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BARRISTERS AND SOLICITORS

Consultations on Approvals for the New Nuclear Plants at Darlington: what have we learned so far?

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Summary

Construction of new nuclear plants at Darlington has been a controversial issue for the past five years and only more so after the tragic meltdown at Fukushima, Japan. The handling of the various consultation processes for the Darlington nuclear approvals has been an extremely complex, fascinating and frustrating odyssey thus far. It highlights some of the flaws and limitations in public consultations for environmental approvals processes for massive infrastructure projects involving expenditures of billions of dollars. This article provides a brief summary of some of the main public policy developments and related approvals processes to date and explores some of the lessons we have learned so far.

Introduction

As the second term of the McGuinty government winds down, the ongoing controversy related to Ontario's energy policies and the expansion of nuclear capacity through construction, operation and decommissioning of up to 4 new reactors at the Darlington Nuclear Generating Station will be a simmering election topic in the Fall of 2011 and debated for years to come.

One of the most controversial aspects of the proposed nuclear plants is how public consultation was undertaken at various stages by a series of agencies and government ministries. Iler Campbell was inspired to review the history of this topic by the protests sparked at the environmental assessment hearings on the project in late March 2011. The way this massive nuclear project is being assessed and approved provides important lessons about public consultation and an opportunity to review how energy policy has evolved in Ontario in the past eight years. This article reviews some of the key steps in the process.

OPA Supply Mix Advice Report

The story really began in December 2005, when the Ontario Power Authority (OPA), an agency created in 2004 to plan for refurbishing Ontario's energy infrastructure, released its Supply Mix Advice Report. The OPA recommended, among other things, that Ontario

should spend $30-40 billion to create 9,400 to 12,400 MW of new or refurbished nuclear generation capacity over the next 20 years (by 2025). The Minister of Energy subsequently claimed that there had been "significant consultation around the OPA report" prior to its release. However, critics contended that the OPA report was essentially drafted behind closed doors, and was not subjected to environmental assessment (EA) planning principles or meaningful public participation.

The OPA's recommendations were based in part on an analysis of the environmental performance of different electricity supply options that was, in the view of observers such as the City of Toronto's Medical Office of Health and many ENGOs, flawed in terms of overall methodology. The OPA's approach to weighting certain types of impacts from various technologies, such greenhouse gas (GHG) generation, much more heavily than other impacts, such as waste generation and water pollution, and its failure to consider the risks and costs to future generations were the target of particular criticism. The OPA analysis also downplayed major environmental impacts associated with nuclear power generation, such as waste generation, water consumption and water pollution associated with uranium mining and milling.

The OPA report was posted on the Environmental Registry established under the Environmental Bill of Rights (EBR) for a public comment period that expired at the end of February 2006. The Ministry of Energy (ENE) then widely distributed a short brochure entitled Our Energy, Our Future, and convened a small number of open houses and meetings in select cities, in order to solicit public feedback on the OPA report. This abbreviated ENE consultation process was criticized by most participants and observers as being completely inadequate for the purposes of commenting on a massive multi-billion dollar infrastructure plan with significant environmental, public health and socio-economic implications.

OPA required to develop a 20-year Integrated Power System Plan

On the basis of the OPA's December 2005 advice, in June 2006 the McGuinty government directed the OPA to develop a 20-year Integrated Power System Plan (IPSP). Among other things, the proposed 2006 government plan set specific mega-watt (MW) objectives for nuclear and renewable sources, including 14,000 MW of nuclear generating capacity, and established MW targets for electricity demand reduction.

Pursuant to the Electricity Act, 1998, statutory directives were issued by the Minister of Energy to the OPA to draft the IPSP in accordance with these plan parameters. Under Ontario Regulation 277/06, the OPA was also directed to "consult" the public and to consider the environment when developing the IPSP.

