

**2007 GTA Terms & Conditions of Service
Stakeholder Consultation**

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Telus Convention Centre, Glen Room 209 - Calgary
June 29, 2006


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Agenda

- Goal
- Article 9 - Customer Contribution Policy
 - Customer contribution study and results
 - Staged load
- Article 14 – Reductions & Terminations of Contract Capacity
- Article 15 – Financial Security, Billing & Payment Terms
- Overview of other proposed revisions
- Session wrap-up


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Goal

- Engage & encourage discussion on the proposed terms and conditions for the 2007 GTA
- Understand the proposed revisions and the AESO's rationale / position
- Build support in negotiating a number of issues outside the hearing process


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2007 GTA Consultation Roadmap

- Consultation initiated – August 2005
- Discussion paper – December 2005
- Stakeholder session – December 2005
- Terms of Reference – January & February 2006
- Study preliminary results – May 2006
- Discussion paper & updated report – June 2006
- Stakeholder session – June 2006

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Customer Contribution Policy

Directive 13A: conduct additional research to:

- *Incorporate a sufficient number and diversity of data points*
- *Determine the Raw Interconnection Project Cost Function*
- *Determine an appropriate multiplier such that 80% of projects do not pay a contribution*


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Customer Contribution Policy: Post Preliminary Results Report

- Endeavored to clarify data anomalies as pointed by the stakeholder community
 - Transmission line costs
 - Substation costs
- Investigate the opportunity to include additional projects into the data set
 - Include a sample of “upgrade” projects
- Review the inter-relationship analysis to determine if any results have changed


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Customer Contribution Policy: Post Preliminary Results Report

- Anomalies in substation and transmission line data clarified
 - Transmission line costs correlation increased to (0.868)
 - Substation costs increased to (0.314)
 - “Greenfield” facility costs increased to (0.349)
- Focused remainder of analysis on “greenfield” and “upgrade” projects
- Proposal development on other relationships not pursued
 - MVA capacity
 - Transmission line length

