Alberta Electric System Operator

2012 Construction Contribution Policy

December 28, 2012
The Alberta Utilities Commission
Decision 2012-362: Alberta Electric System Operator
2012 Construction Contribution Policy
Application No. 1067193
Proceeding ID No. 1162

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   Calgary, Alberta
   T2P 3L8

   Telephone: 403-592-8845
   Fax: 403-592-4406

   Website: www.auc.ab.ca
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1 Introduction

1. On June 20, 2012, the Alberta Electric System Operator (AESO) filed an application with the Alberta Utilities Commission (AUC or Commission) in accordance with the scope of work and schedule established by the Commission in a letter dated July 12, 2011. The application developed and described an approach to establishing the contribution policy for transmission connection projects used to provide system access service to load market participants.

2. The Commission issued notice of the application on June 22, 2012. In response to the notice of application a statement of intent to participate (SIP) was filed by 12 parties. The SIP filed by FortisAlberta Inc. (Fortis) fully supported the AESO’s application and recommended the application be approved as filed, without any further process. Similarly, EPCOR Distribution & Transmission Inc. (EDTI) submitted that it considered the application to be reasonable and that it did not object to the application. The remaining 10 SIPs either did not object to the application or did not state a position. However, six parties indicated that they would actively participate or reserved the right to make submissions in the proceeding. The Industrial Power Consumers of Association of Alberta (IPCAA), indicated that it would like to review the application in greater detail.

3. The remaining parties that submitted a SIP include:

- Access Pipeline Inc. (ACCESS)
- AltaLink Management Ltd. (AltaLink)
- ATCO Electric Ltd. (AE)
- Enbridge Pipelines (Athabasca) Inc. (Enbridge)
- The City of Lethbridge (LETH)
- The City of Red Deer (RD)
- Devon Canada Corporation (DEVONCAN)
- ENMAX Power Corporation (ENMAX)
- The Office of the Utilities Consumer Advocate (UCA)
2  Background

4. On December 22, 2010, the Commission issued Decision 2010-606\(^1\) with respect to the AESO’s 2010 ISO tariff application.\(^2\) In its decision, the Commission determined that:\(^3\)

   … the Commission will establish a module, under a separate proceeding, to deal with aspects of the AESO’s customer contribution policy. The Commission will set out the full terms of reference for this proceeding in correspondence to be issued following this Decision.

5. On April 13, 2011, the Commission issued objectives and provided the terms of reference for an electric transmission contribution policy proceeding and directed the AESO to submit a detailed scope of work and a schedule for filing an application. The Commission also established Proceeding ID No. 1162 to address the contribution policy proceeding.

6. After receiving comments from stakeholders and reply comments from the AESO on its proposed scope of work, the Commission issued a final scope of work on July 12, 2011 and established the deadline date of June 20, 2012 for the AESO to file its application. The final scope of work issued by the Commission is included as Appendix 3 of this decision.

7. The schedule proposed by the AESO to develop its application included provision for stakeholder consultation. The AESO’s consultation included three main components:

   • distribution of a discussion paper reviewing the background to contribution policy with a request for stakeholder comments
   • formation of a small working group to examine contribution policy matters in more detail and to provide input and advice to the AESO during the review of its contribution policy
   • general stakeholder meetings to update the broader stakeholder community and to receive feedback on the conclusions reached by the AESO

8. The working group that was formed had representation from both industry and consumers, consisting of the following organizations:

   • AltaLink
   • AE
   • Enbridge
   • ENMAX
   • Fortis
   • IPCAA
   • UCA

9. The working group met eight times from October 2011 to June 2012 to review and discuss the contribution policy.

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\(^2\) Application No. 1605961 and Proceeding ID No. 530.
\(^3\) Decision 2010-606, Section 9.3.1, page 58, paragraph 301.
10. On July 19, 2012, the AESO held a technical meeting to present an overview of the information included in its application.

3 The current application

11. The application sets out an approach to establishing the contribution policy for transmission connection projects used to provide system access service to load market participants (construction contribution policy). A construction contribution is the financial contribution in aid of construction (CIAC) in excess of the available investment by the AESO (the maximum investment level) that a market participant must pay for the construction and associated costs of transmission facilities required to provide system access service. Construction contributions are intended to balance the economic impact of connecting a new customer between existing customers and the new customer.

12. The application requests approval of:
   - contribution policy principles
   - a methodology to determine a point of delivery cost function
   - a methodology to determine maximum investment levels
   - proposed investment levels to be effective retroactive to July 1, 2012

13. The Commission determined that the application should be considered by way of a written process. No parties filed intervener evidence. Therefore, following receipt of the AESO’s response to information requests, the Commission set out a process for argument and reply argument. The final process steps were scheduled as follows:

<table>
<thead>
<tr>
<th>Process step</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information requests (IR) to the AESO</td>
<td>July 25, 2012</td>
</tr>
<tr>
<td>AESO IR responses (as amended)</td>
<td>August 16, 2012</td>
</tr>
<tr>
<td>Submissions on need for intervener evidence (as amended)</td>
<td>August 21, 2012</td>
</tr>
<tr>
<td>Argument</td>
<td>September 24, 2012</td>
</tr>
<tr>
<td>Reply argument</td>
<td>October 1, 2012</td>
</tr>
</tbody>
</table>

14. The Commission considers the record for Proceeding ID No. 1162 to have closed on October 1, 2012.

15. The Commission has reviewed the application, information responses, argument, and reply. Any references to specific parts of the record are intended to assist the reader in understanding the Commission’s decision, but should not be taken as an indication that the Commission did not consider the entire record as it relates to that issue.
4 Contribution policy principles

16. One of the primary objectives of the construction contribution policy proceeding was to examine the underlying principles that create a requirement for connecting customers to contribute capital.

17. The AESO’s review of contribution policy principles started with a review of principles established in prior decisions of the Commission and its predecessor the Alberta Energy and Utilities Board (the board or EUB). The AESO noted that in Decision 2010-606 in respect of the 2010 ISO tariff, the Commission stated:

The Commission has reviewed the contribution policy principles proposed by the AESO and considers that they reflect cost causation and are consistent with the principles established in previous proceedings.

The Commission considers that the overall intent of the contribution policy and maximum investment levels is to achieve a reasonable balance of what an individual customer pays upfront through a customer contribution relative to what all customers in a particular rate class pay through ongoing rates.4

18. In addition, the AESO noted that its assessment of contribution policy principles had also considered the following sources:5

- Common Approach to Maximum Investment Levels, FortisAlberta, filed as part of its 2010-2011 distribution tariff application
- Maximum Investment Level Study, ATCO Electric, filed as part of its 2011-2012 general tariff application (GTA)
- AltaLink Industry Consultation – Recommendations, AltaLink, recommendations arising from an AltaLink sponsored industry consultation process regarding the AESO’s construction contribution policy

19. In consideration of the above, and in consultation with the working group, the AESO determined that an optimal construction contribution policy should address the following eight principles:

1. provide effective price signals
2. maintain intergenerational equity
3. be based on cost causation
4. be based on local costs
5. be robust and sustainable
6. treat all load market participants equitably
7. compensate utilities equitably
8. be simple, consistent, and transparent

20. In recognition that a construction contribution policy may not, in all circumstances, be able to satisfy all principles simultaneously, the AESO indicated that it considered the first three principles to be primary principles that should be satisfied in as many circumstances as possible.

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5 Exhibit 42.03, Attachment AUC-AESO-003.
In addition, the AESO indicated that the remaining five secondary principles should be satisfied as frequently as possible, but not at the expense of the primary principles.

21. In argument, the AESO noted that the Commission examined the principles proposed by the AESO in several information requests. In this regard, the AESO’s response to AUC-AESO-004 explained that the objectives of providing effective price signals and maintaining intergenerational equity have been contribution policy principles for many years and therefore are not in conflict. The AESO also noted that it considered none of the primary principles to be more important than the other primary principles and therefore submitted that assessments of the contribution policy should reflect a reasonable balance of objectives rather than an arithmetical scoring against weighted principles.

22. The UCA indicated in argument that it supported the contribution policy principles proposed by the AESO, including the categorization of the first three principles as primary, and the remaining principles as secondary. The UCA agreed with the AESO that none of the primary principles should be considered more important than the other primary principles, and submitted that the AESO’s proposal for 70 per cent investment coverage represented an attempt to simultaneously satisfy the three primary contribution policy principles while satisfying as many of the secondary principles as possible.

23. IPCAA submitted that through presentations, round tables, and general correspondence, IPCAA had communicated three primary concerns with the contribution policy methodology, namely that:

- it must support the principles (particularly the primary principles) established through the AESO working group consultations
- it must be consistent going forward
- the impact on rates must be balanced between new and existing customers.

24. IPCAA submitted that its interest in having various methodologies for setting investment levels assessed against the three primary principles had been addressed as part of the AESO’s working group consultations. IPCAA submitted that the assessment included a thorough test of possible mechanisms against both the primary and the secondary principles.

25. IPCAA observed that the response to AUC-AESO-004 examined the question of whether the goals of providing effective price signals and maintaining intergenerational equity may be in conflict. IPCAA submitted that the focus should be on promoting a fair price signal and encouraging consistency going forward. IPCAA further submitted that if the price signal is established through a fair mechanism and kept consistent across multiple AESO GTA proceedings, it should be possible to satisfy both of these principles simultaneously.

26. AltaLink supported the three primary principles proposed by the AESO, but suggested that the primary principles should be weighted equally and not ranked.

27. AltaLink submitted that intergenerational equity is maintained when an investment mechanism results in similar proportions of investment and contribution for similar connection projects in similar circumstances over periods when different tariffs are in effect. Further,

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6 Exhibit 42.01.
7 Ibid.
AltaLink submitted that an effective price signal should influence market participants to select the best long-term economic and technical alternatives while considering good electric industry practice (GEIP).

28. AltaLink submitted that the AESO’s evidence had demonstrated that the principles of providing effective price signals and intergenerational equity are not in conflict and therefore should not be ranked against each other. AltaLink further submitted that ranking is not necessary because maintaining intergenerational equity results in providing effective price signals.

29. ACCESS indicated that it generally supported the eight contribution policy principles outlined by the AESO. ACCESS submitted that the primary principles of price signals, intergenerational equity and cost causation must be balanced, and argued that an overly restricted policy may send a strong price signal but this would be misaligned from an intergenerational equity and cost causation perspective. ACCESS indicated that it generally supported the remaining contribution principles proposed by the AESO, and believed that they form a strong basis for evaluating the methodologies and investment levels proposed in the application.

30. ACCESS noted that no connection projects have included the construction of facilities in excess of GEIP since the AESO’s 2010 tariff was implemented, suggesting that a more restrictive price signal may be required. However, ACCESS submitted that an overly restrictive price signal is the reason that customers and transmission facility owners (TFOs) are disenchanted with the current policy. ACCESS further submitted that for this reason, the price signal must be balanced with concerns for intergenerational equity and cost causation.

31. Taking into account cost increases, ACCESS submitted that the overall contribution level required from customers to connect to the transmission system should be approximately the same over time. Simply put, it is unfair that some customers fund a higher level of connection cost than others.

32. ACCESS submitted that maintaining cost causation is a worthy but difficult goal that is complicated by the fact that connection costs vary site by site, based on distance from the grid, different reliability requirements, and differences in the ability of the system to accommodate new loads at particular times. In addition to these considerations, ACCESS submitted that the principle of cost causation requires consideration of not just connection costs, but also ongoing tariff costs. ACCESS submitted that the AESO’s methodology of aligning the point of delivery charge under Rate DTS with investment levels through the AESO’s cost function ensures that customers who receive high levels of investment also pay higher rates.

33. In reply, the AESO responded to the statement by AltaLink that the primary principles should be weighed equally and not ranked. As set out in its response to AUC-AESO-004(b), the AESO noted that it had stated that there is no basis for stating that any of the primary principles is more important than the others.

4.1 Commission findings

34. The Commission considers the list of eight principles to be reasonably consistent with past decisions and directions of the Commission and the board. The Commission finds that the

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8 Exhibit 42.11, attachment to AUC-AESO-028, cited on page 3 of ACCESS argument.
9 Rates DTS: demand transmission service (AESO ISO tariff).
10 Exhibit 42.01.
eight principles provide a reasonable basis for the assessment of the AESO’s construction contribution policy.

35. The Commission is also in general agreement with the AESO’s classification of the eight principles into three primary principles of relatively higher importance and five secondary principles deemed to be of lesser importance.

