December 15th, 2011

2011 Contribution Policy Working Group
December 12th, 2011 Meeting
Meeting Notes and Summary

Attendees

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<tr>
<th>Name</th>
<th>Company</th>
<th>Stakeholder Segment</th>
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<tr>
<td>Vittoria Bellissimo</td>
<td>IPCAA</td>
<td>Industrial</td>
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<tr>
<td>Tony Demassi / David Morris</td>
<td>AltaLink Management Ltd.</td>
<td>TFO</td>
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<td>Ed de Palezieux</td>
<td>Enbridge</td>
<td>Industrial</td>
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<tr>
<td>Miles Stroh</td>
<td>FortisAlberta</td>
<td>DFO (non-affiliated)</td>
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<td>Mike Windsor</td>
<td>ENMAX</td>
<td>TFO / DFO</td>
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<td>Wayne Taylor</td>
<td>UCA</td>
<td>Small customers</td>
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<tr>
<td>Ken Koenig</td>
<td>ATCO Electric</td>
<td>TFO / DFO</td>
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<td>Lee Ann Kerr</td>
<td>AESO</td>
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<td>John Martin</td>
<td>AESO</td>
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Meeting Summary

Action Items from previous meeting

Ed completed an analysis of the “outlier” bins in the Greenfield project histogram. He suggested that it might be useful to assess the data into “tariff year” bins for analysis. The AESO will complete this analysis.

Ken provided ATCO’s outlier definition:

The practice that ATCO Electric has applied in the past to define outliers is:

Defining what an outlier is not purely mathematical, it is, in part, a subjective exercise. A true understanding of the dataset is required.

A purely mathematical definition of identifying outliers is:

If,

\[ X - \text{average of all observations} \]
standard deviation of all observations

is greater than or equal to 3,
where \( X \) = observation point,
then,

X is an outlier and could possibly be eliminated.

Discretion should be applied in determining the data point’s elimination. Generally….

“Automatic rejection of outliers is not always wise procedure. Sometimes the outlier is providing information that other data points cannot due to the fact that it arises from an unusual combination of circumstances which may be of vital interest and requires further investigation rather than rejection. As a general rule, outliers should be rejected only if they can be traced to causes such as errors of recording the observation. Otherwise careful investigation is in order.” (Source: Basic Econometrics, Ch. 13, Econometric Modelling, Page 541)

Miles committed to providing a brief discussion paper on the pros and cons of contributions between utilities for the next working group meeting.

Reviewing the Data

The updated data was reviewed by the working group members. The updated data included adding upgrade project costs at a substation to original Greenfield project costs (and resulting DTS). In addition, a number of fields were added to the data set, including number of transformers and MVA at the sub, geographical location of the sub, type of contribution (i.e. an AESO direct connect customer, a DFO distribution customer, or a DFO transmission customer). The project costs were inflated using the AESO inflation index as approved in the 2010 GTA.

The AESO completed analysis on a data set using the most recent 50 projects, and on another data set which used projects with ISDs from 2009 to present.

Ken explained ATCO’s current contribution practice for upgrade projects was to buyout the original Greenfield project and applying the current year contribution policy to the new upgrade project cost plus the buyout of the original Greenfield investment, thus revising contract terms.

Miles informed the group that Fortis uses the current year contribution policy to apply to current incurred costs.

The “outliers” were reviewed and discussed. The group identified several factors that might contribute to higher costs that wouldn’t necessarily be captured by an inflation index:

- Delays in regulatory approvals
- PIP and consultation adding to project timelines
- Geographic location
- Outsourcing the construction (as opposed to in-house build)
- High distributed and indirect costs
- Changes in functionality or reliability standards
- AUC Rule 007 (Rules Respecting Applications for Power Plants, Substations, Transmission Lines, and Industrial System Designations)
- Bulk system build
The group reviewed the primary and secondary principles and offered comments and input. The following are the revised primary and secondary principles:

**DRAFT Contribution Policy Principles**

In accordance with the scope of the contribution policy proceeding, the AESO reviewed principles applicable to transmission contributions. The AESO primarily relied on:

- discussion and directions in prior decisions of the Commission and the Alberta Energy and Utilities Board,
- the Common Approach to Maximum Investment Levels filed by FortisAlberta as part of its 2010-2011 distribution tariff application, and
- recommendations resulting from AltaLink’s industry consultation process during 2008 on the AESO’s construction contribution policy.

