Q. Please explain how the $13,113 under the column "Capacity" commencing in year 2011 for the "Retire Plant" alternative in the analysis on page 2 of IC-18NLH is calculated. Similarily, explain how the $45,895 under the column "Capacity" in year 2011 for the "Retire Plant in 2006" of the Snook's Arm Penstock Replacement analysis is calculated.

A. The $13,113 is the estimated levelized annual cost for capacity commencing in 2011 that is equivalent to the capacity contribution from the 400 kW Roddickton Mini Hydro Plant. The calculation recognizes the limited ability of a run-of-river hydroelectric plant to supply capacity value (as compared to a fully dispatchable combustion turbine) through the application of the annual load factor for the plant. The formula is as follows:

Plant Capacity Value =
Plant Capacity x CT Capacity $Cost_{2004}$ x $Escalation_{(2004 - 2011)}$ x Plant Capacity Factor

For the Roddickton Mini Hydro Plant, the $13,113 Capacity value is caculated as follows:

$\$13,113 = 400kW \times \$100/kW/yr \times (1.02)^7 \times 1,000,000\ kWh/(400kW \times 8,760h)$

Similarily, for the Snook's Arm Mini Hydro Plant, the $45,895 Capacity value is calculated as follows:

$\$45,895 = 590kW \times \$100/kW/yr \times (1.02)^7 \times 3,500,000kWh/(590kW \times 8,760h)$