36. The importance of providing economic signals has been extensively discussed in prior AESO GTA proceedings that have considered the AESO’s construction contribution policy. The Commission is of the view that the following quote originally set out in EUB Decision 2000-1\(^{11}\) and highlighted in EUB Decision 2005-096\(^{12}\) remains generally pertinent and reflective of the Commission’s desire that the AESO’s construction contribution policy should exert an economic discipline on siting decisions by sending price signals, reflective of the AESO’s economics, to connecting customers.\(^{13}\)

> The Board considers that customer contributions are suitable in circumstances where service to a customer may impose costs on other customers for which they should not be responsible. An appropriate contribution policy therefore provides a suitable balance to an unlimited obligation to serve by imposing economic discipline on siting decisions. It transfers the economic burden of connection of new customers from the utility and its existing customers to the new customer. In other words, it exerts some of the discipline of the utility’s economics on the economic decision-making of the customer.\(^{14}\)

37. While the Commission accepts the AESO’s submission that it does not expressly rank or place equal weight on each of the three primary principles when assessing different contribution policy approaches, the Commission observes that, in practice, certain decisions made by the AESO as a result of the construction contribution policy review appear to have significantly elevated the importance of intergenerational equity considerations relative to the goal of providing an effective price signal.

38. This is best illustrated by examining the AESO’s response to the following question posed in AUC-AESO-004(c):\(^{15}\)

> All things being equal, does the AESO agree that when considering the principle of providing an effective price signal on a stand alone basis (as distinct from balancing the promotion of this principle with the achievement of other principles), a contribution policy that requires a market participant to pay a contribution would provide a more effective price signal than a contribution policy that creates greater frequency and amounts of unused investment capacity? If the AESO does not agree, please fully explain.

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14 Decision 2000-1, page 270.
15 Exhibit 42.01.
39. The AESO’s response to this question was as follows:

As explained in its application (section 3.1, pages 14-15, paragraphs 52-60), the AESO does not consider that payment of a contribution provides a complete indication of the effectiveness of the price signal provided by a contribution policy. The AESO acknowledges that paying a contribution is more likely to provide a price signal than not paying a contribution, and therefore would be expected to also be more likely to provide an effective price signal, all else being equal. The AESO also considers that the existence of unused investment for some projects does not necessarily mean the contribution policy did not provide an effective price signal for those projects. For example, as explained in section 3.1 of the application, the available unused investment may not have been enough to cover additional facilities that may have been useful for the service required. In such a case, the price signal remains effective even though unused investment exists.

40. The Commission agrees with the general proposition expressed in the later part of the response that the existence of unused investment for some projects does not necessarily mean that the contribution policy did not provide an effective price signal. However, the Commission is of the view that by increasing levels of investment allowance, the price signal provided by the construction contribution policy is weakened, because it diminishes the incentive for connecting customers to request the most economical connection facilities consistent with GEIP and/or to take into account proximity to the existing or planned transmission system when considering alternative locations for the load to be served. In summary, and as discussed later in this decision, the Commission remains of the view that, at the end of the day, providing an efficient price signal is considered a more important policy objective than intergenerational equity.

5 Investment mechanisms examined

41. In Section 4 of the application, the AESO discussed its examination of several potential approaches that could be used to determine investment for connection projects. The AESO explained that each mechanism examined provides a different way of determining the balance between investment levels recovered over time through the average point of delivery charge and the construction contribution paid on a project-specific basis by connecting market participants.

42. The different approaches identified by the AESO and discussed within the working group are briefly summarized below:

1. **Investment coverage**: A mechanism historically used in Alberta whereby the investment level is set so that investment would fully cover connection costs for a certain percentage of new service connections.

2. **Average cost multiplier**: A mechanism which applies a numeric multiplier to the average cost of connection projects to determine the maximum investment level. The AESO noted that the multiplier mechanism has been used to establish investment levels for the AESO’s tariff since its 2007 tariff application was approved.

3. **Revenue test**: A mechanism whereby investment allowances involve a calculation of the incremental revenue expected to be generated by a market participant. Under this mechanism, a market participant pays a contribution if the forecasted incremental revenue over a prescribed period of time would not cover the cost of a connection project.
(4) **Maximum line length**: A mechanism under which a market participant is held responsible for the costs of a transmission line required for a connection project over a prescribed line length.

(5) **Percentage cost coverage**: A mechanism which provides investment as a prescribed percentage for the cost of each connection project. Under this mechanism, every market participant would receive investment based on a certain percentage of project costs, and every market participant would be required to pay some contribution (i.e. the remaining percentage of project costs).

(6) **Zero contribution**: A mechanism whereby market participants are not required to pay a contribution for any connection project deemed to be consistent with GEIP.

(7) **Zero investment**: A mechanism requiring all market participants to pay all of the local connection costs for their connection projects.

43. The AESO undertook qualitative assessments of each of these seven mechanisms against the eight contribution policy principles, which it summarized in Table 4-1 of the application, as reproduced below:

**Table 1. Application Table 4-1, contribution policy mechanisms and principles**

<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Provides effective price signals</th>
<th>Maintains inter-generational equity</th>
<th>Is based on cost causation</th>
<th>Is based on local costs</th>
<th>Is robust and sustainable</th>
<th>Treats all load market participants equally</th>
<th>Compensates utilities equally</th>
<th>Is simple, consistent, and transparent</th>
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<tr>
<td>Investment coverage</td>
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<tr>
<td>Average cost multiplier</td>
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<tr>
<td>Revenue test</td>
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<tr>
<td>Maximum line length</td>
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<td>Percentage cost coverage</td>
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Source: Exhibit 16, application, paragraph 103, page 22.

44. The AESO explained that it had determined from this evaluation that the investment coverage and average cost multiplier mechanisms provide the strongest support for the greatest number of principles. Of these two mechanisms, the average cost multiplier appeared to more strongly support the principles.

45. The AESO indicated that it had focused the majority of its efforts on the average cost multiplier mechanism because of its assessment against the eight principles. In addition, the AESO explained that the investment coverage mechanism had informed its selection of a specific multiplier.
46. In argument, the AESO submitted that its evaluation of possible investment mechanisms supported the continuation of a maximum investment level approach using an average cost multiplier.

47. While a number of parties expressed general support for the AESO’s contribution policy application, no parties other than the AESO discussed the selection of the preferred investment mechanism in argument or reply.

5.1 Commission findings

48. The average cost multiplier mechanism is well understood and well accepted by the industry.

49. The Commission has reviewed the AESO’s assessment of alternative contribution policy mechanisms and finds the AESO’s proposal to continue to use the average cost multiplier mechanism to be reasonable.

6 Contributions between regulated utilities

50. Section 9.3.1 of Decision 2010-606 discussed the previous decisions by the board to require distribution companies to pay contributions comparable to the amounts paid by direct-connect customers for comparable transmission connection facilities. In this discussion, the Commission noted that the principle of comparable treatment was established in the early stages of the electric industry unbundling which occurred after January 1, 2001.

51. After referencing a discussion that took place during the oral hearing for the AESO’s 2010 ISO tariff, the Commission found that due to the increasing significance of contributions as an offset to the rate bases of the transmission facility owners, there was merit in re-examining the requirement for parity as between AESO direct-connect customers and distribution utilities under the AESO’s construction contribution policy. As a result, the Commission found that this issue should be examined as part of the review of the AESO’s construction contribution policy.

52. The Commission determined that one of the three primary objectives for the AESO’s contribution policy proceeding should be to:

3. Examine the underlying principles that create a requirement for customers to contribute capital, and specifically how the application of that principle should be used to determine contributions between two regulated utilities which already have underlying obligations to provide service. [Emphasis added]

53. Furthermore, in the initial terms of reference the Commission requested that the AESO examine opportunities for potential changes to the AESO’s tariff designed to reduce or limit the potential for CIAC balances to reduce the net rate base of transmission facility owners. As part of this direction, the Commission stated as follows:

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16 Proceeding ID No. 530, Transcript Volume 4, pages 391-393, referenced at paragraph 297 of Decision 2010-606.

17 Exhibit 12.01, page 2.
…Measures that could be investigated include, without limitation, changes to the AESO tariff that would exempt distribution facility owners from a requirement to make a contribution in some circumstances or adjust the average level of contributions by increasing the investment function multiplier.  

54. The AESO addressed these matters in Section 5 of the application. The AESO noted that just like direct-connect customers, distribution system owners currently pay construction contributions in accordance with the AESO’s existing contribution policy.

55. The AESO noted two potential advantages of no longer requiring distribution system owners to pay contributions:

- some financial complexity would be removed for integrated utilities with both transmission and distribution functions
- no longer requiring contributions from distribution system owners would remove concerns that transmission facility owners would not be compensated equitably for the contributed assets which they own, operate, and maintain

56. However, the AESO submitted that the requirement for distribution system owners to pay contributions should be maintained within its construction contribution policy for the following reasons:

- requiring distribution system owners to pay construction contributions aligns with the industry structure established by the Electric Utilities Act, SA 2003, c. E-5.1
- requiring distribution system owners to pay a contribution supports the principle of providing an effective price signal, therefore not requiring contributions would remove this price signal
- under a well-designed contribution policy, construction contributions reflect principles of cost causation and are based on local costs incurred for the connection
- requiring contributions from distribution system owners treats all load market participants equally and avoids the need to alter other aspects of the AESO’s tariff
- no longer requiring distribution system owners to pay contributions could reduce harmonization and introduce seams issues between large industrial customers served under a distribution tariff and customers who have received releases under Section 101(2) of the Electric Utilities Act
- maintaining the practice of requiring distribution system owners to pay contributions avoids potential intergenerational equity issues
- discontinuing distribution system owner contributions would require assessments of each TFO’s interconnection standards to avoid cross subsidies

57. In Section 5.2 of the application, the AESO described its assessment of the advantages and disadvantages of not requiring distribution system owners to pay contributions under the AESO’s tariff. The AESO found based on this assessment that not requiring a contribution would not support either of the primary policy principles of providing an effective price signal and having a cost causation basis, and would only moderately support the principle of

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18 Exhibit 1.02, page 3.
19 Exhibit 16, application, paragraph 114, page 24.
20 Ibid., paragraphs 106 through 112, page 23.
maintaining intergenerational equity. Conversely, the AESO submitted that maintaining the requirement for distribution system owners to pay contributions would support most of the policy principles, including relatively strong support for the three primary policy principles. Based on this assessment, the AESO indicated that it had concluded that distribution system owners should continue to be required to pay contributions.21

58. In Section 5.3 of the application, the AESO discussed the potential impact on market participants if distribution system owners were to be exempted from customer contributions. Concerns identified by the AESO in this section included the following:

- direct-connected market participants would be treated inequitably if they were required to pay a construction contribution while a distribution-connected service does not for a similar connection
- direct-connected market participants could reasonably ask for cost allocation and rate class changes in the AESO’s tariff
- concern that customers served by distribution systems where transmission connection costs are relatively low are subsidizing customers served by distribution systems where transmission costs are relatively high
- increased pressure for the AESO to develop separate AESO tariff rates for each distribution system22

59. In addition to the above, the AESO expressed particular concern that deviating from the principle of equitable treatment of all load market participants would result in additional unforeseen issues around harmonization of the AESO tariff and distribution system owner tariffs. In this regard, the AESO expressed concern that:23

- separate rate classes for direct-connected market participants and for distribution system owners would lead to many issues around the differences between the transmission components of distribution tariffs and the AESO tariff applied to direct-connect market participants
- not requiring a contribution would reduce the harmonization of tariffs applicable to large industrial customers served by a distribution company compared to those that are direct-connected
- reduced harmonization could result in unforeseen issues around the granting of releases under Section 101(2) of the Electric Utilities Act, thereby potentially impeding the orderly, economic, and efficient development of the Alberta interconnected electric system by providing greater financial incentives for consumers to seek service either through a distribution system owner or through direct-connected service

60. The AESO concluded that changing from the existing practice of requiring distribution system owners to pay a contribution, to one of not requiring contributions from distribution system owners, would introduce inequitable treatment of load market participants which, in turn, would require significant mitigation of the resulting issues and impacts.24 Furthermore, while the possibility of not requiring contributions between utilities was suggested as a potential means of

21 Ibid., paragraph 125, page 25.
22 Ibid., paragraphs 126 through 133, pages 26-27.
23 Ibid., paragraph 131, page 26.
24 Ibid., paragraph 132, page27.
addressing concerns about high contribution levels, the AESO submitted that a more appropriate solution would be to increase investment levels.25

61. In its response to AUC-AESO-01326 the AESO submitted that construction contributions currently held by transmission facility owners would be approximately $100 million less if the investment coverage proposed in the application had been in place since January 1, 2010. Additionally, in response to AUC-AESO-01627 the AESO explained that its proposal to provide investment coverage for, on average, 70 per cent of connection project costs would have the effect of reducing the contributions required from distribution system owners. As such, the AESO submitted that adopting this more reasonable investment level further supported its proposal to continue the practice of requiring distribution system owners to pay construction contributions.

