

**Canadian Niagara Power Inc.  
International Power Line Rebuild Project  
Fact Sheet**

**Project Description**

Canadian Niagara Power Inc. (“CNP”) proposes to replace two existing lattice steel towers (Queen Street Tower in Canada and the Buffalo High Tower in the U.S.) with new tubular steel poles, and reconductor approximately 1178 metres (0.7 miles) of the existing international power line (“International Power Line” or “IPL”). This is collectively referred to as the IPL Rebuild Project. The transmission line is located downstream and parallel to the Peace Bridge crossing the Niagara River between Fort Erie, Ontario and Buffalo, NY. National Grid owns and operates the portion of the transmission line from the international boundary of the Niagara River to its Buffalo High Tower at Terminal House B in Buffalo. CNP proposes to replace the existing double circuit 115 kilovolt (“kV”) IPL with a single circuit 115 kV line. The existing Queen Street Tower is 67.1 metres (220 feet) high and the Buffalo High Tower is 45.7 metres (150 feet) high and will be replaced with structures 77.7 metres (255 feet) and 59.4 metres (195 feet) in height respectively. Engineering services for the IPL Rebuild Project are being provided by TRC Engineers, and environmental services are being provided by AMEC.

The purpose of the IPL Rebuild Project is to continue to provide a safe and reliable 115 kV connection of the CNP Fort Erie, ON transmission system to the National Grid Buffalo, NY transmission system, which is interconnected through this International Power Line. The IPL has been in place since 1916. The IPL was deenergized in 2011 based on an engineering inspection and analysis of the Queen Street Tower. Despite regular maintenance, the transmission towers and lines are at the end of their useful lives, and the IPL requires replacement. The condition of the towers requires that they be taken down for safety reasons. CNP has applied to the National Energy Board (“NEB”) for approval of the IPL Rebuild Project.

The IPL Rebuild Project will be completed in two (2) phases which are described in more detail below:

**Phase I**

1. Remove all existing conductors from the existing steel lattice towers.
  - A number of options were reviewed to determine the safest and preferred methodology to remove the existing cables given that the wires cross Highway I-190, the rail road in New York, and the international Niagara River. An implosion cutting technique was chosen as it is the safest for all workers and the public, and the most controlled methodology as it minimizes any human contact when the cables are being removed. The scheduled date for the first phase of the project is the morning of November 8, 2014.
  - Most of the energy from the implosion cutting technique is in a low frequency range. The peak sound pressure level measurements from an implosive cable cut at 61 metres (200 feet) is in the range 117-122 decibels (“dB”). For reference, a nearby thunderclap or a firework may reach

a sound level of around 120 dB, and a jet creates a sound level of around 120 dB at 61 metres (200 feet).

- In Fort Erie, the implosion sound can be compared in terms of noise levels to the cannon going off at the Old Fort Erie, which is a regular occurrence. There are a number of businesses and residents in the surrounding area, and CNP is not aware of negative responses related to the noise levels associated with the cannon.
  - A preliminary noise assessment was conducted by an acoustics expert from AMEC during a demonstration of the technique in May 2014. It determined that a peak sound pressure level at 90 meters (295 feet) with a single implosive charge was 114 dB, and six implosive charges was 122 dB.
  - The cables will be cut near the tower in New York.
  - Protection from falling cables will be provided to the riverbank, highway and railroad.
  - The river has a solid rock bed that has been scoured clean by the current. Cables in the water are not expected to cause any adverse environmental effects to the river bottom.
  - Cables will be retrieved from the Canadian riverbank.
  - The entire process is scheduled for 4 hours.
2. Remove the two existing structures, the Queen Street Tower and the Buffalo High Tower. The towers will be disassembled from the top down utilizing cranes. As pieces are removed, they will be loaded onto trucks, where they will be transported to a licensed recycling facility. The existing concrete pad and foundations will be removed to two feet below the surface, and backfilled with soil.

