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APPRO
ASSOCIATION OF
POWER PRODUCERS
OF ONTARIO

Deputation to the Regional Municipality of York
Planning and Economic Development Committee
(Check against delivery)
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Good afternoon, my name is Jake Brooks and I'm with the APPrO, the Association of Power Producers of Ontario. I'm also a resident of York Region.

Thank you for the opportunity to speak today to the issue of electric power resources in York Region. I will try to give you an industry perspective on the issues you are looking at, perhaps somewhat distinct from what you've heard from the OPA or the proponents.

APPrO's concern in this matter is that any decisions taken by the Region be made with the benefit of the best possible information, and in the fullest context. We want you to make the most well-informed decision you can.

First let me tell you what APPrO is.

APPrO is the trade association that represents virtually all of Ontario's generation companies, both public and privately owned companies. Our members produce pretty much all of the electricity Ontarians use, operating pretty much every second of every day, all year long.

We make power in large and small power plants, located right across the province using almost every fuel there is including nuclear, water, natural gas, wind energy and solar power, whether for baseload, intermediate or peaking power - and including simple and combined cycle gas turbines, as well as cogeneration.

We're also building new power plants and refurbishing existing facilities, to help Ontario replace its existing coal fired plants and to make sure we meet Ontario's very aggressive renewable energy goals.

Although it's natural to expect an organization like ours to support the development of new power projects, that is not the only issue I'm here to speak about today. I'm also here to stress the importance of a balanced, well-informed process to determine what kind of electricity resources we put in place in Ontario. APPrO believes that the OPA's processes to find the right solutions and to select the right developer are sound. There's no question that Ontario's planning and approvals processes, although they are complex and certainly could be improved upon, do add up to a thorough and rigorous process. Although no system can guarantee a

decision that everyone will like, the process ought to be able to consider all relevant points of view. I will come back to the quality of the decision making process, but first I'd like to speak to the more immediate question: What are the realistic options for providing electrical power service to the citizens of the Region?

Some are saying that there is a black-and-white choice between clean, renewable energy on the one hand and massive megaprojects on the other hand. I reject that characterization from the outset because it overlooks all the most likely scenarios that are somewhere in between, and in fact, doesn't allow room for getting the most environmentally and economically sound results from a compromise solution.

Because Northern York Region is so close to the point where declining supply reliability could interfere with the normal course of business and thereby impede economic development, realistically there are three choices:

1. A major transmission line into the region.
2. A massive efficiency and conservation program, plus a transmission line into the region.

3. Local generation, in combination with a large scale efficiency program.

As a result of extensive public consultation, the first two options have been effectively ruled out, because transmission is so unpopular. This leaves us with the third option, new generation and efficiency programs, to meet a combination of objectives including population growth, reliability, and the shutdown of coal-fired generation in the region. I don't think there is any thorough assessment of the situation that says the Region can continue to grow, without new transmission or local generation, and meet the standards for reliability, purely through conservation.

What is the over-riding public interest in this case? It's about electricity reliability and meeting future demand.

What does reliability mean? It means being able to count on the electricity you need here at all times -- without blackouts or brownouts -- to power your homes, your schools, hospitals, water treatment plants, local businesses.

Why is reliability an issue in Northern York Region? Across the province, aging power plants, transmission and distribution networks have been struggling to keep up with growing demand. There has been little or no major investment in new infrastructure for a long time. Ontario's population is growing and our economy is changing: and the province is using more – not less – electricity. Although many of our processes are becoming more efficient, peak demands on the system are not decreasing.

And York Region is growing faster than almost anywhere else in Ontario. More new homes, more people, more commerce and local services – and they all need more electricity. Existing homes use more electricity too: more electric devices, using more and more power. It's putting tremendous stress on a local system that simply wasn't designed for this kind of demand.

Although there are a range of views on reliability, the only organization which can say what the physical reliability situation is, with complete authority, is the Independent Electricity System Operator (IESO). The IESO is the organization in Ontario which establishes the reliability

standards for Ontario's electricity grid. That is part of their legislated mandate. They are saying that the Northern York Region is growing beyond the level at which the existing infrastructure can meet the standards for reliability.

This is the situation facing the Northern York Region: If the main 230 kV transmission line is disrupted, the load at Armitage TS, which is greater than 250 MW, cannot be restored so as to comply with the IESO's reliability criteria. Restoration can only be achieved in the required time-frame by either local peaking generation that can turn on and quickly ramp up to 350MW, or a new 230kV transmission line from Markham to bring in the electricity from elsewhere in the province.

It's vital to understand that:

1. Energy conservation and demand management can reduce the overall level of demand, but will not always be able to supply the load needed to service the area while also meeting the reliability standards.
2. Load transfers to neighbouring areas and existing generation at Keele Valley can help restore some of the

load, but cannot provide adequate supply for the area to comply with the reliability criteria.