62. The UCA, IPCAA and ACCESS were the only parties that provided comments in argument or reply argument that specifically addressed the question of whether distribution system owners should be required to pay construction contributions.

63. The UCA agreed with the AESO’s view that the practice of requiring distribution system owners to pay construction contributions should continue based on the reasons set out by the AESO in the application. The UCA also pointed out that, in the AESO’s response to AUC-AESO-016(a),28 it noted that, when the board approved the current practice in Decision 2005-096, it referenced the goal of maintaining equity with past practices and the goal of sending effective price signals.29

64. IPCAA stated that the rationale for having distribution utilities pay contributions was covered in detail by the working group. Citing the AESO’s assessment of this practice against the primary principles in the AESO’s application, IPCAA submitted that it concurred with the AESO’s view that distribution utilities should continue to pay contributions.

65. ACCESS submitted that if distribution system owners did not pay contributions, it would be difficult to provide an appropriate price signal to industrial customers to choose between a transmission or distribution connection. ACCESS also expressed concern that:

- the current alignment between rate and investment methodologies through the average cost function would disappear if a large number of connection projects did not pay a contribution
- the AESO would be required to create a new rate class for the point of delivery charge to distribution system owners to maintain cost causation within the point of delivery charge component of Rate DTS
- the regulatory effort required to create a new rate class for the point of delivery charge applicable for distribution system owners would require a substantial regulatory transition effort that would exceed the benefit it would create

25 Ibid., paragraph 133, page 27.
26 Exhibit 42.01.
27 Ibid.
28 Ibid.
29 Exhibit 42.01, AUC-AESO-16(a), which references findings on page 60 of Decision 2005-096.
30 Exhibit 55.01, page 5.
66. For all of these reasons, ACCESS indicated that it continued to support the AESO’s recommendation to have distribution system owners continue to pay transmission contributions.

6.1 Commission findings

67. The Commission’s findings regarding contributions between regulated utilities are set out in three parts as follows:

- the need for parity under the AESO’s contribution policy between direct-connect customers and distribution system owners
- the impact of requiring distribution system owners to pay contributions on CIAC balances in the financial statements of transmission facility owners
- contribution policy issues arising from differences between the equity thickness levels awarded to transmission facility owners and distribution system owners in generic cost of capital decisions

68. These matters are addressed under separate headings below.

6.1.1 Contribution policy parity between direct-connect customers and distribution system owners

69. The policy of providing comparable treatment between direct-connect market participants and distribution owners under the AESO’s tariff has been in place since the early stages of the electric industry unbundling that occurred on and after January 1, 2001. Specifically, in Decision 2001-6, which approved the contribution policy contained in the tariff of the AESO’s predecessor, the Transmission Administrator, the board made the following finding:

In determining whether or not the contribution policy is just and reasonable, the Board has applied a test that would see all demand customers, including DISCOs, in the same light. That would mean any customer should be able to approach the TA with their load information and their location and be given the same answer as to the cost to connect. If the load and distance to connect were identical then one would expect the cost to be identical.

70. The possibility of exempting distribution system owners from the need to make contributions under the AESO’s contribution policy arose from a limited re-examination during the AESO’s 2010 ISO tariff proceeding of an aspect of an earlier AESO contribution policy proposal. Specifically, in its 2005-2006 tariff application, the AESO proposed to waive customer contributions in respect of transmission projects at AESO points of demand where multiple users are served by a distribution utility. However, consistent with its position during the 2010 ISO tariff proceeding, in the current application, the AESO continued to re-affirm that it has “moved on” from this concept, for several reasons, especially those articulated in paragraphs 106 through 112 of the application.

71. The Commission considers the concerns and rationale provided in this part of the application to be reasonable. It is also apparent to the Commission that the AESO’s rationale for

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32 Decision 2001-6, page 58.
34 Exhibit 16, application, paragraphs 106-112, page 23.
not resurrecting the concept of a distribution system owner waiver was broadly supported by the stakeholders who participated in its contribution policy consultative process, notably the distribution system owners.

72. The Commission agrees with the view expressed by ACCESS that if distribution system owners did not pay a contribution, it would be difficult to provide an appropriate price signal to industrial customers to choose between a transmission or distribution connection. The Commission also accepts that, if differential treatment of distribution system owners and industrial customers under the AESO’s contribution policy were to be endorsed, a number of other significant and potentially complicated changes would have to be made to other aspects of the AESO’s tariff, including the potential need to create a new rate class applicable to distribution system owners to maintain cost causation within the point of delivery (POD) charge component of Rate DTS.

73. However, the Commission considers that the most fundamental reason for which the concept of providing a distribution system owner waiver must be rejected is that providing a waiver would effectively nullify the option set out in Section 101(2) of the Electric Utilities Act of entering into an arrangement with the AESO for the provision of system access service.

6.1.2 The financial magnitude of distribution system owner contributions

74. The contribution policy review examined in this decision stems from findings made in Section 9.3.1 of Decision 2010-606 and reflect in particular two primary issues discussed in that section of that decision, namely:

- a desire to re-consider investment allowances permitted under the AESO’s tariff in light of the Commission’s acceptance of an AESO proposal in its 2010 ISO tariff application to replace the one line / one transformer “standard facilities” criterion for determining investment allowances with the GEIP criterion\(^{35}\)
- the Commission’s interest in investigating whether a proposal put forward by the AESO as part of it 2005-2006 tariff to grant waivers from contributions to distribution system owners for some investments in connection facilities could mitigate concerns discussed during the AESO 2010 ISO tariff proceeding regarding the increasing significance of aggregate levels of contributions as an offset to transmission facility owner rate base\(^{36}\)

75. The Commission considers that findings made subsequent to the establishment of the final scope of work for the current construction contribution policy proceeding have significantly impacted the importance that should now be placed on the second of these primary drivers.

76. In the proceeding considering the 2011 generic cost of capital allowed for Alberta utilities,\(^{37}\) the Commission considered a proposal advanced by transmission facility owners that they should be entitled to a management fee supplemental to the rate of return on rate base assets in respect of assets financed through contributions in aid of construction. In Decision \(^{38}\) the Commission found that, while it has the jurisdiction to authorize compensatory schemes that

\(^{35}\) Decision 2010-606. paragraphs 299 and 300.

\(^{36}\) Decision 2010-606, paragraph 298.

\(^{37}\) Proceeding ID No. 833.

are not specifically provided for in the statutes to ensure that a fair return is realized, the Commission also found that it had not been established that the services provided by the Utilities in respect of CIAC-funded assets represent a value added service that is in addition to the utility services which are compensated under the statutory scheme. It was also not established that the services have any quantifiable value. As a result, the Commission found there was no evidence that the provision of services in respect of CIAC-funded assets required any compensation through a management fee, and no evidence that the failure to provide a management fee would not result in rates that would be just and reasonable.

77. The Commission ultimately awarded a moderate increase in the equity ratio authorized for transmission facility owners, in part, in recognition of some incremental business risk, financial risk and operational leverage risk related to the presence of CIAC funded assets within transmission facility owner rate base assets. The Commission determined, on a go forward basis, that any concerns related to the level of CIAC funded assets would be addressed through possible equity thickness adjustments, to be applied on a utility specific basis.

78. The majority of the increase in transmission facility owner CIAC balances has arisen as a direct outcome of the Alberta government policy to unbundle regulated Alberta electric utilities between transmission and distribution service providers, and the policy decisions made by the board to provide equivalent treatment of direct-connect market participants and distribution system owners under past contribution policies.

79. In this regard, the Commission notes that the AESO’s response to AUC-AESO-12(b), reproduced below, illustrates the extent to which the effect of industry unbundling has driven the level of CIAC balances in the financial statements of the transmission facility owners:

**Table 2. Breakdown of contribution balances by transmission facility owner**

<table>
<thead>
<tr>
<th>Transmission Facility Owner</th>
<th>DFO-served distribution ($ millions)</th>
<th>DFO-served transmission ($ millions)</th>
<th>Direct-connected transmission ($ millions)</th>
<th>Total ($ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AltaLink</td>
<td>173.7</td>
<td>35.4</td>
<td>18.8</td>
<td>227.9</td>
</tr>
<tr>
<td>ATCO Electric Transmission</td>
<td>72.4</td>
<td>114.2</td>
<td>-</td>
<td>186.6</td>
</tr>
<tr>
<td>ENMAX Transmission</td>
<td>24.4</td>
<td>-</td>
<td>-</td>
<td>24.4</td>
</tr>
<tr>
<td>EPCOR Transmission</td>
<td>58.1</td>
<td>2.8</td>
<td>-</td>
<td>60.9</td>
</tr>
<tr>
<td>Lethbridge Transmission</td>
<td>1.6</td>
<td>-</td>
<td>-</td>
<td>1.6</td>
</tr>
<tr>
<td>Red Deer Transmission</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TransAlta Transmission</td>
<td>-</td>
<td>0.1</td>
<td>-</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Total Contributions</strong></td>
<td><strong>330.2</strong></td>
<td><strong>152.5</strong></td>
<td><strong>18.8</strong></td>
<td><strong>501.5</strong></td>
</tr>
</tbody>
</table>

Source: Exhibit 42.01, response to AUC-AESO-12(b).

80. Table 2 illustrates that contributions paid by distribution system owners in respect of transmission connection facilities built to serve mass market and/or distribution voltage

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39 Decision 2011-474, paragraph 469.
40 Decision 2011-474, paragraph 483.
41 Decision 2011-474, paragraph 495.
42 Decision 2011-474, paragraph 503.
43 Exhibit 42.01.
commercial and industrial customers represent almost two-thirds of the transmission facility owner CIAC balances.

81. In light of the findings in Decision 2011-474 outlined above, the Commission considers that the simple fact that the CIAC balances of transmission facility owners are historically large and growing should not, of itself, be something that the AESO should try to mitigate through changes to its contribution policy.

6.1.3 End-user impact of distribution system owner contributions

82. Despite the additional equity thickness granted to transmission facility owners in recognition of CIAC balances in Decision 2011-474, it is apparent that the equity thickness awarded to distribution facility owners in that decision is even higher. The Commission’s equity thickness findings from Decision 2011-474 are summarized below:

Table 3. Equity thickness findings from Decision 2011-474

<table>
<thead>
<tr>
<th>Electric Transmission Companies</th>
<th>2011 approved (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATCO Electric TFO</td>
<td>37</td>
</tr>
<tr>
<td>AltaLink</td>
<td>37</td>
</tr>
<tr>
<td>ENMAX TFO</td>
<td>37</td>
</tr>
<tr>
<td>EPCOR TFO</td>
<td>37</td>
</tr>
<tr>
<td>Lethbridge TFO</td>
<td>37</td>
</tr>
<tr>
<td>TransAlta</td>
<td>36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electric Distribution Companies</th>
<th>2011 approved (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATCO Electric DISCO</td>
<td>39</td>
</tr>
<tr>
<td>ENMAX DISCO</td>
<td>41</td>
</tr>
<tr>
<td>EPCOR DISCO</td>
<td>41</td>
</tr>
<tr>
<td>FortisAlberta</td>
<td>41</td>
</tr>
</tbody>
</table>

Source: Decision 2011-474, Table 10.

83. Having regard to the differences between the equity thickness granted to a TFO compared to a distribution system owner (DISCO) in Decision 2011-474, the Commission remains interested in measures that would have the effect of facilitating a transfer of contributions from distribution system owners to transmission facility owners to enable the possibility that end-use customers could obtain the benefit of the lower return on equity allowed for transmission facility owners.

7 Determination of cost function

84. In Decision 2005-096, the AESO was directed to use a cost-based approach to set the maximum investment levels to be used in its contribution policy. The AESO proposed a point of delivery cost function as part of its 2007 GTA to represent the average cost of connection projects (average cost function) based on the observed and/or derived costs for a set of interconnection projects of varying sizes. The average cost function represents the average cost

\[ 65.84\% = \frac{330.2\text{ million}}{501.5\text{ million}}. \]
per megawatt of capacity for connection projects. The maximum investment level also reflects the cost of point of delivery facilities as represented by the cost function. The AESO’s approach uses the same average cost function to classify point of delivery costs for the contribution policy and for rate design purposes.