The contribution policy principles were discussed by the contribution policy working group, and the AESO considers the following discussion to reflect comments from the working group.

An optimal contribution policy should address the following principles, with the first two considered primary and the remaining six considered secondary. A contribution policy which satisfies these principles should generally prove satisfactory when applied to almost all connection projects, although special cases will likely exist where the policy may not provide desirable results.

**Primary Principles**

1. **Provides Effective Price Signals** — The contribution policy must send price signals that influence market participants to select the best long-term economic and technical alternative for a connection project. The price signals should ensure that market participants consider the costs of connections when requesting system access service. Effective price signals result in market participants requesting:
   - only those transmission facilities needed to meet their service requirements, and
   - facilities that optimize overall costs, including impacts of siting their own facilities and other factors.

   The contribution policy should not provide excessive investment that would encourage market participants to request facilities beyond those needed to meet their service requirements.

2. **Maintains Intergenerational Equity** — The contribution policy must balance what a new market participant pays as a contribution compared to what all market participants pay through related rate components. In general and consistent with historical practice, new market participants should receive a fair and sufficient level of investment such that most do not pay a contribution. As well, a new service should not unduly burden existing services and should not place undue upward pressure on rates.

**Secondary Principles**

3. **Is Based on Local Costs** — The contribution policy should directly relate to the current local connection costs of system access service and should exclude system costs. The connection costs should reflect reasonable standards of functionality and service to meet the market participants’ requirements.
4. **Is Robust and Sustainable** — The contribution policy must accommodate changes to the service characteristics, functionality, and standards that apply to system access service, as those characteristics, functionality, and standards change over time.

5. **Is Based on Cost Causation** — Investment levels should be determined on the same cost causation basis as are the related rate components, to the extent practical. Since investment is recovered through rates, basing both on cost causation will ensure investment is appropriately recovered through rates over a broad range of market participant connections.

6. **Treats All Load Market Participants Equitably** — The contribution policy should apply equally to owners of distribution systems, owners of industrial systems, and direct-connected market participants who receive section 101 releases. In as much as all load market participants pay the same investment-related rate components, all should be subject to the same contribution policy.

7. **Compensates Utilities Equitably** — The contribution policy should ensure utilities are fairly compensated for the facilities they own, operate, and maintain to provide system access service.

8. **Is Simple, Consistent, and Transparent** — The contribution policy must be simple to administer and update. It must also be able to be applied consistently and transparently.

The group then reviewed the mechanisms/criteria matrix. It was suggested that a mechanism “combo” might be added to the matrix. It was also suggested that the group consider doing a “failure analysis” to see if the mechanism would fail under certain circumstances.

**Action Items**

1) Miles will prepare a brief discussion paper identifying the pros and cons of contributions between utilities

2) Lee Ann to do further analysis:
   - Investigate the histogram “bins” by tariff year
   - Apply the ATCO “buyout” approach to our greenfield + upgrade projects
   - For those outliers where the estimate is still at the PPS level, adjust + 20% and – 10% and determine if they are still outliers

3) For the 10 outliers, the TFOs will analyze the specific project data to determine the underlying causes for the costs

**Next Steps**

The next meeting is scheduled for Thursday January 12th 1:00 pm – 4:00 pm, AESO offices, Room 2539. The following agenda items are proposed:

1) Examination of the outliers;

2) Review of the criteria / mechanisms matrix;

3) Examine whether a contribution should be required between utilities;

4) Examine capital costs and factors that contribute to variability; and

5) Consider differences between upgrade and Greenfield projects.