



Topic: Connection Process

Reference: Section 6.6, Paragraph 413, Page 102 of 268

Preamble: The AESO states that the new connection process will provide significant improvements, streamlining, and clarification to the system access service request process.

Request:

Please confirm that Demand Transmission Service customers will continue to have the option of having the AESO prepare connection proposals. If confirmed, how will the AESO recover the costs of connection proposals prepared for DTS customers? If not confirmed, please explain.

Response:

Confirmed. As stated in subsection 5(1) of section 4 of the proposed tariff, "A market participant...may work with the owner of the transmission facility or other parties to develop the connection proposal," and other parties may include the AESO.

The costs incurred by the AESO in preparing these proposals will form part of the AESO's administrative costs, approved by the AESO Board through the budget review process discussed in section 2.1 (pages 10-14) of the application and recovered through the interconnection charge in Rate DTS.

Topic: Requested Relief Regarding Future Tariff Applications

Reference: Paragraph 28, Section 1.3, Page 8 of 268
Paragraphs 580, 589-591, Section 8.1, Pages 259-261 of 268

Preamble: In part (d) of paragraph 28 the AESO seeks:

“approval of the approach proposed to update rate and investment levels in annual filings, although such filings would be subject to their own review and approval processes; and...”

The UCA is seeking to understand the full nature of the requested relief sought, and the basis for the AESO’s request.

Request:

- (a) Please confirm that the AESO is not requesting approval that “filing comprehensive applications no more frequently than perhaps every three years would be a more reasonable expectation” (paragraph 580).
- (b) Please confirm that approval of the relief requested regarding the annual update process would not constrain or limit the Commission in reviewing a future tariff application. If confirmed, please explain why the AESO considers approval of the requested relief regarding the annual tariff update process necessary or appropriate. If not confirmed, please explain in detail.

Response:

- (a) Confirmed. The quoted phrase was intended to provide context for the AESO’s request.
- (b) Confirmed. As discussed in section 8.1 (page 261) of the application, approval of the annual tariff update methodology would allow a straightforward and formulaic update of the rates and investment levels and accordingly facilitate an efficient regulatory review process. The AESO considers that an update prepared in accordance with an approved methodology should not warrant material debate in a regulatory proceeding. The AESO also suggests that such an update might eventually be considered a compliance filing and approved without review if no objections were received from stakeholders.

Topic: Transmission Cost Causation Studies

Reference: Paragraph 597, Section 8.2, Page 261 of 268

Preamble: The AESO indicates that significant bulk transmission system facilities are expected to be constructed over the next several years and that an update to the transmission capital cost causation study will likely be required when these bulk system facilities begin to be reflected in the TFO tariffs.

Request:

- (a) Is the AESO aware of any legislative provision that could result in the cost of new transmission facilities (and in particular the cost of Critical Transmission Infrastructure as defined in the *Electric Utilities Act*) being reflected in the TFO tariffs prior the facilities being completed? If so, please explain.
- (b) If the next transmission capital cost causation study results in a material change in the functionalization or classification of capital-related costs, would the AESO agree that design of the AESO's rates should be reviewed? If not, please explain giving all reasons.
- (c) Would the AESO agree that the next transmission capital cost causation study should be reviewed by the Commission before the new bulk system facilities have a material impact on the total transmission revenue requirement? If not, please explain giving all reasons.

Response:

- (a) Sections 39, 40, and 41 of the *Transmission Regulation* address the recovery by a TFO of pre-construction costs, assistance costs, and other secondary costs related to, among other things, Commission-approved applications; ISO needs identification documents; and ISO directions. As well, costs related to new transmission facilities are generally included in construction work in progress when a TFO determines its revenue requirement, and therefore may affect TFO tariffs prior to the facilities being completed.

The AESO is not aware of legislative provisions that specifically apply to the recovery of the costs of critical transmission infrastructure prior to those facilities being completed. The AESO notes in particular that, inasmuch as provisions of sections 39 and 40 of the *Transmission Regulation* apply to Commission-approved applications and ISO needs identification documents, those provisions may not apply to critical transmission infrastructure projects.

In any case, the costs included in a TFO tariff would be approved by the Commission through a regulatory review of an application prepared by the TFO, and the ISO would not generally be involved in determining how or when those costs are determined.

