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17 December 2008

Ms. Kirsten Walli, Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto, ON
M4P 1E4

Dear Ms. Walli:

Re: EB-2007-0707 – Phase IIA Cost Award – Lake Ontario Waterkeeper Motion to Vary

Attached please find a notice of motion to vary the Board's decision and order in the IPSP Phase IIA cost awards to permit costs claimed by Lake Ontario Waterkeeper for a community meeting in Moosonee.

The documentary evidence provided with this notice of motion may be sufficient to deal with the motion in writing. However, if the Board requires elaboration or further explanation, Lake Ontario Waterkeeper proposes an oral hearing of the matter.

Yours truly,

Peter Faye
Counsel
Lake Ontario Waterkeeper

Cc Intevenors in EB-2007-0707

IN THE MATTER OF sections 25.30 and 25.31 of the Electricity Act, 1998, S.O. 1998, Chapter 15 Schedule A, (the “Electricity Act”)

AND IN THE MATTER OF an Order by the Ontario Energy Board (the “Board”) dated November 28, 2008 which approved cost awards for eligible intervenors in an application by the Ontario Power Authority (the “OPA”) for review and approval of the Integrated Power System Plan and proposed procurement processes (the “IPSP”)

AND IN THE MATTER OF Rules 42 and 44 of the Board’s Rules of Practice and Procedure.

NOTICE OF MOTION FOR REVIEW AND VARIANCE

The Moving Party, Lake Ontario Waterkeeper, will bring a motion to the Board at a time and place to be determined by the Board for an order:

- (1) Varying the decision of the Board with respect to the eligibility of Lake Ontario Waterkeeper’s costs to attend and host a community meeting in Moosonee;
- (2) An order of the Board extending time for the filing of this Motion, should it be required and;
- (3) Such further and other order that the Moving Party requests and that the Board considers appropriate.

The grounds for the orders are:

(1) The Decision and Order of the Board to deny Lake Ontario Waterkeeper's costs for the meeting in Moosonee was based on errors of fact, specifically:

- a. That the meeting was not directly related to the IPSP proceeding. The meeting involved a presentation by an OPA representative on the IPSP and was conducted to gather input from local stakeholders on the impacts of northern river hydroelectric development proposed in the IPSP. Therefore, the meeting was directly related to the IPSP proceeding.
- b. That the meeting was not specifically related to Waterkeeper's mandate as stated in its Application for Intervenor Status filed November 14, 2007. Section 4 of Lake Ontario Waterkeeper's Application for Intervenor Status explained its intention to take an active role in identifying issues related to hydro electric development on northern rivers. Local input on these issues is critical to understanding the impact of proposed hydroelectric development, but the community had not previously been consulted by the OPA. Therefore, the meeting in Moosonee to identify impacts of northern river developments proposed in the IPSP was within Lake Ontario Waterkeeper's mandate.

THE FOLLOWING DOCUMENTARY EVIDENCE will be used at the hearing of the motion:

- (1) Lake Ontario Waterkeeper's application for intervenor status dated November 14, 2007;
- (2) LOW Interrogatory 16, EB-2007-0707, Exhibit 1, Tab 23, Schedule 16.
- (3) Lake Ontario Waterkeeper's notes of meeting for the meeting held August 11, 2008 in Moosonee; and
- (4) OPA's presentation slides used at the meeting in Moosonee.

Dated: December 17, 2008

TO: Board Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
P.O. Box 2319
Toronto, ON
M4P 1E4

AND TO: Ontario Power Authority and Intervenors in EB-2007-0707



November 14, 2007

BY COURIER AND EMAIL

Ms. Kirsten Walli

Board Secretary

Ontario Energy Board

2300 Yonge St., Suite 2701

Toronto, Ontario, M4P 1E4

Dear Ms. Walli:

RE: **Lake Ontario Waterkeeper
Notice of Intervention
Board File No. EB-2007-0707 Ontario Power Authority
Approval of the Intergrated Power System Plan – Phase 1**

This letter is to request intervenor status for Lake Ontario Waterkeeper in the above noted proceeding and to notify the Board that we will be seeking a cost award. Our Notice of Intervention is attached and has been copied to the Applicant.

Yours truly,

Mark Mattson

President & Waterkeeper

cc. Miriam Heinz, Ontario Power Authority (By email)

Mailing Address: 264 QUEEN'S QUAY WEST, SUITE #104. TORONTO, ON M5J-1B5

Office Address: 550 QUEEN STREET EAST, SUITE #115

T 416-861-1237 **ADMIN@WATERKEEPER.CA** **WWW.WATERKEEPER.CA**

PROUD MEMBER OF WATERKEEPER ALLIANCE

ONTARIO ENERGY BOARD

IN THE MATTER OF an Application by the Ontario Power Authority for review and approval of its integrated power system plan and approval of its proposed procurement process.

**NOTICE OF INTERVENTION
OF
LAKE ONTARIO WATERKEEPER (“WATERKEEPER”)**

1. Application

Lake Ontario Waterkeeper hereby applies for Intervenor status in the above noted proceeding and for a determination that it meets the eligibility criteria set out in the Board’s Rules of Practice and Procedure and its Practice Directions on Cost Awards.

2. Description of the Intervenor and its Membership

Lake Ontario Waterkeeper is a registered charity, pursuing environmental justice in the Great Lakes Basin and protecting people’s rights to safely swim, drink, and fish in public waterways. Since our launch in 2001, Lake Ontario Waterkeeper has investigated, documented, and monitored the impacts of power generation sources on our watershed. Despite our concerns about pollution from the traditional energy industry, Waterkeeper believes that Ontario possesses the laws, policies, and experience needed to protect our waterways and the public. Our aim is to help the government incorporate these strengths into Ontario’s Integrated Power System Plan (“IPSP”).

Our membership consists primarily of individuals representing residents of the Lake Ontario watershed, including fishers, boaters, and grassroots environmental organizations. Through our weekly newsletter (*Waterkeeper.ca Weekly*) and our weekly radio show (*Living at the Barricades*) we bring environmental issues to the attention of and provide a forum for discussion for an audience comprising our members along with academics, policy-makers, lawyers, and students.

