Q. **Re 2011 Capital Plan - Individual Capital Projects:**

Project B-10, Upgrade Hydrogen System-Holyrood: Provide details and all underlying assumptions with respect to the cost benefit analysis of this project, including particulars of what work would be done under the alternative upgrade without electrolyzer and bulk storage.

A. The following assumptions were made with respect to the cost benefit analysis of the project:

Study Assumptions

Present Worth Year:	2010*
Number of Years in Study:	20
Discount Rate:	8%

*Costs accrued at year end.

Cost Assumptions with Electrolizer Installation

Capital Costs:	2011 - $1,191,900
	2012 - $ 800,400
Maintenance Costs:	$2,500 per year, escalated using Nalcor's 2010 Inflation and Escalation Forecast

Cost Assumptions without Electrolizer Installation

Capital Costs:	2011 - $771,600
	2012 - $726,600
Maintenance Costs:	$3,000 per year, escalated using Nalcor's 2010 Inflation and Escalation Forecast

Hydrogen Gas Costs: $60,100 per year based upon historical costs, escalated using Nalcor's 2010 Inflation and Escalation Forecast.

The scope of work for both alternatives will include the installation of new hydrogen control panels, piping replacement, relocation of manual control valves on all three units, and the installation of automatic emergency vent valves on Units 2 and 3. However, the least cost alternative as determined by the cost benefit analysis will also include the installation of an electrolyzer and low pressure bulk storage system.