Upon completion, the IPSP would be reviewed by the Ontario Energy Board (OEB) under the Electricity Act, 1998, rather than the Ministry of the Environment and the Environmental Review Tribunal (ERT) under the Environmental Assessment Act (EA Act),

which meant that new nuclear projects undertaken under the IPSP wouldn't be subject to the EA Act. This wasn't the first time that a large nuclear facility wasn't subject to the EA Act; it is noteworthy that when it was originally built, Darlington was specifically exempted from the Act by a regulation passed in 1977 and older plants like Pickering were built prior to the enactment of the law.[1]

Around the same time in June 2006, the Canadian Nuclear Safety Commission (CNSC) determined that sufficient information was available to confirm that the licensing for a new nuclear power project was prescribed on the Law List Regulation, and required the application of the Canadian Environmental Assessment Act (CEAA). The CNSC therefore established that it was a responsible authority (RA) under CEAA and that the project was prescribed by the Comprehensive Study List Regulations.

Accordingly, the Ontario government also directed Ontario Power Generation (OPG) to begin the federal approvals process for new nuclear plants at an existing site, including an environmental assessment. In September 2006, the CNSC received a licence application from OPG to build a new nuclear power plant with up to four new reactors for the production of approximately 4,800 megawatts. The proposed project would be located near OPG's existing Darlington site, on the shores of Lake Ontario, the same facility exempted from the EA Act in 1977.

Exemption from the Ontario EA Act

When the Ontario government released its first long-term energy plan on June 13th, 2006, provincial officials failed to disclose the fact that on the previous day, Ontario Regulation 276/06 had been passed by Cabinet to exempt the entire IPSP from the EA Act. It was quietly posted on the Ontario government's E-laws website one day after the June 13th energy announcements were made.

Three days later, an information notice regarding Ontario Regulation 276/06 was posted on the Registry in response to concerns raised by the Environmental Commissioner of Ontario, opposition parties and ENGOs that the EBR required that such a key regulation be posted for public comment.

To many observers it appeared that the McGuinty government had been convinced by engineers and other nuclear supporters that the energy woes facing Ontario would largely be solved by building new and refurbishing existing centralized nuclear capacity. The important policy debate about alternatives and other ways to meet Ontario's future energy needs that would have taken place if the IPSP had been subject to a full EA under Ontario's EA Act were over.

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[1] Environmental Commissioner of Ontario, The *Environmental Bill of Rights* at 10: The Potential for Reforming the Law, June 2004, p. 5, http://www.eco.on.ca/uploads/Reports%20-%20Background,%20Discussion,%20Roundtable/Ten%20Year%20Review/Discussion%20paper%20for%20reform.pdf

Green Energy and Green Economy Act

In 2007, the OPA responded to the McGuinty government's 2006 long-term energy proposals when it released its detailed 20-year energy plan and filed it with the OEB. The complexity of the plan and its reliance on nuclear power continued to attract considerable criticism. With the October 2007 election approaching, the McGuinty government and the OPA put the controversial IPSP on the backburner.

After the government's successful re-election campaign and the economic meltdown in the summer of 2008, the economic and political picture related to some projects under the IPSP began to look somewhat different. Early indications from the nuclear reactor procurement process suggested that the cost of new reactors would be higher than the $26 billion initially budgeted for nuclear refurbishment and new plants, perhaps not surprising since some experts note that new nuclear plants can cost $8 billion to $15 billion.[2] After getting this multi-billion dollar "sticker shock" from the vendors, the Ontario government suspended the procurement process and has been unable to pick a vendor or reactor type. This had significant consequences for the CEAA process and hearings, as noted below.

Pressure began to grow for some type of immediate economic stimulus package; in response the McGuinty government focused on development and passage of the Green Energy and Green Economy Act (GEGEA) which was proclaimed in May 2009. One of the main goals of this law was to kick-start economic development by providing incentives for industry to develop a range of solar, wind and conservation projects.