85. In this application, the AESO modified its approach to develop the average cost function. Development of the cost function differs in several respects, the most significant change being the incorporation of upgrade projects into the dataset along with greenfield projects. Other steps taken in the development of the cost function included updating the greenfield project data and revising the inflation index used to escalate project data.

86. In this section, the discussion of the proposed average cost function has been divided into the following parts:

- connection project data
- update connection project data
- incorporating upgrade projects
- inflation index
- proposed cost function

87. These matters are addressed under separate headings below, followed by the Commission’s findings.

7.1 Connection project data

88. To estimate the average cost function, the AESO compiled information related to requests for system access service (connection project dataset). In addition to cost information, the dataset includes information about:

- connection type (AESO direct-connected, distribution-served transmission-connected, or distribution served distribution-connected)
- location (geographic co-ordinates)
- substation number
- substation voltage level
- number of transformers
- project type (greenfield or upgrade)
- transmission line length
- substation costs
- transmission line costs
- distributed and indirect costs

89. Only participant-related costs\(^{45}\) are included in the dataset. System related costs\(^{46}\) are the responsibility of all customers and should be recovered from all customers through rates.

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\(^{45}\) Participant related costs are the costs associated with the construction project, entailing radial transmission extensions and enhancements at adjacent substations. These costs can normally include the point of delivery, communication enhancements at adjacent substations, a new breaker at an existing substation if required, and other enhancements required to complete the participant’s connection.
90. In this application, the AESO has also introduced the concept of maximum DTS, where the DTS contract level associated with a connection project reflects its final or maximum capability. The maximum DTS level represents the largest capacity for which a connection project has been configured and designed to serve. The AESO explained that many connection projects have contract levels that vary over time (usually referred to as staged contract levels). Under this concept, the largest DTS capacity increase that does not require construction at a substation would be considered the maximum DTS capacity.

7.2 Update connection project data

91. The dataset used for the AESO’s 2010 ISO tariff application consisted of 46 greenfield projects and 18 pre-AESO projects. The dataset included all project cost estimates where a proposal to provide service (PPS) level estimate was available.

92. For this application, the 2010 dataset was updated with the most recent cost estimates or final costs where available. The DTS capacity data was also updated.

93. The AESO also outlined other project updates that were undertaken, including:

- Two projects entailed the construction of two substations. These costs were separated out resulting in four projects.
- One project was granted an industrial system designation and was removed from the dataset. Connections with industrial system designation include generation and are generally atypical, therefore these projects are not included in the greenfield project analysis.
- It was discovered that a connection project was incorrectly included as a greenfield project in the 2010 dataset. The project actually entailed upgrades at five separate substations. This project was divided into five projects and included in the upgrade project data.
- Another project was incorrectly included as a greenfield in the 2010 data and was included in the upgrade project data.

94. A total of 24 new projects were added to the greenfield project dataset. Projects were included where a PPS level estimate was available and a facility application had been filed for the project.

95. The updated and revised dataset now includes 69 AESO-era greenfield projects, 18 pre-AESO greenfield projects and 128 upgrade projects. The AESO explained that it was important to maintain the previous projects in the dataset to provide as much stability and continuity to the cost function as possible. The final combined dataset consists of 215 connection projects.

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46 System-related costs are those project costs associated with looped transmission facilities, radial transmission lines that will become looped within five years, or in any circumstance where the AESO deems that for economics or system planning purposes a facility larger than that required to serve the market participant is necessary. In those cases, the AESO classifies these portions of the project as system-related costs.

47 Exhibit 16, application, paragraph 141, page 29.

48 As part of the AESO’s 2007 GTA proceeding, data for 18 older projects with small and large DTS levels were added to the database to improve the coverage of DTS capacities that were not well represented in the greenfield project data in that application. The 18 projects were developed prior to the formation of the AESO.

49 Exhibit 42.01, AUC-AESO-021(a).
7.3 Incorporating upgrade projects

96. An upgrade project represents construction of transmission facilities to increase the capacity of or improve system access service at an existing point of delivery. The existing point of delivery may consist of original greenfield construction or may also include one or more prior upgrades to an original greenfield project.

97. One example of an upgrade project involves adding capacity by adding or replacing a transformer, which would generally incur significant costs for the upgrade. A second example of an upgrade project involves adding one or more breakers to an existing substation to allow access to additional transformer capacity at the substation. This type of upgrade project does not require an increase in transformer capacity and therefore costs are usually lower.

98. The AESO explained that incorporating an upgrade project within the dataset should only reflect the cost of accommodating the additional capacity at an existing substation and should not add another instance of the original cost of the existing substation.

99. The AESO described the approach used to incorporate upgrade projects in the estimation of the average cost function as follows:

To ensure the cost function reflects only the upgrade cost for an upgrade project, the cost of the substation already in place to accommodate the initial capacity (which is considered to have been built as a greenfield project) was calculated using the cost function developed for greenfield projects. The cost of the upgrade project was then added to the calculated greenfield cost to determine a “total” cost for the substation, which would then be capable of serving the total capacity (initial capacity plus incremental capacity) at the substation. An upgrade data point therefore reflects the total costs and total capacity at the substation, which would be comparable to the cost and capacity at a greenfield substation, but the total cost would vary from the cost function only to the extent the upgrade cost varied from the cost function.

After determining data points for all the upgrade projects, a new power curve regression was analyzed for the composite data set including all greenfield and upgrade projects. The resulting power curve was slightly different from the original greenfield-only power curve. Since the cost to accommodate the initial capacity at an upgrade project was based on the original power curve, the new power curve changed the data points for upgrade projects slightly. Therefore the data points for upgrade projects were recalculated based on this first iteration of the power curve, and the new upgrade data points were then used with the greenfield data points to develop another iteration of the power curve. This iterative process — develop upgrade data points using the existing power curve for initial capacity costs, combine them with greenfield data points, and determine a new power curve — was repeated 15 times to allow the power curve determinants to converge on stable values. The AESO considers the iterative process to be appropriate both to develop a stable power curve that is as representative as possible of the combined greenfield and upgrade project data, and to acknowledge that some substations are upgraded multiple times through their lives. (Multiple upgrades are likely to occur when one considers that 128 upgrade projects occurred during the same period as only 69 greenfield projects.)

100. The approach used, which calculates the original cost of the existing substation using the cost function, avoids any impact associated with multiple additions to the original substation.

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50 Exhibit 16, application, paragraphs 187-188, page 37.
Using this iterative process allows the use of the “with upgrades” cost function in the calculation of the final cost function.\textsuperscript{51}

101. Upgrade projects, by their nature, tend to be larger since incremental capacity is being added at an existing substation that already has greenfield capacity. As a result, incorporating upgrade projects in the dataset used to establish the cost function has the effect of providing more investment to upgrade projects. However, the AESO considered that providing greater investment should not dampen the price signal that prompts market participants to consider future capacity requirements when requesting system access service (i.e., the cost of upgrading is typically higher than the cost of providing the same capacity at the time of greenfield construction).

102. ACCESS explained that upgrade projects have traditionally had a higher level of contribution compared to greenfield projects and the inclusion of upgrades adds a minimal increase to the cost function and in turn investment levels for upgrade projects. However, ACCESS also argued that since a greater number of upgrade projects occur as compared to greenfield projects, ignoring upgrades in the cost function analysis would lead to a less robust analysis. ACCESS supported the AESO’s use of upgrade projects in its analysis.\textsuperscript{52}

103. ACCESS also pointed out that upgrades do offer some efficiency as investment in the facilities is delayed. Along the same line, the AESO argued that market participants should not be unduly harmed if unexpected load growth or capacity increases are required beyond periods which can be reasonably forecast.

7.4 Inflation index

104. The AESO made some modifications to the inflation index used to escalate original project costs to current cost levels.

105. The first modification was made to recognize that the majority of material and construction costs for a connection project are typically incurred by a transmission facility owner six to eighteen months prior to the in-service date of the project. To reflect this, the AESO now escalates all project costs starting one year before a project’s in-service date.

106. The second modification was to revise the composite inflation index the AESO had specified as part of its 2010 ISO tariff application. The composite index approved as part of that application used a four-component index based on Statistics Canada indices for substation equipment, transmission line, industrial services, and industrial structures. Statistics Canada has since discontinued the Alberta-specific industrial services index and the AESO was required to look for an alternative inflation index.

107. The AESO proposed an inflation index using the Electric Utility Construction Price Index (EUCPI), a Canada-wide index that includes a transmission sub-index (EUCPI transmission) and Average Hourly Earnings for Salaried Employees in Alberta (Alberta AHE). The AESO proposed a weighting of 53.2 per cent EUCPI Transmission and 46.8 per cent Alberta AHE. The proposed weightings for equipment and labour costs were established as part of a detailed analysis conducted in the AESO’s 2010 ISO tariff application.

\textsuperscript{51} Exhibit 42.01, AUC-AESO-022(b).
\textsuperscript{52} Exhibit 55.01, ACCESS argument, page 7.
108. The AESO explained that the proposed index is less volatile and simpler than its previous composite index. It also pointed out that the these Statistics Canada indices are long standing and therefore not expected to be discontinued in the foreseeable future.

7.5 Proposed cost function

109. The AESO argued that the power curve cost function that was specified in previous tariff applications continues to best represent the data and therefore the proposed cost function will be similar to the cost functions approved in Decision 2010-606 for the AESO’s 2010 ISO tariff application and in Decision 2007-106\(^{53}\) for the AESO’s 2007 GTA.

110. The AESO explained that even with the addition of new data, the variability of connection project costs within the dataset remains significant. It pointed out however that the data nevertheless exhibited a clear trend of increasing costs as contract capacity increases for connection projects. The AESO stated that the proposed cost function and the corresponding coefficient of determination (the correlation of the data with the cost function) is generally comparable to previous cost functions and therefore concluded that the power curve continues to produce a reasonable average cost function for transmission connection projects.

111. The AESO submitted that incorporating costs for both greenfield and upgrade projects results in a cost function that better reflects cost causation for all projects. Incorporating upgrade projects in the cost function has the following advantages:\(^{54}\)

- it improves the price signal provided to upgrade projects
- it better reflects cost causation of all connection projects
- it improves the equitable treatment of all load market participants

112. The proposed cost function based on a power curve regression using the 215 data points is:

\[
\text{Average cost} = 1,976,700 \times \text{MW}^{0.5810}
\]

113. The proposed average cost function and the 2010 average cost function is depicted in the chart below along with the greenfield and upgrade project data points plotted.

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\(^{54}\) Exhibit 42.01, AUC-AESO-023 and Exhibit 54.01, AESO argument, paragraph 42, page 11.
114. The AESO explained that while it does not expect to propose further revisions to the average cost function as part of its next comprehensive tariff application, some stakeholders who would be affected by a change to the point of delivery charge under Rate DTS have not participated in this contribution policy proceeding. Therefore, the AESO anticipates that use of the updated cost function for rate design purposes will be further examined under the comprehensive tariff application. The AESO expected that if further adjustments to the cost function result from the next tariff application proceeding, those adjustments can be incorporated into the contribution policy at that time.

115. The AESO argued that the cost function should be approved without waiting for the AESO’s next tariff application to:
   - ensure the contribution policy is based on the best information currently available
   - incorporate upgrade projects into the cost function, which the AESO considers to result in a cost function that better reflects cost causation for all connection projects

116. The AESO considered that any risk of further changes to the cost function in the AESO’s next tariff application is outweighed by the advantages of implementing the proposed refinements to the cost function, especially given the comparability to the time period between cost function changes in the recent past.\(^{55}\)

117. The UCA supported the proposed method of determining the average cost function, including the incorporation of upgrade projects. However, the UCA considers that the same cost function should continue to be used for both the determination of investment levels and the

\(^{55}\) Exhibit 54.01, AESO argument, paragraph 73, page 16.
establishment of Rate DTS. Such alignment means that a market participant who receives a higher level of investment will pay a higher monthly charge for the service received. Therefore, parties that were not represented on the construction contribution working group may not support the adoption of the updated average cost function for rate design purposes in the next tariff application. The UCA explained that, if the average cost function was approved at this time for contribution policy purposes, but not adopted for rate design purposes, then customers over approximately 20 megawatts (MW) would benefit from higher investment levels without paying higher rates, and customers under approximately 20 MW would receive lower investment levels without benefitting from the lower rates.  

