Q. Reference: 2018 Cost of Service Methodology Review Report dated November 15, 2018

On page 26 (lines 10 – 13) of the CA Energy Consulting Report it is stated with respect to a marginal cost-based allocation that "The approach presents the technical challenges of 1) marginal cost and class load development and 2) the possibly more variable cost shares than are found in embedded costing. U.S. jurisdictions demonstrate the feasibility of the approach." Would a methodology be needed to reconcile marginal costs to embedded costs to ensure the full recovery of the revenue requirement? Roughly, what is the difference between marginal cost-based rates and embedded cost-based rates; i.e., are marginal costs about 75% of embedded costs? How might Hydro apply a marginal cost-based allocation approach to the combined generation and transmission components of Muskrat Falls?

A. This response has been provided by Christensen Associates Energy Consulting.

Marginal cost-based cost allocation does not require a reconciliation step to ensure full cost recovery. The process multiplies marginal costs and class loads to obtain marginal cost-based class revenues for each class over the test period. Summing across classes yields firm-level marginal cost-based revenues. The allocator is each class's share of firm-level revenue. Applying these shares to the financial (embedded) costs fully allocates financial costs to classes. In this case, the costs would be those costs functionalized as generation. The level of marginal cost-based revenues compared to the total of embedded costs for Hydro's generation, is not relevant to the cost allocation process. Under this allocation approach, marginal costs are used to determine class allocators. The application of the resulting class allocators to total embedded costs (total financial costs) yields the embedded cost responsibility of each class.