Lake Ontario Waterkeeper has deep connections to grassroots environmental organizations and community groups. We have regional ties (local groups in Port Hope, Kingston, Hamilton, etc.), provincial ties (Ottawa Riverkeeper, Georgian Baykeeper, etc.), national ties (Grand Riverkeeper Labrador, Fundy Baykeeper, Petitcodiac Riverkeeper, Bow Riverkeeper, Fraser Riverkeeper, etc.), and international ties (160+ Waterkeeper programs worldwide, Waterkeeper Alliance based in New York State). This network provides us with awareness of the direct impacts of energy planning on communities.

3. Waterkeeper's Interest in the Proceeding

(i) HOW WE ARE AFFECTED BY THE IPSP

Energy production is the largest industrial use of Lake Ontario, and its impacts may increase as a result of the IPSP. Every drop of water in Lake Ontario is affected by electricity generation. The same is true of our land uses and the quality of our air and soil. These impacts include: water levels (dams); mercury levels in fish (coal-fired power plants); quality of drinking water and food supply (air and wastewater emissions at nuclear power plants); land uses and fish habitat (wind power); air, water and soil quality (air and wastewater emissions from nuclear fuel facilities); air, water and soil quality (high and low level radioactive waste sites); air, water and soil quality (alternative fuel projects such as municipal waste and tire incineration). As the primary defender of Lake Ontario, each of these impacts affects our work.

(ii) PRIOR INVOLVEMENT IN THE OPA'S PUBLIC CONSULTATION PROCESS

Lake Ontario Waterkeeper has been involved in this decision-making process to date. We made a submission to the Ontario Power Authority on February 13, 2006 regarding the Integrated Power System Plan - Supply Mix report and participated in the consultation process at conferences held by the OPA. We have published a number of editorials on the matter in our electronic publication, *Waterkeeper.ca Weekly*, including "Who's really unclear about nuclear ... U.K. or Ontario?" (March 13, 2006) and "(Em)powering Ontario: town hall tour should raise questions," (February 6, 2006).

(iii) PAST INVOLVEMENT IN ENERGY REGULATION

Lake Ontario Waterkeeper has participated extensively in the regulation of Ontario's energy facilities over the last five years. In 2001, we researched and published a report entitled, *Port Granby: Leaking radioactive hazardous waste site* that prompted the Port Granby cleanup environmental assessment. We have undertaken groundbreaking research in the area of mercury contamination and transboundary legal options. We have participated in licencing hearings, such as the recent Cameco mid-term licence review. We have also published a number of editorials on

the environmental impacts of energy production, including “Closing Ontario’s coal plants: political success, environmental failure” in the Winter 2006 issue of *Waterkeeper Magazine* and “Nuclear energy, not clean energy” (*Waterkeeper.ca Weekly*, Mar 22, 2006).

4. Nature and Scope of Participation

Lake Ontario Waterkeeper intends to participate actively in the proceeding on a full time basis for the duration of those parts of the proceeding in which it has a particular interest and expertise. Specifically, it intends to submit comments on the proposed issues list; participate in any technical conferences and/or issues days prior to the hearing; introduce evidence and expert testimony at the hearing; cross examine witnesses; and otherwise provide research and comment to the Board as appropriate.

Its main concerns in the IPSP proceeding will be on the environmental impacts and the cost effectiveness of generation and transmission projects proposed in the IPSP. Although Waterkeeper’s primary interest lies in the Great Lakes basin, it has ties through the Waterkeeper Alliance to northern river watershed protection efforts and may take an active role in identifying the issues raised by proposed hydraulic generation projects in those areas.

Waterkeeper is also active in Provincial and Federal environmental assessments of wind projects, in the licensing of ethanol production facilities, in the effects of uranium processing facilities and in energy from waste proposals. It expects to make useful contributions to the Board’s understanding of the issues involved in those types of projects.

5. Request for Written Evidence and Service of Documents

Lake Ontario Waterkeeper requests 2 copies of all evidence and other documents related to the proceeding. These should be directed as follows:

Lake Ontario Waterkeeper
Attn: Mr. Mark Mattson, President & Waterkeeper
264 Queen’s Quay West, Suite #104
Toronto, ON M5J-1B5
Phone: (416) 861-1237
Fax: (416) 850-4313
Email: mark@waterkeeper.ca

Mr. Peter Faye, Counsel
42 Eastwood Cres.

Markham, ON, L3P 5Z7

Phone: 905-294-2013 and (cell) 416-434-9826

Email: pfaye@rogers.com

In addition, Waterkeeper requests that any electronic files be emailed to:

Ms. Julia Hambleton

Julia@waterkeeper.ca

6. Request for Cost Award

Lake Ontario Waterkeeper is a registered charity dependent on donations from individuals and grants from foundations for its operating budget. It does not have the resources to participate properly in this proceeding without assistance in the form of a cost award. It received funding from the OPA for its involvement in the IPSP consultation process.

Waterkeeper believes that its representation of its membership interest and of the broader public interest in environmental and economic impacts of electricity projects on water resources meets the eligibility criteria in section 3.03(b) of the Board's *Practice Direction on Cost Awards* because it, "*primarily represents a public interest relevant to the Board's mandate*".

Accordingly, Lake Ontario Waterkeeper requests a determination that it is eligible to apply for a cost award.

Based on our discussions with other environmental and community organizations, it appears unlikely that the nature and focus of our organization will duplicate the interests of other participants in the IPSP proceeding. However, Waterkeeper shares the Board's concerns that hearing length and costs be controlled and will coordinate its participation with other intervenors to ensure that duplication and overlap do not occur.

DATED AT TORONTO, ONTARIO THIS 14TH DAY OF NOVEMBER 2007

Mark Mattson

President & Waterkeeper

Lake Ontario Waterkeeper

LOW INTERROGATORY 16

QUESTION

Issue: C1

Reference: Ex. C Tab 4 Sch. 2

This exhibit discusses the efforts of the Ministry of Energy to consult with Aboriginal groups that might be affected by plans in the IPSP. Has the Ministry or the OPA conducted any direct consultations with the Cree First Nations to acquaint them with potential hydro electric development in the James Bay lowlands? If yes, please provide any documentation or reports related to that consultation. If no, would the OPA and/or the Ministry be prepared to conduct a consultation in Moosonee if Waterkeeper can arrange it with local Cree leaders?