118. The UCA submitted that the same average cost function should continue to be used to establish both the investment levels and Rate DTS. To maintain this alignment, the UCA proposed that the updated investment levels be based on the average cost function that is adopted for rate design purposes in the comprehensive tariff application that is to be filed in March 2012, at which time the updated investment levels would be applied retroactively to July 1, 2012.

119. ACCESS made a similar argument, stating that cost causation must consider not only the connection cost, but the ongoing rates. The AESO’s methodology of aligning the point of delivery charge within Rate DTS with investment levels through the AESO cost function ensures that those customers that receive high levels of investment will pay higher rates.

7.6 Commission findings

120. The Commission acknowledges the level of effort put forth by the AESO, in consultation with the working group and stakeholders, to revise and update the average cost function for this application. However, as the AESO points out “[t]he cost function itself is not a product of the contribution policy, however, and cost function changes would occur in due course in a comprehensive ISO tariff application that reviews and updates the cost causation information on which the tariff’s rates are based.” It was for this reason that changes to the cost function were determined to be out-of-scope for this proceeding, as provided in the final scope of work:

The AESO interprets the Commission’s statement to exclude consideration of:

- alterations to the structure of the maximum investment level based on the point-of-delivery cost function determined by the AESO and increased by a multiplier (although the level of the multiplier is considered an in-scope matter)

121. The Commission recognizes that changes in the average cost function occur over time with respect to rate design, as Rate DTS charges are paid for many subsequent years and are subject to change to reflect revisions and updates to the average cost function, whereas a construction contribution is paid for a service at a point in time and is not subject to later change. Notwithstanding, the Commission agrees with the UCA that changes to the average cost function should be applied simultaneously for both the determination of investment levels and the establishment of Rate DTS, therefore avoiding to the extent possible any potential for

56 Exhibit 49.02, UCA argument, paragraph 10, page 2.
57 Exhibit 55.01, ACCESS argument, page 4.
58 Exhibit 16, application, paragraph 263, page 57.
59 Exhibit 12.01, paragraph 9(3)(b), page 3.
60 Exhibit 42.01, AUC-AESO-031.
significant misalignment between what a customer receives in investment and the rates that are paid for that service.

122. The Commission also agrees with the AESO that “a disadvantage of using the updated cost function is that it may be revised through the course of the AESO’s next comprehensive tariff application, which would result in an additional change to the AESO’s investment levels.”\textsuperscript{61} While this would not be a problem in and of itself, given the other factors discussed above, the Commission considers that proposed changes to the average cost function warrant full consideration in a comprehensive tariff application.

123. Consequently, the Commission will not approve the changes the AESO has proposed to the average cost function at this time. The AESO is directed to refile the proposed changes to the average cost function in its next comprehensive tariff application. In this way, any stakeholders who would be affected by a change to the point of delivery charge, that did not participate in this proceeding, will have an opportunity to comment on the proposed changes.

124. The Commission has reviewed the proposed modifications to the inflation index and while the Commission will not address the changes to the inflation index in this decision, it notes that subsequent to the AESO filing this application, the Commission released Decision 2012-237,\textsuperscript{62} with respect to the Rate Regulation Initiative. The choice of an inflation index was examined in detail in that decision, and its findings with respect to an inflation factor may warrant consideration by the AESO given that the AESO has chosen to propose an inflation index similar to the one used by ENMAX.\textsuperscript{63}

8 Determination of investment level

125. The AESO has proposed to establish investment levels with an approach that combines a multiplier applied to an average cost function. Under the AESO’s proposed approach the maximum investment level will target a percentage of aggregate connection project costs. A multiplier has been used to establish investment levels in the AESO’s tariff since its 2007 tariff application, however the proposed approach differs from past contribution policies because it focuses on the level of aggregate connection costs covered rather than on the number of projects covered.

126. As outlined previously in Section 5 of this decision, the AESO concluded that an average cost multiplier and investment coverage provide the strongest support for the greatest number of principles.

127. Under the AESO’s proposal to set investment levels, a multiplier is applied to the average cost function to achieve a target level of investment coverage. For example, a multiplier of 1.0 would result in a maximum investment level equal to the average cost of a connection project, and a multiplier of 1.5 would result in maximum investment of 50 per cent more than the average cost of a connection project.

\textsuperscript{61} Exhibit 44.01, UCA-AESO-001(c).
\textsuperscript{63} Exhibit 16, application, paragraph 173, page 34.
The AESO explained that a multiplier used to set investment levels is not considered a permanently fixed number, rather it should be adjusted each time the average cost function is updated and new projects are added to the database, or perhaps more frequently as costs of projects change from year to year.\textsuperscript{64}

In this section, the discussion of the proposed investment level has been divided into the following parts:

- forward looking investment levels
- reasonability
- proposed investment level
- alignment with contribution policy principles
- investment tiers
- rate impacts

These matters are addressed under separate headings below, followed by the views of interveners with respect to the proposed investment level and then the Commission’s findings.

8.1 Forward looking investment levels

The AESO considered that the contribution policy should be forward looking. To achieve this the AESO proposed to use only recent projects to establish a multiplier for setting maximum investment levels. The AESO argued that recent project costs (connection projects with in-service dates of 2010 or later) provide more relevant information on present and future cost trends when establishing investment levels to be applied to current and future connection projects.

The use of recent projects to set the investment level differs from the development of the point of delivery cost function, which is based on an analysis of all available connection project cost information (87 greenfield projects and 128 upgrade projects). The dataset of recent projects consists of 68 projects, of which 26 are greenfield projects and 42 are upgrade projects. The AESO considered that the 68 projects represent a reasonably substantive dataset that is unlikely to be unduly influenced by any one connection project or any one factor.\textsuperscript{65}

The AESO explained that using only recent projects to establish investment levels is a reasonable approach to recognize that any changes to service characteristics, functionality, and standards occur over time.\textsuperscript{66} Whereas, establishing investment levels based on the costs of all projects would discount changes to service characteristics, functionality and standards and therefore would result in a contribution policy that does not satisfy the principle that it should be robust and sustainable.\textsuperscript{67}

The AESO expected that the maximum investment level will be applied to projects in the future that are more similar to recent projects than to projects in prior time periods. The AESO

\textsuperscript{64} Exhibit 16, application, paragraph, 225, pages 48-49. In this application, the AESO is not requesting approval of any specific methodology to update investment levels, beyond the annual update to reflect inflation already approved in prior proceedings.

\textsuperscript{65} Exhibit 42.01, AYC-AESO-26(b), page 2.

\textsuperscript{66} Ibid., AUC-AESO-26(b), page 2.

\textsuperscript{67} Ibid., AUC-AESO-26(c) page 3.
suggested that if recent connection projects represent a different mix than connection projects overall, the investment levels should reflect this reality rather than ignore it. In this way, the contribution policy accommodates changes to service characteristics, functionality, and standards over time.

135. The AESO recognized that connection project costs vary due to many factors, including radial line requirements, transmission voltage level, substation configuration, varying geography and construction conditions, and overall project complexity. However, the AESO’s examination of both greenfield and upgrade project outliers did not reveal any unique characteristics that could explain why some projects have higher than average costs. The AESO therefore concluded that no projects should be excluded from the project database, nor from development of an average cost function. The AESO submitted that a maximum investment level based on a multiplier applied to an average cost function will not significantly reduce contributions for projects where costs are much higher than average.

136. The AESO observed that all outlier greenfield projects exhibited at least one of the following factors:

- Geographic location can add significant costs to a connection project, especially if a project requires long distances of transmission line.
- Building in advance of bulk system expansion can add significantly to project costs, although some of the facilities built may later be converted to system facilities (with an associated contribution refund).

137. The following factors were less frequently observed, but can still add significantly to the costs of a connection project:

- Delays in regulatory approvals or due to other unforeseen circumstances can increase costs by, for example, changing the season of construction or causing demobilization and re-mobilization of construction.
- Recently implemented requirements for participant involvement and additional consultation can add to project costs and timelines.
- Requirements to unexpectedly outsource construction to maintain schedules under abnormal or exceptional circumstances can add to connection project costs, especially during constrained labour market conditions.
- High distributed and indirect costs can contribute to higher costs for more-recent projects.
- Changes in functionality or reliability standards over time can impact connection project costs.

138. With respect to upgrade projects, all outlier projects involved the addition of a transformer. Another factor observed was that upgrade project outliers involved a contract capacity increase of five MW or less, which resulted in a high per MW cost. Upgrade project outliers also all occurred at substations older than 20 years, with substation ages ranging from

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68 Ibid., AUC-AESO-23(c), paragraph 149.
69 Exhibit 16, application, paragraph 164, pages 32-33.
70 Ibid., paragraph 155, page 31.
71 Ibid., paragraph 156, page 32.
23 years to 47 years. This suggests that it may be more expensive to accommodate additional or replacement transformers at older substations.\textsuperscript{72}

8.2 **Reasonability**

139. The AESO explained that the determination of an optimal contribution policy is essentially a balancing act that needs to consider a number of variables, including aspects of investment coverage. Judgment must be used to ensure that the outcome represents a reasonable balance of objectives.

140. The AESO considered that the level of unused investment establishes an upper bound for a reasonable level of investment coverage. Unused investment is the amount of investment that the project would otherwise be eligible for if its costs were not already fully covered by investment.

141. The AESO examined the size and frequency of contributions to determine the lower level for investment coverage, such that the level of investment would provide an effective price signal while still maintaining intergenerational equity with prior contribution policies.

142. The AESO explained that large amounts of unused investment can have unintended consequences. When a connecting market participant is afforded a large investment to cover costs that are below average, that market participant might be incented to request facilities over and above what is required to satisfy the system access service request. Therefore, increasing the level of unused investment will have the disadvantage of market participants potentially failing to appropriately consider the costs of connections when requesting system access service. Over time this would tend to increase average project costs which, in turn, would place upward pressure on rates.

143. High levels of unused investment would require additional monitoring of connection projects by the AESO to ensure that investment is not provided for:

- facilities beyond those required to accommodate market participants’ needs for system access service, or
- facilities in excess of good electric industry practice

144. The AESO submitted that an appropriate investment level should limit unused investment, but still provide reasonable investment coverage for greenfield and upgrade projects.

145. The AESO explained that low levels of investment may result in an excessive price signal (large construction contribution), which may cause a market participant to sacrifice the operability and reliability of its facilities or processes to avoid or reduce the level of construction contribution.\textsuperscript{73} Alternatively, it may cause a market participant to avoid requesting system access service, even when such avoidance may not be optimal from an overall system perspective. System access service could be avoided by installing on-site generation, requesting service at distribution voltage, or limiting capacity by shutting down or curtailing processes.

\textsuperscript{72} Ibid., paragraph 163, page 32.

\textsuperscript{73} Exhibit 54.01, AESO argument, paragraph 12, page 5.
146. The AESO suggested that if market participants took these actions, it may have the following effects:\textsuperscript{74}

- it may limit the development of transmission facilities, which can be shared with other market participants
- more facilities than those required for system access service may be constructed
- it may only be a short-term solution
- it may not support the economic, orderly, and efficient development and operation of the transmission system

147. The AESO considers that the level of investment should support optimal connection project configuration and design, and should not result in sub-optimal outcomes by being either insufficient or excessive.

148. The AESO stated that a change in the level of construction contribution will have little, if any, effect on the number or size of system access service requests it receives. The costs of a transmission service connection are usually small compared to the total cost of the end use development being built and owned by the market participant, and are usually not a determining factor in whether a project proceeds.\textsuperscript{75} Nevertheless, the construction contribution may still represent a material cost and the AESO observed that market participants appear to respond to the price signal of a construction contribution by: optimizing the stages or timing of their project; refining the nature or details of their service requirements, or by adjusting the service location on their property to minimize their construction contributions.\textsuperscript{76}

149. In addition to sending a price signal, the AESO considered that an appropriate investment level should also reflect cost causation and be based on local costs, such that the resulting contributions are considered fair and equitable by both market participants and transmission facility owners.

150. The AESO acknowledged that part of the balancing act should be the consideration of what all market participants pay through related rate components, as higher AESO investment also puts upward pressure on point of delivery charges under Rate DTS.

