

IN THE MATTER OF the Electrical Power
Control Act, RSNL 1994, Chapter E-5.1 (the
EPCA) and the Public Utilities Act, RSNL 1990,
Chapter P-47 (the Act) as amended, and their
subordinate regulations; and

IN THE MATTER OF an Application
by Newfoundland and Labrador Hydro,
pursuant to Section 68 of the Act,
for the approval of changes in depreciation
methodology and asset service lives.

REVISED

**Requests for Information
From Newfoundland and Labrador Hydro**

**To: Mr. Jacob Pous
Witness for the Consumer Advocate
NLH-CA-1 to NLH-CA-50
and**

**To: Ms. Patricia Lee
Witness for the Industrial Customers
NLH-IC-1 to NLH-IC-32**

October 15, 2012

Newfoundland and Labrador Hydro, Applicant

Newfoundland and Labrador Hydro Depreciation Methodology

Requests for Information from Hydro To Consumer Advocate

Mr. Jacob Pous

GENERAL

NLH-CA-1 Does Mr. Pous agree with Hydro's recommendation to replace the sinking fund method of depreciation with the straight line method?

Reference: On page 5, lines 21 to 22, Mr. Pous states: "Appendix A also includes a list of proceedings in which I have previously presented testimony."

NLH-CA-2 Please specifically indicate the testimony that has been prepared by Mr. Pous over the past ten-year period that has been entered on behalf of a rate regulated utility, a Public Service Commission or intervener group. If Mr. Pous has prepared and filed a depreciation study over the past ten years, please provide a copy of the study[ies].

NLH-CA-3 Please provide a summary of any research undertaken by Mr. Pous into any Canadian GAAP. Please file any professional papers authored, or copies of presentations made, by Mr. Pous on the topic of Canadian GAAP.

NLH-CA-4 Please provide a summary of the professional education of Mr. Pous with respect to International Financial Reporting Standards (IFRS). Please specifically identify any courses taken by Mr. Pous on the topic of IFRS.

NLH-CA-5 Please file any professional papers authored, or copies of presentations made, by Mr. Pous on the topic of the impact of implementation of IFRS on rate regulated entities.

NLH-CA-6 Please specifically indicate if Mr. Pous is being presented as an expert witness on the topics of Canadian GAAP or the IFRS.

Reference: On page 7, lines 4 to 6, Mr. Pous states: "Based on available information, I recommend limited adjustments to the average service life ("ASL") and/or retirement dispersion pattern proposed for only 10 of the 136 categories of accounts identified in the 2011 study."

NLH-CA-7 If Mr. Pous has incorporated into his recommendations material or data other than that entered into evidence by Hydro, please provide a copy of all such other information.

Reference: In its “Newfoundland and Labrador Hydro 2009 Annual Review” (attached), the Board’s financial consultant, Grant Thornton, LLP, reviewed both the sinking fund and straight line methods of depreciation. Their report at page 42 states “In completing our procedures, we recalculated depreciation for both methods on a test basis and compared the estimated service lives used in the calculations to the 1998 Depreciation Study. We also reviewed the interest rates used in calculating sinking fund depreciation for reasonableness.” No significant discrepancies were noted in the interest rates used and Grant Thornton, LLP states that “depreciation expense for 2009 does not appear unreasonable.”

In light of the fact that the Board has approved Hydro’s depreciation policy in Order No. P.U. 7(2002–2003) and the Board’s auditors have verified the calculations please respond to the following requests concerning Mr. Pous’ evidence:

NLH-CA-8 Page 15, lines 10 to 12; “When debt was retired, rolled over, or revolved, Hydro should have revised its sinking fund calculation in order to maintain the underlying principle for sinking fund depreciation.” Have any orders subsequent to P.U. 17(2002-2003) varied Hydro’s approved depreciation methodology to revise its sinking fund calculation in the manner to which Mr. Pous refers?

