Q. Explain the synchronous condenser use impacts reported for 1992 and 2000 in Schedule V of R. J. Henderson's 2001 GRA evidence, and provide similar numbers and explanations for each additional year since 2000 when such impacts have occurred. Explain if and why impacts from condenser use are forecast for the 2004 test year and beyond, and explain under what conditions the condenser use could provide benefits in this test year.

A. The synchronous condenser use noted in Schedule V of R.J. Henderson's evidence reflects the consumption by all synchronous condensers on Hydro's system with the exception of Holyrood unit #3. Synchronous condenser energy consumption at Holyrood is not metered, and as a result, consumption by Holyrood unit #3 synchronous condenser is reflected in system losses. The table below summarizes synchronous condenser usage for the period 1993-2002 inclusive and also does not include Holyrood unit #3 usage.

	1993	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**
Synchronous Condenser Use (GWh)	4.66	6.40	1.00	1.94	2.10	7.36	6.31	4.75	3.70	2.61

The synchronous condenser use reported in Schedule V of R. J. Henderson's evidence and in the above table are for both Cat Arm generators, unit #7 at Bay d'Espoir and the gas turbines at Hardwoods and Stephenville. They are each operated periodically for system voltage support when the generator is not required to supply power and energy.

Synchronous condenser usage is not forecast for 2003 and 2004, as synchronous condenser operation is highly dependent upon the exigencies of load patterns, precipitation patterns, water storage conditions, and transmission requirements and falls well within the forecast variances in system losses which are also dependent on these factors.