Ministry of Energy consultation in late 2010

With the GEGEA in place, on November 23, 2010, the Ministry of Energy released Ontario's Long Term Energy Plan: Building Our Clean Energy Future.[3] Overall, the revised plan was seen as a significant improvement requiring the OPA to achieve through Conservation and Demand Management (CDM) a peak demand reduction target of 7,100 megawatts (MW) and an energy savings target of 28 terawatt-hours (TWh) by the end of 2030.

ENE's June 2006 supply mix directive required that the OPA plan to use the existing base of 7,850 MW of renewable energy (hydroelectric generation) and to double this capacity to 15,700 MW by 2025 including hydroelectric, wind, solar, and bio-energy.
The revised IPSP shall provide for renewables, excluding hydroelectric, to account for approximately 10-15 per cent (10,700 MW of capacity) by 2018.

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[2] Robert Benzie and Debra Black, Darlington to get 2 new reactors, Toronto Star, June 17 2008.

[3] Ministry of Energy released Ontario's Long Term Energy Plan: Building Our Clean Energy Future, 2010; http://www.mei.gov.on.ca/en/energy/html/LTEP_en.html See also: Ministry of Energy, Draft Supply Mix Directive November 23, 2010; http://www.ebr.gov.on.ca/ERS-WEB External/displaynoticecontent.do?noticeId=MTExNDIz&statusId=MTY3MTY0&language=en

The ENE plan also requires the OPA to plan for nuclear generation to account for approximately 50 per cent of total Ontario electricity generation. This means that the OPA plan must provide for the refurbishment of 10,000 MW of existing nuclear capacity at the Bruce Nuclear Generating Station and the Darlington Nuclear Generating Station as well as the procurement of two new nuclear reactor units (about 2,000 MW) at the Darlington site. Based on this plan, a revised supply mix directive was issued to the OPA by the Minister in February 2011.

The Regulatory Hearings for Darlington

On September 30, 2009, OPG formally submitted its Environmental Impact Statement (EIS), an updated Application for a Licence to Prepare Site (LTPS), and other approval applications to the responsible authorities (RAs) which include the federal Minister of the Environment and the CNSC and the Departments of Fisheries and Oceans, and Transport Canada.[4]

Prior to any physical construction activity for the new nuclear facility taking place, OPG must complete an EIS in accordance with CEAA requirements and obtain the LTPS, the first of a number of licences. Federal authorities must be satisfied that the proposed site can accommodate a facility that will meet all health, safety, security and environmental protection requirements.

In October 2009, the Minister of the Environment and the President of the CNSC mandated a three-member Joint Review Panel (JRP) to assess the environmental effects of the proposed project as described in the EIS and review the application for the LTPS under a JRP Agreement.

Joint Review Panel Public Hearing

The Joint Review Panel's public hearing for OPG's Darlington project ran from March 21 through April 8, 2011, and addressed both EA issues and the LTPS application. A protest by Greenpeace and others at the start of the hearing was widely reported in the Canadian media because of their efforts to highlight that the inherent risks of nuclear technology. The risks had been highlighted by the earthquake disaster in Japan in March 2011 where reactors at Fukushima had subsequently melted down releasing radioactive discharges into the surrounding communities, contaminating food supplies and requiring mass evacuations.

While OPG had assessed the new facility's potential impacts on the local community and the environment in general terms, ENGOs pointed out that the failure of the Ontario government to select a vendor and reactor design meant that it was impossible to fully evaluate the environmental and health impacts associated with a particular reactor design, its

[4] OPG, Darlington Environmental Impact Statement; see http://www.opg.com/power/nuclear/darlington/d_overview.asp

cooling towers, and on-site waste storage and handling systems. Consequently there were significant data gaps in the EA evidence presented at the hearing, requiring the RAs to undertake a considerable amount of further data and information gathering in the future, as noted by the JRP.