NLH-CA-9 Page 27, lines 16 to 17; “...Hydro’s arbitrary and unilateral decision to cease the booking of depreciation when it believes an item becomes fully depreciated...”. Have any orders subsequent to P.U. 17(2002-2003) varied Hydro’s approved depreciation methodology to revise its depreciation calculation in a manner that permits continuing booking depreciation when an item becomes fully depreciated as outlined by Mr. Pous?

Reference: On page 8, lines 20 to 26, Mr. Pous describes the number of categories used by Hydro as “extremely excessive”.

NLH-CA-10 Please provide a listing of the categories used by other Canadian utilities which have a similar asset base as Hydro, particularly those with the varied types of generation operated by Hydro, as well as transmission and distribution assets.

NLH-CA-11 Please describe, in detail and with supporting calculations, the impacts Mr. Pous believes arise due to the quantity of categories used by Hydro.

Reference: Mr. Pous’ evidence on page 12, lines 19 to 20.

NLH-CA-12 Please confirm that Hydro records 100% of its investment less net salvage values through the use of depreciation and recording of a gain or loss on disposal. If not, please provide supporting calculations.

Reference: On page 13, footnote 7, Mr. Pous’ evidence notes that “Hydro modified the sinking fund method by applying the rate to the net plant or depreciated plant rather than the original cost.”

NLH-CA-13 In Hydro’s response to CA-NLH-251 it is stated “Hydro uses the modified sinking fund method from Public Utility Depreciation Practices published by the National Association of Regulatory Utility Commissioners (NARUC)”. Would Mr. Pous

agree that the use of these words from Hydro's response is more indicative of the modified sinking fund method being a recognized method of depreciation rather the words "Hydro modified the sinking fund method" used in the footnote, which could imply that Hydro, itself, developed the method of sinking fund it uses?

Reference: In his evidence at page 15, lines 14 to 15, Mr. Pous states "When debt is refinanced or retired the interest rate in the sinking fund formula must also change in order to maintain the new constant combination of cost of debt retirement and depreciation expense."

NLH-CA-14 What interest rate would Mr. Pous recommend be used in the sinking fund formula after debt is refinanced?

NLH-CA-15 Outline the pros and cons of using:
a) The cost of the replacement debt;
b) The company's weighted average cost of capital;
c) The company's weighted average cost of capital minus the cost of any specific debt issues already assigned to sinking fund assets; and
d) The rate recommended by Mr. Pous in response to NLH-CA-14 if different than one of the methods in a) to c).

NLH-CA-16 How often would Mr. Pous recommend that the sinking fund rate be updated?

Reference: As outlined in response to CA-NLH-254, Hydro's hydraulic assets date back to 1967 and that "The practice has been ...that once the sinking fund rate is established for an asset, that rate remains in place for the life of the asset."

In his evidence at page 15, lines 22 to 24, Mr. Pous states "Unfortunately, the total justification, substantiation, and documentation Hydro chose to present in support of its burden of proof rests on one word in the final sentence to its response to a data request. That singular word is "practice..."

NLH-CA-17 Does Mr. Pous accept that it is a Board-approved practice? If Mr. Pous does not accept that it is a Board-approved practice, please provide all documented justification that supports that response.

Reference: On page 16, lines 26 to 28 Mr. Pous states "...Hydro recognizes only \$47.50 of depreciation expense on an annual basis for 2009. This miniscule amount is due to its "practice" of retaining the original interest rate over the life of the investment"

NLH-CA-18 Does Mr. Pous acknowledge that the "miniscule" amount of \$47.50 is not solely due to Hydro's "...practice" of retaining the original interest rate over the life of the investment" as is implied in this statement?

NLH-CA-19 Using straight line depreciation of \$12,087.46 per month as shown on page 16, line 17 of Mr. Pous' evidence, for the 293 months that the Cat Arm Dam 4 was in service to December 31, 2009, would result in \$3,541,625.78 accumulated

depreciation. Mr. Pous has stated that updating the WACC rate would result in \$24,986.18 based on the information outlined in this section of the evidence. Does Mr. Pous acknowledge that updating the interest rate as proposed only adjusts $((\$24,986.18 - \$351.32) / \$3,541,625.78)$ 0.696% of amount that would have otherwise been accumulated under straight line depreciation?

