at least 2006.

The revenue cap and rebate system discourages some producers from entering into long-term contracts for green power or energy efficiency by creating a sense that consumers are protected from price increases above 3.8 cents. This system also increases the difference between the price for traditional power and renewable energy at the necessary premium to cover higher energy production costs, making renewable energy very hard to sell. For wind this premium is 3.4-7.8 e/kWh assuming a 30% wind capacity factor.

## 3.2 Import Price Protection

On peak demand days when electricity is imported to meet Ontario demand, a situation can develop where electricity importers receive a much higher price for their power than Ontario generators receive during the same time period. This is having a disproportionate effect on investment in renewable generation in Ontario as potential developers, most planning renewable projects such as wind farms wait to see how this situation will be resolved. During heat waves such as the one in July 2002, Ontario imported approximately 10% of its power at prices up to \$2/kWh. This is well above the Hourly Ontario Energy Price (HOEP) that Ontario generators received during the same time period which peaked at 47.1¢/kWh.<sup>26</sup>

This situation is a consequence of the way the IMO handles import offers as opposed to the five-minute Market Clearing Price (MCP) and Hourly Ontario Energy Prices (HOEP) used to set the clearing price for domestic supplies. While MCP and HOEP are set by bids and offers into the Real-Time Energy Market, import offers to sell into the Ontario Real-Time Energy Market are competitively determined through a pre-dispatch process before each hour. Once these import offers are accepted, the quantity of electricity and minimum price for the hour stay the same regardless of what offers Ontario generators submit to the Real-Time Energy Market during that hour – i.e. the MCP and HOEP in this real-time market are independent from the import prices.<sup>27</sup>

<sup>&</sup>lt;sup>25</sup> "Ontario's Physical Power System" from IMO, www.theimo.com

<sup>&</sup>lt;sup>26</sup> Toronto Star, July 25, 2002

<sup>&</sup>lt;sup>27</sup> "Understanding the Role of Import Prices During High Demand Periods", July 3, 2002, www.theimo.com

#### 3.2.1 Import Prices on a different track

The rationale for this process of handling imports is to remove the risk that an importer would incur on a transaction if the price decreased between the pre-dispatch and the real time periods. In contrast, Ontario generators are not protected from this risk. This situation limits investment in generation capacity in Ontario, including green power. While the IMO has implemented a rule change on July 29 to prevent traders from gaming the system by setting up simultaneous import and export transactions to take advantage of the higher import prices, the underlying market inequities in price and risk for domestic generators as opposed to importers still exist.<sup>28</sup>

# 3.3 Lack of Real Time Pricing undermines renewables and energy efficiency

Another market inequity, which results from the current situation, is the limited investment in Demand Response systems, especially Peak Load Management systems in Ontario. Payment to importers in excess of HOEP is recovered by the IMO from customers through an hourly uplift charge. Wholesale Customers see these uplift charges on their settlement statements, for customers served by a Local Distribution Company (LDC) the uplift charge is a component of the Wholesale Market Services charge. During peaks like that experienced July 2, the uplift charges can double the commodity cost for that hour for Wholesale Customers.<sup>29</sup>

Since customers with interval meters can see the MCP, they have the option to react to the high prices with Demand Response systems such as Peak Load Management, which curtail electricity use in response to real-time price triggers. However, customers do not receive real time price signals for the additional cost of imported power which could trigger appropriate Demand Responses, instead they are forced to pay the premium for this power after the fact in non-avoidable "uplift charges". This stifles the market for Demand Response systems in Ontario as well as making Ontario's Industry, Commercial and Industrial sector less competitive than they could be if they had more control over their electricity expenses.

### 3.4 Subsidy for Exports of Traditional Power

Not only has the price of imported power from the US been distorted by the uneven market rules of the IMO, but the export price of Ontario power has also been artificially lowered by virtue of the transmission rates determined by the Ontario Energy Board, established by the Ontario Energy Board Act (1998). Presently, electricity is wheeled through Ontario to other provinces or wheeled out of Ontario to the United States using

<sup>&</sup>lt;sup>28</sup> "IMO Revises Import Rules But Problems Persist", IPPSO FACTO, August 2002.

