Q. Please prepare the generation expansion plan and CPW analysis for the Isolated Island Option using the following assumptions:

- delete the electrostatic precipitators, scrubbers and NO_x burners;
- maintain and operate the Holyrood Thermal Generating Station to 2041 using 0.7% sulphur No. 6 fuel;
- add a 900 MW HVdc link from Labrador in 2041 using Labrador power at $2/MWh constant; and
- Holyrood Thermal Generating Station retired in 2041.

Compare this sensitivity to the Muskrat Falls/HVDdc (sic) Interconnection Base Case.

A. The table below provides a Strategist generation plan and CPW for a 2041 Labrador Interconnection case assuming no environmental upgrade capital and associated O&M at Holyrood, continued operations for Holyrood to 2041 followed by its retirement, use of 0.7% heavy fuel oil, and supply of Churchill Falls power at $2 /MWh constant. The CPW for this 2041 Labrador Interconnection case is $6,703 million ($2010), which is $51 million greater than the Interconnected Island reference case of $6,652 million.

Since the scenario presented assumes that the Province will forgo export revenue from Churchill Falls, the same assumption should be applied to the Interconnected Island alternative. Consequently, the same $2 /MWh assumption for the cost of power supply out of Labrador after 2041 has been applied, where profits from Churchill Falls are directed to ratepayers such that the power purchase expense for

Muskrat Falls power would effectively be $2 /MWh. With this assumption, the CPW declines to $5,898 million ($2010). The CPW economic preference for the reference interconnection case over the 2041 interconnection case is $805 million ($2010).

Nalcor's response to MHI-Nalcor-3 provides Nalcor's views on the risks and uncertainties associated with continuing Isolated Island operations followed by an interconnection to Labrador in 2041. These risks and uncertainties relate to security of supply and reliability, cost to ratepayers, environmental compliance, and operational uncertainty for Holyrood.

2010 PLF Strategist Generation Expansion Plans		
	Isolated Island as per PUB-Nalcor-55 (2041 Labrador Interconnection)	**Labrador HVdc Interconnection/Muskrat Falls (Reference Interconnected Island case)**
	PLF 2010	**PLF 2010**
2010		
2011		
2012		
2013		
2014	25 MW Wind	50 MW CT
2015	36 MW Island Pond	
2016	Holyrood Upgrade	
2017		Holyrood Units 1 & 2 Sync Condensers 900 MW Labrador Interconnection
2018	23 MW Portland Creek	
2019	Holyrood Upgrade	
2020	18 MW Round Pond	
2021		
2022	170 MW CCCT	
2023		
2024	50 MW CT Holyrood Upgrade	
2025		
2026		
2027	50 MW CT	
2028	Replace 2 Existing Wind Farms (~54 MW)	

2010 PLF Strategist Generation Expansion Plans		
2029	Holyrood Upgrade	
2030		
2031	50 MW CT	
2032		
2033		
2034	Replace 2014 Wind Farm (~25 MW) 50 MW CT	
2035		
2036		23 MW Portland Creek
2037		170 MW CCCT
2038	50 MW CT	
2039		
2040		
2041	900 MW Labrador Interconnection	
2042		
2043		
2044		
2045		
2046		50 MW CT
2047		
2048		
2049		
2050		50 MW CT
2051		
2052	50 MW CT	
2053		
2054	50 MW CT	50 MW CT
2055		
2056	50 MW CT	
2057		
2058	50 MW CT	50 MW CT
2059	50 MW CT	
2060		
2061		
2062	50 MW CT	
2063	50 MW CT	50 MW CT
2064		

2010 PLF Strategist Generation Expansion Plans		
2065		
2066	50 MW CT	50 MW CT
2067		
CPW 2010$ millions	$6,703	$6,652 – Reference $5,898 – With comparable assumption of Labrador power at $2 / MWh post 2041.