NLH-CA-20 Does Mr. Pous agree that if Hydro's recommendation to switch to the straight line method, from sinking fund, is approved, then such resulting "miniscule" amounts will no longer occur?

Reference: In his evidence at page II-4, Mr. Kennedy states "The United States Security Exchange Commission (SEC) recognized that the sinking fund method does not result in an appropriate allocation of depreciation expense and mandated in the early 1980's that the sinking fund method could not be used by publicly traded companies." Subsequent to when Mr. Pous commenced performing depreciation analyses approximately 40 years ago and prior to the SEC mandating that the sinking fund method could not be used by publicly traded companies.

NLH-CA-21 Please outline in detail:

- a) A list of all US and Canadian utilities which used the sinking fund method of depreciation during that period;
- b) Indicate, for each utility, whether or not the original sinking fund rate was maintained throughout the life of the assets or until the sinking fund methodology was abandoned; and
- c) If the original sinking fund rate was not maintained throughout the life of the assets, please outline the basis for the revised rate. Please provide all documentation including any related regulatory orders.

Reference: Page 19, lines 2 to 3, "...Hydro even uses a mix of sinking fund and straight line depreciation within the same account."

NLH-CA-22 In making the statement, did Mr. Pous consider Hydro's response to IC-NLH-74 which outlines that hydro generators, for example, are depreciated using sinking fund and others using straight line and that the depreciation policy in this regard was approved by the Board in Order No. P.U. 7(2002-2003)?

Reference: Mr. Pous' evidence page 19, lines 5 to 7

NLH-CA-23 In light of the approval granted by the Board in Order No. P.U. No. 7(2002-2003), on what basis is the answer "No" given as an answer to the question "Did Hydro seek Board approval for which assets were subjected to the sinking fund method?"

Reference: Page 21, lines 12 to 14.

NLH-CA-24 Please confirm that the nation referred to in “National Association of Regulatory Commissioners” is the United States, and that the US has not yet implemented IFRS.

Reference: IAS 16 (68) states that "the gain or loss resulting from the derecognition of an item of property, plant and equipment shall be included in profit or loss when the item is derecognised."

On page 21 of his evidence, Mr. Pous has provided an excerpt from the NARUC Publication regarding group depreciation.

NLH-CA-25 Has Mr. Pous considered the IFRS requirement in IAS 16(68) in his recommendations regarding the treatment of retirement of assets from the group, more specifically the debiting of the cost of the asset to the accumulated depreciation account and the crediting to the asset account with no gain or loss being recognized?

NLH-CA-26 Without specific information regarding the cost of the specific asset, how does Mr. Pous suggest valuing such transactions?

Reference: On page 24, lines 7 to 10, Mr. Pous states that “even though plant remains in service and a Board-approved depreciation rate exists of a particular asset, Hydro will ignore such facts, and based on its unilateral opinion that an asset has become fully accrued, it will in effect change the depreciation rate to zero (0).”

NLH-CA-27 Please confirm that if a regulator approves a service life in years on a unit basis rather than a depreciation rate, that a utility would logically stop depreciating its’ assets once they reached the end of the approved service life.

Reference: Evidence, page 28, lines 25 to 28.

NLH-CA-28 Mr. Pous states that “In this process, neither the utility nor the customers are permitted to retroactively true-up prior over- or under recovered revenue requirements with the exception of depreciation expense.” With regard to the jurisdiction of Newfoundland and Labrador, please provide all legislative, regulatory or other references that indicate depreciation expense can be retroactively trued up.

Reference: Page 27, lines 8 to 13.

NLH-CA-29 Hydro has an integrated asset record system, which includes financial data and maintenance data, including work order issuance, associated with the same asset record. Does Mr. Pous recognize that asset records may be used for other purposes, such as maintenance data retention?

NLH-CA-30 Hydro is required to perform five separate cost of service studies for its systems: Island Interconnected, Labrador Interconnected, Island Isolated, Labrador Isolated and L’Anse au Loup. Separate rate base and revenue requirements are

required for each system. Please advise how this use of the asset records has been factored into Mr. Pous' recommendation on group accounting.