<sup>&</sup>lt;sup>29</sup> "Understanding the Role of Import Prices During High Demand Periods", July 3, 2002, www.theimo.com

Hydro One's transmission lines. Consumers whether domestic or international local distribution companies (LDCs) or directly connected customers (DCCs), pay to use these wires and not generators. Yet the Ontario Energy Board (OEB) has approved vastly different rates for international and domestic consumers: \$1/MW-hour and \$4.85/MW-hour, respectively. The theory behind this pricing suggests that importers in other jurisdictions should only pay incremental costs for using the wires; otherwise, the combined costs of wheeling through various jurisdictions would become prohibitive. <sup>30</sup>

However, this differential transmission rate, in effect, subsidizes traditional, non-renewable generators. Because renewable energy is primarily local and small in scale, only large generators have the production capacity to economically export power to other jurisdictions. Ontario's three largest electricity generators are nuclear (44% of total generation), primarily large hydro (27%), and coal (21%). Currently, renewables account for 0.7% of the market share. Of these, nuclear and hydro generally run at a constant capacity to serve the "base load" of Ontario demand. Since it is easiest and most cost effective to increase or decrease coal-fired electricity output in response to demand, "peaks" in demand, including those caused by export demand, tend to result in more coal-fired generation.

Consequently, the OEB-approved transmission rates have the effect of subsidizing non-renewable energy generation, especially coal, artificially increasing the demand for those sources and undermining the demand for green power both in Ontario and neighboring jurisdictions that import cheap Ontario power. In short, the practical effect of the current wheeling system is to facilitate trades of coal-fired power.

#### 3.5 Transmission and Powerline Connections

Connecting to the transmission grid is fundamental for generators. Even so, the <u>Select Committee on Alternative Fuel Sources</u> Final Report cites the testimony of renewable generators who have trouble connecting to the grid.<sup>32</sup> In short, new generators, including green power sources, have to pay to upgrade the grid to get connected, whereas existing traditional power generators in many cases have their connection costs covered by the rate base.

Regulatory, physical and economic limitations, as well as inadequate or unavailable transmission capacity in Northern Ontario, block the development of renewable power by hindering its connection to the grid. These limitations stem from the government's concentrated investment in Southern Ontario and in long-haul transmission lines. While the Ontario Market Design Committee made recommendation to the Ontario government on proposed market rules to remedy this unfairness, new users of the grid have to pay for

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<sup>&</sup>lt;sup>30</sup> Boland, Bruce, "Ontario Power Generation: Positions on Transmission Issues" (released 6 August 1999), infra fn. 34, p. 4.

<sup>&</sup>lt;sup>31</sup> Alternative Fuel Sources Report, supra note 6 at 6.

<sup>&</sup>lt;sup>32</sup> Ibid. p.18.

their own connection.<sup>33</sup> Requiring new generators, however, to pay the full cost of their transmission upgrades actually discourages new connections.

The existing long-haul transmission lines were designed to allow nuclear and coal generators to provide service while located outside of populated areas. The basic premise was to have these populations experience the advantages but not the disadvantages of brown generation. These generators did not pay for the construction of and their connection to these lines, thereby, giving them a huge competitive advantage compared to new generators who will have to pay for their connection. Thus, if nothing is done to help new renewables to connect, the existing generation operates with a significant advantage – the status quo is preserved. New renewable generators wishing to connect must carefully decide where to connect and bear the financial consequences of this choice.

When new local renewables cannot economically connect to the grid, generators capable of bulk transmission (mainly, nuclear, large hydro, and coal) serve these "captive communities" over the long-haul transmission lines. Again, green power and local community development suffers.

## 3.6 Environmental Assessment Inequities

The Ministry of Environment's Guide to Environmental Assessment (EA) Requirements for Electricity Projects has different capacity thresholds that determine the rigor of the assessment process. This regulatory approach based on capacity rather than fuel source in effect discriminates against renewables, increasing the cost of wind energy projects compared to some fossil fuel projects.<sup>34</sup> For example, a 2 MW wind project requires an EA screening process, whereas natural gas or oil projects are exempt up to a 5 MW level.<sup>35</sup>

Yet despite the fact that 87% of Ontario voters agreed that a full environmental assessment of the proposed Pickering nuclear plant refurbishment under Ontario Hydro's Nuclear Asset Optimization Plan (NAOP) was necessary, the Federal Environmental Assessment procedures (led by Canadian Nuclear Safety Commission) excluded the following fundamental considerations: a review of accidents involving basic safety systems failure; issues of cost or need for the restart; and a discussion of the adequacy of radiation protection standards for workers or the public.<sup>36</sup> In contrast, wind developers who apply for federal incentives such as the Wind Power Production Incentive (WPPI), discussed below, must undergo a full EA. In short, this regulatory framework undermines

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<sup>&</sup>lt;sup>33</sup> Ontario Hydro Services Company, *Stakeholders' Guide To Transmission 2000* (Toronto, 2002) at 4-5.

