



**NOT SAFE**  
**NOT CLEAN**  
**NOT ECONOMICAL**  
**NOT FOR ONTARIO**

THE MCGUINITY GOVERNMENT IN ONTARIO HAS ANNOUNCED THAT IT PLANS TO POUR AN ADDITIONAL \$45 BILLION INTO NUCLEAR POWER.

IT'S A TECHNOLOGY THAT HAS A PROVEN TRACK RECORD OF BEING UNSAFE, UNSUSTAINABLE AND UNECONOMICAL.

MANY PEOPLE IN ONTARIO BELIEVE THAT \$45 BILLION IN PUBLIC EXPENDITURES COULD BE MORE SAFELY AND EFFECTIVELY INVESTED IN RENEWABLE ENERGY AND CONSERVATION. WE AGREE.

  
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## 1. THE LOWDOWN

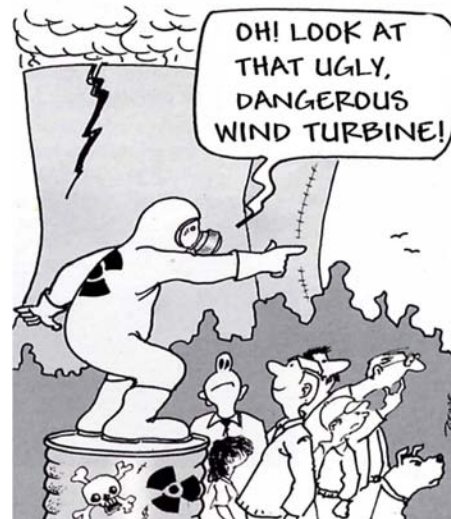
Supporters of the nuclear industry at the federal and provincial levels have been engaged in the process of trying to fast-track and entrench the 'nuclear option'.

In late 2005, senior officials of Ontario Power Generation held discussions with the CNSC (Canadian Nuclear Safety Commission, the federal regulatory agency) about building a new nuclear power reactor in Ontario. At the time, the CNSC through its president, suggested its staff help Ontario Power Generation deal with its "lack of understanding" about environmental planning "... so they can produce the right documents later."<sup>1</sup>

Two weeks after this meeting, in December 2005, the Ontario Power Authority (OPA) released a series of recommendations on electricity planning, including the recommendation that new nuclear reactors be built. The report gave short shrift to the potential for renewable energy and specifically stated that the potential for energy conservation had not been evaluated.

In June 2006, the Ontario government released its response to the OPA report, indicating that existing nuclear reactors at Pickering and Darlington would be refurbished

and at least two additional nuclear reactors would be constructed. Total estimated cost for nuclear: Over \$45 billion. The Ontario government has decided to proceed without the "open and public debate" on nuclear power that had been promised a year earlier.<sup>2</sup>



*Nuclear power is by far the most expensive of the alternative sources of new supply available to Ontarians, terminally addicted to vast subsidies, as Ontario Hydro, on whose Board I sat for five years, has amply demonstrated*

Jim MacNeill, O.C.  
Secretary General of the World Commission on Environment

## 2. NOT IN THE PUBLIC INTEREST

What's happening in Ontario can be seen as part of a nuclear industry 'survival strategy'. The industry needs a survival strategy for many reasons, including the following:

### **Nuclear power is not emission or waste-free**

Routine emissions from nuclear reactors include a number of different elements such as carbon-14 and tritium. Over the years, leaks around nuclear reactors in Canada have raised levels of tritium, a known carcinogen, well above background levels.<sup>3</sup>

Spent fuel from CANDU reactors contains over 200 deadly radioactive elements - byproducts of the fission process - including uranium, plutonium, cesium, and strontium. High-level nuclear waste will remain toxic for periods far longer than recorded human history, in some cases for millions of years. Ontario already has 30,000 tonnes of such waste.

### **Nuclear power is not a "solution" to climate change**

There are far safer and less expensive ways to mitigate the consequences of climate change as various studies over the last twenty years have shown. In a 2006 paper on the "economics and climate-protection potential" of nuclear power, Amory Lovins reaffirms the advantages of energy efficiency

over nuclear and adds "... Empirically, on the criteria of both cost and speed, nuclear power seems about the least effective climate-stabilizing option on offer." <sup>4</sup>

### **Nuclear power has cost the Canadian public billions**

Over a 50 year period (1953 to 2002), government subsidies to AECL (Atomic Energy of Canada Limited ) totaled \$17.5 billion (2001 dollars). Cost over-runs on the last nuclear station to be built in Ontario at Darlington were in the billions of dollars. Debt incurred by Ontario Hydro (the OPG predecessor) in the operations of its power reactors amounted to over \$35 billion. <sup>5</sup>