RESPONSE

George Hookiman, General Manager of the Attawapiskat First Nation, a member of the Mushkegowuk Council (Cree) attended the regional meeting in Thunder Bay. Subsequently, Brian Hay of the OPA met in person with Grand Chief Stan Louttit of the Mushkegowuk Council (Cree) in Toronto on June 18, 2007. At that meeting, an approach to visits by the OPA to the Cree communities along the James and Hudson Bay coasts, likely also involving representations of OPG, was discussed. The OPA is currently discussing a workable schedule for such meetings with OPG.

**Public Information Meeting:
Hydroelectric Development in the Moose River Basin
Polar Bear Lodge, Moosonee, Ontario
August 11, 2008**

Notes:

1. Audio of this meeting was recorded by Krystyn Tully, Lake Ontario Waterkeeper.
2. Names of community participants have been removed to protect their privacy.

Introduction: Mark Mattson, Lake Ontario Waterkeeper

- LOW is working on OPA's power plan for next 20 years in Ontario
- Hearing starts in September
- In talking with (Participant) and others, came to see people here had not been familiarized with the situation, potentialities
- Brian Hay, OPA is here to give overview
- Peter Faye, lawyer for LOW in hearings, is here to talk about process, gather concerns

Powerpoint Presentation by Brian Hay, OPA

- wants to explain Integrated Powers Systems Plan (IPSP) & how it relates to First Nations
- presentation designed by engineer for technical information
- Brian is going to try to make it specific & relevant to this region
- Going to try to show the framework for OPA's intentions and how they see it
- The system is designed to serve people where they are in concentrations = load centres
- Centres are connected by a network that distributes the power into communities / homes
- Remote communities are "off-grid": this issue is not fully dealt with in IPSP
- Graphs of power demand: capacity 30,000 MW (300x Otter Rapids facility)
- Current mix of sources: hydro = ~26% of capacity (22% usually used b/c of steady nuclear use)
- History:
 - o Ontario Hydro built Niagara Falls, high capacity direct current lines, etc.
 - o 1998: Ontario government changed nature of market, broke up Ontario Hydro, opened to competition
 - result: instability
 - government imposed price cap to deal with instability
 - OPG: run nuclear, coal, and hydro
 - Hydro One: generation (wires)

- IESO (independent electric systems operator): balance everything across the province
 - Ontario Energy Board: pre-existent body, regulated natural gas. Shifted role to regulating electricity.
 - Private enterprise: competitors came into to provide power, also regulated by OEB
- In 2003, focus shifted to “renewables” and conservation, shutting down coal
- Now, the OEB regulates:
 - OPG
 - IESO
 - Local distribution centres
 - Hydro One
 - OPA
- What is the OPA?
 - First goal is conservation
 - Second: supply. OPA buys power from all sources, gives it to the IESO, which manages it.
 - supports development of new wind, hydro, cogeneration, natural gas plants
 - RESO (renewable energy standard offer) program
 - Planning: including planning power supply mix development
- IPSP:
 - OPA charged with reducing energy use by 20% by managing demand
 - Mandate to increase use of renewables (almost double it)
 - Limit nuclear generation to 14000 MW
 - Use natural gas for very high specific applications
 - Phase out coal entirely by 2014
- Encourage support for businesses to be more energy efficiency
- Consumer control: device can be installed in homes so energy can be remotely monitored
- Estimates of growth in demand to 34,000 MW (?) by 2027
- In order to phase out coal and some nuclear, and facilitate higher levels of use, they must replace phased out sources with other sources.
- To do so: OEB hearing
 - Hearing from stakeholders and intervenors
 - Will either say go ahead, or make OPA reformat plan
- Planning Criteria: Mix must be:
 - Feasible, reliable, cost-effective, flexible, socially acceptable, and meet environmental performance requirements
- Seen through short-term, mid-term and long-term
- “flying banana” chart: estimate of level of conservation that is possible
- plan to double the amount of “renewables”
 - 2700 MW Hydro: planned to come from Northern Ontario

- Chart shows planned new hydro potential, coded based on near, mid and long term
 - He emphasized that this is an estimate, not a reality / firm plan
 - **Projects closer to major demand centres will be developed first**
- Wind: lots of capacity along James and Hudson Bay coasts – issues about transmission and reliability
- Nuclear: to 13000 MW
- Natural Gas: up to 500 MW, for specific applications
- Coal: will be maintained for security purposes, aim to be right out of it by 2014. This may require new transmission lines
 - Kanawapta Area (Manitoba): Ontario could hook in via Kenora, Thunder Bay, or through Thunder Bay directly, or diagonally, or via Moose River Basin
 - All of this is in drawing board phase
 - Basically: transmission will have to connect any new sources of wind / hydro power
- Cost projections: depend on how much energy is conserved
- Environmental Performance:
 - Aim to reduce the amount of SO₂, NO_x, CO₂, other GHGs
 - Radioactivity levels will be unchanged
 - Water use will be increased
 - Transmission up = land use up
- Showed map of all potential sites for hydro power in Northern Ontario
 - Emphasized that this is map of all potential sites, not sites that are planned for development
- Encouraged everyone to comment via web site, contact him directly
- Re: consultation
 - Said consultation was done across the province
 - Said there was specific consultation with First Nations
 - Looking to 'build capacity' by funding programs that build knowledge of power system among First Nations communities
- Emphasized that the mandate of the OPA is limited, must be seen as part of the puzzle with other players.

End of Powerpoint presentation by the OPA.
Brian Hay opened the floor to questions.

Mark Mattson: How has the Moose Basin Watershed figured into this 20 year plan, and what consultation has been done / will be done with this community before the hearing in Toronto? What is the OPA putting into the plan, how did it get there, and when will real negotiations with First Nations begin?

Brian Hay: estimates indicate there are ~ 1000 MW potential in moose river basin, but there is also a clear commitment that there will be no green-field development until a co-planning process is developed with First Nations. He

understands that OPG has been talking along these lines with some First Nations groups, but he doesn't know which ones. OPA can facilitate contact, help get joint planning and negotiation going sooner. He prefers to avoid presenting two choices and calling it consultation. Government has announced relevant policies in last two years, including creating Ministry of Aboriginal Affairs, which he thinks shows they plan to work closely with First Nations.