<sup>&</sup>lt;sup>34</sup> Environmental Assessment Act, R.S.O. 1990, c. E.18, s. 3; 2001, c. 9, Sched. G, s. 3 (3) [hereinafter Environmental Assessment Act].

<sup>&</sup>lt;sup>35</sup> Ontario Regulation 116/01, s. 4 under the EA Act, ibid. and see Glen Estill, <u>Environmental Assessment</u>, www.skygeneration.ca.

<sup>&</sup>lt;sup>36</sup> Green Report Card on Electricity Restructuring in Ontario (Toronto: David Poch, et al and the Green Energy Coalition, 2002) at 10, see www.sierraclub.ca/national.

environmental and human health protection and confers a financial benefit on traditional fuel sources by lowering environmental assessment, start up and operational standards and costs.

#### 3.7 Gross Load vs. Net Billing

Electricity transmission requires much capital. Once wires and other facilities are installed, their costs become sunk - these assets cannot easily be moved or resold. Furthermore, the operating costs of wires remains fairly constant, regardless of how much electricity they transmit. By installing generators, including green power, that connect directly to Local Distribution Utilities, Directly Connected Customers, or end-use customers without using the long-distance wires (known as distributed or embedded generation), customers can avoid long distance transmission charges and reduce the demand on the wires. Some argue that if customers can avoid transmission costs, than they should pay compensation for the wire's lost revenue sources to discourage a trend to "bypass" the grid.

But this view ignores the fact that embedded generation can reduce the costs of transmission expansions to meet new demand and can reduce placing demand on the lines, saving line losses and maintenance costs. The benefits of small scale distributed generation to the grid in avoiding transmission expansion and line losses are not recognized in the price paid for power in the current electricity system in Ontario.

Charging embedded generation for transmission capacity it does not use discourages dispersed green power generators by denying them the economic benefit of locating themselves outside of the grid. This disproportionately affects renewable generators since these generators tend to be local and small in scale and fit well into sustainable embedded generation schemes.<sup>37</sup>

#### 3.7.1 Partial Net-Billing

To address this issue, the Ontario Energy Board (OEB), in its May 2000 decision, <sup>38</sup> adopted a partial net-billing scheme in which customers with their own generation capacity within the local grid can avoid some high voltage transmission charges.<sup>39</sup> However, in a subsequent ruling made without the benefit of a public hearing, the OEB limited its decision to apply only to customers with on-site generators such as large industrial operations and not to those customers who send their power to others in the local grid, such as the Toronto Renewable Energy Co-op. 40 This regulatory policy forces renewable local generators to subsidize a transmission system that is primarily used by large scale non-renewable power generators and their customers.

<sup>&</sup>lt;sup>37</sup> Christine Elwell, Sierra Club of Canada, "Backgrounder: Ontario Hydro's Transmission Rate Application", 2000, at 3.

OEB Decision RP-1999-0044.

<sup>&</sup>lt;sup>39</sup> Green Report Card. supra fn. 37, at p. 10.

<sup>&</sup>lt;sup>40</sup> Ibid. at p. 6.

#### 3.7.2 **Net Metering**

Net metering allows small power generators to sell/supply surplus power into the grid, usually at peak demand periods, and to buy power from the grid in the conventional manner when their own generation is insufficient to meet their needs, and they are subsequently billed for the difference. This widely known approach supports green power and climate protection because when the wind is blowing and the sun is shining, the need for power generated from polluting sources is reduced.

Many consumers have expressed an interest in having their own renewable generation within a net-metering scheme. The Select Committee suggests that the provincial government adopt policies favoring net metering, including: universally allowing net metering for applications up to 60kW, ensuring all electrical distribution companies offer net metering, and exempting suitable meters from the provincial sales tax. 41 In summary. not only do green power producers face a gross-billing approach to transmission rates that fail to recognize their avoided costs to the transmission system but they also can not benefit from net-billing and metering schemes because these widely recommended policies are not currently in place in most local distribution systems.

While not a direct subsidy of non-renewables, the province's lack of policies favoring net metering inappropriately increases the cost of distributed generation and thus reduces competition from renewables.