- (b) The AESO agrees that the functionalization and classification of capital-related costs should be reviewed through an update to the transmission cost causation study, as discussed in section 8.2 (pages 261-262) of the application. The AESO does not foresee a need to review other aspects of the AESO's rate design at that time. The current rate design is based on principles and determinations established in recent tariff decisions, and the AESO considers that those principles and determinations would generally not be affected by changes to the functionalization and classification of capital-related costs.
- (c) Agreed, as discussed in section 8.2 (pages 261-262) of the application. The AESO considers an update to the transmission cost causation study should be prepared for the ISO tariff application which proposes rates that will likely apply in the years when new bulk system facilities would materially impact the functionalization and classification of wires costs.

Topic: Transmission O&M Cost of Service Study

Reference: Appendix C, Page 13

Preamble: The costs of the system control centre were functionalized based on the number of lines and transformers in service.

Request:

- (a) Please discuss the merits of also including the number of capacitor banks in service in the functionalization of control centre costs.
- (b) Please update Table 8 on page 13 of Appendix C to include lines, transformers and capacitor banks in service in the functionalization of control centre costs.

Response:

- (a) The addition of switchable reactive power devices (capacitors and reactors) has some merit in that these devices are switched in and out by operators as required by system conditions. On the other hand, the requirement for reactive power devices changes over time as load and system configuration changes. The addition of a new transmission line to reinforce an area of the transmission system reduces (or eliminates) the requirement for a capacitor bank at a substation. Therefore, reactive power devices may not provide a stable allocator as system conditions change.

On balance, however, since switching reactive power devices is completed by system control centre operators, there is merit in including these devices as elements. Therefore, a revised *Appendix D - Transmission O&M Cost Workbook* has been prepared and is provided with these information responses. The revised workbook includes all the upgrades that were noted through the process of responding to information requests, including:

- removal of tabs that were working sheets prior to the Table of Contents;
 - correction in Total Elements in AL Sch 5.1 ALL:AL-8;
 - correction of Field Operations FTE in AL Sch 5.1 ALL:AL-10;
 - correction of link to Isolated Generation Operation and Maintenance Cost in AT Sch 5.1; and
 - addition of reactive power devices to elements (capacitors and reactors) as discussed above.
- (b) The TFOs currently have 9 reactive power devices connected to 240 kV busses (functionalized as bulk system) and 72 connected to 138 kV busses (functionalized as local system). The impact of adding these as elements is shown in Attachment UCA.AESO-004 (b). The following extract from that workbook shows the impact of adding reactive power devices to the number of elements.

Weighted Capital and Non Capital Addition of Reactive Devices as Elements	Bulk System	Local System	POD	Totals
Demand Related	28.1%	17.5%	17.6%	63.2%
Energy Related	6.4%	4.8%	2.7%	13.8%
Customer (POD)	<u>0.0%</u>	<u>0.0%</u>	<u>23.0%</u>	<u>23.0%</u>
Totals	34.5%	22.2%	43.3%	100.0%

Weighted Capital and Non Capital Base Case	Bulk System	Local System	POD	Totals
Demand Related	28.1%	17.4%	17.7%	63.1%
Energy Related	6.4%	4.7%	2.7%	13.8%
Customer (POD)	<u>0.0%</u>	<u>0.0%</u>	<u>23.0%</u>	<u>23.0%</u>
Totals	34.5%	22.1%	43.4%	100.0%



Topic: Transmission O&M Cost of Service Study

Reference: Appendix C, Page 10

Preamble: G&A costs are functionalized and classified in the same proportion as O&M costs.

Request:

Please discuss the merits of functionalizing and classifying G&A costs in the same proportion as the capital-related costs, or in the same proportion as the sum of the capital-related and O&M costs.

Response:

Please refer to information response AUC.AESO-002.

Topic: Transmission O&M Cost of Service Study

Reference: Appendix C, Pages 20-22

Preamble: The recommended prepaid O&M charge of 14.5% is based on the present value over 20 years of the total O&M costs divided by the RCN of the electric transmission system.

Request:

- (a) Please confirm that annual structure payments and linear and property taxes were not included in the derivation of the 14.5% prepaid O&M charge. If confirmed, please explain why annual structure payments and linear and property taxes should be excluded from the derivation of the prepaid O&M charge. If not confirmed, please explain in detail.
- (b) Please provide the impact on the 14.5% prepaid O&M charge if the derivation of the prepaid O&M charge also included (i) annual structure payments; (ii) linear and property taxes; and (iii) both annual structure payments and linear and property taxes.
- (c) Please explain why the G&A costs that are directly related to O&M costs, such as staff expenses, should be excluded from the derivation of the prepaid O&M charge.

Response:

- (a) Confirmed. Linear taxes and annual structure payments were considered capital-related in the *Transmission O&M Cost Study*. From the perspective of incremental costs associated with incremental system facilities, linear taxes and annual structure payments would generally be considered incremental costs.

