APPENDIX 'B'

SUPPLY MIX DIRECTIVE

June 13, 2006

Dr. Jan Carr Chief Executive Officer Ontario Power Authority 1600-120 Adelaide Street West Toronto, Ontario M5H 1T1

Dear Dr. Carr:

Re: Integrated Power System Plan

As authorized by the Lieutenant Governor in Council under Section 25.30 of the *Electricity Act, 1998*, I am providing direction for the preparation of the Integrated Power System Plan.

The Government directs the OPA to create an Integrated Power System Plan to meet the following goals:

- 1. The goal for total peak demand reduction from conservation by 2025 is 6,300 MW. The plan should define programs and actions which aim to reduce projected peak demand by 1,350 MW by 2010, and by an additional 3,600 MW by 2025. The reductions of 1,350 MW and 3,600 MW are to be in addition to the 1,350 MW reduction set by the government as a target for achievement by 2007. The plan should assume conservation includes continued use by the government of vehicles such as energy efficiency standards under the *Energy Efficiency Act* and the Building Code, and should include load reduction from initiatives such as: geothermal heating and cooling; solar heating; fuel switching; small scale (10 MW or less) customer-based electricity generation, including small scale natural gas fired co-generation and tri-generation, and including generation encouraged by the recently finalized net metering regulation.
- 2. Increase Ontario's use of renewable energy such as hydroelectric, wind, solar, and biomass for electricity generation. The plan should assist the government in meeting its target for 2010 of increasing the installed capacity of new renewable

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energy sources by 2,700 MW from the 2003 base, and increase the total capacity of renewable energy sources used in Ontario to 15,700 MW by 2025.

- Plan for nuclear capacity to meet base-load electricity requirements but limit the installed in-service capacity of nuclear power over the life of the plan to 14,000 MW.
- 4. Maintain the ability to use natural gas capacity at peak times and pursue applications that allow high efficiency and high value use of the fuel.
- 5. Plan for coal-fired generation in Ontario to be replaced by cleaner sources in the earliest practical time frame that ensures adequate generating capacity and electricity system reliability in Ontario.

The OPA should work closely with the IESO to propose a schedule for the replacement of coal-fired generation, taking into account feasible in-service dates for replacement generation and necessary transmission infrastructure.

- 6. Strengthen the transmission system to:
 - Enable the achievement of the supply mix goals set out in this directive;
 - Facilitate the development and use of renewable energy resources such as wind power, hydroelectric power and biomass in parts of the province where the most significant development opportunities exist;
 - Promote system efficiency and congestion reduction and facilitate the integration of new supply, all in a manner consistent with the need to cost effectively maintain system reliability.
- 7. The plan should comply with Ontario Regulation 424/04 as revised from time to time.

Yours sincerely,

Dwight Duncan Minister of Energy