Q. Please provide a list of all incidents with details as to the time and circumstances where in the opinion of Hydro, it has been established that Hydro failed to meet the requirements imposed on it by the Air Pollution Control Regulations 39/04 together with the magnitude of the exceedances in question relative to the requirements under the Air Pollution Control Regulations.

A. The preliminary results of a recent health assessment review for data from January 2001 to April 2005 indicated a single hourly maximum for sulphur dioxide at one location in exceedance of the regulatory standard. The value recorded was 1362 ug/m^3 and the regulatory standard is 900 ug/m^3.

In December 2005, the sulphur dioxide monitor at the Indian Pond Road site recorded three consecutive ambient air concentrations in excess of the regulatory limit. These were 970 ug/m3 at 1600 hours, 1106 ug/m3 at 1700 hours, and 1044 ug/m3 at 1800 hours.

However, a review of the aforementioned data by HTGS personnel and subsequent agreement by the regulator indicates the readings in question to be related to equipment calibration testing being undertaken at that time (1362 ug/m^3 reading) and inconclusive due to recording anomalies (December 2005 readings).

In October 2005, the fine particulate (PM 2.5) monitor at the Main Gate monitoring station (located within the HTGS property boundary) recorded a single daily average air concentration in excess of the regulatory limit. The value recorded was 25.8 ug/m^3 and the regulatory standard is 25 ug/m^3.

HTGS routinely exceeds the prescribed opacity limits of 20%, 25% and 30%, above which there are successively higher penalties to be imposed under the Air Pollution Control Regulations. There are several exceedances that occur each month as a result of typical operations, i.e. soot blowing, load transition, unit start-up. The exceedances are reported monthly to the regulator in the form of 6-minute average readings, 24 hours per day, seven days per week.

HTGS started to combust 1% sulphur fuel in March 2006 and, notwithstanding the brief period of monitoring thus far, the plant emissions monitoring equipment is showing significant reductions in levels of sulphur dioxide (SO_2) and, to a lesser degree, oxides of nitrogen (NO_x). An extended operating period will demonstrate the degree to which the number of regulatory exceedances may be reduced for these and other parameters such as opacity and particulate.

The Department of Environment and Conservation uses emission dispersion modeling in conjunction with the actual measurements described above. Through this modeling it has been determined that exceedances have occurred at the HTGS on several occasions in each of the last ten years.