Reference: Page 29, lines 21, 25, states: "For example, if Hydro recovers \$100 for a \$100 investment and ceases the booking of depreciation to the accumulated provision for depreciation, but later incurs \$10 of cost of removal when the asset actually retires, it will book such amounts to the accumulated provision for depreciation and once again need to establish a depreciation expense necessary to recover that amount from future customers."

NLH-CA-31 Please confirm that the above example quoted by Mr. Pous in his evidence is the manner in which Mr. Pous understands that Hydro recovers its cost of retirement of assets. If Mr. Pous cannot provide such confirmation, please outline Mr. Pous' understanding of the method used for the collection of net salvage used by Hydro.

Reference: Page 37, lines 20 to 21.

NLH-CA-32 Please provide the Canadian standard used by the other Canadian utilities to which Mr. Pous refers.

Reference: Pages 37 through 39, discusses the use of a peer group in forming the depreciation parameter recommendations.

NLH-CA-33 Please provide a list of regulated Canadian Companies that Mr. Pous would view as being relevant peers.

NLH-CA-34 Does Mr. Pous agree that company policies regarding capitalization limits, retirement policies, retirement pricing policies, company maintenance practices, age and technology of equipment replacement, and terrain could all play a role in the average service life characteristics of a utility?

NLH-CA-35 Please provide a summary of the average service life recommendations entered into evidence by Mr. Pous related to electric utilities. The summary should indicate by account the specific recommendation of Mr. Pous.

ACCOUNT ANALYSIS

Reference: Pages 39 through 42 on Mr. Pous' evidence discusses the basis of the average service life recommendation of Mr. Pous related to Account B01 – Battery and Power systems:

NLH-CA-36 Please provide copies of all evidence of Mr. Pous entered into a regulatory proceeding over the past ten-year period relating to the life estimates of battery systems. Please include the life estimate of the Applicant, and identify any changes as proposed by Mr. Pous.

NLH-CA-37 In making the recommendation for a 23-L4 Iowa curve, please provide all reasons outlining why Mr. Pous did not recommend a 20- or 25-year life.

NLH-CA-38 In making the recommendation for a 23-L4 Iowa curve; please provide the specific weighting utilized by Mr. Pous for each factor considered in the development of the recommended Iowa curve.

Reference: Evidence of Mr. Pous, pages 42 to 46 regarding Account F04 – Footings and Foundations.

NLH-CA-39 Please provide copies of all evidence of Mr. Pous entered into a regulatory proceeding over the past ten-year period relating to the life estimates of electric utility footings and foundations. Please include the life estimate of the Applicant, and identify any changes as proposed by Mr. Pous.

NLH-CA-40 At page 43, lines 16 and 17, Mr. Pous claims that “the investment in this account appears to consist of concrete foundations and concrete pillars. From this standpoint, one would expect a much longer ASL than 50 years.” Please provide all supporting documents and bases for this specific comment.

NLH-CA-41 At page 45, line 8, Mr. Pous indicates that concrete foundations and pillars normally can be expected to last 80, 90 or in excess of 100 years. Please provide all supporting documents and bases for this specific comment.

NLH-CA-42 Please provide the specific weighting utilized by Mr. Pous of each factor considered in the development of the recommended Iowa curve.

Reference: Evidence of Mr. Pous, pages 46 to 55, and pages 64 to 66 regarding Account G03 – Generators, Account P03 – Penstocks; Account P10 – Powerhouses; and W01- Water Regulating Structures.

NLH-CA-43 For each account please provide copies of all evidence of Mr. Pous entered into a regulatory proceeding over the past ten-year period relating to the life estimates of the group. Please include the life estimate of the Applicant, and identify any changes as proposed by Mr. Pous.

NLH-CA-44 In making the recommendation for changes in the Iowa curve proposed by Hydro, please provide the specific weighting utilized by Mr. Pous of each factor considered in the development of the recommended Iowa curve for each account identified above.