#### Historic and Current Nuclear Subsidies

#### Debt Relief and Debt Financing 3.8.1

The nuclear industry has enjoyed subsidies of over \$16 billion since 1953, 42 and Ontario Hydro's Nuclear Asset Optimization Plan (NAOP) has provided a huge, anti-competitive subsidy to nuclear generators. NAOP was a multi-billion dollar investment in the Darlington, Bruce B and Pickering B nuclear plants. The reallocation of debt upon the reorganization of Ontario Hydro, through the stranded debt charge, shifted a great portion of the bill for NAOP to taxpayers and electricity consumers.<sup>43</sup> The nuclear generators have the use of multi-billion dollar facilities without paying for the debt that was incurred to build them. However, any new form of generation, which includes renewables, must pay for its own debt.

<sup>&</sup>lt;sup>41</sup>Alternative Fuel Sources Report, supra fn.6, p. 17.

<sup>&</sup>lt;sup>42</sup> 2000 Report of the Federal Commissioner of the Environment and Sustainable Development, supra fn. 15 and see Green Power Opportunities, supra fn. 14, at p. 6.

<sup>&</sup>lt;sup>43</sup> Green Report Card, supra fn.37, p. 11.

#### 3.8.2 Relief from Decommissioning Costs and Insurance Liability

Green Power generators, which do not generate toxic waste or emissions, are liable for all decommissioning costs to winding up a facility while the nuclear industry is heavily subsidized for it's decommissioning costs. The nuclear industry has been subsidized for the cost of disposing of its toxic waste, and the huge costs of eventual plant decommissioning. The nuclear industry has enjoyed substantial indirect subsidies from the Nuclear Liability Act, which limits liability for an accident to a paltry \$75 million and thus reduces insurance costs to this risky technology. This Act was put in place because the free market will not offer insurance coverage with sufficient limits on nuclear facilities. Conversely, other generators, including renewables, have to pay the full market price for insurance. Indeed, the nuclear industry would not exist without government assuming liability.

Bruce Power, a private subsidiary of British Nuclear, paid little for the lease of the Bruce plant from the Ontario government and will make provision for decommissioning and waste management based on current estimates of those costs. Once Bruce Power's lease ends or they go bankrupt like their parent has, they will face no liability for the inevitable underestimation of these costs. 45

#### 3.9 Insufficient Incentives for Renewables

Despite the environmental and public health benefits that green power produces, it is widely recognized that green power producers face extraordinary challenges. While renewable technology costs have decreased, the diffusion of green power offerings to the waiting public is inhibited by low manufacturing volumes and poor economies of scale. In addition to historic government subsides, we have shown that green power producers face extra costs for environmental approvals, insurance, transmission rates and connections, and lack the clear ability to net-bill. This occurs in a regulated market that distorts domestic as well as import \ export prices and overwhelmingly favours traditional fuel sources and investment. It has also been estimated that the additional marketing, administration and distribution costs and retail returns, increase the retail cost of renewable energy by 2-4c/kWh.<sup>46</sup>

To address some of these barriers and in anticipation of Kyoto implementation, the 2001 federal budget announced a Federal Wind Power Production Incentive (WPPI) to support the installation of 1000 MW of new wind capacity in Canada over a 5-year period. Although a step in the right direction, this incentive is not enough to bridge the gap between the higher cost of producing renewable energy and the cost of traditional power sources. The federal WPPI is about 1.2 c/kWh (~67¢/kWh after tax). It should either be raised to 2.7c/kWh at the federal level, or the province needs to come up with an

<sup>&</sup>lt;sup>44</sup> Ibid.. at 7.

<sup>&</sup>lt;sup>45</sup> "Enhancing Sustainable Economic Development in Canada with Renewable Energy", Sept 2002 from <a href="https://www.carecoalition.com">www.carecoalition.com</a>

<sup>46</sup> Ibid.

incentive to make up this difference in order to level the playing field and be competitive with a similar incentive for wind producers in the US<sup>47</sup> The federal government should also eliminate the federal excise tax on bio-diesel, as has been done for other fuels such as ethanol, propane and natural gas.<sup>48</sup>

While the WPPI is a positive first step, it needs to be expanded to adequately cover the huge cost of educating consumers about the need for renewable energy and to justify the premium cost for it. There should be similar incentives for renewable low-environmental impact energy other than wind, so that support of green power is universal and the market can pick the winning technologies. In short, this small incentive does not even begin to remedy the burden of current regulatory barriers to competition.

To summarize, eliminating the apparent market inequities and subsidies could have the dual benefits of beginning to put green power on a level field with traditional fuels and of giving customers a truer price signal in the electricity market. In turn, this could foster energy efficiency investments. Better price signals, together with supportive government Demand Side Management programs<sup>49</sup> would ensure energy efficiency and conservation.

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<sup>47</sup> Ibid.

