

Ontario Energy Board

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15, Schedule B;

AND IN THE MATTER OF an Application by Ontario Power Generation Inc. for approval, pursuant to Part 1, Paragraph 5.2 of Ontario Power Generation Inc.'s Generation Licence EG-2003-0104, of a Reliability Must-Run Agreement for the Thunder Bay Generating Station between Ontario Power Generation Inc. and the Independent Electricity System Operator.

WRITTEN SUBMISSION

OF

NOACC COALITION: (The Northwestern Ontario Associated Chamber of Commerce (NOACC), the Northwestern Ontario Municipal Association (NOMA), Common Voice Northwest, and City of Thunder Bay)

June 7, 2013

WEILER, MALONEY, NELSON
Barristers and Solicitors
1001 William Street, Suite 201
Thunder Bay ON P7B 6M1

John A. Cyr
Telephone: (807) 625-8880
Facsimile: (807) 623-4947
Email: jcyr@wmnlaw.com

Submissions that follow are made on behalf of the NOACC Coalition.

The Ontario Power Generation Inc. ("OPG") seeks approval in this Hearing of a reliability must-run agreement ("RMR Agreement") entered into with the Independent Electricity System Operator (the "IESO") in relation to one of the two 153 MW coal-fired units at OPG's Thunder Bay Generating Station ("Thunder Bay GS Unit").

The NOACC Coalition supports approval of the OPG Application.

While the concern of the OPG as to recent uneconomic use of the two 153 MW thermal generators at the Thunder Bay GS Unit is mandated the NOACC Coalition supports the longer range view of the IESO that de-registration of both units would be detrimental to reliability and security of the power supply system in the Northwest Region.

The NOACC Coalition asks the Board to consider key features of the power supply system in the Northwest Region.

1. First and foremost it is essential to understand the thermal generators in the Thunder Bay GS Unit, along with the thermal generator at the Atikokan Generating Station function as a part of base load generation in the Northwest Region. That base load function arises:
 - when low water conditions in the Northwest Region reduce the production of the hydraulic generators, hydraulic generation being the other component of base load generation in the power system in the Northwest Region; and
 - when there are permanent faults in the East West Tie.
2. The unique role of a default base load generator is that it needs to be dispatchable. When low water reduces the availability of hydraulic generation as the base load generation in the Northwest region, as it periodically does, the power system within the Region must be robust enough to provide the alternate form of base load generation at will. In the Northwest Region it is only the thermal generators in the Thunder Bay GS Unit and the Atikokan Generating Station that are capable of ensuring that robustness because their power is, by its nature, dispatchable.
3. Both the adequacy and the security branches of the reliability of power supply in the Northwest Region require a power system unique to the Region.

On the adequacy branch of reliability adequate supply is not merely meeting existing load but planning for substantial growth in load with:

- an expanding mining sector with specifically forecasted increases in demand; and
- a long overdue upgrading and expansion of supply to First Nation communities
 - with replacement of existing diesel generating capacity in First Nation communities,
 - with added load arising from:
 - growing First Nation community residential populations,
 - pent up demand for power supply for commercial development within First Nation communities and on First Nation Traditional Territories, stalled because of inadequate power supply, and
 - desperate need for infrastructure improvements in essential facilities within First Nation communities (water purification and waste management), where improvements have been sidelined because of inadequate power supply.

On the security side of reliability:

- security of power supply is prerequisite to industrial and commercial investment in the Northwest Region; a power interruption causes economic losses in damage and lost production in affected mills and mines in the order of millions in each occurrence in each mill and each mine site;
- repeated power interruptions force off shore management to look to future investment in other jurisdictions with systems (and costs) more amenable to their long term development needs; and
- because the load in the Northwest Region is largely industrial and commercial, rather than residential, phased brown outs and load shedding are not an acceptable operational risk.

4. NERC reliability standards require system planning that ensures generating capacity that is of a size equal to the size of anticipated load plus a marginal amount equivalent to the largest generating source.

The NERC standard was developed to preclude, as much as is practicable, tied electricity grids collapsing in themselves and triggering, in domino effect, the collapse of adjoining grids.

The NERC standard for reliability in relation to the power system planning in the Northwest Region is not sufficient. The standard needed for the Northwest Region must take into consideration the facts that:

- the Northwest Region comprises 45% of the land mass of the entire province; and
- the population of the Northwest Region is less than 5% of the provincial population.

These two facts result in a vulnerable power system with none of the inherent density and concomitant robustness and inherent dynamic harmony that arises naturally in a power system that has been developed for densely populated areas such as in southern Ontario.

In the Northwest Region the large thermal generators in the Thunder Bay GS Unit and the Atikokan Generating Station play an indispensable role in providing whatever robustness and dynamic harmony can be made available of so diffuse a power system.

In the Northwestern Region the reliability standard must ensure generating capacity that is equal to the size of the anticipated load plus a marginal amount equivalent to the largest supply source, namely the upgraded East West Tie.