Q. **C-16, Tab 7: Install Backup System for Raw Water Supply and Clarifier -Holyrood; $955,600**

Please provide the details for the calculation of the Base Outage Time (days) as shown in Table 2, p. 11 of Appendix A under Tab 7.

A. The Base Outage Time (days) is the number of days the referenced generation capacity outage scenario would last in the base Strategist analysis. It is calculated using the Forced Outage Rate (FOR) of the unit type under assessment. The FOR is the percent of time a generating unit is unavailable due to a forced outage. The Base Outage Time (days) was calculated using the following formulas:

Hydro Units

Base Outage Time (days) = $(FOR/100)^N$ x capacity outage duration

Where N is the number of units in the scenario.

Holyrood Units

Base Outage Time (days) = $(FOR/100)^N$ x (capacity outage duration x (1 – (25 – FOR)/100))

Where:

N is the number of units in the scenario; and

25 is the percent of time Holyrood units are unavailable for reasons other than forced outages such as annual planned maintenance and running maintenance. This value was assumed to be negligible for the hydro units.

A FOR of 0.86% was used for the hydro units and a FOR of 9.58% was used for the Holyrood units.