## Phase II

New foundations will be installed within the footprint of the existing structures. Replacement structures with three new tubular steel poles will be erected at each location. New conductors and overhead ground wires will then be installed. The visual landscape will be slightly altered as the tower base will decrease in width from 24 metres (79 feet) to 12.2 metres (40 feet), the new wires will be slightly more visible, and the tower height will increase. However, the overall impacts will improve as the old steel lattice towers will be replaced.

Replacement of the line is necessary to restore electrical reliability to the CNP transmission system in Fort Erie and to restore the structural integrity to the facilities being replaced.

- Removal and replacement of the IPL will provide an alternate source of power to CNP during planned and unplanned outages on its system. IPL will operate as an alternate power source only.
- Outages to the CNP transmission system impact the Buffalo-Fort Erie Bridge Authority (operates the Peace Bridge). This affects transportation, immigration, border security, and policing associated with the bridge. Car and truck traffic is delayed giving rise to increased direct costs and traffic back-ups on the bridge.

No adverse environmental effects are anticipated to result from this proposed project.

- An environmental assessment prepared in support of the permitting process concluded that there are no environmental impact anticipated to result from the project.
- No additional right-of way is necessary.
- The cable and towers will be removed immediately – no storage along the river necessary.

Consultation with stakeholders and permitting for the project is ongoing.

### **Project Schedule**

<b><u>Task</u></b>	<b><u>Time Frame</u></b>
Final Permitting	Ongoing
Demolition and Removal of Conductors	November 8, 2014
Alternate Demolition and Removal of Conductors	November 9, 2014
Removal of Lattice Steel Towers	November - December 2014
Construct New Facilities	August–October 2015
In-service	October 31, 2015

**The proposed schedule has been confirmed by O’Connell Electric Company Inc. and is subject to variation based on weather or unforeseen conditions.**

**CANADIAN NIAGARA POWER INC.**  
**INTERNATIONAL POWER LINE REMOVAL AND REPLACEMENT PROJECT**  
**FREQUENTLY ASKED QUESTIONS AND ANSWERS (“Q&A”)**

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1. What is the international power line and who owns it?

The international power line (“IPL”) is an electricity transmission line that interconnects two transmission systems in different countries. The IPL referred to in this Q&A crosses the Canadian and United States international boundary. It is owned by Canadian Niagara Power Inc. (“CNP”) since 1916 on the Canadian side of the international boundary in the Niagara River. The portion on the United States side of the international boundary is owned by National Grid. This project is being carried out by CNP with National Grid’s cooperation and oversight.

2. What is the IPL Removal and Replacement Project, and why is it necessary?

This is a rebuild project and is required because the IPL and the supporting towers on both the US and Canadian sides (Buffalo High Tower in Buffalo, and Queen St. Tower in Fort Erie) are at the end of their useful lives and need replacement. The replacement of these towers with new pole structures and new conductor will restore a backup power supply to Canada.