 $<sup>^{48}</sup>$  See Julian Reed, M.P., supra fn. 1, , p. 6. and see The Truth about Fuel Subsidies, The Green Incubator Inc. www.aboutbiodiesel.com

<sup>&</sup>lt;sup>49</sup> Alternative Fuels Sources Report, supra fn. 6, p. 61: Measures undertaken to control the level of energy usage at a given time by consumers, utilities or third parties.

# 4.0 Market Inequities and the Competition Act

The Canadian Competition Bureau enforces the <u>Competition Act</u> (the Act), a federal law governing Canadian business activity. The Act promotes a competitive marketplace by regulating anti-competitive conduct.<sup>50</sup> It does so by, among other things, including enforcement of specified prohibited anti-competitive conduct by the use of criminal and civil provisions. The main prohibitions are as follows:

#### ➤ Abuse of a Dominant Position:

"When a dominant firm engages in anti-competitive acts that substantially lessen competition in the marketplace." <sup>51</sup>

#### > Exclusive Dealing:

"When a supplier requires or induces a customer to deal only or primarily in products designated or supplied by the supplier, or to refrain from dealing in another product." 52

#### Refusal to Deal:

"When someone is substantially affected in his or her business, or is unable to carry on business, because of the inability to obtain adequate supplies of a product on usual trade terms." <sup>53</sup>

The Act applies to most Canadian corporations. It also binds provincial and federal crown corporations, "in respect of commercial activities engaged in by the corporation in competition, whether actual or potential, with other persons to the extent that it would apply if the agent were not an agent of Her Majesty."<sup>54</sup>

To launch a successful complaint to the Competition Bureau, who then refers the issue to the Competition Tribunal for a decision, the complainant must show the anti-competitive conduct in question fits within a specific prohibitive provision of the Act.<sup>55</sup> It is possible to request a preliminary determination.

The problem with bringing a green power complaint domestically is threefold. First, by definition, abusive government regulations and perverse subsidies come from government. Yet the Act only applies to the private sector or to government Crown corporations, and the latter application is limited to when the Crown Corporation is

<sup>&</sup>lt;sup>50</sup> See Kaiser, Gordon, *Competition Law of Canada* (New York: M. Bender, 1994).

<sup>&</sup>lt;sup>51</sup> "The Competition Bureau" Online: <a href="http://strategis.ic.gc.ca/SSG/ct01075e.html">http://strategis.ic.gc.ca/SSG/ct01075e.html</a> (retrieved 19 July 2002) [hereinafter "The Competition Bureau"]. See *Competition Act*, R.S.C., 1985, c. C-34, s. 78 [hereinafter *Competition Act*].

<sup>&</sup>lt;sup>52</sup> *Id.* See *Competition Ac.*, s. 77.

<sup>&</sup>lt;sup>53</sup> *Id.* See *Competition Act*, s. 75.

<sup>&</sup>lt;sup>54</sup> Competition Act, s. 2(1).

<sup>&</sup>lt;sup>55</sup> "Competition Act and Competition Bureau" Online: <a href="http://www.islandnet.com/~wwlia/ca-comp1.htm">http://www.islandnet.com/~wwlia/ca-comp1.htm</a> (retrieved 19 July 2002).

engaged in commercial activities. Consequently, only OPG and Hydro One -- and not OEB or the IMO, for example could be the subjects of a complaint.

Secondly, the Act does not apply to businesses whose activities have regulatory approval. Therefore, any rates proposed by Hydro One and approved by the OEB or OPG capped revenue that is overseen by the OEB, are not likely subject to the Act. Essentially the Act only applies to unregulated business conduct. Moreover, the Act will only apply to those corporations who engage in anti-competitive conduct, and not to those that merely take advantage of a competitive opportunity provided by government, such as OPG, Hydro One or British Nuclear.

Finally, the provisions of the Act are narrow. The Bureau refers very few cases to the Tribunal. Successful complaints will seek to protect competition in a market, not the consumers therein. Therefore, complaints must generally show a partial and anticompetitive act gives an advantage or disadvantage to a sector of a market; a neutral rule that has the same effect will not likely trigger a remedy under the Act. Neutral rules on their face - e.g. 'all fuel exporters can take advantage of reduced transmission rates' –are not likely grounds for a complaint, despite the fact that a specified group benefits to the exclusion of green power producers. Thus, the Act protects competition, but not competitiveness. Recall how many times consumers have been unsuccessful in proving gasoline price gouging by the major oil companies under the Act.

