The PIRA High and Low forecasts both have a similar probability of occurring. While it is possible that fuel prices could be sufficiently low to render a CPW preference of only $120 million for the Interconnected Island alternative under the PIRA Low forecast, it is equally probable that fuel prices could be sufficiently high for the Interconnected Island alternative to have a $5,474 million CPW preference over the Isolated Island alternative under the PIRA High forecast. Also, a more recent long-term PIRA fuel price forecast as of May 2011 yields a $2,806 million CPW preference for the Interconnected Island alternative.

Load Growth

The low load growth case reflects a 50 percent reduction in the rate of annual load growth starting in 2015, after Vale's Long Harbour operation reaches full production. This case yields a $752 million CPW preference for the Interconnected Island alternative.

The low load growth is assumed not to affect annual demand and thus the timing of generation additions was not revised. To the degree that demand would be affected under a low load growth scenario, it is likely that CTs planned in both alternatives for the latter years of the analysis period could be deferred or avoided resulting in slightly lower CPWs for both alternatives.

Capital Costs

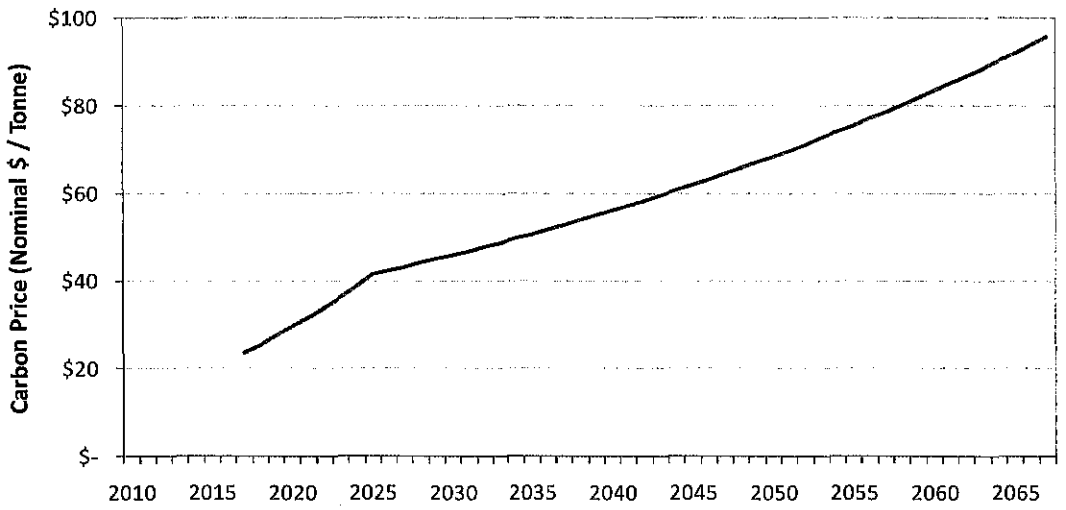
The *"Muskrat Falls and LIL Capex + 25%"* reflects the impact of higher capital costs for the two LCP projects. This case yields a $1,183 million CPW preference for the Interconnected Island alternative.

Carbon Pricing

Due to continuing uncertainty of federal regulation of atmospheric emissions, Nalcor chose not to include any impact from possible carbon pricing in its reference case analysis. Notwithstanding, Navigant believes that some form of greenhouse gas (GHG) emission mitigation legislation is possible over the analysis period. To address this possibility, Nalcor and Navigant estimated the potential impact of projected carbon pricing coming into effect in 2017[34] using carbon price projections developed by the US Department of Energy as an analysis of the Waxman-Markey Legislation. The carbon price forecast is shown in Figure 22.

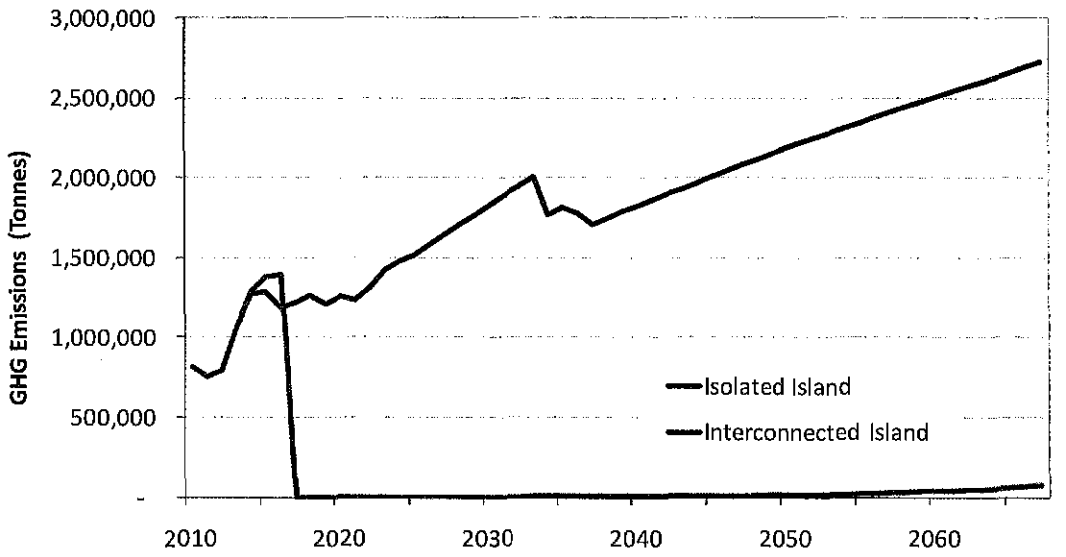
[34] If carbon pricing was introduced prior to 2017, it would increase the CPW of both alternatives by approximately the same amount given the similar levels of GHG emissions for both alternatives through the end of 2016.

Figure 22: Projected Carbon Prices



Given the level of GHG emissions in the Isolated Island alternative, as shown in Figure 23, the introduction of any form of carbon pricing would increase thermal production costs and have a significant impact on the CPW for the Isolated Island alternative. Post 2017, the GHG emissions in the Interconnected Island alternative are essentially zero until the later part of the analysis period when relatively limited GHG emissions from CTs operating infrequently to serve peak demand are expected.

Figure 23: GHG Emissions: Interconnected Island and Isolated Island Alternatives



This case yields a $2,655 million CPW preference for the Interconnected Island alternative.