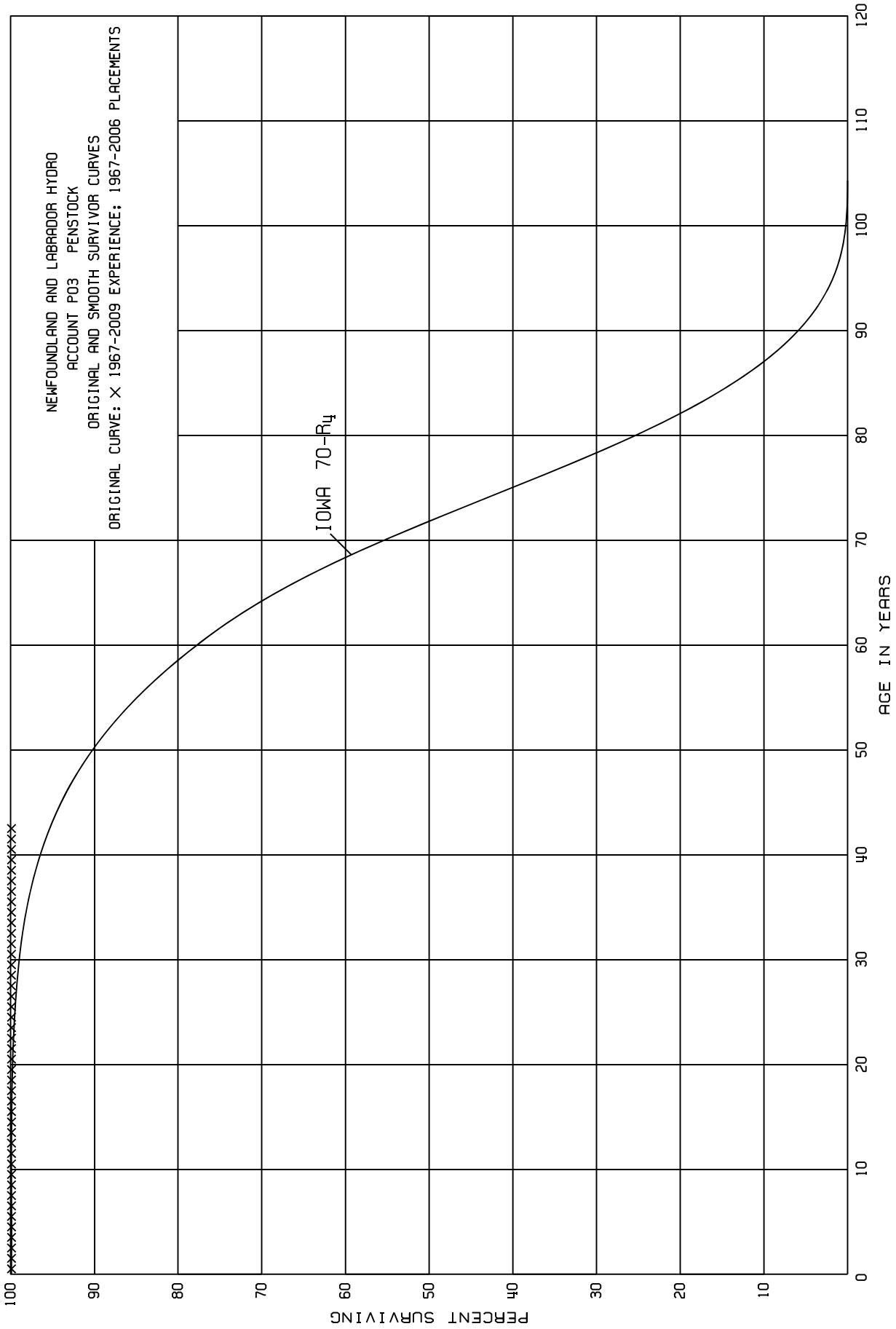
Q. Re: Account P03: Please fully explain and justify the selection of a 70R4 life-curve combination for Account P03 - Penstock. The response should specifically address the curve fit set forth on page IV-138 of Exhibit 1 (note that page IV-138 presents a 75R4) and why a longer life is not appropriate. The response should also present the specific steps and corresponding information and documents relied on to arrive at the proposed life-curve combination.

A. In responding to this Request for Information, it was noted that an incorrect Iowa curve (75-R4) was provided in the Gannett Fleming study. The correct Iowa curve (70-R4) has been included as CA-NLH-96 Attachment 1.

As indicated in the retirement rate analysis at pages IV-139 of the Gannett Fleming report, there has been no retirement activity in this account from 1991 through 2009 time period. However, the Iowa 70-R4 Iowa curve anticipates very few retirements through this observation period. As such, the recommended 70-R4 provides a reasonable fit to the observed life table. Additionally, as noted in the discussion with the operations group, these facilities have historically been maintained through operating expenditures. However, it is the experience of Gannett Fleming that the penstock structures will eventually require capital upgrades to ensure their integrity. As noted in the aged surviving plant provided at page V-70 of the Gannett Fleming report, a significant portion of investment in penstocks has occurred in the 1980s, and as such, the recommended 70-R4 Iowa curve is not consistent with this investment not after being retired.

The life estimates of peer Canadian utilities range from 60 to 100 years with most in the 60 to 75 year range, and only one peer using a life estimate of greater than 75

years. The 70-R4 provides for a maximum life estimate of some investment to reach approximately 100 years and indicates that 55% of the investment will still be in service at age 70. At this point in time, there is no evidence to suggest that penstocks can be expected to last beyond the ages in accordance with the recommended 70-R4 Iowa curve.


NEWFOUNDLAND AND LABRADOR HYDRO
ACCOUNT P03 PENSTOCK
ORIGINAL AND SMOOTH SURVIVOR CURVES
ORIGINAL CURVE: X 1967-2009 EXPERIENCE; 1967-2006 PLACEMENTS
IOWA 70-R4
PERCENT SURVIVING
AGE IN YEARS
100
90
80
70
60
50
40
30
20
10
0
10
20
30
40
50
60
70
80
90
100
110
120