Q. Re: Account S05: Please fully explain and justify the selection of a 7SQ life-curve combination for Account S05 – Software. The response should specifically address the vintage surviving balances that exceed 7 years as set forth on page V-98 of Exhibit 1 and why a longer life is not appropriate give the number and magnitude of surviving vintages. The response should also present the specific steps and corresponding information and documents relied on to arrive at the proposed life-curve combination. Finally, provide the dollars retired with the corresponding system name and vintage year of installation that have occurred for both 2010 and 2011.

A. The selection of the 7-SQ life estimate for software was based on the judgment and experience of Mr. Kennedy, review of the peer life estimates used for this equipment and on the information regarding company practices gained through the management and operations interviews as summarized in CA-NLH-12 Attachment 1.

Gannett Fleming notes that the subject of appropriate average service life estimates for computer software applications was considered in the early 2000s after many utilities made large investments in third party software systems to deal with the Year 2000 issue. A summary is provided below of some the proceedings in which the issue of life estimates for computer equipment arose:

- In a depreciation study filed with the Alberta Department of Energy in September 2001, ENMAX Power Corporation requested approval for computer software to be amortized over a five year period. Ultimately, the department approved a 10 year period for large software installations, and a five year period for smaller software applications. In order to comply with

this directive, ENMAX chose to apply a 10 year amortization period to all computer software for 2001 and 2002. In a 2002 technical update, ENMAX requested approval for a five year amortization period for all computer software for the years 2003 through 2005 indicating that the ENMAX system software for which the Alberta Department of Energy directed a 10 year life in the 2001/2002 ENMAX Transmission System Decision, was for a third party developed accounting system software package. ENMAX indicated that it is this type of software installation that has received approvals of average service lives of approximately five years in recent applications and negotiated settlements throughout the country. The Alberta Department of Energy approved a five year amortization period for all computer software with the exemption of the Enterprise Software.

- TransCanada Pipelines in a National Energy Board of Canada Decision RH-1-2002 received approval for a five year life for software. The application, information requests, intervener evidence and the Decision did not dispute the requested five year life.
- In a 2002 Alberta Energy and Utilities Board (AEUB) Decision regarding the ATCO Affiliate transactions, a four year life for computer software was approved for the ATCO group of companies. Recently, in the ATCO Affiliate transaction hearing, the average life estimates for computer software became an issue. Specifically, the four year amortization period used by ATCO I-Tek in the determination of fair market value and in the determination of the annual license fee were debated. The AEUB, in Decision 2002-069, upheld the use of the four year life in both the determination of the fair market value and in the determination of the annual service fee to be charged to the regulated utilities. The only remaining asset for computer software of the regulated utilities is the

Customer Information system, which was internally developed over a number of years. This internally developed system has an approved average life of 10 years.

- In a General Rate Application filed by AltaLink LP on September 30, 2002 before the Alberta Energy and Utilities Board, it included a depreciation study by Gannett Fleming recommending a five year amortization period for all computer software. The five year life estimate was approved by the Alberta EUB.

All of the above applications and regulatory approvals were based on the fact that historically, large computer based software installations in utilities have been developed in-house on large mainframe computer hardware. These internally developed systems typically had long and extensive development and installation periods. These systems were rarely updated, with system maintenance being undertaken internally, and charged to operating expense. Usually after a 10 to 15 year period, large new internally developed systems were implemented. As a result, these large internally developed systems usually had service lives of approximately 10 years.

However, in recent years, the majority of these systems are now being developed by third party vendors, with little or only limited support by internal resources. This is consistent with the trends noted for Hydro software. The third party vendors normally support these systems through annual licensing contracts that do not include system enhancements. Typically, any system enhancements are implemented through new system versions offered every two to three years. The new versions introduce system enhancements requested by a number of the third

party vendor clients. These new releases are costly and require significant third party resources to implement.

The new releases to system software normally contain a significant amount of rewriting of the system functionality. Normally by the time that the implementation of a second system release is completed, a very limited amount of the original system functionality remains. Therefore, by the time an installation is five years old, the originally installed system code and functionality are replaced by new versions and the original installation should be retired.

Throughout Canada, the regulated utilities and regulators have been recognizing this trend. In the early 1990s, regulators typically approved a life of approximately 10 years for large internally development system software, and shorter lives of five to seven years for minor personal computer based software. However, in more recent applications, proposals for shorter average lives for third party system software have been approved. As Hydro has primarily moved toward using third party software, it was determined that a life in excess of seven years would not be appropriate.

The aged plant balances as shown at page V-98 of the Gannett Fleming report indicate plant surviving at ages in excess of seven years. These plant balances represent investment that should be retired but for which retirement orders have not been issued. It has been the experience of Mr. Kennedy that these types of general plant accounts are often overlooked in the retirement order process, resulting in unretired investment remaining in the plant accounting ledgers.

Review of the average service life estimates of the peer group for this equipment indicates life estimates ranging from five to 10 years, with most peers using five

years. Additionally, all of the peers use amortization accounting for this account. Accordingly, the recommended 7-SQ curve is consistent with both the approach used by the peers and the approved life estimates.

There have been no retirements from account S05 in 2010 or 2011.