- He worked on Berger inquiry in Mackenzie Valley, knows value of properly consulting with First Nations and Metis people. OPA is trying to make this a sustained engagement that engages people like never before, but it is uncharted territory. Processes have changed. At least 5 government ministries (Energy, Natural Resources [site release], Environment [EA review process], Northern Ontario, Aboriginal Affairs) are involved and must be coordinated. Must ask: how can the OPA effectively engage "you folks" – he wants to hear back on this and start a process, so that he can say he is working with First Nations and Moosonee community when he is on the stand at the hearings.
- i.e. Cochrane: First Nations and local communities are working on a regional basis to create a combined force to look at environmental issues.

Mark Mattson: f/u: Regarding the latest development, i.e. Little Abitibi, these projects are developed without any consultation. Here we are a few weeks before the hearings, and there has not been consultation here, and we don't even have the information. Who made the Moose River Basin Commitment (MRBC)?

Brian Hay: Ministry of Natural Resources

Mark Mattson: Are these communities part of the MRBC?

Brian Hay: Let's call the MNR tomorrow morning and find out. I am open to finding answers. As of October, my role will be to work directly and exclusively with First Nations communities to make this plan work.

Mark Mattson: Can we get a map showing where all the potential Moose River Basin, and also Northern River Basins, are located? And that show where the sites with policy constraints are, and if the constraints were to be lifted, where would the development sites be? Would like to see the regional consultation as part of the evidence of the OPA.

Brian Hay: I am in agreement on the last point that it doesn't exist and needs to. The issue is it is very difficult to get agreement on, i.e. RES3 (Renewable Energy Supply 3) Directive. Got input on it, put it into Guidelines for proponents, OPG, and principally private companies. Stated it was based partly on advice from First Nations and Metis Council. Have been criticized on it as inadequate consultation. Years ago: Cold Lake Project (Alta). Asked community to set up coordinating committee, very successful.

Re: Map = I will try to get you a map with detail, but remember it is developed by others, and depends on what they see as possible. Suggests knocking on the door of OPG and MNR, since they are public bodies and should give their maps.

Mark Mattson: (To community members present) Do you have good contacts with OPG?

Participant: Yes. First time, OPG made an offer, membership rejected deal. OPG came back 3 days later with a better package. In this area, you must deal with Moose Cree First Nations. We have highest levels of cancer in the province. The silt in water is from dams, as are the low water levels. We end up drinking the garbage that comes into the river from all these developments. We signed a treaty with the province and Canada saying we share the land, and we didn't forfeit this. We have seen the write up from 1905, our elders have told us, we didn't agree to this. The redevelopment of the Mattagami complex will not happen unless the Moose Cree say yes. Everything done in drainage system ends up here. The land and the fish have changed. We are told not to eat some of the fish. No one came to see us about wind power or about dams in the French River. We have heard word that two dams are planned in French River, but we were told that would not happen until we were consulted. The developers have to consult with us. It is very frustrating when we are not consulted with first. People in Quebec who made hydro deals have told me that they are starting to feel the effects of the dams and warn us not to do it. They cannot eat the fish out of the river. We had negotiations with Ontario Hydro in early 90s, but the most they offered was 3 million, and we turned it down. It is basically the same people now, they want to take the natural resources without sharing. Moosonee and Moose Factory pay the highest rate of hydro bills in the province. There is a high rate of unemployment; some people can't even pay their hydro bills. We are not against resource development, we just need control of our destiny, and we need a piece of the action if we agree with it. i.e. Kapuskasing: to get around dealing with council and first nations, the timber company offered 300 people in Kapuskasing a fitness centre. The first place you have to go if you want any resource development here is the Moose Cree First Nation.

Brian Hay: We tried to meet with Mushkegowuk council twice last year...

Participant: That is not ours.

Brian Hay: I know. I got tired of waiting for my colleagues to act on this, which is why I dropped everything to be here today. I want to do this now so we don't have to repeat it in 3 to 5 years. ... Hopefully people are becoming more aware and realistic, and from my point of view, I'd like to move ahead and do it together.

Participant: This hearing is Sept 8?

Brian Hay: There are 8 sections of the plan, each have been reviewed with stakeholders

Participant: But OPA has a general plan, and this hearing is to see if what OPA wants to push forward works with the province.

Brian Hay: We are not trying to push anything, our plan is subject to change, redoing

Participant: From the map, the James Bay area is a massive area of potential in this plan.

Brian Hay: It just shows potential here, plus on the Albany River. The estimate is that there is 2700 MW of potential power. That is little more than ¼ of all hydro power.

Participant: I understand OPA has talked to one person in Mushkegowuk. No one else knows that there is a hearing on Sept 8. The community is shocked to learn at this late time that there is this potential development of their traditional lands.

Brian Hay: Last February, every First Nations group was notified by letter, online, held regional consultations, all First Nations invited to send delegates, had major meeting in Toronto.

Participant: Why not in Mushkegowuk? Why not Moose Factory? The communities on this river . . .

Brian Hay: The decision to go ahead is based on OPG making a decision to go ahead and going through regulatory process that involves direct consultation. Our involvement is on an abstract level. If you haven't heard about this before, it is not because we haven't reached out to First Nations communities.

Participant: I'm not going to speak for these communities, but when the people living here are only hearing this now, and only because you've been forced to come here and only came last minute...

Brian Hay: I haven't been forced to come. From our point of view, we have reached out extensively. This is a proposal, a concept, there is no decision on what to actually do here.

Participant: When I see the map here, there are sites that are not potential sites. You say the OPA doesn't make decisions, but by putting those on your plan as potential sites, you are opening a door. In the early 1990's, a lot of the damming was stopped. Then it comes out that it is not stopped, just put on hold to be repackaged. Consultation was held in Thunder Bay, not Moose River Basin, even though it is the people here that will be directly affected. I found it very upsetting to see these sites as potential sites on a map, like saying to the OPG to go ahead, you can begin to actively pursue these sites. Before you even put those sites, that are on our territory, on a map, you should have consulted Moose Cree people. We are not hearing "if" these are going to happen, but "when". By the time these plans are put in place, I will be old, but my kids will

only be 28. You are talking about wiping out whole cultures. Talking about Smokey Falls, how much power has been sold to US?