8.3 Proposed investment level

151. The AESO considered that investment coverage from 64 per cent to 76 per cent of aggregate project costs represents a reasonable target range for transmission investment levels. The AESO explained that most variables have reasonable levels within that range of investment coverage:\textsuperscript{77}

- 40 per cent to 50 per cent of projects are fully covered by investment, while 50 per cent to 60 per cent of market participants are required to pay a contribution
- 64 per cent to 76 per cent of aggregate project costs are covered by investment, while 24 per cent to 36 per cent of project costs are paid by contribution

\textsuperscript{74} Exhibit 42.01, AUC-AESO-006.
\textsuperscript{75} Exhibit 16, application, paragraph 266, page 57.
\textsuperscript{76} Ibid., paragraph 267, page 57.
\textsuperscript{77} Ibid., paragraph 239, page 51.
• potential unused investment is limited to eight per cent to 20 per cent of aggregate project costs

152. The AESO suggested that investment coverage greater than approximately 76 per cent creates excessive unused investment, as it results in more than 20 per cent of aggregate project costs being available as unused investment.

153. Within this range, the AESO proposed that the midpoint of 70 per cent of aggregate costs be established as the target investment coverage for transmission maximum investment levels. This target investment coverage is achieved with a multiplier of 1.33 applied to the average cost function. A 1.33 multiplier results in 46 per cent of projects with costs fully covered by investment and in turn, 54 per cent of projects requiring a contribution to be paid.

154. At the proposed investment level, if project costs are high enough, the amount of investment for a project will increase by 80 per cent compared to current 2011 investment levels. Under the AESO’s proposal, the number of projects for which contributions must be paid will be reduced, and the size of contributions, when they are required, will be significantly reduced.

155. Although the proposed increase in maximum investment levels will result in an increase in unused investment, the AESO considered the increase would be relatively small, representing a total of only 13 per cent of aggregate project costs. It also noted that unused investment will be $5 million or more at only nine per cent of connection projects.

156. The AESO explained that the investment coverage is not the same for greenfield and upgrade projects. The proposed 70 per cent investment coverage overall would result in 76 per-cent investment coverage for greenfield project costs and 55 per cent coverage for upgrade project costs.

157. The following table summarizes the investment coverage for greenfield and upgrade projects using a 1.33 multiplier applied to the average cost function.

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78 Ibid., paragraph 242, page 51. A multiplier of 1.33 results in a 64 per cent increase in aggregate investment in connection projects compared to the investment provided by current 2011 investment levels, because some projects will have investment limited by project costs such that an increase in maximum investment levels will not result in an increase in actual investment in those projects.

79 Ibid., paragraph 272, page 58.

80 Ibid., paragraph 249, page 52.

81 Ibid., paragraph 241, page 51.
Table 4. Summary of investment coverage

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of projects that receive investment</th>
<th>Investment coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upgrade projects (42)</td>
<td>20</td>
<td>48%</td>
</tr>
<tr>
<td>Greenfield projects (26)</td>
<td>11</td>
<td>42%</td>
</tr>
<tr>
<td>Total projects (68)</td>
<td>31</td>
<td>46%</td>
</tr>
<tr>
<td>Coverage at 2011 investment levels</td>
<td>10</td>
<td>15%</td>
</tr>
<tr>
<td>Investment increase over 2011 levels</td>
<td>210%</td>
<td>210%</td>
</tr>
<tr>
<td>Projects with unused investment</td>
<td>31</td>
<td>46%</td>
</tr>
<tr>
<td>Projects with ≥ $5 million unused investment</td>
<td>6</td>
<td>9%</td>
</tr>
</tbody>
</table>

Source: Exhibit 16, application, paragraph 241, page 51.

8.4 Alignment with contribution policy principles

158. The AESO considers that 70 per cent investment coverage represents a reasonable balance in satisfying, to the greatest extent possible, all the contribution policy principles proposed in the AESO’s application.

159. In terms of the three primary principles, the AESO concluded the following:

- **Provides effective price signal** – over half of connection projects will be required to pay a contribution. However, most contributions are reasonable in magnitude and, in aggregate, represent only 30 per cent of project costs.\(^{82}\)

  The AESO considered that the proposed investment level at 70 per cent investment coverage over all connection projects represents a reasonably effective price signal that will encourage the best long-term economic and technical alternatives for connection projects.

- **Maintains intergenerational equity** – connection project costs and investment coverage have varied considerably in the past. The AESO considers that, from the perspective of historical investment coverage, a target of 70 per cent is reasonable. It is slightly higher than the average of 68 per cent, which the AESO considers reasonable because the lower investment levels of recent tariffs have, at least in part, been responsible for this separate contribution policy proceeding\(^ {83}\).

  The average of 68 per cent is shown in the chart below relative to investment coverage provided in the current 2011 tariff as well as historical tariffs. The proposed 76 per cent investment coverage for greenfield projects is also shown\(^ {84}\).

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\(^{82}\) Ibid., paragraph 248, page 52.

\(^{83}\) Ibid., paragraph 253, page 53.

\(^{84}\) Ibid., Figure 8-10, paragraph 253, page 53.
Based on cost causation – the refinements to the cost function ensure that the proposed approach continues to support this principle. The incorporation of upgrade projects into both the cost function development and the investment coverage assessment enhance the cost causation basis for the proposed investment levels. The contract capacity required for system access service continues to be a strong driver of costs, and therefore provides a sound cost causation basis for the investment determination.  

The AESO submitted that the proposed investment coverage does not give undue consideration to any specific principle or to any specific concern identified during the development of the application.

8.5 Investment tiers

The AESO proposed to keep the investment tiers the same as in the current tariff as they continue to represent the economies of scale in the point of delivery cost function.

The AESO proposed that these investment levels (as outlined in Table 5) be incorporated into Section 8 of the ISO tariff.

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85 Ibid., paragraph 254, page 53.
86 Exhibit 42.01, AUC-AESO-30(a).
Table 5. Proposed investment levels

<table>
<thead>
<tr>
<th>Tier</th>
<th>Rate DTS investment</th>
<th>PSC factor</th>
<th>Rate PSC investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012 proposed maximum investment levels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substation fraction (for new points of delivery only)</td>
<td>$29,250/year</td>
<td>21%</td>
<td>$6,140/year</td>
</tr>
<tr>
<td>First (7.5 x substation fraction) MW of contract capacity</td>
<td>$52,600/MW/year</td>
<td>21%</td>
<td>$11,045/MW/year</td>
</tr>
<tr>
<td>Next (9.5 x substation fraction) MW of contract capacity</td>
<td>$27,150/MW/year</td>
<td>21%</td>
<td>$5,700/MW/year</td>
</tr>
<tr>
<td>Next (23 x substation fraction) MW of contract capacity</td>
<td>$19,100/ME/year</td>
<td>21%</td>
<td>$4,010/MW/year</td>
</tr>
<tr>
<td>All remaining MW of contract capacity</td>
<td>$12,450/MW/year</td>
<td>0</td>
<td>$0/MW/year</td>
</tr>
</tbody>
</table>

Source: Exhibit 16, application, paragraph 258, page 55.

8.6 Rate impacts

163. The AESO explained that a change to the contribution policy as proposed may impact market participants in two respects:

- it may affect the amount of construction contribution an individual market participant must pay for connection of a new service or expansion of an existing service
- it may affect the average rates paid for system access service by all market participants in as much as it affects the amount of investment recovered through rates

164. A market participant that continues to take service with no changes that require construction of transmission facilities will generally not be impacted by changes to the contribution policy. However, the point of delivery charge in Rate DTS will change in response to changes in the shape of the cost function and market participants will be affected by the associated changes to rates.

165. The proposed change in the shape of the cost function is estimated to result in lower point of delivery charges for system access service smaller than approximately 20 MW and higher point of delivery charges for system access service larger than approximately 20 MW.87

166. The cost of transmission facility owner tariffs is recovered by the AESO primarily through Rate DTS, which is charged for system access service to load market participants in accordance with the ISO tariff. Increased investment in new and expanding services will in turn increase the rate base of transmission facility owners. Costs associated with the rates base of transmission facility owners, including depreciation, return on investment, interest on debt, and income taxes, are recovered through transmission facility owner tariffs paid by the AESO. The transmission facility owner tariffs will accordingly increase when investment levels increase. However, the additional revenue from new and expanding services will offset, at least to some extent, the transmission facility owner tariff increases resulting from investment in those services.

167. The AESO’s proposed investment levels are expected to result in a 64 per cent increase in transmission facility owner investment in new and expanding services, however the impact on the transmission charges under Rate DTS is expected to be small and gradual. The cumulative

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87 Exhibit 16, application, paragraph 287, page 60.
impact of increased investment over 10 years is approximately a $1.36/megawatt hour (MWh) increase in point of delivery charges under Rate DTS.\(^8\)

168. The AESO explained that, under the currently-approved Rate DTS, the charge is equivalent to approximately an average $22/MWh, of which approximately $5/MW is attributable to the point of delivery charge. The $1.36/MWh increase estimated with the proposed investment levels therefore represents an increase of approximately six per cent in Rate DTS over a 10-year period.

169. The AESO is not requesting any change to its rates in this application as changes to its rates were beyond the scope of matters to be addressed. The use of the updated cost function for rate design purposes will be examined in the next comprehensive tariff application.

### 8.7 Intervener support for the proposed investment level

170. The UCA supported the proposed 70 per cent investment coverage and agreed that the proposed investment level attempts to simultaneously satisfy the three primary principles, while satisfying as many of the secondary principles as possible.

171. However, the UCA considers investment coverage of 70 per cent to be at the high end of the reasonable range. The UCA explained that the proposed 70 per cent coverage for all projects results in 76 per cent coverage for greenfield projects.

172. IPCAA submitted that the contribution policy needs to find an appropriate range that discourages the construction of unnecessary facilities, but encourages the construction of optimal facilities. IPCAA submitted that this was not a specific number, but a range and the AESO’s proposed coverage of 70 per cent of aggregate project costs stems from a point within that range of reasonableness. IPCAA emphasized that the 1.33 multiplier was established within the range of reasonableness and took into account historical data and knowledge of the drivers associated with customer contributions.\(^9\)

173. ACCESS agreed with the 1.33 multiplier and the proposal that 70 per cent of overall construction costs are covered by investment. ACCESS argued that lower levels of multipliers would not provide a similar balance between price signals and intergenerational equity.\(^10\)

174. ACCESS also supported the AESO’s proposal to determine the multiplier using only the latest projects in the analysis. ACCESS argued that this approach ensures that the proposed level of investment is adequate to cover current projects. As long as this approach is maintained in the future, it will ensure that the multiplier is sufficient to cover current project costs, mitigating the potential for future investment cliffs.\(^11\) ACCESS added that because the proposed investment levels will only maintain the historical average cost coverage, the proposed level of investment is not excessive.

175. AltaLink supported the principles-based target range of 64 per cent to 76 per cent of actual project cost coverage proposed by the AESO, because the range represented the AESO’s

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\(^8\) Ibid., paragraph 284, page 59.
\(^9\) Exhibit 51.01, IPCAA argument, page 4.
\(^10\) Exhibit 55.01, ACCESS argument, page 5.
\(^11\) Ibid., pages 8-9.
best attempt to simultaneously satisfy the three primary principles while satisfying as many of
the secondary principles as possible.\textsuperscript{92}

176. AltaLink expressed concern that, should the future reflect the historical experience, the
actual project cost coverage level determined by the Commission in this proceeding will fall
below the reasonableness range. Such a result would clearly fail to satisfy the primary principles
and would materially further skew the average cost coverage percentage downwards, affecting
future reasonableness range calculations.\textsuperscript{93}

177. AltaLink requested that the Commission:

a. Approve the AESO’s application.

b. Make a finding that, with respect to setting investment levels, the primary principles
must be weighted equally and not ranked.

c. Make a finding that the on-going construction contribution policy that best satisfies
the primary and secondary principles is represented by targeting actual project cost
coverage levels of 64 per cent to 76 per cent.

8.8 Commission findings

178. A review of investment coverage for transmission connection projects under the AESO’s
construction contribution policy was a key in-scope item for this proceeding. As the AESO
explained, a multiplier mechanism has been used to establish investment levels in the AESO’s
tariff since its 2007 tariff application. This approach has been continued in this application, as
the AESO’s proposed approach to establishing investment levels combines a multiplier applied
to an average cost function. One difference proposed in this application is that the level of
investment coverage focuses on the level of aggregate connection costs covered rather than the
number of projects covered. The Commission agrees with the approach proposed by the AESO,
but considers that the level of investment proposed at 70 per cent of aggregate connection costs,
achieved with a multiplier of 1.33, requires further deliberation, as outlined below.