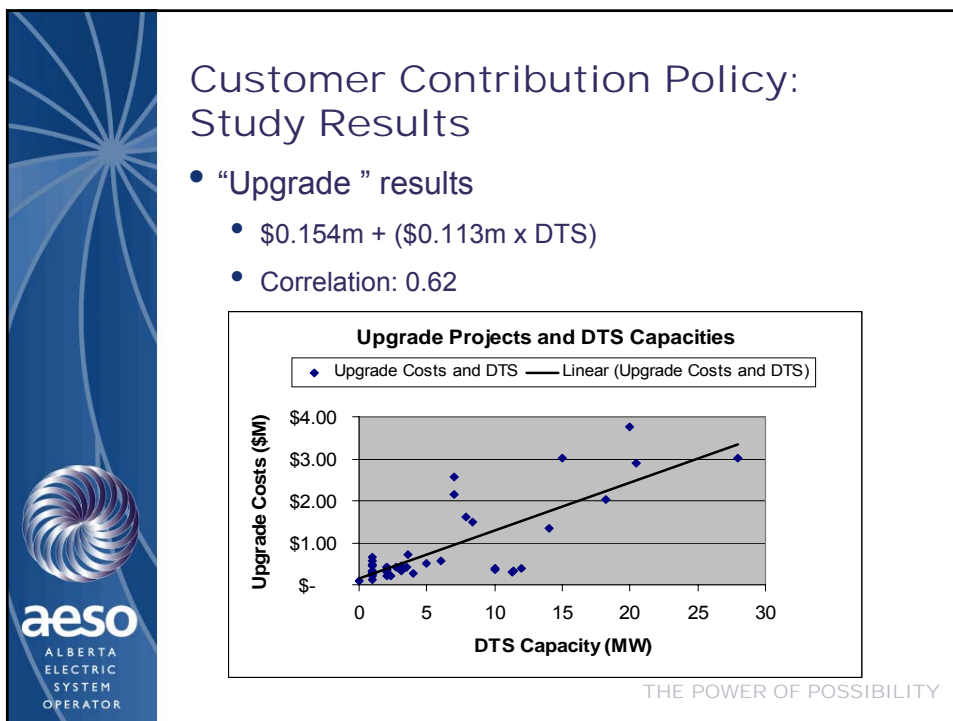
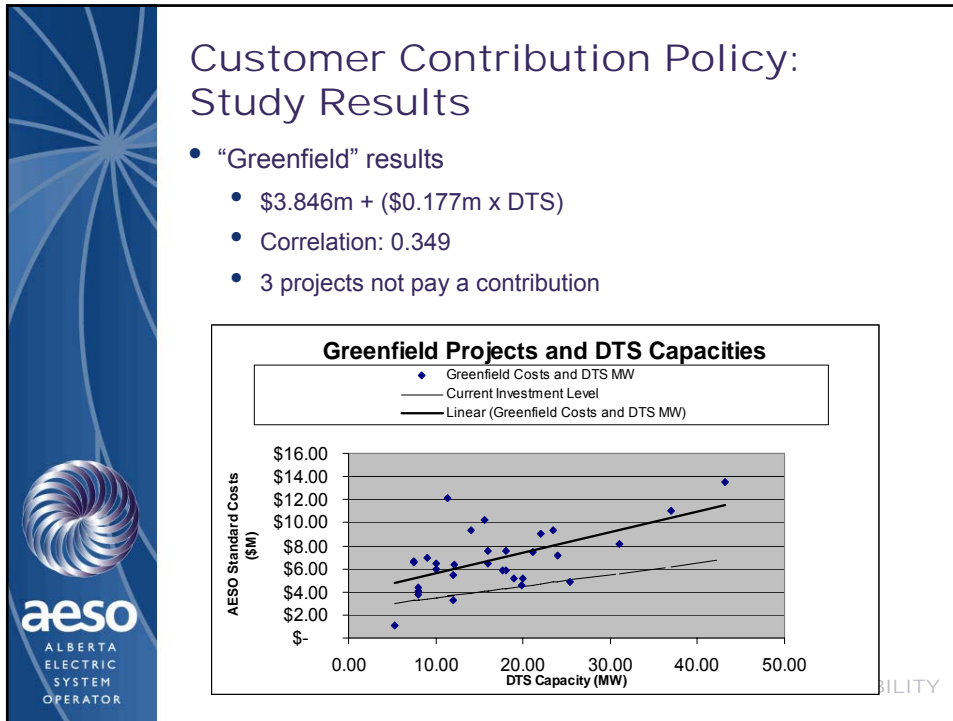
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Customer Contribution Policy: Study Results

- “Greenfield” results + “upgrade” results = reasonable investment function
- “Greenfield” data set
 - 34 PODs
 - Less three projects (all system related costs)
 - Standard facility costs vs. DTS Contract Capacity
- “Upgrade” data set
 - 44 projects
 - Less one project (all system related costs)
 - Standard facility costs vs. DTS Contract Capacity

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**Customer Contribution Policy:
Investment Function: Slope**

- Single function to work on average for both “greenfield” and “upgrade” projects
 - Weighted average of “greenfield” slope & “upgrade slope”
 - 31 projects: 521MW x 177k/MW = \$92.4m
 - 43 projects: 258 MW x 113k/MW = 29.2m
 - $(\$177k \times \$92.4m) + (\$113m \times \$29.2m)$
 $(\$92.4m + \$29.2m)$
 - **\$162m / MW**

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**Customer Contribution Policy:
Investment Function: y-intercept**

- Reflect cost construction of a substation & associated line work
 - “Greenfield” data
 - In the absence of strong statistical data from the raw data, average of “greenfield” projects used to determine y-intercept
 - 521.9MW / 31 projects = 16.84MW
 - Raw function: $\$3.846 + (\$177k \times 16.48MW) = \$6.83m$
 - Back-calculate using the weighted average slope
 - $\$6.83m - (\$162k \times 16.84 MW) = \mathbf{\$4.099m}$

Proposed cost function:

- **$\$4.099m + (\$162k / MW)$**

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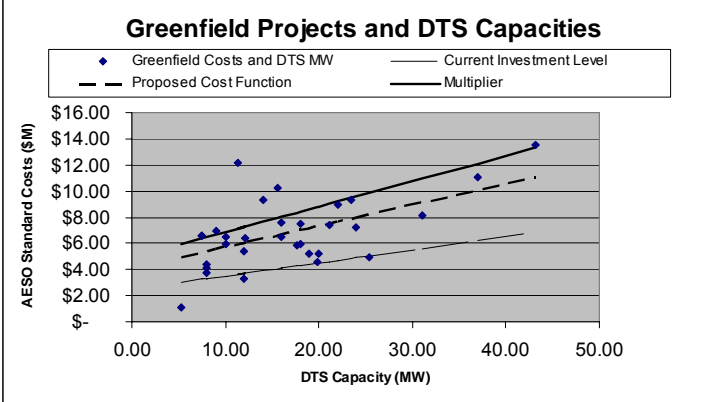


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Customer Contribution Policy: Proposed Investment Function

- Apply multiplier to achieve 80% of projects not required to pay a contribution
- Multiplier of 1.2: **\$4.918m (20 years) + \$194,000/MW**
- 80.6% fully covered

Greenfield Projects and DTS Capacities





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Customer Contribution Policy Proposal: Addressing Stakeholder Inquiries


What is the intent or what is the study to address?

- Simply to follow the Board direction?
- Analysis based upon DTS level or capacity of the POD?

Research & consultation has established:

- Comply with the Board directive
 - Investigate other reasonable alternatives
 - Project cost deconstruction & analysis
 - Lack of strong statistical data
- Developing a reasonable cost function based on the best possible data
- Proposal presents a reasonable mix of statistical results and general rate design principles

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**Customer Contribution Policy Proposal:
Addressing Stakeholder Inquiries**


Limited number of data points to base an investment function on:

- Increased sample: 78 “greenfield” (1999-2006) & a number of upgrade / expansion projects

Outcome

- Reduced data skewing (multi-facility projects)
- Accurate and broad sample used in preparation of the investment function
- Proportionately accounts for expansion projects

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**Customer Contribution Policy Proposal:
Addressing Stakeholder Inquiries**


Data validity

- Substation & transmission line length vs. cost
 - Data reviewed and various anomalies were sufficiently clarified
 - Higher correlation of data

Outcome

- Most recent and accurate information used in preparation of the investment function
- Reasonable predictor of near future projects
- Strong data set

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Customer Contribution Policy Proposal:
Addressing Stakeholder Inquiries


Limited investigation of other relationships

- Data tested against other relationships
- Linear and non-linear relationships investigated

Outcome

- Limited correlation was uncovered
- Most relevant data was provided
- Reasonable to consider other rate design principles in the absence of strong statistical data
- Data sample provided for stakeholder review and analysis


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Customer Contribution Policy Proposal:
Preliminary Results

- 12 pending interconnection projects
- Project cost estimates vary from +/- 30% to +20/-10%
- Proposed investment function
 - $\$4.92\text{m} + (192\text{k} / \text{MW})$
- 9 of 12 (75%) of pending projects would be fully covered by investment.

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**Article 9:
Staged Loads**


AESO proposal

- The current year AESO contribution policy will apply to all customers with DTS contract changes

Guidelines:

- Unused investment from original customer contribution determinations may not be carried forward after ISD
- “Grace Period” of one year from in-service date to account for operational analysis of future load changes
- Extend the original DTS commitment term to be eligible for further AESO investment
- Contract must be increased ≥ 1.0 MW for each year of the contracted term (assuming the project is eligible) for the local investment function

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**Article 9:
Staged Load**

Rationale:

- Mixed stakeholder positions
- Investment linked to rate recovery for the period
- Assume commercial decisions made originally were appropriate
 - From the customer contribution policy & customer perspectives
- Harmonization i.e. similar practice employed by other utilities
- Administrative ease