3. Renewable resources (wind, solar, etc), regardless of their size – either small or large scale can not be guaranteed to supply the load. (Wind doesn't always blow, the sun doesn't always shine). They can be welcome additions to the provincial grid, but are not necessarily suited to help with reliability.
4. Combined Heat and Power (or cogeneration) resources, regardless of their size, would already be running full out (in order to be achieving their high thermal efficiency). They would be unable to respond to additional demand on short notice.
5. A 30MW simple-cycle plant could only supply 30MW. Not the full load at Armitage TS to comply with the reliability criteria.

Today NYR (Northern York Region) is below the provincial standards for reliability. Saying no to the OPA's reliability and growth solution will condemn NYR residents to a standard of electricity service below other Ontario ratepayers. That's not the way the system should operate in

Ontario: We are all entitled to the same, uniform standard of electricity reliability.

Some people say the demand forecasts are all wrong.

The OPA, the IESO and the local distribution company, PowerStream, all forecast the Northern York Region to grow by more than 3% per year (including the effects of CDM and price elasticity) over the next 10 years and beyond. As you know, planning is not done on the basis of year-to-year variations, but on a long term trend basis.

Whether or not the forecast grows at 3.25% or 2.2% -- with conservation taking a full role -- demand still continues to grow. If the transmission line goes down, there will be no power to conserve. The OPA has always said that there are three reasons for local generation:

1. to meet immediate peak demand;
2. to provide sustained reliability;
3. to ensure security of supply in a time of crisis.

The OPA's NYR plan is a responsible and cost-effective way to address these facts.

Many have questioned whether or not a simple cycle plant is the best solution for NYR. This is a legitimate question – but again, let's consider the facts.

First, even the opponents to this solution agree that either of the other technologies (CCGT or CHP) would cost significantly more. A simple cycle plant is the most cost-efficient solution in terms of capital costs. Transmission is effectively off the table.

Second, many assert that energy conservation and demand management programs can meet NYR's peak day electricity needs at a lower cost than a new simple-cycle power plant.

This is simply wrong. Energy conservation and demand management programs, while important, **CANNOT** alone meet our peak electricity needs. Human behaviour is not as reliable as technology. Not every resident will join Peak Saver. Not every company can reduce demand on demand.

Third, there are widespread misconceptions about the size of the plant, how often the plant will run, and how clean it will be.

Simple cycle plants are designed to run far less often and for shorter periods than other kinds of plants. And, they can also stop and start far more quickly. Local reliability needs this kind of flexibility. This plant will run about 900 hours a year. The contract under which it is to be built is specifically designed to ensure that it runs only when needed. No more. In fact the owners would be penalized for running the plant “out of merit.” The OPA has a statutory obligation to protect the interests of consumers with respect to prices and it is careful to ensure that the power purchase agreements it signs don’t incur unnecessary costs for Ontario’s ratepayers.

The simple cycle power plant as proposed will not be a major polluter. Modern gas-fired power plants are amongst the cleanest of dispatchable energy resources. A simple cycle gas plant is far cleaner per tonne of emissions than home furnaces, cars and diesel tractors, for example. It will certainly be cleaner than keeping Ontario’s coal-fired plants running.

I would guess that everyone in this room agrees in principle with the need to move to a cleaner energy system. The differences of opinion in this discussion are largely around how best to go about getting cleaner air. There is a very real risk that without a plant like the one the OPA has in mind, Northern York Region will find itself facing practical supply difficulties year after year, forcing the province to generate or import more of its power from plants with much higher emission rates.

The OPA has been very active in explaining why a 350 MW simple cycle gas fired power plant is the right solution for York Region at this time, and has provided ample opportunities for public input. It has demonstrated that it is capable of running a rigorous competitive process and effectively complying with the directive from the Minister to procure the mandated resources.

To conclude: The Region of York and the various municipalities have now been empowered with the facts by the OPA, the IESO, and others. These municipalities have the responsibility for some very important and difficult

decisions. It is they who will have to consider the consequences of delay or inaction with respect to local reliability and the region's unprecedented growth. As our President, Dave Butters noted at the April 30 Aurora Town Hall meeting, facts are facts: they are stubborn things, and they will not disappear simply because we don't like them.

It was with some foresight that the Council of York Region adopted its motion in December of 2004 supporting at that time the "initiative to provide local hydro distribution through a proposed 300 megawatt gas-fired peaking facility as a solution to additional electricity demands." APPrO believes that was the appropriate decision at the time, and that the circumstances in 2008 make it an even more appropriate position today.

I commend the OPA for its balanced and forthright approach, the municipal leaders for encouraging debate, and the citizens of York Region for taking up the challenge of participating in critical decisions. The public discussion process is working to a great extent, as demonstrated by this very meeting. I say let's contribute to the process, even try to improve on it, continue to encourage public discussion, and

allow the OPA and others to complete their work and reach their conclusions, based on the kind of public participation and airing of views that have been made possible through this process.

Thank you. Those are my submissions.