Reference: Evidence of Mr. Pous, pages 55 to 58 regarding Account R12 – Right of Way.

NLH-CA-45 Please provide copies of all evidence of Mr. Pous entered into a regulatory proceeding over the past ten-year period relating to the life estimates of electric utility rights of way. Please include the life estimate of the Applicant, and identify any changes as proposed by Mr. Pous.

NLH-CA-46 Please specifically identify the asset that Mr. Pous views as being depreciated in a utilities right of way account.

NLH-CA-47 Does Mr. Pous view that a contractual extension for rights of way should always be assumed or that the right of way will always be extended after the lease for right of way has expired?

Reference: Expert evidence of Mr. Pous, page 61 regarding Account S05 – Software.

NLH-CA-48 At page 61, lines 12 through 24, Mr. Pous provide three examples of SAP systems that are being depreciated over a period of ten years or longer. Is it Mr. Pous' believe that the accounting systems used by Hydro are the SAP systems?

NLH-CA-49 Please provide Mr. Pous' understanding of the differences in system architecture between a J.D. Edwards system, a Powerplan system and a SAP system. Please provide comment on the manner in which the differing system architecture may impact the life estimates of each of the three systems identified above.

NLH-CA-50 Please provide Mr. Pous' understanding of the magnitude of cost associated with a system implementation for each of the three major accounting systems identified in the two previous questions.

Newfoundland and Labrador Depreciation Methodology

Requests for Information from Hydro To Industrial Customers

Ms. Patricia Lee

GENERAL

- NLH-IC-1 Does Ms. Lee agree with Hydro's recommendation to replace the sinking fund method of depreciation with the straight line method?
- NLH-IC-2 Please provide a summary of any research undertaken by Ms. Lee into any Canadian GAAP. Please file any professional papers authored, or copies of presentations made by Ms. Lee on the topic of Canadian GAAP.
- NLH-IC-3 Please provide a summary of the professional education of Ms. Lee related to IFRS. Please specifically identify any courses taken by Ms. Lee on the topic of IFRS.
- NLH-IC-4 Please file any professional papers authored, or copies of presentations made by Ms. Lee on the topic of the impact of implementation of IFRS on rate regulated entities.
- NLH-IC-5 Please specifically indicate if Ms. Lee is being presented as an expert witness on the topics of Canadian GAAP or IFRS.
- NLH-IC-6 Would Ms. Lee view that two fully qualified depreciation experts could review the same information and present differing depreciation parameters that could both be considered as a reasonable expectation of the average service life characteristics?

Reference: Expert evidence of Patricia S. Lee, page 2, states "The determination of appropriate depreciation lives and salvage values requires an understanding of the plans, needs and pressures facing an individual company. It also requires knowledge of the various types of plant under study or review and the various factors impacting the depreciation parameters such as competition and technological advancements."

- NLH-IC-7 Please provide all documentation utilized by, or considered by Ms. Lee to determine the impact of competitive influences facing Hydro. If Ms. Lee does not believe that Hydro is facing any competitive influences, please specifically state that assumption.
- NLH-IC-8 Does Ms. Lee believe that the conversion of the Canadian Generally Accepted Accounting Principles to the IFRS would cause pressure on Hydro related to its depreciation policies and practices? If yes, please specifically identify the pressures that Ms. Lee believes are caused by the conversion to IFRS.

Reference: Expert evidence of Patricia S. Lee, page 3, states: “I have proffered testimony in telecommunications, electric and gas cases before the Public Service Commission.”

NLH-IC-9 Please specifically indicate the testimony that has been prepared on behalf of a rate regulated utility rather than on behalf of the Public Service Commission. Please provide a copy of the any depreciation studies Ms. Lee has prepared and filed on behalf of an applicant utility.

Reference: Expert evidence of Patricia S. Lee, page 4, states: “I will provide examples where the Company has understated its reserve and overstated its proposed depreciation rates and resulting estimated expenses.”

NLH-IC-10 Does Ms. Lee accept that Hydro has calculated its depreciation in a manner approved by the Board? If not, please provide all documented justification that supports that response.

