

1 Q. Re: Account D01: Please fully explain and justify the selection of a 100R4 life-curve
2 combination for Account D01 - Dams & Dykes. The response should specifically
3 address the curve fit set forth on page IV-52 of Exhibit 1 and why a longer life is not
4 appropriate. The response should also present the specific steps and corresponding
5 information and documents relied on to arrive at the proposed life-curve
6 combination.

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9 A. As indicated in the retirement rate analysis on pages IV-53 of the Gannett Fleming
10 report, this account has not been subjected to any retirement activity over the 1991
11 through 2009 time period. However, as indicated on page IV-52, the recommended
12 100-R4 Iowa curve anticipates very few retirements through this observation
13 period. As such, the recommended 100-R4 provides a reasonable fit to the
14 observed life table. Additionally, as noted in the interview notes provided in
15 response to CA-NLH-12, the dams within the Hydro system are earthen structures
16 and repaired through operating cost. However, it is the experience of Gannett
17 Fleming that earthen structures will eventually require capital upgrades to ensure
18 their integrity. As noted in the aged surviving plant provided on page V-25 of the
19 Gannett Fleming report, most of the investment in the Hydro system occurred in
20 the 1980s and as such, the recommended 100-R4 Iowa curve would not expect this
21 investment to be retired yet.

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23 A review of the average life estimates of peer Canadian utilities has ranged from 70
24 to 100 years. Gannett Fleming is also aware of an earthen dam in the Northwest
25 Territories Power System that is currently being replaced within the first 60 years of
26 its life. While newer earthen dams may be expected to have longer lives than
27 those structures constructed in the 1960s through the 1990s, the structures are

1 subjected to very strict review standards (as indicated in the operational notes
2 provided with CA-NLH-12). It is also noted that the 100 year life is an average age
3 life estimate and calculated in accordance with a very right mode curve. The 100-
4 R4 provides for a maximum life estimate of some investment to reach over 140
5 years, and that 55% of the investment will still be in service at age 100 years. At
6 this point in time, there is no evidence to suggest that earthen dams of the age of
7 the Hydro system can be expected to last beyond the ages in accordance with the
8 recommended 100-R4 Iowa curve.