

**Undertaking 65****Re: 12-Hour Breakpoint****Undertaking to provide an analysis showing how the 12-hour breakpoint determined.**

To determine the Avalon load levels for starting thermal units, the economics of operating a Holyrood unit at minimum load (70 MW) were compared to operating the Avalon standby generation (Holyrood CT and Hardwoods GT) at base loads (50 MW total). At 2015 fuel prices, it was determined that the economic "breakeven point" occurs when standby units are operated 17 hours per day. That is, the cost of fuel consumed by a Holyrood unit operating at 70 MW for 24 hours equals the cost of fuel consumed by the standby generators operating at 50 MW for 17 hours. To account for changes in fuel prices, the practice of starting up standby units early to allow for starting failures to ensure they are ready for the peak demand hours, and uncertainties in load forecasts and load flow results, a more conservative threshold of 12 hours/day was considered appropriate. That is the standby generation will be used in place of Holyrood only in cases when the customer demand indicates they are required to operate for 12 hours per day or less.