Although low-impact renewables face a struggle to enter the new market, and are doubly challenged to overcome subsidies of non-renewable generators, the <u>Competition Act</u> likely cannot address or offer a remedy for this unfairness. Consequently, its rules may be neutral but its discriminatory effects are not. Given this result and without legislative improvements, a domestic remedy for green power interests does not ultimately appear to be available. However, it would still be helpful to proceed with a complaint anyway in order to build the case for the Act's amendment and to add to the record about the anti-competitive electricity market in Ontario. The form to fill out with the Competition Bureau is attached in Appendix A.

# 5.0 Subsidy Complaint under US Trade Law

If Ontario based green power interests are not able to successfully launch a complaint under the federal <u>Competition Act</u> because the market barriers and government subsidies are the result of government approvals or programs, then serious consideration might be given to engaging in cooperative cross-border activities to expose and remove the barriers to green power in Ontario's "open market" for electricity. A subsidy complaint based initially on US domestic law and, upon appeal, based on international treaties such as the NAFTA or the GATT/WTO system, is appealing in that it can then be initiated by green power interests directly without relying on governments to take the lead.

From an environmental protection perspective, it is also important to expose and remove "perverse subsidies", which reduce costs or add revenue such that the returns from traditional energy sources are inflated beyond normal economic levels. Indeed, perverse subsidies represent a failure of economic as well as environmental policy.<sup>56</sup>

Because the Ontario government opened the electricity generation market up to competition, important trade policy obligations are triggered, such as non-discriminatory treatment of all NAFTA electricity suppliers and investors. While the scope of the obligations are huge, and include the implications of Chapter 12 on the 'Free Trade in Services' and Chapter 11 on 'Investor-State Dispute Mechanisms', this paper is limited to a brief discussion of Chapter 19 on 'Anti-Dumping and Countervailing Duty Matters'.

NAFTA Chapter 19 provides a system of "appeals" to bi-national arbitration panels, which then replace the domestic judicial review of administrative duty determinations. Under Chapter 19, dispute settlement is available about the imposition of "anti-dumping" or "countervailing" import duties on goods and services from a NAFTA jurisdiction. These duties are imposed by government to remedy the dumping of a good that sells below cost in a foreign market or to counter a government subsidy that causes injury to competing businesses.<sup>57</sup> The amount of the duty is established to offset the amount of the dumping or subsidy in order to level the playing field. The rationale for imposing a duty has been described this way:

"Where there is a direct casual link between an act of a government in reducing the costs of production and the export of a product, state support for an enterprise or region ceases to be a matter of national policy and becomes an international issue of economic burden shifting". 58

<sup>57</sup> Article 1902 incorporates by reference the General Agreement on Tariffs and Trade (GATT) Subsidy Code of 1986. For a general overview of NAFTA, see Barry Appleton, Navigating NAFTA, Carswell Publishing, 1994.

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<sup>&</sup>lt;sup>56</sup> For a discussion of perverse subsidies in the context of overfishing, see World Wildlife Fund, <u>Towards</u> <u>Rational Disciplines on Subsidies to the Fishery Sector</u>,

 $<sup>\</sup>underline{http://www.worldwildlife.org/commerce/discipline.pdf}$ 

<sup>&</sup>lt;sup>58</sup> R. Rivers and J. Greenwald, "The Negotiations of a Code on Subsidies and Countervailing Measures: Bridging Fundamental Policy Differences", 11 L. Pol. Int'l. Bus. (1979) p. 1446.

It is important to note that NAFTA retains the domestic law of the NAFTA parties; NAFTA panels only review whether the domestic law was properly applied, not whether the domestic law is appropriate.

In order to address the anti-competitive conditions for green power in Ontario, US interests could make a complaint under US trade law that is designed to remedy trade barriers against US business exports in open markets. <sup>59</sup> A US exporter of green power (or related technologies and services, including investors) could file an on-line petition under Section 301 of the US <u>Trade Act</u> of 1974. <sup>60</sup> In order to be successful, the objectionable subsidy by a foreign government or public body must have provided a specific benefit to a single firm or industry or a group thereof, that caused adverse trade effects or material injury or the threat thereof to the interests of the competing US industry. <sup>61</sup> Each aspect must be proven. We discuss below whether some of the energy subsidies and market inequities identified above could be considered "countervailable", and examine in particular whether they can be considered a governmental financial contribution.