Brian Hay: Ontario is not a net exporter of power, we export to US when we have surplus, and import when they do. Whether there is a plan or not, the water is there, the potential is there. The alternative to this is someone from Toronto coming in to develop a dam here, and then too bad for you. If we don't have a plan, people will come and explore and exploit (human nature). The bottom line is, can we do it in a way that benefits everyone and is environmentally responsible. This is an attempt to start a comprehensive planning process that includes everyone.

Mark Mattson: Just on that, you mentioned Justice Berger, who was very direct on consulting and talking directly to the people. ... By separating OPA from OPG, you have the planning authority separate from the builder ... OPG is not going to come up here to have an open forum with the people. This could be the flaw for the OPA, if you can't go back to these other groups and say we're not going to accept proposals that were not done transparently.

Brian Hay: The difference between us and the Berger commission and others, is theirs was a once through. We intend to be here in a sustained effort, every 3 years, to repeat and renew the plan. We are committed to capacity building, to allow folks here to build up knowledge of the system, so they have knowledge and ability to participate in an ongoing way. No question it could be improved. One of the legacies of Ontario Hydro is they did nothing to engage people for 100's of years. You start with a primer, like this.

Participant: Can you repeat what you said about Ontario Hydro running over us?

Brian Hay: They came in with no consultation

Participant: The reason they can't do that anymore is times have changed. If they could still do that, they would. Now we are more aggressive, and have more people better educated and knowing the issues.

Peter Faye (Counsel for LOW in the IPSP): When I worked for Ontario Hydro, we built transmission lines, dams, etc. We just expected to be welcomed wherever we went. When people opposed it, they were shocked. They thought they were doing the people of Ontario a favour. I think the company has to have changed by now, I left them in 1991. If they haven't learned anything from the 80's and 90's when many of their projects were defeated, I would be surprised.

Participant: I think they are still like that ... The negotiations have to be with Moose Cree First Nation, if you have to contact any one person, it should be the Chief. We don't want resource companies working behind our backs. It seems like everyone was invited to these hearings but us. We just found out today.

Brian Hay: We wrote on several occasions, I can show you the letters - it wasn't intentional.

Participant: Aren't there rivers in the south that are already polluted you can use? I intend to protect five rivers up here. I want my children and grandchildren to be able to go out on the land. We are not against resource development; we just don't want to destroy the land.

Mark Mattson: On that, the North French has policy constraints against development. The people here don't want dams on the French, but there they are in exhibit D-5-1. How are they going to have some control over this? How can it be ensured that the people from this community are heard, compensated, etc.?

Brian Hay: We are all in this together, all part of this. My sense is there are two parts to your question: You must make a decision either 1) no development on those rivers period; or 2) if there is development on those rivers, we want control, the right to have a say, the right to prevent environmental impact, etc.

If the first option is taken, there are steps that can be taken in the legal and political arenas to make that intention known. If it is the second option, you have to elaborate the conditions under which development could go ahead. Follow the processes; use public interest groups like LOW.

Peter Faye: What I'm hearing is: we don't want to see those names on the plan. How do we get it off the plan? How do they get the OPA to take those names off - these rivers that should never be developed at all?

Brian Hay: Taking something out completely means it doesn't exist for the purposes of planning, so I don't think that is a good idea. Someone else could come and develop it. Better to take it before a regulatory body to have to ruled out. We can't prevent the future development, however – there is no such thing as a permanent no or yes. Look at the Mackenzie River Valley – there was a moratorium for 10 years, now the people need the money and are negotiating a price.

Mark Mattson: But the French has a history. It's not a lot of MW, the people here have a lot of information and knowledge, and they have not been consulted. I appreciate that 134 Chiefs got a letter, but this community is at the heart of these lands, they deserve more than a letter. With the amount of power that Ontario is hoping to develop, they deserve a much more intensive consultation.

Brian Hay: Again, we don't hope to develop it, it is just a potentiality. We are seeing other things happen, other power sources developing, that might take hydro off completely.

Mark Mattson: When are we going to get this community in the driver's seat with respect to their future?

Brian Hay: Any community has some say, but we live in a broader context.

Mark Mattson: Do they need to go to their band chiefs and municipal governments?

Brian Hay: I recommend you put together a regional planning group, to speak to the OPA, MNR, MOE, etc. because it is not only OPA looking at developing resources in this area (i.e. mining). It makes sense to put together a regional entity that can work on these issues. I would be willing to argue at the OPA for capacity building funds to make this happen.

Participant: This is a map of our territory...

Brian Hay: Taking something off the map doesn't make it cease to exist.

Participant: For resource development people to come in planning anything, they have to come to Moosonee First Nations community first, bottom line.

Brian Hay: I am making a personal commitment, I am not retiring at 65, I plan to get rid of all my other commitments. I will make a commitment to be up here every 3 months, with technical people. If you put together a group, we will make an undertaking to support that kind of capacity building financially.

Participant: A lot of people from the south don't understand us when we talk about our connection with the land. The spring hunt and the fall hunt are incredibly important to us.

Brian Hay: What do you use in your spring hunt?

Participant: a boat and a rifle

Brian Hay: What kind of rifle?

Participant:...

Brian Hay: I use a From my point of view, people who do not hunt and are not close to the land, don't understand what it is like. I do. I can connect personally with what you're saying.

...



ONTARIO POWER AUTHORITY



May-June 2007

First Nations & Métis Regional Forum

This presentation will cover.....

