

1 Q. With reference to the calculation of remaining life accruals, Part V of the 2011
2 Study, pages V-1 to V-131, please explain the meaning of the heading to each
3 column (1) - (7). Please identify the source of the data contained in each column (1)
4 - (7). Please show the underlying calculations, if any, of the information contained in
5 each column (1) - (7).
6
7

8 A. Each of the columns is explained below:

9 **Year (Column 1)**: Represents the installation year of the original cost of plant
10 remaining in service as at December 31, 2009.

11 **Original Cost (Column 2)**: Represents the net depreciable cost (original cost less
12 contributions in aid of construction) of the plant remaining in service for each
13 installation year as identified in Column 1. It should be noted that this value
14 represents the net depreciable cost remaining in service after all historic retirement
15 activity has been removed from the account. This information (both the net
16 depreciable cost remaining and the installation year) is downloaded from the Hydro
17 plant accounting systems into the Gannett Fleming models.

18 **Calculated Accrued (Column 3)**: Represents the theoretical amount of accumulated
19 depreciation that should be recovered for each vintage, based on the Iowa Curve
20 and the age of each vintage and the net salvage requirements. (It is noted that
21 there has been no net salvage recognized in this study). This Calculated Accrued
22 amount is based on an accrued factor that is calculated within the Gannett Fleming
23 models. However, the factors are published in a number of textbooks, including
24 *Depreciation Systems, by Frank K. Wolf and W. Chester Fitch, Iowa State University*
25 *Press, 1994*

26 **Allocated Book Reserve (Column 4)**: In total, this column represents the amount of
27 actual accumulated depreciation from the Hydro accounting system as of December

31, 2009. The accumulated depreciation was provided to Gannett Fleming at a total account level. The Gannett Fleming models then allocated the total accumulated depreciation to each vintage, based on the amount of calculated accrued as determined in Column 3. As such, each install year is assigned an amount of booked accumulated depreciation based on the percentage of each installed year calculated accrued as a percentage of the total calculated accrued.

Future Book Accruals (Column 5): Is a calculated amount for each installed year. The amount is determined by the following formula:

$$(\text{Original Cost} \times \text{Net Salvage Percentage}) - \text{Allocated Book Reserve}$$

There has been no provision for net salvage in this study.

Remaining Life (Column 6): Represents the period of time that assets related to each installation year have remaining as at December 31, 2009. In these calculations where the ASL procedure is used, the remaining life for each install year can be determined by:

$$\text{Life estimate} - (2009 - \text{Install year}) - 0.5$$

The 0.5 adjustment is made to reflect a mid-year convention for both plant additions and retirements.

Annual Accrual (Column 7): This is calculated for each install year by dividing the Future Book Accruals (Column 5) by the Remaining Life (Column 6).

Composite Remaining Life: Calculated by dividing the sum of Column 5 by the sum of Column 7.

Composite Annual Depreciation Rate: Calculated by dividing the sum of Column 7 by the sum of Column 2.