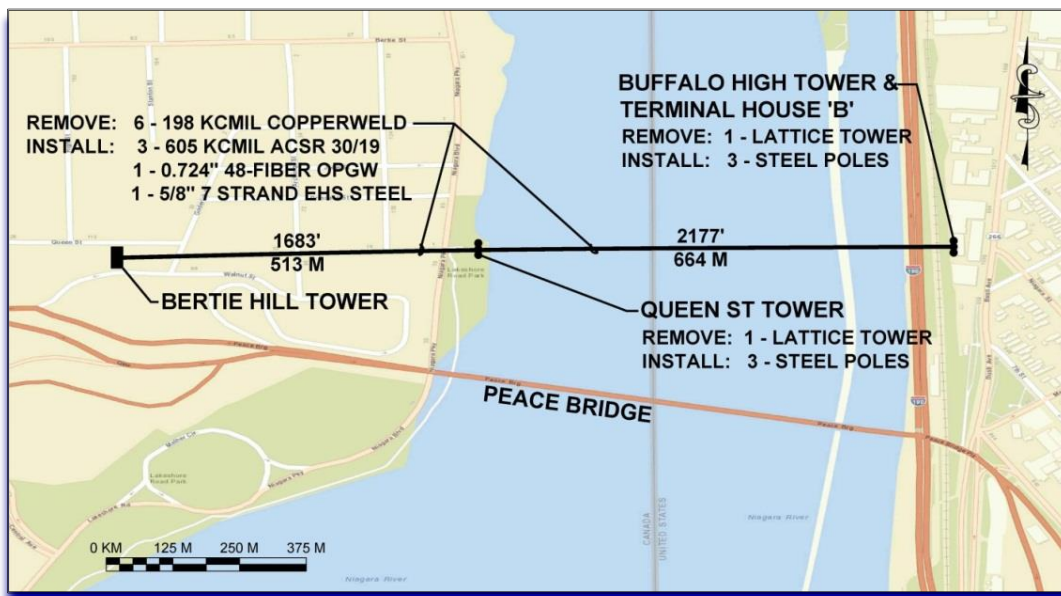
3. Who will benefit from the removal and reconstruction of these towers?

From a safety perspective, customers and the general public benefit from the removal of the aged facilities in a safe and controlled manner. The rebuild primarily provides electrical system benefits to the CNP system and its customers in Canada.

4. Where are the existing lines and towers located? Will they be reconstructed in the same location?

Please see Project Map below for the location of the existing lines and towers. The rebuild will occur within the same footprint as the old towers.

**PROJECT MAP**



5. Has the public and any Aboriginal groups been given notification and information regarding the project?

CNP's application to the National Energy Board ("NEB") is on the public record. There was a formal notification in newspapers about the project. In addition, CNP has reached out to Aboriginal communities identified by the Ontario Ministry of Energy and has provided notification to them. A communications plan is being implemented to inform the general public of further project details. Key stakeholders at the federal, state and local level in the US and Canada are part of the outreach plan. The NEB's approval of the project on June 26, 2014 is also available to the public.

6. Will there be any electricity outages during the removal and reconstruction?

For safety reasons, the transmission line has been de-energized since 2011, and no customer outages are required for this project.

7. How long will the entire project take to complete?

One year is required to complete the demolition and construction phases. However, both the demolition and the construction activities will be short in duration.

8. What approvals are required for this project?

The NEB approved the project on June 26, 2014 and other key permits in the US and Canada are in place. As part of the NEB application, CNP filed a socio-economic and environment assessment, which determined that there are no adverse environmental effects anticipated to result from this project.

9. Will there be any impact on road or rail traffic on either side?

NY Interstate 190 and the CSX railroad on the US side will be detoured in both the north and south lanes during the removal process. (Saturday morning, November 8 from approximately 4 am to 10 am). The Peace Bridge will be closed for approximately 30 minutes during removal.

In Canada, traffic around the Queen Street Tower during construction (demolition and rebuild) will be detoured, which is expected to have little effect on existing traffic due to the capacity of the road infrastructure and the project's location in an area of low traffic volume.

10. What sort of measures will be out in place to protect the environment?

To avoid adverse environmental effects, CNP is implementing a construction environmental management plan ("CEMP"). The CEMP will prescribe all environmental management measures, mitigation measures, contingency measures, responsibilities, supervision, and reporting necessary to ensure the least impact to the environment during construction (demolition and rebuild).

11. What do the structures look like today and what will they look like after completion?

Please see the photos below for a visual image of the Buffalo High towers both today and after completion.



**TODAY**



**AFTER COMPLETION**

12. If I have further questions regarding the IPL Removal and Replacement Project, who should I contact?

Please contact either of the following from CNP and NG:

CNP

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13. Where can I find information and updates pertaining to on the IPL Removal and Replacement Project?

Please refer to CNP website: [www.cnpower.com](http://www.cnpower.com) , Facebook “Canadian Niagara Power”, Twitter @CNPpower.