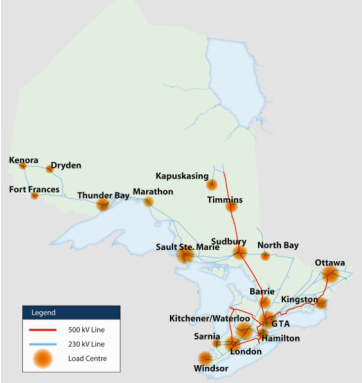
- Background of Ontario's Power System
- Ontario's Electricity Industry Structure
- Role of Ontario Power Authority (OPA)
- Ontario's planning Challenges: CDM, generation and transmission
- 20 Year Integrated Power System Plan



2



Ontario Power System



3



Ontario Power System

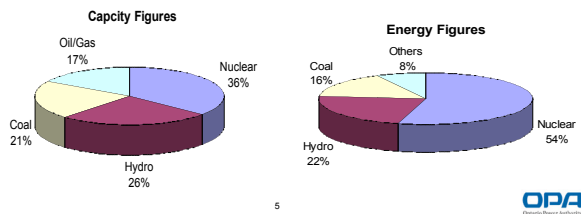


4



Ontario's 2006 Generation and Demand

- The summer peak
 - August 1st, 2006: 27,005 MW
- The winter peak
 - January 16th, 2006: 23,052 MW
- Total Generation: approximately 30,000 MW and 156 TWh



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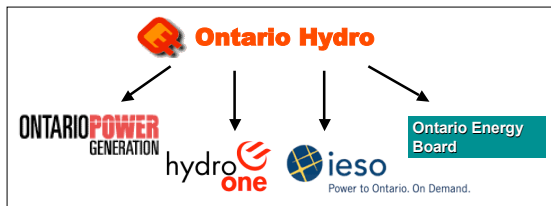
Electricity Industry Structure

- **Until 1998, Ontario Hydro managed most of Ontario's generation, transmission and conservation efforts**
 - Harnessed hydro power from Niagara Falls in the 1900's
 - Nuclear CANDU technology in the 1970's
 - 500 kV bulk transmission development in the 1980's
- **In 1998, Government enacted the *Electricity Act*,**
 - Assumed that market will perform system planning function
- **In 2002, Electricity market opens**
 - Demand Supply gap causes high price
 - Market had no plans to add generation to the Ontario system
 - Ontario was facing a looming future supply shortfall and price instability
 - Government imposed price cap

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Recent electricity industry changes

- In 1998, Ontario Hydro's role was divided up:



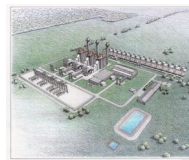
- Other participants also given new roles – examples:



7

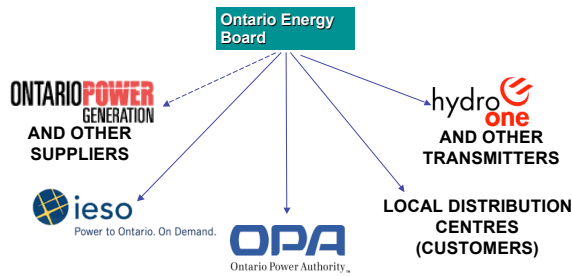
Electricity Industry Structure

- **In 2003**
 - Electricity Supply Task Force concluded that
 - "...the market approach adopted in the late 1990's needs substantial enhancement if it is to deliver the new generation and conservation Ontario needs, within the timeframes we need them".
 - Liberal party was elected to form the government
 - Announced intentions for coal phase-out, set renewable & conservation targets



8

Ontario's Electricity Industry Structure 2004/05



9

What Does the OPA do?

1. Conservation

- Execute conservation and demand management initiatives
- Build conservation capabilities across all sectors
- Advance a sustained conservation culture

2. Supply

- Obtain needed generation capacity in a timely way that also supports long-term sector development

3. Development

- Facilitate risk transfer from electricity customers to investors
- Promote development of new renewable, CDM and supply technologies

4. Planning

- Develop and deliver a comprehensive long-term plan that addresses CDM, generation and transmission

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Government Direction - IPSP

- Reduce peak demand through CDM - 6,300 MW by 2025
- Increase use of renewable energy - 15,700 MW by 2025
- Limit Nuclear generation to 14,000 MW
- Use natural gas for high value applications
- Phase out coal from the supply mix of Ontario
- Strengthen transmission system
 - Enable achievements of the supply mix goals
 - Facilitate development and use of renewable energy resources
 - Promote efficiency and congestion reduction and facilitate the integration of new supply

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Ontario's CDM Challenges

- 6300 MW is an aggressive target
- CDM infrastructure dismantled over the last 15 years, only recently being build
- Consumer acceptance of CDM
- Regulatory and policy barriers



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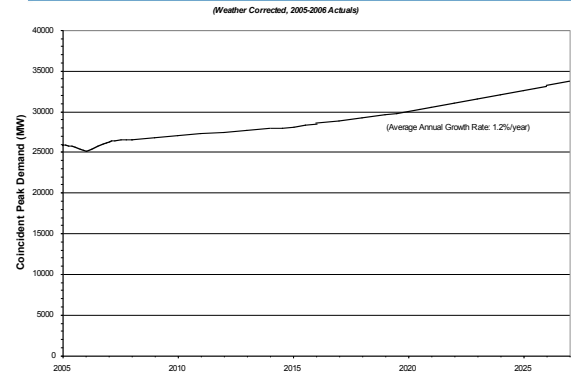
Ontario's Generation Challenges

- Phasing out coal
- Replacing or refurbishing aging nuclear facilities
- Development and integration of large wind resources



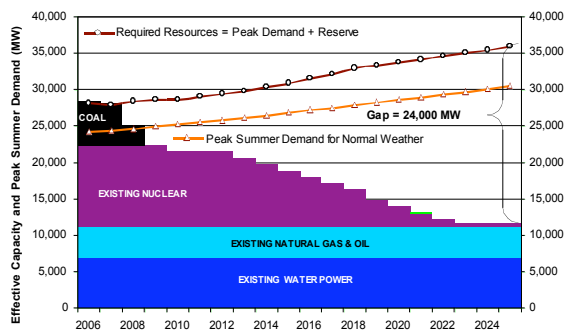
13

OPA Reference Forecast - Peak



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Ontario's Supply and Demand Challenges



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IPSP will be a road map for Ontario

- The IPSP will be the basis to:
 - Develop infrastructure required for a sustainable electricity service
 - Provide for the implementation of choices in the near term
 - Develop specific options for the medium term
 - Explore broad options and opportunities and assess "big-picture" scenarios for the longer term
- What is the framework for the IPSP?
 - An industry sector hybrid of planning and markets
 - An unbundled sector – no vertically integrated monopoly – separate system operator, generators, transmitters, distributors
 - Compatible with various sector structures – competitive or non-competitive
 - Builds on existing infrastructure, sector capability, public policies
 - Public interest review through Ontario Energy Board