179. The Commission agrees with the AESO that there are a number of variables that must be
considered when establishing the investment level and judgment must be used to ensure that the
outcome represents a reasonable balance of objectives. The principles outlined by the AESO and
accepted by the Commission provide guidance when balancing the objectives. The AESO
considered that the level of unused investment establishes an upper bound for a reasonable level
of investment coverage and that the size and frequency of contributions paid by market
participants establishes the lower bound. While the Commission accepts this in general, there is a
significant range between the upper and lower bounds. The AESO also recognized this and
proposed a reasonable target range for transmission investment levels of 64 per cent and 76 per
cent. The Commission considers that the AESO’s reasonable range is likely too high and
requires further evaluation for a number of reasons.

180. The Commission considers that the AESO’s contribution policy has evolved in discrete
points over time and therefore an analysis of average investment levels across past tariffs can be
misleading. The Commission considers that the changes made to the contribution policy in the

\textsuperscript{92} Exhibit 56.01, AltaLink argument, paragraph 27, page 5.
\textsuperscript{93} Ibid., paragraph 32, page 6.
2007 GTA and carried forward to subsequent tariff applications should establish a benchmark to which an examination of investment coverage is compared. As shown in Figure 8-10 of the AESO’s application (and reproduced above in Section 8.4 above), investment coverage stood at 61 per cent in the 2007 ISO tariff. The Commission agrees with IPCAA, which emphasized the need for a consistent policy going forward to promote intergenerational equity. IPCAA submitted that, if the price signal is established through a fair mechanism and kept consistent across multiple AESO GTAs, it will be possible to satisfy both the principle of maintaining intergenerational equity and effective price signals simultaneously and thereby meet customer expectations with regards to contribution policy. For this reason, the Commission does not consider that the principle of intergenerational equity is sacrificed at investment coverage levels of approximately 60 per cent.

181. The Commission considers that any increase to the investment level needs to balance the benefits to the system from supporting optimal connection project configuration and design with the level of investment and the corresponding increase in rates paid by all market participants. The Commission accepts the AESO’s contention that the level of investment should not result in sub-optimal outcomes by being either insufficient or excessive. However, it is not clear to the Commission at what level the construction contribution is considered insufficient or excessive. The AESO did indicate that a change in the level of construction contribution will have little, if any, effect on the number or size of system access service requests it receives. There was no evidence provided that the current contribution policy results in sub-optimal outcomes or that it does not support optimal connections, even at the low investment levels that were experienced in 2011. The AESO did state that the low levels of investment resulted in “frequent expressions of dissatisfaction and complaints from market participants arising from the frequency and magnitude of construction contributions paid for connections of new services or expansions of existing services.”

182. The AESO was requested to plot the 24 new greenfield projects added to the dataset against the 2010 cost function. The resulting chart is reproduced below.

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94 Exhibit 51.01, IPCAA argument, page 3.
95 Exhibit 16, application, paragraph 271, page 58.
96 Exhibit 42.09, attachment AUC-AESO-023 (c-d).
183. The chart illustrates that the majority of new connection projects have costs that are considerably above the 2010 average cost function. The AESO’s historical analysis of investment coverage for 2010 and 2011 is provided in the following table.

**Table 6. AESO historical analysis of investment coverage**

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average cost of connection projects ($ million)</td>
<td>16.8</td>
<td>26.6</td>
</tr>
<tr>
<td>Average AESO investment ($ million)</td>
<td>10.1</td>
<td>8.4</td>
</tr>
<tr>
<td>Average investment coverage</td>
<td>60%</td>
<td>32%</td>
</tr>
</tbody>
</table>

Source: Exhibit 19, application, Appendix C.

184. The AESO explained that numerous factors contribute to high project costs and no single characteristic can explain why some projects have higher than average costs. As illustrated in the table, the average cost of a connection project increased by 58 per cent between 2010 and 2011, yet none of the projects had facilities constructed in excess of good electric industry practice. The AESO points out that increasing the investment level increases the level of unused investment and that a disadvantage of increasing the level of unused investment is that market participants will potentially fail to appropriately consider the costs of connections when requesting system access service. The Commission considers that over time, this would tend to increase average project costs and in turn place upward pressure on rates. Whereas a lower level of investment would provide a stronger price signal and would further reduce unused investment. For this reason, the Commission considers that the investment coverage and the reasonable range proposed by the AESO appear to be too high.

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97 Exhibit 42.11, attachment AUC-AESO-028.
185. The proposed 70 per cent investment coverage is the overall average for greenfield and upgrade projects. The investment coverage for greenfield projects would be 76 per cent and 55 per cent for upgrade projects. The AESO indicated that investment coverage greater than approximately 76 per cent creates excessive unused investment, with more than 20 per cent of aggregate project costs being available as unused investment. The Commission agrees with the UCA that investment coverage of 70 per cent is at the high end of the reasonable range.

186. Reducing the level of investment to achieve lower investment coverage for greenfield projects would in turn reduce the investment coverage for upgrade projects. The Commission considers that this is an acceptable result given that a larger price signal for upgrade projects should further incent market participants to consider future capacity requirements when requesting system access service at the time of greenfield construction.

187. After the final scope of work had been established for this proceeding, the Commission issued a ruling on whether to permit a management fee on transmission facility owner CIAC balances. As a result of this ruling, reducing CIAC balances as a means of avoiding potential management fee costs is no longer a consideration for the AESO’s contribution policy. While the AESO acknowledged that its investment coverage recommendation was tested against this consideration, it submitted that the recommendation was based primarily on satisfying the contribution policy principles.

188. The AESO has proposed to use only connection projects with in-service dates of 2010 or later to establish a multiplier for setting maximum investment levels. It argued that using only recent projects to establish investment levels is a reasonable approach that recognizes the changes to service characteristics, functionality, and standards that occur over time. ACCESS supported this approach, suggesting it would ensure that the multiplier is sufficient to cover current project costs and thereby mitigate the potential for future “investment cliffs” as evidenced between 2010 and 2011. AltaLink expressed a concern that, should the future reflect the historical experience, the actual project cost coverage level determined by the Commission in this proceeding will fall below the reasonableness range.

189. In past ISO tariffs, investment coverage was determined based on all available connection project cost information, the same dataset used to estimate the average cost function. Ordinarily, as part of a comprehensive tariff application, the dataset would be updated with new connection projects and the most recent cost data for the existing connection projects. In this way, the higher cost projects increase the overall average cost, but the increase would be dampened by older, lower cost connection projects (even though they are escalated by inflation). The Commission has some concern with moving away from this approach. The Commission agrees that investment coverage should recognize the changes to service characteristics, functionality, and standards that occur over time, but at the same time investment coverage should not incent increasing costs due to increased radial line requirements, transmission voltage level, substation configuration, varying geography or unique construction and environmental conditions. The Commission considers that the regular updating of connection project data that occurs as part of a comprehensive tariff application should sufficiently capture the changes to service characteristics, functionality, and standards that occur over time. The update to the cost data and to the average cost function will also serve to rectify any potential “investment cliffs” as evidenced between 2010 and 2011.
190. For the reasons stated above, the Commission is not prepared to approve the investment level proposed by the AESO. The Commission is not persuaded that increasing the investment coverage to the level proposed will best achieve the economic and efficient development of the transmission system.

191. The Commission will not make a determination on the level of investment under the AESO’s construction contribution policy at this time. Instead, the Commission directs the AESO to address the concerns expressed in this decision and accordingly directs the AESO to bring its construction contribution policy proposal forward as part of its next comprehensive tariff application.

9 Effective date

192. The AESO requested that the proposed investment levels be approved effective July 1, 2012. A July 1, 2012 effective date would affect all connection projects that received a permit and licence (P&L) after this date. The AESO submitted that an effective date of July 1, 2012 was reasonable because the proposed investment level increase was large enough that some market participants may attempt to delay projects until this construction contribution policy proceeding had concluded. Such delays could create inefficiencies and schedule changes that impact many market participants, including transmission facility owners.

193. ACCESS submitted that an effective date of July 12, 2011 should be used given:

- the AUC’s July 12, 2011 letter clearly set out the matters in scope for this proceeding
- the evidence on the record regarding the impacts that the proposed policy would have on those projects receiving P&L on or after the date of that letter

194. ACCESS further submitted that there were 18 connection projects that received P&Ls after July 12, 2011 and prior to July 1, 2012 that would be eligible for an AESO investment. Of those 18 projects, 17 would receive a higher AESO investment if the proposed policy were applied to these projects. On an aggregate basis, the investment would be $95 million under the proposed policy. ACCESS argued that customers should not be required to contribute $95 million more for the same level of service solely because of the timing of the effective date. ACCESS further noted that nowhere in Decision 2010-606 did the Commission state that the multiplier was approved on a final basis.

195. The UCA did not oppose the AESO’s proposal that the updated investment levels be applied retroactive to July 1, 2012 but did oppose the implementation of the updated contribution policy retroactive to a date prior to July 1, 2012. The UCA submitted that the contribution policy in effect prior to July 1, 2012 was not an interim tariff, and no party applied to the AUC to request the AESO’s contribution policy be changed or made interim prior to the current application.

196. The AESO also opposed ACCESS’ proposed effective date of July 12, 2011 stating that Decision 2010-606 gives no indication that the Commission’s decision on investment levels was not final. Further, the AESO submitted that the retroactive application of changes to an investment policy can create problems. The Commission issued P&Ls for the connection

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98 Exhibit 55.01, ACCESS argument, page 13.
projects based on its understanding of those projects, including their costs, at that time. Similarly, the market participant committed to proceed with a connection project shortly after a permit and licence were issued. The market participant may have made a different decision had a future change to a contribution policy been expected to apply retroactively. The AESO acknowledged that the affected market participants are unlikely to object to the decreases in contributions for the 17 projects discussed by ACCESS; however, that the precedent established by such a retroactive decision should apply equally if the investment is reduced.

9.1 Commission findings

197. Because the Commission has not approved any changes to the AESO construction contribution policy in this decision, the current construction contribution policy approved in Decision 2010-606 and the 2011 tariff update approved in Decision 2011-275 remains in effect. Given this finding, consideration of the AESO’s request for an effective date of July 1, 2012, is no longer an issue to be decided in this decision. However, the Commission considers that certain issues should be clarified for the purposes of the upcoming comprehensive tariff application.

198. The Commission, in the past, has permitted the AESO to implement a retroactive effective date in prior tariffs for construction contributions based on the AESO’s submission that some market participants may attempt to delay projects until the proceeding has concluded, which could create inefficiencies and schedule changes that may impact transmission facility owners. However, in this application, the AESO stated that a change in the level of construction contribution will have little, if any, effect on the number or size of system access service requests it receives.99 Given this, parties are advised that for the purposes of the construction contribution policy that will be filed as part of the AESO’s next comprehensive tariff application, the Commission will not approve an effective date that is set prior to Commission approval.

10 Linkages to distribution performance-based regulation

199. The Commission considers that changes to the AESO’s contribution policies may have an impact on the performance-based regulation (PBR) framework approved for electric distribution system owners in Decision 2012-237.

200. Presently, the unamortized contributions paid by distribution system owners to the AESO are recovered by distribution system owners as part of their cost of service rate base.

201. The PBR framework provides a formula mechanism for the annual adjustment of rates independent of the underlying costs incurred by the distribution system owner. In general, rates for distribution system owners are adjusted annually by a rate of inflation (I) relevant to the prices of inputs the companies use, less an offset (X) to reflect the productivity improvements the companies can be expected to achieve during the PBR plan period. As a result, a distribution system owner’s revenues are no longer linked to its costs. Companies subject to a PBR regime must manage their businesses and service obligations with the revenues derived under the PBR formula mechanism. The PBR framework is intended to create efficiency incentives similar to those in competitive markets.

99 Exhibit 16, application, paragraph 266, page 57.
202. Certain types of costs, however, including certain categories of capital expenditures, were designated by Decision 2012-237 to be flow-through costs, which are to be collected by an electric distribution system owner in addition to the revenues received under the PBR formula. These flow-through items are discussed in Section 7.4.2.1 of Decision 2012-237.

203. Decision 2012-237 also permits a company to apply for collection outside of the I-X mechanism of capital project costs that meet an established set of criteria. If approved, these capital projects, will be designated as a “capital tracker” and the approved forecast revenues will be collected outside of the I-X mechanism and subsequently true-up to approved actual capital expenditures. Distribution system owners may, in circumstances where the capital tracker criteria are satisfied, apply for capital tracker treatment for capital investment contributions required pursuant to the AESO customer contribution policy as the result of a distribution connection request.