## 5.1 A Softwood Lumber Dispute in Energy?

The on-going Softwood Lumber dispute between Canada and the US presents an apt analogy. In 2002, Canada went to the World Trade Organization (WTO) for a ruling that US countervailing duties in the order of 19% on softwood lumber imported into the United States from Quebec, Ontario, British Columbia, Alberta, Manitoba and Saskatchewan were contrary to US trade obligations. The US imposed the duty to remedy the low stumpage fees that Canadian provinces charge for the right to cut standing timber on public lands. It should be recalled that many US and Canadian environmental groups supported the US complaint, alleging that Canadian lumber interests also benefit unfairly from a lack of government enforcement of the federal Fisheries Act and a failure of the government to enact a meaningful Endangered Species Act. In contrast, equivalent US lumber producers are required to meet specified environmental protection standards that increase their costs. Indeed the presence of "perverse subsidies" in the electricity sector raises many similar questions, including whether the failure of government to establish and enforce environmental standards, such as those based on multilateral obligations e.g. the Kyoto Protocol, can be considered a countervailable subsidy.

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<sup>&</sup>lt;sup>59</sup> The equal vent Canadian Law in this regard is the <u>Special Import Measures Act</u>, ch. S-15, administered by the Canadian International Trade Tribunal, see http://www.citt.gc.ca/menu\_e.htm

<sup>&</sup>lt;sup>60</sup> US Code Title 19 Customs Duties, Chapter 12, Trade Act of 1974.

<sup>&</sup>lt;sup>61</sup> See The Trade Compliance Center, of the US Department of Commerce International Trade Administration, that "helps American exporters overcome foreign trade barriers and works to ensure that foreign countries comply with their commitments to the United States" <a href="http://www.tcc.mac.doc.gov/cgi-bin/doit.cgi?218:54:1:5">http://www.tcc.mac.doc.gov/cgi-bin/doit.cgi?218:54:1:5</a>

<sup>&</sup>lt;sup>62</sup> See NGO Statement on Softwood Lumber Dispute, December 2001, http://www.sierraclub.ca/national/forests/softwood-lumber-statement.html

<sup>&</sup>lt;sup>63</sup> Christine Elwell, Energy, Summit of Plummet? A Canadian Civil Society Assessment on the Road to Johannesburg, by the Canadian Environmental Network, <a href="https://www.cen-rce.org/wssd">www.cen-rce.org/wssd</a>, comparing and

With respect to the criterion that the subsidy be specific, recall that only Ontario power exporters (i.e. traditional fuels), benefit from the low OEB approved transmission rate, and that domestic green power producers must pay the higher domestic transmission rate. Similarly, traditional energy sources benefit from the 3.8 ¢/kWh domestic price cap and IMO approved import price protection. Evidence of adverse effects, injury or the threat thereof includes: declining or impeding of sales, market share, profits, productivity, capacity, ability to raise capital or investment and significant price undercutting or suppression.

On the issue of proving the "financial contribution" criterion, WTO texts say that a governmental financial contribution exists not only when the government provides outright financial assistance, but also in the case where "a government provides goods or services other than general infrastructure." The WTO in its 2002 Preliminary ruling in the Softwood Lumber Dispute confirmed the US Department of Commerce determination that a financial contribution was proven since the provision of stumpage rights by provincial governments constitutes the provision of a good or of services. But the WTO further found that the US approach to finding that a benefit was conferred on Canadian softwood lumber producers was flawed, and so the dispute goes back to the US Department of Commerce for a reconsideration of that methodology.

The important point to note, however, is that it is possible for private parties to have governments impose, on their behalf, anti-dumping and countervailing duties to offset not only direct governmental financial contributions, but also indirect inequities in the provision of government goods and services. These could perhaps include electricity transmission and interconnection rates as well as government approved domestic price caps and import price protection schemes.

To summarize, the purpose of this discussion on a US-led subsidy complaint and a Canadian based <u>Competition Act</u> complaint was to explore the options available to protect the public interest should the Ontario government fail to adopt the main recommendations of the Select Alternative Fuels <u>Committee Report</u>. As argued above, the Select Committee's recommendations regarding the scope of renewables that could benefit from proposed programs such as a Renewable Portfolio Standard and consumer labeling and certification are in need of reexamination. We look forward to an effective process that will quickly make the necessary legislative and regulatory amendments to

contrasting free trade in fossil fuels with the Kyoto Protocol, together with a baseline of Canadian energy development and export data.

<sup>&</sup>lt;sup>64</sup> See above, p.

 $<sup>^{65}</sup>$  See above, p.

