

# Napanee Generating Station

## Open House #1

### Questions and Responses

(following TransCanada's presentation):

**Q How much waste heat will be emitted from the Napanee Generating Station (NGS) stacks?**

**R** Virtually all heat in the exhaust is recovered for generation of steam and consequently, power at NGS. The stack temperature is approximately 200 degrees F – which is about as low as we can take it without creating condensation-related damage in the heat recovery boilers.

**Q How much energy does each turbine generate?**

**R** In cycle 1, each of the two gas turbines generates approximately 250 megawatts (MW). In cycle 2, the steam turbine generates approximately 400 MW, for a total of 900 MW being generated.

**Q What is the oblong feature identified in the rendering of the facility? [see slide 8 of the presentation]**

**R** The oblong feature is meant to represent a storm water pond. It is not known exactly where it will be located on the site but we know that one may need to be part of the facility design.

**Q Why is a storm water pond required?**

**R** We are required to replicate the existing conditions for storm water flows on site. Given the new facility will affect these conditions, we may need to incorporate a storm water pond into the storm water system design so that the rate of flow and the quality of storm water flow are not different than the pre-existing conditions.

**Q What is the distance between the proposed NGS and the nearest residence?**

**R** The NGS will be approximately one kilometre from the nearest resident.

**Q Does your baseline noise monitoring include the Lennox Generating Station (LGS) running?**

**R** Yes.

February 11, 2013  
5 p.m. to 8:30 p.m.

South Fredericksburgh Hall, 2478  
County Road 8  
Greater Napanee, Ontario

**Q Will your modeling indicate how much louder it will be with both plants running than it currently is when the Lennox Generating Station is not running?**

**R** Yes. We will provide information relative to both facilities running at the same time.

**Q What is the economic pay back period for a plant of this type?**

**R** While this is dependent on how often the plant runs, it is estimated the pay back period would be approximately 10 years.

**Q What are the expected construction costs?**

**R** The full project is anticipated to cost approximately \$1.2 billion. It is anticipated that construction costs will be between \$500 and \$600 million.

**Q How much noisier will your plant be compared to a similar facility like Halton Hills?**

**R** Halton Hills Generating Station has been designed for 40 dBA and we would expect NGS to be about the same.

**Q How many gas plants has TransCanada completed?**

**R** TransCanada has completed Halton Hills and Portlands Energy Centre in Ontario. Bécancour in Québec and Grandview in New Brunswick, and a number of facilities in Alberta.

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**Q Do you have any gas plants up in northern Ontario?**

**R** TransCanada has sold a number of assets in northern Ontario including the Nipigon, Kapuskasing, Calstock, Tunis, and North Bay plants.

**Q What is your commitment that TransCanada will own the plant over the 20-year life of the plant?**

**R** While we cannot provide a guarantee, it is our intention to own and operate the NGS. We are long term holders of our major power assets. The plants in northern Ontario were smaller assets, unlike Halton Hills or the proposed NGS.

**Q In a worst case scenario, should NGS be sold, would the new purchaser be required to meet TransCanada's environmental commitments?**

**R** Yes, all commitments made as part of our permitting process would need to be abided by.

**Q How often does TransCanada's Bécancour facility run?**

**R** Hydro-Québec is not currently asking us to operate the Bécancour facility.

**Q When was Bécancour built?**

**R** Bécancour was built in 2004.

**Q Do you still own the facility?**

**R** Yes.

**Q Is there a chance that could happen here?**

**R** We currently have a 20-year contract to operate the facility. It is unlikely the NGS would sit idle once complete, based on the projected supply and demand pattern for power in Ontario, which includes phasing out coal-fired power plants this year.

**Q What is the life-span of the facility?**

**R** Approximately 30 years. We have a 20-year contract with the Ontario Power Authority. After that we would re-contract the facility with the OPA or operate it simply based on the market conditions at that time.

**Q What is the stack height of the NGS compared to the Lennox facility?**

**R** It is estimated that the NGS stacks will be approximately 200 feet high, or approximately 1/3 the height of LGS.

**Q What happens after 20 years? Will the plant need to be refurbished after 20 years?**

**R** While we don't know for sure what the province's energy needs will be in 20 years, new contracts may be negotiated at that time. It is not known how often the plant will need to run after 20 years. Refurbishments and general maintenance are conducted throughout the life of the asset at regular intervals.