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Planning criteria

Criteria	Description
Feasibility	Comprising technical feasibility, commercial availability, technological maturity, sufficient infrastructure and lead time and compliance with regulations, all of which must be present if resources are to be incorporated in the IPSP
Reliability	Resource adequacy and system security, which make up the components of this criterion, are necessary to maintain system reliability at all times throughout the planning horizon
Cost	Encompasses cost of options on the planning horizon, the value of conservation, cost of services to consumers and impact on customers' bills
Flexibility	Includes the flexibility of options in the future and the robustness of the plan to be sufficiently adaptable to a range of future scenarios
Environmental Performance	Includes the amounts of greenhouse gas (GHG) emissions, conventional contaminant air emissions, radioactivity, water use and wastes generated
Social Acceptance	Includes the matters that have significant socio-economic implications, meeting government policy and addressing stakeholder expectations

- **Context for sustainability in the IPSP**
 - No precedent – OPA looked to recent international research and experience for a set of sustainability indicators

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Summary of 20 Year Action Plan

Near Term 2008-2010

- Natural gas and renewable
- Establish CDM infrastructure and meet 1350 MW target
- Transmission catch-up
- Major uncertainties relate to implementation of currently planned resources
- Uncertainty managed by existing resources (coal, imports)

Medium Term 2011-2015

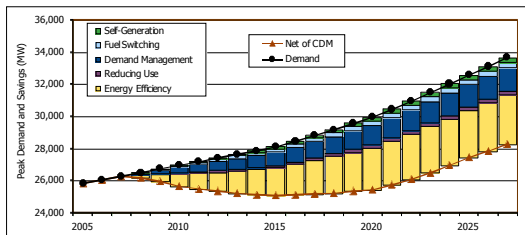
- Nuclear refurbishment
- CDM transformation
- Market-based mechanisms in wider use
- Transmission to enable renewable resources
- Major uncertainties relate to feasibility of future options
- Uncertainty managed by developing a broad portfolio of options

Long Term 2016 +

- Technology breakthroughs (e.g. Storage, Gasification, End-Use, Transmission)
- CDM/price/technology interaction
- Major uncertainties relate to demand/the economy/energy prices/environmental policies
- Opportunities for alignment in urban planning processes
- Uncertainties managed by updating plan every 3 years

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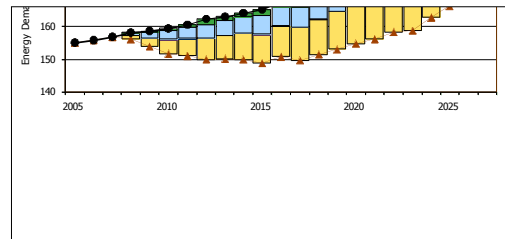
Limit growth in peak demand



- Peak demand is highest amount of generation required in the year
- Generation to meet peak is expensive – only needed about 2% of the time
- Demand is expected to grow from 25,800 MW to 33,700 MW in 2027
- The five types of CDM are expected to limit demand growth to 28,300 MW – a 16% reduction in peak demand

19

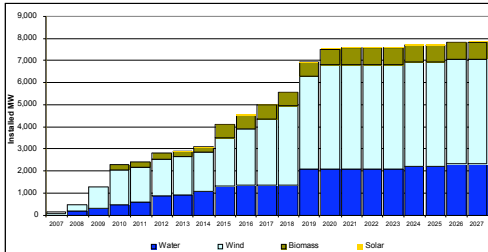
Limit growth in total energy consumed



- Total energy consumption is measured in terawatt-hours (trillion watt-hours) per year
- Consumption is expected to grow from 155 TWh to 195 TWh
- The five types of CDM are expected to limit consumption growth to 171 TWh – a reduction of 12%

20

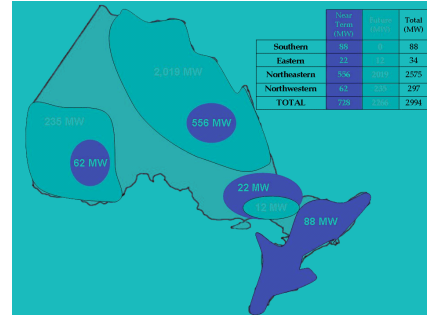
New renewable resources



- Plan calls for 15,700 MW of renewables
- Currently about 8000 MW – so plan doubles the renewables
- Plan adds over 2000 MW of waterpower, 5000 MW of wind power, 800 MW of biomass and 40 MW of solar

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New hydro electric potential

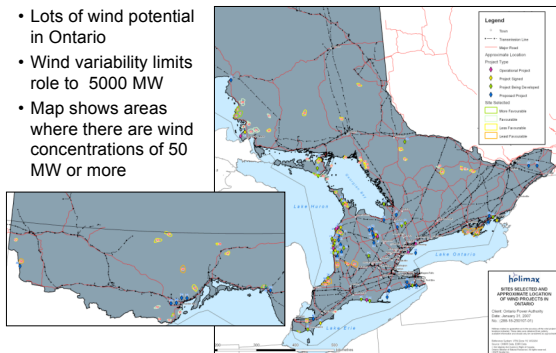


- Near-term potential – 700 MW (includes Mattagami)
- Future potential – 2200 MW

22

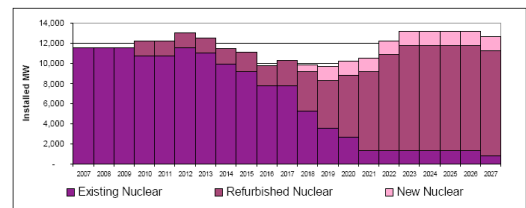
New wind power potential

- Lots of wind potential in Ontario
- Wind variability limits role to 5000 MW
- Map shows areas where there are wind concentrations of 50 MW or more



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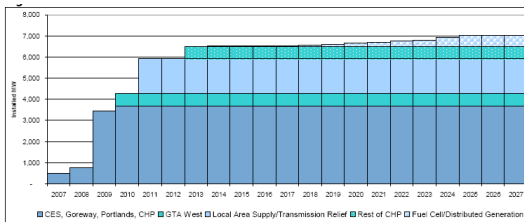
Restore and maintain nuclear



- Currently, 11,400 MW of nuclear, but decisions required on refurbishments and new build
- Plan calls for 12,600 MW of nuclear
- Major effort required to coordinate refurbishments and transmission and integrate nuclear resources with other supply resources