<sup>&</sup>lt;sup>66</sup> See US Subsidy Enforcement Center of the US Department of Commerce, supra fn 61, the GATT Subsidy Code, Article V1(1), April 1979 and see the evidence outlined in <u>Green Power Opportunities in Ontario</u>, supra fn 14, p. 10-12.

<sup>&</sup>lt;sup>67</sup> WTO, Agreement on Subsidies and Countervailing Duties, Article 1.1(a)(iii), see <a href="www.wto.org">www.wto.org</a> and see Marc Benitah, The Law of Subsidies under the GATT/WTO System, Kluwer Law International.2002. <sup>68</sup> BNA WTO Reporter, Monday July 29<sup>th</sup>, 2002 and see US Department of Commerce, Notice of Preliminary Affirmative Duty Determination, 66 Fed. Reg. 43186 (Aug.17,2001).

ensure sustainable energy markets. Indeed, the first best solution would be for the government to develop and implement timely and effective policy, on the advise of the Select Committee, stakeholders and the general public. Unfortunately, though, without government and/or public interest interventions, green power development, investment and diffusion will likely remain disappointing until prices reflect true costs and a level playing field is created.

#### 6.0 Conclusion

Despite the environmental and public health benefits that green power promises, it is widely recognized that green power producers face extraordinary challenges. While the costs associated with renewable technology have decreased, the diffusion of green power offerings to the public is inhibited by low manufacturing volumes and poor economies of scale. In addition to historic government subsides, we have shown that green power producers face extra costs for environmental approvals, insurance transmission rates and connections, and lack the clear ability to net-bill. Furthermore, the regulated market distorts domestic as well as import and export prices. Taken together, this situation overwhelmingly favours traditional fuel sources and investment.

While the effort to internalize the environmental and public health costs associated with traditional fuel production and use is on-going, nevertheless there are a number of direct subsidies and market inequities that can be removed, including the following:

- Distorted Domestic price cap
- > Import price protection
- ➤ Lack of real-time pricing
- ➤ Lower transmission rate for exports
- > Distorted transmission connection rates
- ➤ No Net Billing
- ➤ Distorted Environment Assessments
- ➤ Debt financing and insurance liability caps for nuclear generators
- ➤ Direct government subsidies of \$16 billion since 1953.
- > Inadequate provision for nuclear decommissioning and waste storage
- > Insufficient Incentives for Renewables

Again, the appeal of launching a competition and/or subsidy complaint based either on domestic law under the <u>Competition Act</u> or on international treaties is that these complaints can be initiated by green power interests without relying on governments to take the lead. One can only lament about the lack of sound government policy to address the market inequities and ensure sustainable energy development for so long before alternative public interest strategies become urgent. Of course, the best solution would be for timely and effective green power policy development and implementation by government, following the advice of the Select Committee, stakeholders and the general public.

Given the tremendous economic, health and environmental benefits of green power, the federal and provincial governments would be advised to level the playing field and provide the same support and enthusiasm to the emerging green power sector that it supplied in the past for the conventional energy sector. Green power provides a non-polluting and secure source of reliable energy supply.

# 7.0 Appendix A

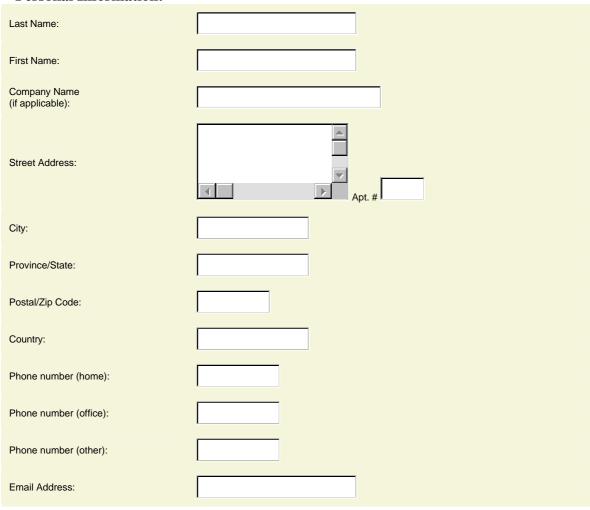
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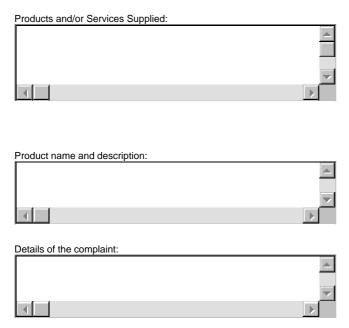
# 7.1 Information Centre Enquiry/Complaint Form

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