In addition, the ENGOs complained there was no opportunity at the hearings to raise deeper, complex issues about the safety of the technology, its relative costs compared to renewable and conservation projects, the need for the plants and vexing issue of long-term safe storage and disposal of nuclear wastes. It's a fair question whether this venue could really do that. While CEAA, the EIS Guidelines, and the JRP Agreement for the project appeared to explicitly require the consideration of "need" and "alternatives to" the new plants in the EA, OPG insisted at the hearings that need was not within the JRP's mandate and the JRP ultimately agreed with ENE officials that the IPSP process would resolve these matters.

Indeed, many argue that these deeper questions about need and safety are part of the less than satisfying process on the IPSP. The JRP process was examining much narrower questions about EA approvals for a yet to be selected reactor technology and a licence to prepare a site. In effect, JRP hearings were not intended to provide the proper forum to debate these deeper issues.

On June 3 the record for the hearing was closed, requiring the Panel to submit its report to the federal government within 90 days and make it public. On August 25th the JRP released its 143 page report which includes 67 specific planning and scientific recommendations for OPG and a number of other government agencies.[5] The 67 recommendations contained in the JRP's report range from conducting more environmental studies to reviewing Canada's nuclear liability program.

The JRP concluded that the project is "not likely to cause significant adverse environmental effects," provided the mitigation measures proposed and commitments made by OPG during the EIS review, and the Panel's recommendations are implemented. In response critics have argued that the recommendations reveal major gaps in OPG's plan and require that much more environmental study is needed in order to identify impacts on water, fish, airsheds, soil, and species at risk.

Each RA must now respond to the JRP's Report and make a "course of action" decision under s.37 of CEAA (with the approval of the Governor in Council).[6] If the government departments accept the JRP report with Cabinet support, then the JRP is in a position to issue the licence to prepare the site. After this decision is made, the JRP will be dissolved and all further licensing decisions for the new site will be made by the CNSC Tribunal.

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[5] Government of Canada, Darlington New Nuclear Power Plant Project Joint Review Panel Environmental Assessment Report (August 2011). http://www.waterkeeper.ca/wp-content/themes/waterkeeper/documents/Darlington_JRP_EA_Report_August_2011.pdf

[6] CEAA, s.37(1.1).

Recent Developments: Consultation sessions for the OPA's 2011 IPSP

Consistent with the February 2011 directives and EA exemptions, the OPA began to develop a revised approach to consultation on the 2011 IPSP and has promised to release its new plan by the end of 2011. In information provided to stakeholders, the OPA advised that input shared "will inform the evidence submitted with the IPSP when it is filed with the OEB."[7] However, the information shared by stakeholders will only be used to guide decisions on matters where the ENE supply mix directive and other sources (e.g., sound engineering principles) have not specified an action or outcome.

On May 6th, 2011, an announcement was made that four consultation sessions for the OPA's 2011 IPSP would begin on May 17th, 2011 but only 10 days notice was provided.[8] The notice also invited groups to apply for participant funding to contribute expertise during the consultation sessions. However, confirmation of funding was only sent to some ENGOs 10 or 11 days before the final consultation session on May 31st, 2011.

The OPA's participant funding rules also severely restricted the ability of some participants to participate in this process. Funding was only made available for travel, accommodation, and third-party expert expenses. Given the funding restrictions, certain groups such as Lake Ontario Waterkeeper (LOW) considered hiring an external expert to participate in the process on their behalf. However, the extremely short time frame made this impossible.[9]

Based on their experience with this process, LOW made the following recommendations

1. Provide sufficient notice of information sessions, participant funding, and comment deadlines to allow for meaningful participation by the public. At a minimum, 30 days of notice for each of these dates should be provided.

2. Provide participant funding decisions in a timely way, allowing a minimum of 30 days between funding notification and the beginning of consultation activities.

3. Make participant funding available for in-house staff time to facilitate work by groups like LOW, with in-house expertise, if they lack core funding to allow those staff to work on the project.