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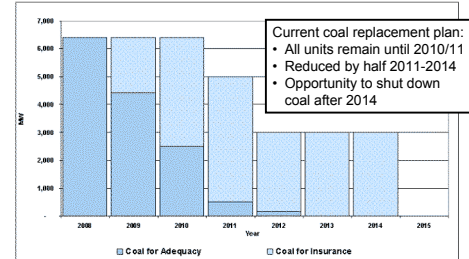
Natural gas generation



- Plan calls for a "smart gas" strategy – use gas wisely for peak demand periods and to solve constraints on transmission
- 7000 MW of new gas, mostly in the early part of the plan – 5000 MW already committed or government directed

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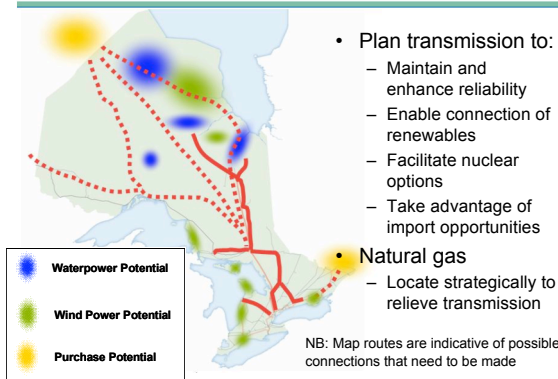
Coal is replaced by natural gas and renewables



- Coal plants required until gas and renewable replacements are in place
- Coal currently contributes about 6000 MW – Lakeview was 2400 MW
- Operating and transmission considerations are important
- Air emissions is a regional issue that needs a regional solution

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Significant additional transmission might be required

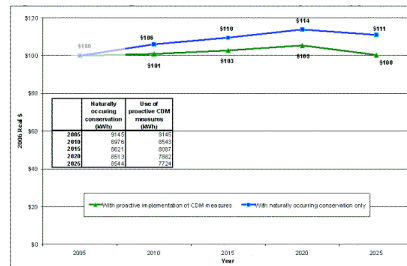


- Plan transmission to:
 - Maintain and enhance reliability
 - Enable connection of renewables
 - Facilitate nuclear options
 - Take advantage of import opportunities
- Natural gas
 - Locate strategically to relieve transmission

NB: Map routes are indicative of possible connections that need to be made

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Costs to customers – residential bill impact

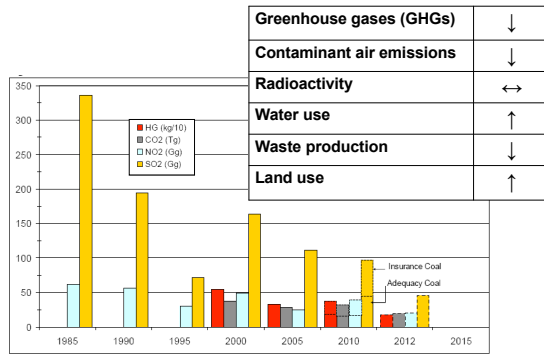


Note: Costs are projected, based on assuming \$100 current household bill amount in 2005.
Source: OPA

- Over the life of the plan, the conservative estimate is that costs could increase for residential customers by 11% (no inflation)
- For those who practice conservation, the cost could stay constant

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Environmental performance



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Procurement of conservation and supply

- **OPA's procurement requirements**
 - Both conservation and supply resources
 - Needed more in the near term than in the long term
 - Needed for where industry participants have not invested
- **OPA's procurement process**
 - Based on defined principles and policies
 - Transparent, consistent, fair and enforceable
 - Preference is to purchase via competitive process
 - Alternative options include non-competitive, or standard offer where most efficient

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Summary of the IPSP

- **Limit growth in electricity demand**
 - By conservation and demand management
- **Renewable resources**
 - By increased waterpower, wind power, biomass and solar
- **Conventional resources**
 - Restore nuclear capability by refurbishments and new build
 - Pursue a "smart gas" strategy
 - Replace coal by renewables and gas
- **Transmission**
 - Provide necessary transmission for reliability, integration and enabling renewables
- **Procurement**
 - Purchase conservation and supply resources as necessary
 - Facilitate risk transfer from electricity customers to investors

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IPSP Regulatory Process

- Regulatory process begins with filing by OPA of plan
- Interested parties can participate in process
- IPSP requires OEB review and acceptance
- 20-year rolling plan with 3-year update cycle

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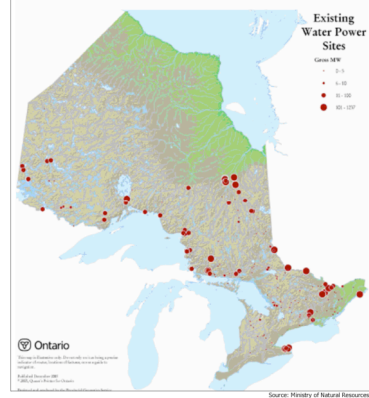
Your questions and comments?



33

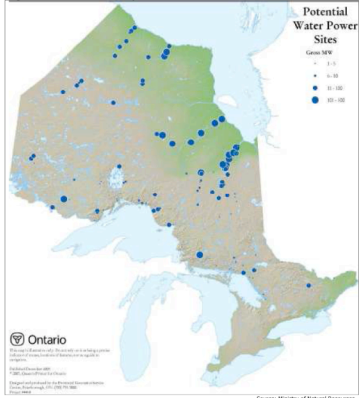
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Ontario Power Authority

Figure 3.6.2 – Existing Waterpower Sites in Ontario



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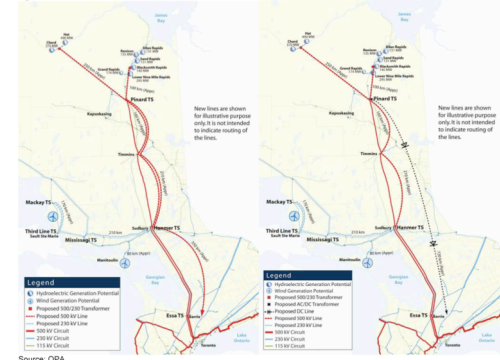
Figure 3.6.3 – Potential Waterpower Sites in Ontario



Source: Ministry of Natural Resources

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Figure 4: AC and DC Alternatives for North-South Tie Reinforcement



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