NLH-IC-11 In its “Newfoundland and Labrador Hydro 2009 Annual Review”, the Board’s financial consultant, Grant Thornton, LLP, reviewed both the sinking fund and straight line methods of depreciation. Their report at page 42 states “In completing our procedures, we recalculated depreciation for both methods on a test basis and compared the estimated service lives used in the calculations to the 1998 Depreciation Study. We also reviewed the interest rates used in calculating sinking fund depreciation for reasonableness.” No significant discrepancies were noted in the interest rates used and Grant Thornton, LLP states that “depreciation expense for 2009 does not appear unreasonable.” Does Ms. Lee accept that Hydro’s depreciation expense calculations have been reviewed and confirmed by the Board’s auditors?

Reference: Expert evidence of Patricia S. Lee, page 6 where a series of five general observations are made.

NLH-IC-12 The first observation indicates that “The study is devoid of any support or justification for the proposed life/curve combinations”. Please provide all references to a published Minimum Filing Requirement document or regulation specifically applicable to rate regulated utilities within the Province of Newfoundland outlining depreciation study filing requirements.

NLH-IC-13 The third observation indicates that “... the company plans to apply the group depreciation rate to each unit of property within the group account. This is fundamentally inconsistent with the meaning of the group depreciation procedure”. Please indicate if, to the knowledge of Ms. Lee, there are any additional rate regulated Canadian utilities that are following this same practice. If Ms. Lee is not aware of any Canadian utilities following this practice, please specifically state this assumption.

NLH-IC-14 The fourth observation indicates that “Hydro incorrectly ceases depreciation on an individual asset when it becomes fully depreciated...” Please indicate if, to the

knowledge of Ms. Lee, there are any additional rate regulated Canadian utilities that are following this same practice. If Ms. Lee is not aware of any Canadian utility following this practice, please specifically state this assumption.

NLH-IC-15 The fourth observation indicates that “Hydro incorrectly ceases depreciation on an individual asset when it becomes fully depreciated...” Does Ms. Lee accept that Hydro ceases depreciation on an individual asset when it becomes fully depreciated as approved by the Board? If not, please provide all documented justification that supports that response.

Reference: On page 8, Ms. Lee states “...it appears as though Hydro calculates the annuity portion of the formula correctly but has not been adding the interest on the reserve for the total monthly or annual depreciation expense.”

In response to CA-NLH-251, Hydro provided the formula and the detailed depreciation calculation for the Cat Arm Dam 4 asset which shows this 100 year asset is fully depreciated in period 1200 when accumulated depreciation reaches \$14,504,952.42. (An Excel spreadsheet has subsequently been provided.) Interest costs related to funding this asset form a separate component of the revenue requirement.

NLH-IC-16 Please provide a similar detailed depreciation calculation for the Cat Arm Dam 4 asset using the method advocated by Ms. Lee and the basis that these calculations would have been applicable in this jurisdiction rather than those that were used. Please provide the related Excel spreadsheet with all formulas intact.

Reference: On page 9, Ms. Lee indicates Hydro should be asked to review its records and provide the Board with options regarding a correction.

NLH-IC-17 Please provide a list of all regulatory decisions requiring a regulated utility to provide its regulator with similar options when the utility was calculating its depreciation in accordance with the methodology approved by its regulator.

Reference: On page 11, Ms. Lee indicates that Hydro has understated its’ depreciation expense due to restating original cost to net book value and moving from sinking fund depreciation to a remaining life technique.

NLH-IC-18 Would Ms. Lee agree that if Hydro depreciated its’ assets based on the remaining life in years (months) rather than using depreciation rates that there would be no change in depreciation expense. For example, the original cost of 100,000 and a reserve of \$20,000 depreciated over a remaining life of 50 years would give the same depreciation expense as 80,000 depreciated over a remaining life of 50 years.

Reference: Expert evidence of Patricia S. Lee, page 19 indicates that under Generally Accepted Accounting Principles that “where an average life and depreciation rate is established for the account, the measure of recovery is the reserve for the total account, not for each individual asset within the account.” This comment was in reference to the specific topic relating to the cessation of depreciation when an asset is fully recovered.