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[7] OPA, FAQs on IPSP consultation process, 2011; http://www.powerauthority.on.ca/faqs-ipsp-consultation-process

[8] "OPA begins consultations on updated IPSP", May 9, 2011, http://www.powerauthority.on.ca/news/opa-begins-consultations-updated-ipsp

[9] Lake Ontario Waterkeeper , Letter to Ontario Power Authority, June 6, 2011; http://www.waterkeeper.ca/wp-content/themes/waterkeeper/documents/June142011_IPSP2011OPAInfoSessions.pdf

It remains to be seen how effectively the OEB's approval process will deal with environmental, health and social aspects of the IPSP and whether many environmental groups will seek intervenor status and be granted adequate funding to participate in the OEB hearings. Moreover, given the history of the IPSP process and the fact that no new draft IPSP has been presented to date it is conceivable that a new one never will be drafted and approved by the OEB, particularly if a new governing party or a minority government is elected in Ontario.

In response to the revised supply mix directive issued to the OPA by the Minister in February 2011, OPG is now proposing the refurbishment of its existing nuclear reactors including those at Darlington,[10] and the federal EA process for those projects are just gearing up. In the event that procurement decisions for new reactors are further delayed it seems likely that OPG's focus will shift to refurbishment projects. Again, it is noteworthy that OPG is proceeding with its EA work on these projects prior to review and approval of a revised IPSP by the OEB.

What have we learned so far?

The handling of the various consultation processes for the new Darlington nuclear approvals has been a fascinating and frustrating odyssey thus far. The good news is that efforts by ENGOs to highlight the long-term environmental, health and economic costs of nuclear power have helped to spur development of the GEGEA and should make Ontario a leader in the renewable energy field.

The Darlington project and related IPSP approvals seem like a classic case of piece-mealing whereby federal and/or provincial regulators divide up various portions of the approval and EA processes to limit the scope of what may be considered as legitimate input. Participants and intervenors are either shut out of key processes entirely (as was the case with the 2006 EA Act exemption) or presented with a series of consultation processes that are so complex (such as the Ministry of Energy, IPSP and OEB processes) or narrowly focused (i.e. the JRP hearings) that they are destined to breed cynicism amongst public interest stakeholders.

As noted above, it also is problematic that the JRP hearings for this project came forward before the revised IPSP has been drafted by the OPA and approved, which one senior environmental lawyer involved with both processes has likened to "putting the cart before the horse".

A related problem and serious process flaw was that the EA prematurely proceeded before a reactor and cooling tower type was selected by the Ontario government and assessed by OPG and the RAs at a sufficient level of detail. This meant that the JRP panel was required

[10] OPG, Project Description, Darlington Nuclear Generating Station, Refurbishment and Continued Operation Project, EA, NK38-REP-07730-10001, Submission to the CNSC, April 2011; http://www.opg.com/power/nuclear/refurbishment/DNGS%20Refurb%20EA%20Project%20Description%20Apri%2027%202011-%20FINAL.pdf

to review much of the project as general options which would be subject to considerable post-EA planning and information gathering by the RAs.

The JRP hearing also highlighted the shortcomings of using an inquisitorial, panel-driven model rather than an adversarial model to deal with environmentally significant mega-projects. Lawyers representing ENGOs and other participants were unable to properly review evidence under oath, cross-examine witnesses, and fully assess witness qualifications. While the model used by the ERT, OEB and other regulatory tribunals has disadvantages, it usually affords intervenors a chance to use the adversarial process to more fully test the claims made by staff and consultants for proponents such as OPG and RAs such as the CNSC and DFO.

The Joint Review Panel hearing seemed destined to become political theatre because of its limited scope and the limited mandate of the panel with respect to value-based concerns that the public and ENGOs wanted to raise; indeed this was realized. Some of the key questions raised are – have the various consultation processes served the public interest? Will the taxpayers of Ontario and Canada and the various stakeholders who participated in the IPSP and JRP processes get something worthwhile out of their efforts and feel that their voices were heard? Time will tell.