

1 Q. Re: Account B01: Please fully explain and justify the selection of a 15S3 life-curve  
2 combination for Account B01 - Battery & Power Systems. The response should  
3 specifically address the curve fit set forth on page IV-6 of Exhibit 1 and why a longer  
4 life is not appropriate. The response should also present the specific steps and  
5 corresponding information and documents relied on to arrive at the proposed life-  
6 curve combination.

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9 A. As indicated in the notes from the operational meetings held on June 8, 2010 with  
10 Manager of Telecontrol, the historic retirement trends in this account are not  
11 expected to be indicative of the future expectations for the following reasons:

- 12 • Newer technology valve regulated lead acid batteries are expected to not have  
13 a life beyond 20 years.
- 14 • Even the older technology Flooded Cell batteries should not have been left in  
15 service for more than 20 years. However, historically batteries have been kept  
16 in service for too long, resulting in the systems in which these batteries to  
17 become inaccurate and unreliable. As such, the batteries are now being  
18 replaced more proactively at a younger age.

19 When comparing the existing average service life estimate of 15 years to other peer  
20 electric utilities, with the exception of Qulliq Energy, the account structures of the  
21 peer companies are not specifically componentized to the battery and battery  
22 system level to the same degree as Hydro. It is noted, however, that the one peer  
23 comparable of Qulliq Energy used a 15-R3 Iowa curve. Additionally, Mr. Kennedy  
24 has reviewed similar components through on-site tours and operational interviews  
25 with various utilities. The trends as indicated by the Manager of Telecontrol are  
26 similar to the trends witnessed by other Canadian utilities, however most other

27 utilities have not specifically componentized these assets. Generally, the battery  
28 systems are expected to last not more than 20 years.

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30 It is also noted that the systems upon which the battery systems are used have  
31 greatly evolved to a much more digital nature over the past ten years. Interviews  
32 with both the Hydro staff, and other utility staff have indicated that the battery  
33 systems now must be more reliable than legacy systems which provided support to  
34 largely analog systems.

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36 Overall, when selecting the average service life, the life estimates were primarily  
37 based on the comments from the internal experts. The fact that these comments  
38 were consistent with comments from peer utilities and the one peer that does  
39 detail this account to a similar level provided the additional support to continue to  
40 use the 15-S3 Iowa curve.