However, linear taxes and annual structure payments would be disproportionately overrepresented if included in the calculation of incremental costs of connection project facilities. Linear taxes and annual structure payments relate to transmission lines and not substations, with the following considerations.

- Transmission lines comprise about 56% of the RCN value of AltaLink and ATCO Electric property as summarized on the “Summary” sheet in the System RCN Multiplier workbook provided as Appendix E to the application.
- Transmission lines comprise only about 21% of RCN connection project costs as determined on the “psc” sheet in the POD Cost Function Workbook provided as Appendix G to the application.

Simply adding linear taxes and annual structure payments to proposed O&M costs would overstate the incremental O&M charge applicable to incremental facilities for connection projects. To avoid overstating these costs, and for consistency with the treatment of these costs in the rest of the *Transmission O&M Cost Study*, linear taxes

and annual structure payments were excluded from the calculation of the incremental O&M charge.

- (b) Despite the discussion in part (a) above, if linear and property taxes are included in the non-capital related costs, and are also included in O&M for purposes of prepaid O&M charges, the following table shows the calculations of a prepaid O&M charge.

	Proposed O&M	Proposed O&M Plus Lin/Prop Taxes	Proposed O&M Plus Ann Str Payments	Proposed O&M Plus Lin/Prop Tax and Ann Str Pay
Annual Revenue Requirement	98,028,360	136,124,422	103,497,013	141,593,076
Estimated Total Property RCN	8,000,000,000	8,000,000,000	8,000,000,000	8,000,000,000
Annual Revenue Requirement/RCN	1.23%	1.70%	1.29%	1.77%
PV of Annual Rev Req/RCN	14.46%	20.08%	15.27%	20.88%

- (c) The G&A costs are not directly proportional, or linked, to any incremental facilities. In general, an incremental increase in the cost of facilities does not result in a proportional incremental increase in G&A costs. Therefore, it is difficult to justify the addition of incremental G&A costs to an O&M charge to be applied to incremental facilities.

Topic: Annual Tariff Update

Reference: Paragraphs 579-594, Section 8.1, Pages 259-261 of 268

Preamble: The AESO is proposing an approach for an annual update of its rates and investment levels.

Request:

- (a) Assuming that the tariff proposed in the current application does not take effect before 2011, does the AESO intend to apply its proposed annual update process before the tariff proposed in the current application takes effect?
- (b) Please identify any barriers to adjusting the timing of the proposed annual update process to allow the updated AESO tariffs to be reflected in distribution system owners' tariffs at the beginning a test year. Please discuss how any such barriers identified could be eliminated.
- (c) Please confirm that if the updated composite inflation index were less than the composite inflation index used to set the then current maximum investment amounts, then the annual update process would result in a reduction to the maximum investment amounts. If not confirmed, please explain.

Response:

- (a) If the proposed tariff does not take effect before 2011, the AESO would expect to propose an update to the rates and maximum investment level in the application. The nature of the update would depend upon the Commission's findings with respect to the AESO's 2010 tariff application.
 - If the proposed rates, investment level, and update approach are approved without material changes, the AESO would likely apply the approved approach to update the rates and investment level in a separate tariff update application.
 - If material changes to the rates, investment level, or update approach are directed, and a tariff refiling is required, the AESO would likely propose to incorporate updated costs, billing determinants, and composite inflation index into the refiling.

Other factors may also affect the nature of the update, including the timing of decisions on the AESO's tariff application and the availability of AESO Board-approved forecast costs and forecast billing determinants for 2011.

- (b) The main barrier to adjusting the timing of the proposed annual update process is the availability of AESO Board approved forecast costs and forecast billing determinants. As discussed in section 2 (pages 13-14) of the application, ancillary services costs, losses costs, and administration costs are approved by the AESO Board after consultation with

stakeholders through the Budget Review Process. As explained in section 4.19 (page 65) of the application, billing determinants are based on the load forecast in the AESO's *Future Demand and Energy Outlook* forecast. As finalization of both the AESO Board-approved forecast costs and the forecast billing determinants requires adequate time, including for stakeholder consultation where applicable, the AESO is not aware of any ways to remove the impact of these items.

The AESO also considers that deferral account adjustment Rider C is an appropriate mechanism to address short-term cost and revenue variances that may arise due to the time required for development of forecast costs and billing determinants.

- (c) Confirmed. Such a decrease in investment level would be conceptually consistent with the decrease in rates that would occur in a tariff update if billing determinants increased proportionately more than the AESO's revenue requirement.

