January 18th, 2011

2011 Contribution Policy Working Group
January 12th, 2011 Meeting #4
Meeting Notes and Summary

Attendees

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Stakeholder Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vittoria Bellissimo</td>
<td>IPCAA</td>
<td>Industrial</td>
</tr>
<tr>
<td>Tony Demassi / David Morris</td>
<td>AltaLink Management Ltd.</td>
<td>TFO</td>
</tr>
<tr>
<td>Ed de Palezieux</td>
<td>Enbridge</td>
<td>Industrial</td>
</tr>
<tr>
<td>Miles Stroh</td>
<td>FortisAlberta</td>
<td>DFO (non-affiliated)</td>
</tr>
<tr>
<td>Mike Windsor</td>
<td>ENMAX</td>
<td>TFO / DFO</td>
</tr>
<tr>
<td>Wayne Taylor</td>
<td>UCA</td>
<td>Small customers</td>
</tr>
<tr>
<td>Ken Koenig</td>
<td>ATCO Electric</td>
<td>TFO / DFO</td>
</tr>
<tr>
<td>John Martin</td>
<td>AESO</td>
<td>ISO</td>
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Participated via conference call:

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Stakeholder Segment</th>
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</thead>
<tbody>
<tr>
<td>Brett Wiles</td>
<td>EPCOR</td>
<td>TFO / DFO</td>
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<tr>
<td>Lee Ann Kerr</td>
<td>AESO</td>
<td>ISO</td>
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Meeting Summary

Action Items from previous meeting

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 40 9 outliers, the TFOs will analyze the specific project data to determine the underlying causes for the costs

Treatment of upgrade projects
The AESO decided not to pursue the application of the ATCO buy-down approach to the data, as the AESO policy is limited to 20 years investment for a single project. A brief discussion on different approaches to the investment policy for upgrade projects ensued. The group discussed a number of approaches:

- Offer current day investment levels for an upgrade project for the balance of the original contract term
- Base the investment on the weighted average of the total capacity of the project (after the upgrade)
- Investment levels are applied a multiplier dependent on the number of transformers at a substation
- Investment levels are based on the age of the substation (i.e. less than 5 years old, or greater than 20 years old)
- New capacity gets current day investment for a full 20 years (AESO’s current policy)
- Buy-down of the original project, applying current day investment and new contract terms (ATCO policy)

**Reviewing the Data**

The group reviewed and discussed the analysis of the data. Several suggestions were made for further analysis.

**Outliers**

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

1) PIP and consultation adding to project timelines
2) Geographic location
3) Outsourcing the construction (as opposed to in-house build)
4) High distributed and indirect costs
5) Changes in functionality or reliability standards
6) AUC Rule 007 (Rules Respecting Applications for Power Plants, Substations, Transmission Lines, and Industrial System Designations)
7) Bulk system build

The TFOs undertook to investigate the outliers to determine the underlying causes for elevated costs. The TFOs then assigned the appropriate factors to each of the outlier projects. (A project title appearing twice indicates that two TFOs were involved):
Contribution Policy Principles

The group will review and finalize the proposed contribution policy principles for the next meeting.

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.
Mechanisms/Criteria Matrix

The group reviewed the mechanisms/criteria matrix. The AESO had populated the cells with suggested values. The group suggested revisions, and these have been incorporated in the table below (revisions are in bold):

Mechanism / Criteria Matrix

<table>
<thead>
<tr>
<th>Mechanism / Criteria</th>
<th>Provides effective price signals</th>
<th>Maintains I/G equity</th>
<th>Based on local costs</th>
<th>Robust and sustainable</th>
<th>Based on cost causation</th>
<th>Equitable treatment of all load MPs</th>
<th>Compensates utilities equitably</th>
<th>Simple, consistent and transparent</th>
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</thead>
<tbody>
<tr>
<td>“80/20” rule</td>
<td>1 / 3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
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<tr>
<td>Multiplier</td>
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<td>3</td>
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<tr>
<td>Revenue test</td>
<td>3</td>
<td>1</td>
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<td>3</td>
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<td>3</td>
<td>1 / 3</td>
<td>2</td>
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<td>3</td>
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<tr>
<td>% of costs for all projects</td>
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<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Zero contribution</td>
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<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Zero investment</td>
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<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
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1 = not meeting criteria
2 = partially meeting criteria
3 = fully meeting criteria

1 / 3 = individual projects would either fully meet or no meet criteria

Action Items

1) TFOs to confirm factors assigned to outlier projects
2) Review and finalize contribution policy principles
3) Review and finalize mechanisms/criteria matrix
4) Review discussion paper – Contributions between Utilities

Next Steps

The next meeting is scheduled for Thursday February 2\textsuperscript{nd} 9:00 am – 12:00 noon, AESO offices, Room 2539. The following agenda items are proposed:

1) Review of the factors affecting outlier costs;
2) Finalization of the principles;
3) Finalization of the criteria / mechanisms matrix;
4) Discuss whether a contribution should be required between utilities;
5) Examination of capital costs and factors that contribute to variability; and
6) Consideration of differences between upgrade and Greenfield projects.