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Article 14
Reductions or Termination of Contract Capacity

Proposed Article 14.2: Notice of Reduction or Termination

- Must provide written notice re: terminations or reductions will be effective 5 years from the notification date.
- Extensions to notice period
 - Can only be done once
 - Extended by the same amount of time remaining between the expiration of the original notice period and the date of the request to extend the notice period
 - Rationale
 - Greater clarity
 - Response to customer requests

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Article 14
Reductions or Termination of Contract Capacity


Proposed Article 14.3: Excursions During Notice Period

- Primarily the same in content and intent as before
- Included clause suggesting customers may provide additional notice of reductions after an excursion

Proposed Article 14.4: Payment in Lieu of Notice

- PV of billing capacity charges
- Article 19.4 discount rate to be used
- Opportunity to revisit calculations if a material difference between requested and actual

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Article 14
Reductions or Termination of Contract Capacity

- Treatment of the Regulated Generating Unit Connection Cost (RGUCC) in cases of accelerated unit termination


Proposal

- RGUCC no longer applicable upon termination of operation of the unit;
- Details on what constitutes as termination; and
- Provisions respecting the re-application of charge if the unit were to power up again

Rationale

- Charge was to create level playing field
 - Which is no relevant if no longer generating

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Article 15
Financial Security, Billing and Payment Terms

- Article 15.1 (b), the AESO may obtain financial security from a customer for up to three months in advance for System Access Service.
 - Currently no means to encourage customers to comply
 - Non compliance remedy seems unnecessarily harsh (withholding service)

Proposal

- A financial penalty as a reasonable intermediary step prior to withholding service
 - Financial penalty will be calculated at the Toronto Dominion Canadian prime rate plus 6%;
 - Penalty will be added to the Customer's Statement of Account.


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Article 15
Financial Security, Billing and Payment Terms

- Currently worded Article 15.8 suggests that the full 1.5% late payment charge would apply even in circumstances where payment is late for less than one month
 - AESO suggests that this is unnecessarily harsh and does not follow this practice
 - Proposed revisions are intended to clarify the situation


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Article 9:
Dual-use ratio

- Dual-use ratio designed to apportion POC installation costs between supply and demand customers at one site
- Proposing that it also apply to other multiple use POC situations.
 - i.e. where two demand customers or one dual-use customer and one demand customer share a POC.

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Article 9: Discount Rate


- The AESO is proposing to modify the discount rate formula set out in Article 9.14(a) to accommodate the Board's annual generic return on equity orders

Proposed Article 9.14(a):

- For unassigned transmission facilities, for transmission facilities supplied to the AESO by an investor owned Transmission Facility Owner or for facilities supplied to the AESO by an income tax paying municipally owned Transmission Facility Owner:

$$[0.67 \times (\text{GCB} + 1\%)] + [(0.33 \times R) \div (1-T)]$$
- where GCB is equal to the yield on 30-year Government of Canada bonds; R is equal to the EUB approved generic rate of return on common equity, as amended from time to time; and T is equal to the combined federal and provincial income tax rate for investor owned TFOs.

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Other Considerations

Article 5

- Amended to reflect requirements for new or expanded System Access Service

Article 3

- Provide additional wording regarding provision of service


Article 9

- Prepaid O&M

Article 13

- Coordinate Article 13 and Article 5
 - Coordinate with other interconnection queue consultation


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Directive 12a & 22 Harmonization with DISCOs

- AESO preparing discussion paper
 - Accounting for comments provided by DISCOs in the December 2005 discussion paper
 - Quick overview of historical decisions
 - Current investment levels
 - Details of each customer contribution policy
- Outlining the AESO's position on the issue
- Seek DISCO comment on discussion paper
- Determine next steps


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Upcoming Milestones

- Stakeholder comments to the AESO
 - July 11, 2006
- File 2007 GTA week of July 24
- Tariff effective April 1, 2007

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- Information can be accessed on www.aeso.ca by following the path **Tariff ► Current Consultations ► 2007 Terms & Conditions**

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