Topic: Investment Policy

Reference: Paragraphs 473-486, Section 6.11.3, Pages 114-116 of 268
Appendix F, Page 15

Preamble: The AESO indicates that an adjustment to the determination of maximum investment levels is required to accommodate the removal of the standard facilities definition. The AESO determined that reducing the multiplier from 1.15 to 1.06 resulted in a total investment for all 64 projects in the data set of \$439 million, compared to a total investment of \$440 million based on the current standard facilities cost.

Request:

- (a) Please confirm that the facilities constructed for the 64 projects in the data set may have been limited by the standard facilities definition in the current investment policy. If not confirmed, please explain in detail. If confirmed, would the AESO agree that the reduction in the multiplier from 1.15 to 1.06 may not be sufficient to offset the removal of the standard facilities definition?
- (b) Under the AESO's proposed investment policy, assuming each of the 64 projects used the entire available maximum investment, what would be the total investment (comparable to the \$439 million in the preamble)? What is the ratio of the expected total investment of \$439 million to the total maximum available investment?
- (c) Would the AESO agree that the multiplier should be adjusted as part of future tariff applications in order to maintain this expected ratio of total investment to total maximum available investment? If not, please explain in detail.

Response:

- (a) The AESO considers that facilities constructed for the 64 projects in the data set were rarely, if ever, limited by the standard facilities definition. In the AESO's experience, a market participant will pay a construction contribution rather than receive service through facilities that the market participant considers to not provide an acceptable level of service. This is consistent with the conclusion in Decision 2007-106 (section 8.1.2.1, page 95) that "the lower investment allowance in Decision 2005-096 did not discourage investment" by market participants in system access services. Also in the AESO's experience, a market participant will not request additional facilities simply because a connection project's cost is below the maximum investment level. When the cost of a connection project in the data set was occasionally below the maximum investment level, the AESO does not recall instances where market participants tried to have additional facilities added to the connection project. In general, if a market participant considered that the proposed facilities provided an acceptable level of service and those

facilities were fully covered by investment, the market participant did not try to gain additional investment for the service.

Based on these comments, the AESO considers that its proposed reduction of the multiplier to 1.06 is sufficient to offset the removal of the standard facilities definition.

- (b) The total maximum theoretical investment would be \$515 million if calculated by applying the investment amounts in section 8 of the proposed tariff and a 20-year investment term to the contract capacity for each of the 64 projects in the data set. (This amount is the sum of the “investment available when using new equation” in column G of the “cost-function-tot” sheet of the workbook provided as Appendix G to the application.) The expected total investment of \$439 million is 85.3% of the total maximum theoretical investment of \$515 million.
- (c) The AESO considers it may be reasonable to perform a similar comparison for discussion in future tariff applications. However, such an approach appears to resemble the “80/20 rule” discussed in the AESO’s 2007 tariff application and rejected as a rule in Decision 2007-106 (section 8.1.2.1, page 93). The AESO suggests that implementing a new “85.3% rule” would not generally satisfy the contribution policy principles summarized in section 6.11 (pages 107-110) of the application, and in particular would not reflect the conclusion in Decision 2007-106 (page 95) that “[s]etting the appropriate level for the maximum investment allowance is a balancing act.”

Topic: Amortized Construction Contribution Rider I

Reference: Paragraphs 290-315, Section 4.16, Pages 58-62 of 268

Preamble: The AESO is proposing a new rider that provides market participants with an option to amortize and pay construction contributions over a period of up to 20 years, using a discount rate that reflects the capital structure, debt rate, return on equity and income tax rate applicable to the TFO who owns the facilities. The AESO proposes to reserve the right to deny or rescind Rider I if significant and substantiated doubt exists about the viability of the project or the financial stability of the market participant.

Request:

- (a) Please confirm that under the proposed Rider I, the effective financing rate to a market participant who elects Rider I would be significantly less if the TFO was municipally owned rather than investor-owned, since the tax rate for municipal owners is zero? Please discuss the merits of charging all market participants who elect Rider I the same financing rate based on the discount rate for an investor-owned utility, with any Rider I payments in excess of the TFO's discount rate being applied to the AESO's other costs.
- (b) How does the AESO intend to assess whether there is significant and substantiated doubt about the viability of a project or the financial stability of a market participant? Please provide a copy of any guidelines that have been developed.
- (c) Notwithstanding that the proposed risk premium is expected to be self-funding in long-term, would the AESO agree that if there is a default in the short-term then the carrying costs that would otherwise have been recovered through Rider I will be borne by DTS customers? If not, please explain. If so, please explain why the AESO believes that DTS customers should be exposed to this new risk.