**Q You have said that your stacks will not be as high as Lennox's stacks. Does that mean that the emissions will not be dispersed as far (beyond residences)?**

**R** The emissions (which will impact the design of the stacks) from NGS will be far different from those at Lennox's, and thus stack heights will be different. Dispersion patterns will be part of the emissions studies, and these studies will help to determine the height requirements of the NGS stacks.

**Q How near are Halton Hills' neighbours relative to that facility? The same distance as NGS?**

**R** Halton Hills' nearest neighbour is located much closer (approximately 300 m away) than any neighbour of the proposed NGS.

**Q How will construction noise impact wildlife?**

**R** Potential construction effects including noise will be studied by our wildlife experts as part of our environmental studies.

**Q How much water will come out of the cooling tower?**

**R** Approximately 4,000 gallons per minute at maximum consumption. Dispersion modeling will be conducted as part of our environmental assessment.

**Q The area enjoys welcome, cool breezes during the summer that aren't enjoyed in town. How do we know that the cooling towers won't result in warm, humid air traveling around our neighbourhood?**

**R** I have not heard of any facility where this has been the result. Environmental studies will indicate whether there are any measures that need to be taken to minimize any loss of enjoyment of property due to the construction and operation of the facility.

**Q Residents have asked, in previous meetings, for you to ensure that no development occurs on the strip of land to the east of the facility. Where does this stand?**

**R** We have made inquiries of OPG as to whether we may purchase this land. We have not yet completed these discussions.

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**Q How do we know, if you do purchase that land, that you won't put up wind turbines?**

**R** We would be purchasing that land in order to address concerns of neighbours, not to develop it. Set-backs required for the development of wind turbines would not allow for development on that site.

**Q Will there be any changes required to the electrical system as a result of this plant?**

**R** No, there would be no changes required to the electrical system.

**Q What are the traffic impacts likely to be during construction, based on your previous experience?**

**R** We will be conducting traffic studies and modeling as part of our environmental assessment in order to identify traffic effects during construction, and we will work with the Municipality and Ministry of Transportation to determine the best routes for traffic during construction activities.

**Q If both Lennox and NGS are running full out, can the local Union Gas line accommodate both facilities?**

**R** We have made inquiries of Union Gas and they are doing studies on their pipeline to determine that, and they will report back to us. We will share that information when it is available.

**Q Do you have a negotiated price and how much would you need to run the facility in order to run it economically?**

**R** The details of our contract with the OPA are publicly available. Those figures are dependent on a number of variables. We are to be paid a capacity payment on top of whatever power we sell to the market. These are essentially capacity contracts.

Note: For further clarification, the NGS team would like to add:

TransCanada signed a Clean Energy Contract with the Ontario Power Authority (OPA) in December 2012. Under the terms of this agreement, Napanee Generating Station will earn revenue from two sources. First, it will generate revenue from the sale of electricity into the Ontario market. However, because this revenue is not expected to cover the fixed capital costs of the plant, the OPA will cover this shortfall in the form of direct monthly payments to TransCanada. These payments are adjusted monthly based on a formula described in the contract, which can be viewed at:

[www.powerauthority.on.ca/sites/default/files/OPA-TCE-CES-agreement.pdf](http://www.powerauthority.on.ca/sites/default/files/OPA-TCE-CES-agreement.pdf)

This contract is common in Ontario and most large gas-fuelled generators operate with this type of arrangement in place. Under the Clean Energy Supply contract, TransCanada is financially responsible for the capital cost and performance of the facility as well as the operating and maintenance costs over the 20-year term of the contract.

**Q Can you confirm that you will need to conduct refurbishments of the equipment at the plant regularly, and will these be major construction-like projects or represent mini "economic booms"?**

**R** Yes, the plant will be regularly taken out of service (in some cases for six weeks at a time, in some cases, for far less time) in order to conduct maintenance. These would not be major construction-like projects. Over the course of six weeks, perhaps 100 different trades-people would be working on the maintenance.

**Q How do you conduct wetland studies?**

**R** Terrestrial biologists will study current conditions of the wetland and will do so in four different seasons to ensure we are aware of the characteristics of the wetland year-round and better understand potential effects.

**Q So someone will actually go to the wetland and study it?**

**R** Yes, a terrestrial biologist will conduct the studies.

**Q Will the draft Environmental Review Report be available when it is complete?**

**R** Yes, the document will be available for public review once the studies have been completed.