204. As discussed in Section 6 above, capital investments needed by distribution system owners to serve new customers or load growth may not exclusively be provided through distribution voltage facilities. It is possible that some tradeoffs may be made in the design of new or expanded connection facilities such that transmission voltage facilities may be substituted for distribution voltage facilities when assessing alternatives for accommodating load growth. Given this substitutability, and given that the recovery of capital expenditures necessary to safely and reliably accommodate load growth is capped under the PBR formulas, the Commission considers that there may be some inherent incentive for distribution system owners operating under the PBR regime to potentially adjust facility design under PBR versus what would have been expected under the cost of service regulatory model.

205. A further linkage between the PBR framework and changes to the AESO’s contribution policy relates to the fact that the PBR framework was developed with regard to going-in rates based on distribution system owner revenue requirements and rate bases that reflected unamortized contributions based on an AESO contribution policy that did not reflect the changes proposed in the current proceeding. The Commission considers that adjustments may be necessary to reflect the impact of any major contribution policy changes on go-forward capital expenditures.
11 Order

206. It is hereby ordered that:

   (1) The AESO’s proposed construction contribution policy is not approved and the AESO is directed to bring its construction contribution policy forward in its next comprehensive tariff application and address the concerns expressed in this decision.

Dated on December 28, 2012.

The Alberta Utilities Commission

(original signed by)

Mark Kolesar
Vice-Chair

(original signed by)

Anne Michaud
Commission Member

(original signed by)

Bill Lyttle
Commission Member
## Appendix 1 – Proceeding participants

<table>
<thead>
<tr>
<th>Name of organization (abbreviation)</th>
<th>counsel or representative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Pipelines Inc. (ACCESS)</td>
<td>L. Manning, C. Wiggins, J. Dawson</td>
</tr>
<tr>
<td>ATCO Electric Ltd. (AE)</td>
<td>L. Keough, J. Grattan, S. Parhar, T. Martino, B. Yee, L. Kerckhof</td>
</tr>
<tr>
<td>AltaLink Management Ltd. (AltaLink)</td>
<td>Z. Lazic, D. Morris, K. Evans, E. Tadayoni, T. Kanasoot, J. Wrigley, D. Fischbach, J. Piotto, J. Yeo</td>
</tr>
<tr>
<td>Devon Canada Corporation (DEVONCAN)</td>
<td>E. de Palezieux, P. Speight</td>
</tr>
<tr>
<td>EPCOR Distribution &amp; Transmission Inc.</td>
<td>D. Gerke</td>
</tr>
<tr>
<td>ENMAX Power Corporation (ENMAX)</td>
<td>K. Hildebrandt, J. Petatur, J. Schlauch, T. Carle</td>
</tr>
<tr>
<td>Enbridge Pipelines (Athabasca) Inc. (Enbridge)</td>
<td>E. de Palezieux, K. Svidal</td>
</tr>
<tr>
<td>FortisAlberta Inc. (Fortis)</td>
<td>T. Dalgleish, QC, M. Stroh, J. Walsh</td>
</tr>
<tr>
<td>Name of organization (abbreviation)</td>
<td>counsel or representative</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>---------------------------</td>
</tr>
</tbody>
</table>
| Industrial Power Consumers Association of Alberta (IPCAA) | M. Forster  
R. Mikkelsen  
V. Bellissimo  
J. Cheng |
| The City of Lethbridge (LETH) | M. Turner  
O. Lenz |
| The City of Red Deer (RD) | M. Turner  
J. Jorgensen |
| Office of the Utilities Consumer Advocate (UCA) | T. Marriott  
K. Kellgren  
R. Daw  
G. Rock  
A. M. Glenn  
B. Shymanski  
W. Taylor |
| The Alberta Utilities Commission | |
| Commission Panel | M. Kolesar, Vice-Chair  
A. Michaud, Commission Member  
B. Lyttle, Commission Member |
| Commission Staff | S. Ramdin (Commission counsel)  
W. MacKenzie  
J. Halls |
Appendix 2 – Summary of Commission directions

This section is provided for the convenience of readers. In the event of any difference between the directions in this section and those in the main body of the decision, the wording in the main body of the decision shall prevail.

1. Consequently, the Commission will not approve the changes the AESO has proposed to the average cost function at this time. The AESO is directed to refile the proposed changes to the average cost function in its next comprehensive tariff application. In this way, any stakeholders who would be affected by a change to the point of delivery charge, that did not participate in this proceeding, will have an opportunity to comment on the proposed changes. ................................................................. Paragraph 123

2. The Commission will not make a determination on the level of investment under the AESO’s construction contribution policy at this time. Instead, the Commission directs the AESO to address the concerns expressed in this decision and accordingly directs the AESO to bring its construction contribution policy proposal forward as part of its next comprehensive tariff application. ................................................................. Paragraph 191
Appendix 3 – Final scope of work

(consists of 5 pages)
July 12, 2011

To Interested Parties
(As registered on Proceeding ID No. 530, AESO 2010 ISO Tariff Application and the AUC electric email notice list)

Electric Transmission Contribution Policy Proceeding
Application No. 1607193
Proceeding ID No. 1162

Final scope of work and application filing schedule


2. In its decision, the Commission determined that

301. … the Commission will establish a module, under a separate proceeding, to deal with aspects of the AESO’s customer contribution policy. The Commission will set out the full terms of reference for this proceeding in correspondence to be issued following this Decision.¹

3. On April 13, 2011, the Commission established objectives and provided terms of reference for an electric transmission contribution policy proceeding and directed that the AESO submit, by May 31, 2011, a detailed scope of work and a schedule for filing an application. The Commission also established a deadline of June 10, 2011, for parties to submit comments on the AESO’s proposal and a deadline of June 17, 2011, for the AESO reply to the comments received.

4. The Commission established Proceeding ID No. 1162 to deal with the contribution policy proceeding.

5. Parties generally supported the proposed in-scope and out-of-scope matters that were put forward by the AESO. However, in response to concerns about overly broad wording, the AESO provided additional clarification on two of the in-scope items.

6. The Commission has reviewed the AESO’s proposal, the comments of interested parties and the AESO’s reply and has established the final scope of work, the schedule, and a deadline date for the AESO to file its application.

¹ Decision 2010-606, paragraph 301, page 58.
7. While the Commission has accepted the proposed in-scope and out-of-scope items proposed by the AESO, it finds that the AESO was not explicit enough with respect to the third objective that was outlined in the April 13, 2011 Commission letter, which stated:

3. Examine the underlying principles that create a requirement for customers to contribute capital, and specifically how the application of that principle should be used to determine contributions between two regulated utilities which already have underlying obligations to provide service.

8. For this reason the Commission has added to the in-scope items proposed by the AESO. The in-scope items, as revised by the Commission, are provided below.

**Matters considered in-scope**

(1) Review the rationale, history and factors that influenced the development and implementation of transmission contribution policies, including:

- Review legislative requirements and policies in Alberta that impact transmission contributions.
- Review principles and directions established in prior decisions, including Decision 2010-606, that impact transmission contributions.
- Review other generally accepted regulatory principles and guidelines that are relevant to transmission contributions.
- Review principles and methodologies used for other utilities or in other jurisdictions relevant to transmission contributions, and in particular those used to establish maximum investment levels.

(2) Document changes in the frequency and amount of contributions over time.

(3) Examine whether a contribution should be required between two regulated utilities which already have underlying obligations to provide service; examine the potential impact on becoming a direct connect customer if distribution facilities owners do not have to make contributions in the future; and, investigate the means of mitigating any impacts.

(4) Identify those factors which most frequently result in contributions being paid for a point of delivery connection project, together with

- Examine the capital costs of transmission connection projects, including related investment and contribution amounts and factors that contribute to the variability of such costs between connection projects.
- Examine factors that may result in different considerations applying to expansion projects compared to greenfield connection projects.

(5) Investigate the impacts of contribution policies, maximum investment levels, and contribution levels on market participants, including
• Contribution balances for transmission facility owners and any other potential impacts (excluding Rider I and management fee impacts, which are included as out-of-scope items 1 and 2 below).

• Impact of changes to contribution policies on rates charged for system access service.

• Effects and impacts on intergenerational equity and potential means of mitigating such impacts.

(6) Develop one or more recommendations for determining the appropriate level of contributions that should result from application of a transmission contribution policy.

9. The out-of-scope items were accepted as proposed.

Matters considered out-of-scope

(1) Matters related to the AESO’s proposed Amortized Construction Contribution Rider I, as these matters are being comprehensively examined in the 2011 Generic Cost of Capital Proceeding (Application No. 1606549 and Proceeding ID No. 833).

(2) Matters related to the “management fee” proposals of AltaLink Management Ltd. and ATCO Electric Ltd., as these matters are also being comprehensively examined in the 2011 Generic Cost of Capital Proceeding.

(3) The functional form and structure of the maximum investment allowance, as specified in the terms of reference (page 3) provided by the Commission for the Transmission Contribution Policy Proceeding. The AESO interprets the Commission’s statement to exclude consideration of:

(a) alterations to the functional form of providing investment up to the lesser of connection project costs or a maximum investment level;

(b) alterations to the structure of the maximum investment level based on the point-of-delivery cost function determined by the AESO and increased by a multiplier (although the level of the multiplier is considered an in-scope matter);

(c) provision of an unused investment credit (such as the Option B credits provided by FortisAlberta prior to 2002); and

(4) Generating unit owner’s contributions as required under Section 29 of the Transmission Regulation.
10. The AESO presented two options for completing the transmission contribution policy work: Option A was a stand-alone proceeding that had an application filing date of June 30, 2012, and Option B, which integrated the transmission contribution policy proceeding into the 2013 tariff application, with a filing date of March 31, 2013.

11. The position of parties on the proposed scheduling options is summarized as follows:

- EPCOR Distribution & Transmission Inc. (EDTI or EPCOR) and FortisAlberta were supportive of either option.
- AltaLink expressed support for an expedited schedule for the proceeding, with an application no later than June 30, 2012 (consistent with the AESO’s Option A schedule for the proceeding as a stand-alone module). ATCO Electric also suggested that the Transmission Contribution Policy proceeding should be dealt with expeditiously.
- The Inter Pipeline Fund (IPF) recommended an even more accelerated proceeding, with an application no later than February 29, 2012, to minimize any intergenerational inequity that may arise from delaying changes to the contribution policy. The IPF also expressed concern that, if the Transmission Contribution Policy proceeding was integrated into a comprehensive tariff application, it might not receive the full focus of all participants in the tariff application proceeding.
- The Industrial Power Consumers Association of Alberta (IPCAA) supported Option B, integrating the Transmission Contribution Policy proceeding into the AESO’s 2013 tariff application. The Office of the Utilities Consumer Advocate (UCA) also supported addressing the in-scope matters as part of the 2013 tariff application.

12. The AESO recommended Option B given the extent of the in-scope matters. The AESO submitted that integrating the contribution policy activities into the AESO’s 2013 tariff application (Option B) would avoid conflict and overlap with development of that application, allow coordination with activities such as development of the point of delivery charge and updated transmission cost causation study, and generally improve regulatory efficiency. The AESO also pointed out that both IPCAA and the UCA, which each represent groups of consumers who ultimately pay costs impacted by the contribution policy, support integrating the contribution policy activities into the 2013 tariff application.

13. The Commission considers that the more accelerated scheduling proposed by IPF does not appear realistic given the scope of work and the work steps outlined by the AESO. However, the Commission does agree that the proceeding should be dealt with expeditiously and considers that there is merit in a focused proceeding that is separate from the tariff application. Therefore the Commission directs the AESO to file its application according to the schedule proposed as Option A, with the earlier filing date of June 20, 2012. The schedule is set out in the table below.
Schedule for completing the electric transmission contribution policy proceeding

<table>
<thead>
<tr>
<th>Activity</th>
<th>Option A Stand-Alone Proceeding</th>
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</thead>
<tbody>
<tr>
<td>Initial AESO consultation with stakeholders through a discussion paper, comment and reply process</td>
<td>August 2011 – October 2011</td>
</tr>
<tr>
<td>Working group examination and development of transmission contribution policy principles</td>
<td>November 2011 – February 2012</td>
</tr>
<tr>
<td>AESO preparation and filing of application</td>
<td>March 2012 – June 2012</td>
</tr>
<tr>
<td><strong>Application filing date</strong></td>
<td><strong>June 20, 2012</strong></td>
</tr>
</tbody>
</table>

14. The AESO should submit its application under Application No. 1607193, Proceeding ID No. 1162. A formal notice of this proceeding will not be issued until receipt of the application from the AESO.

15. If you have any questions regarding the outline or the schedule please contact Wayne MacKenzie by email at Wayne.MacKenzie@auc.ab.ca or by phone at 403-592-4420.

Sincerely,

Wayne MacKenzie
Application Officer