Response:

- (a) Confirmed. As discussed in section 4.16 (pages 59-60) of the application, the AESO's first consideration for Rider I was that it "must be structured such that any resulting financial benefits to a TFO are fully recovered from the market participant whose construction contribution is being amortized." (paragraph 298) This is consistent with the cost causation principle which underlies the design of the AESO rates and which is discussed in section 4.2 (page 28, paragraph 127) of the application. The cost causation principle states that rates should "recover costs in the manner in which they are caused" and, when so designed, "should provide appropriate price signals, should be fair, objective, and equitable, and should minimize or eliminate inter-customer subsidies." If a market participant elects Rider I in an area served by a non-tax-paying municipal TFO, using the discount rate for a tax-paying investor-owned TFO would in effect charge more

than the costs caused by that market participant and result in that market participant subsidizing costs of other market participants.

The AESO notes the following additional considerations with respect to the discount rate used for a non-tax-paying municipal TFO:

- the discount rate in the AESO's tariff has historically reflected the impact of whether the TFO pays income tax or not;
- the market participant who most frequently receives system access service from a municipal TFO is the municipal distribution utility, and using the discount rate for a tax-paying investor-owned TFO could result in charging costs to the municipal distribution utility to the benefit of customers of investor-owned distribution utilities; and
- using the discount rate for a tax-paying investor-owned TFO would create an additional difference between the AESO's tariff and the distribution tariff of the municipal utility, which may influence a market participant's preference for service at distribution or transmission voltage.

(b) Please refer to information response AE.AESO-001 (h).

(c) The carrying costs will be borne by DTS customers to the extent they are not covered by the risk premium in the Rider I financing rate. The AESO would expect the risk premium to be adjusted in a subsequent tariff application to reflect any defaults under Rider I, such that Rider I would continue to be self-funding.

As discussed in section 4.16 (pages 61-62) of the application, the AESO considers the "new risk" to which market participants under Rate DTS are exposed to be small. The risk should also be evaluated in the context of other alternatives such as the management fee approach proposed by AltaLink and ATCO Electric to address concerns with the levels of contributions they hold. An estimate of potential total management fees is provided in information response TCE-Keystone.AESO-002. An assessment of the cost and benefit of the Rider I approach should include in the analysis the costs and benefits of other approaches.

Topic: Fort Nelson

Reference: Paragraph 193 Section 4, Page 41 of 268
Paragraph 216, Section 4, Page 46 of 268

Preamble: The AESO proposes to essentially grandfather the existing 25 MW load service to Fort Nelson by embedding the 25 MW amount as the basis for future TMR cost sharing and future transmission capital cost sharing and is not proposing to revisit the cost sharing associated with the 25 MW existing load service. In EUB Decision 2005-096 (August 28, 2005), page 33, regarding the AESO's proposal for rates applicable to Fort Nelson, the Board stated:

“The Board notes that the largest single element in the proposed FDS rate is the allocation of TMR costs. The Board agrees with BCH that the AESO has not provided a sufficient basis for this charge. In particular, the Board does not consider that there is sufficient evidence that the AESO has considered the real value of Fort Nelson generation to Alberta customers.”

Request:

- (a) Has the AESO assessed the overall costs of the provision of service to Fort Nelson and the benefits of the Fort Nelson generation to Alberta customers? If so, please provide the results of the assessment. If not, please explain in detail.
- (b) Has the AESO considered providing notice to terminate the current arrangement for the 25 MW load service at Fort Nelson? If so, please explain with all reasons why the AESO decided not to provide such notice. If not, please explain with all reasons why the AESO considers that the current arrangement for the 25 MW load service at Fort Nelson should be continued indefinitely.

Response:

- (a) The AESO discussed a qualitative assessment of the costs and benefits relating to the Fort Nelson generator in the Fort Nelson Rate FTS Working Group for the AESO's 2010 tariff. Please refer to information response BCH.AESO-016 (c) for a quantitative assessment.
- (b) The AESO does not believe it has the right to unilaterally terminate the current arrangement for system access service to BC Hydro at Fort Nelson. BC Hydro has satisfied all its obligations with respect to the service, and the tariff for the service has been approved by the Commission and its predecessor and is therefore just, reasonable, and not unduly preferential, arbitrarily or unjustly discriminatory, or inconsistent with any law. To address the significant changes to circumstances that are relevant to the service, the AESO considers the appropriate approach is to request the

Commission to approve changes to Rate FTS, which the AESO has done in this application.