- NLH-IC-19 In making the above statement, was Ms. Lee referring to Canadian GAAP, US GAAP or IFRS?
- NLH-IC-20 IAS 16 (68) states that "the gain or loss resulting from the derecognition of an item of property, plant and equipment shall be included in profit or loss when the item is derecognised." Has Ms. Lee considered the IFRS requirement in IAS 16(68) in this comment regarding the treatment of retirement of assets from the group, more specifically the debiting of the cost of the asset to the accumulated depreciation account and the crediting to the asset account with no gain or loss being recognized?
- NLH-IC-21 Without specific information regarding the cost of the specific asset, how does Ms. Lee suggest valuing such transactions?

ACCOUNT ANALYSIS

Reference: Expert evidence of Patricia S. Lee, pages 23 to 25 regarding Account G03 – Generators.

- NLH-IC-22 Please provide copies of all evidence of Ms. Lee entered into a regulatory proceeding over the past ten-year period relating to the life estimates of electric generators. Please include the life estimate of the Applicant, and identify any changes as proposed by Ms. Lee.
- NLH-IC-23 In making the recommendation for a 70-S4 Iowa curve, please provide all reasons outlining why Ms. Lee did not recommend a 75-, 80- or 85-year life.
- NLH-IC-24 In making the recommendation for a 70-S4 Iowa curve, please provide the specific weighting utilized by Ms. Lee of each factor considered in the development of the recommended Iowa curve.

Reference: Expert evidence of Patricia S. Lee, pages 25 to 28 regarding Account P03 – Penstocks.

- NLH-IC-25 Please provide copies of all evidence of Ms. Lee entered into a regulatory proceeding over the past ten-year period relating to the life estimates of hydro-electric generation station penstocks. Please include the life estimate of the Applicant, and identify any changes as proposed by Ms. Lee.
- NLH-IC-26 Please indicate the number of depreciation studies reviewed by Ms. Lee that included a depreciation recommendation for penstocks.
- NLH-IC-27 At page 26 of the evidence of Ms. Lee, Avista Utilities are provided as an example of a utility that has penstocks that have been in service for 100 years and is only now having the penstocks relined. Please provide a copy of the Avista depreciation study referenced by Ms. Lee. Please also provide any other examples of similar circumstances known to Ms. Lee.

- NLH-IC-28 At page 27 of her evidence, Ms. Lee indicates that it has been demonstrated that penstocks can reasonably be expected to experience a life of more than 100 years. Please provide all support that demonstrates this assertion.
- NLH-IC-29 In making the recommendation for an 80-S4 IOWA curve, please provide the specific weighting utilized by Ms. Lee of each factor considered in the development of the recommended IOWA curve.
- Reference: Expert evidence of Patricia S. Lee, pages 28 to 32 regarding Account P10 – Powerhouse**
- NLH-IC-30 Please provide copies of all evidence of Ms. Lee entered into a regulatory proceeding over the past ten-year period relating to the life estimates of hydro-electric generation station powerhouses. Please include the life estimate of the Applicant, and identify any changes as proposed by Ms. Lee.
- NLH-IC-31 At page 30 of the evidence of Ms. Lee, Ms. Lee states that the life of a concrete or steel powerhouse should be expected to live far longer than a brick structure. Ms. Lee further suggests that given proper construction and maintenance, brick powerhouses are expected to experience lives in the range of 50 years to 75 years. With regard to these statements please provide the following:
- a) All documentation and support relied upon by Ms. Lee in providing the opinion that concrete or steel powerhouses should be expected to live longer than brick powerhouses.
 - b) Specifically identify what building practices would be considered as “proper construction”
 - c) Specifically identify what maintenance practice would be considered as proper maintenance”.
- NLH-IC-32 In making the recommendation for an 85-R3 IOWA curve, please provide the specific weighting utilized by Ms. Lee of each factor considered in the development of the recommended IOWA curve.