### **Nuclear power has serious safety issues**

It's not just Chernobyl or Three Mile Island that have raised concerns about nuclear power plant safety. In August 1997, following a series of safety problems at Pickering and elsewhere, Ontario Hydro (OH) announced that seven nuclear reactors would be closed and others repaired at a cost of several billion dollars. At the time, the Chair of OH stated that the nuclear division operated like a "special nuclear cult." <sup>6</sup>

Special treatment also extends to liability in the event of a power reactor accident. The nuclear industry has its own federal law, limiting civil liability for off-site damages to \$75 million, even if those damages are in the billions. No insurance company will insure private property against the consequences of a nuclear accident. <sup>7</sup>

## **3. WHAT'S THE ALTERNATIVE?**

The Ontario government wants to move away from coal-fired power. Rather than moving towards nuclear power, Ontario would do better to spend the billions earmarked for nuclear on renewable energy technologies, conservation and demand-side management (coordinated control of electricity supply and demand).

Many countries have already recognized this. In Denmark by 2008, for example, 25% of all electricity consumed will be derived from wind power. <sup>8</sup> In contrast, the Ontario government has only committed to procure 5 per cent of electricity from all sources of low-impact renewables by 2007 and 10 per cent by 2010. <sup>9</sup>

Recently, a coalition of environment groups released a report demonstrating that energy efficiency and low-impact renewable energy sources are capable of providing twice the projected electricity needs of Ontario by 2020. <sup>10</sup>

### **Check out the following web sites for more information:**

[www.cnp.ca](http://www.cnp.ca), [www.sierraclub.ca](http://www.sierraclub.ca),  
[www.greenpeace.ca](http://www.greenpeace.ca), [www.ccnr.org](http://www.ccnr.org)

**Ontario MPP contact information**  
<http://olaap.ontla.on.ca/mpp/daindex.do?locale=en>

**Federal MP contact information**  
<http://webinfo.parl.gc.ca/>

## **4. WHAT CAN BE DONE?**

- Please write to the Premier of Ontario and your MPP. Tell them that you want meaningful, comprehensive public hearings on future electricity generation in Ontario.
- Write Ontario Energy Minister Dwight Duncan and demand that the decision-making time line be extended to allow the collection of all relevant information on the potential for renewable energy and conservation. The OPA Report admitted no conservation targets were included.
- The construction of a new nuclear power plant will cost billions of dollars and take over a decade to complete. Ask decision makers how much renewable energy could be produced in the same timeframe using the same amount or less money.
- Write to the Prime Minister, leaders of the opposition and your federal MP. Urge them to ensure that the CNSC functions at arms-length from the nuclear industry and that a record of all meetings with utility and nuclear industry representatives including OPG, OPA and AECL be made public.
- Join the Sierra Club of Canada or other environmental groups that work on promoting sane energy alternatives to nuclear power.

07/2006

## **References**

[1] "Ontario utility eyes two sites for nuclear reactors" Martin Mittelstaedt, The Globe and Mail, February 14, 2006, [globeandmail.com](http://globeandmail.com)

[2] "Public deserves a debate on the energy strategy" Murray Campbell, The Globe and Mail, June 14, 2006,

[3] In July 1997, it was revealed that Ontario Hydro failed to report tritium contamination of ground water on the Pickering site for twenty years. In 1979, 2,150,000 becquerels per litre (Bq/L) of tritium were found in groundwater, and in 1994 OH found 700,000 Bq/L.

The largest tritium release from a CANDU reactor to date occurred in 1992, when a tube-break in Pickering Reactor #1 dumped 2,000 litres of heavy water contaminated with 2,300 trillion becquerels of radioactive tritium into Lake Ontario.

[4] Amory B. Lovins, "Nuclear power: economics and climate-protection potential" Rocky Mountain Institute, 6 January 2006, p. 15, [www.rmi.org/images/other/Energy/E05-14\\_NukePwrEcon.pdf](http://www.rmi.org/images/other/Energy/E05-14_NukePwrEcon.pdf)

[5] David H. Martin, "Canadian Nuclear Subsidies: Fifty Years of Futile Funding" January 2003, Campaign for Nuclear Phaseout, [www.cnp.ca/resources/nuclear-subsidies-at-50.pdf](http://www.cnp.ca/resources/nuclear-subsidies-at-50.pdf)

[6] Toronto Star, August 14, 1997

[7] Canada, Department of Justice, *Nuclear Liability Act*, Chapter N-28

[8] Danish Wind Industry Association, "Know How", [www.windpower.org/en/didyouknow.htm](http://www.windpower.org/en/didyouknow.htm)

[9] WWF-Canada, Greenpeace Canada, Pembina Institute, Sierra Club of Canada, Ontario Clean Air Alliance, and the David Suzuki Foundation "Put Some Energy Into a Smart, Green Strategy", [www.sierraclub.ca/national/programs/atmosphere-energy/nuclear-free/smart-green-energy.pdf](http://www.sierraclub.ca/national/programs/atmosphere-energy/nuclear-free/smart-green-energy.pdf)

[10] *ibid*