



AESO 2005 General Tariff Application Preview

AESO Regulatory Stakeholder Workshop

September 22, 2004 — Calgary, Alberta

THE POWER OF POSSIBILITY

Introductions

- Gord Kyle
Executive-Vice President
Market and Strategic Initiatives
- Rob Senko
Director, Regulatory
- John Martin
Manager, Regulatory



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Agenda

- Welcome
- Overview
- Phase I (revenue requirement)
- Phase II (tariff and terms and conditions)
- Stakeholder discussion
- Lunch



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Purpose

- Update stakeholders on the upcoming filing of AESO 2005 General Tariff Application (GTA)
 - Comprehensive Phase I and Phase II filing planned for Friday, October 1, 2004
 - This preview includes draft values for revenue requirement and tariff, but numbers are still being refined and may change in final filing
 - Continuation of consultation process for AESO tariff applications
 - Includes responses to many outstanding Board directions



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Purpose (cont'd)

- Seek feedback on possibilities for negotiation of items or potential for written proceeding
- Transmission Regulation requires 2006 GTA to be filed by February 1, 2005
 - Significant tariff changes for 2006
 - AESO seeks quick resolution of 2005 application to allow focus on 2006 tariff



aeso
ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY



AESO 2005 Phase I Application Preview

Rob Senko

AESO Regulatory Stakeholder Workshop

September 22, 2004 — Calgary, Alberta

THE POWER OF POSSIBILITY

Preliminary AESO Cost Forecast for Wires (\$M)

	2005 Forecast (a)	2004 Projected (b)	2004 Forecast (c)	2003 Actual (d)
WIRES				
TFO's Wires-Related Costs				
AltaLink	180.0	160.3	160.3	136.2
ATCO Electric Ltd.	180.7	170.0	170.0	132.2
Foster Creek Substation	0.0	0.0	0.0	0.0
Isolated Generation	(5.8)	(5.5)	(5.1)	(5.7)
Subtotal ATCO Costs	174.9	165.0	165.0	126.5
Enmax Power Corporation	33.6	33.4	33.4	31.3
EPCOR Transmission Inc.	35.2	30.6	30.6	31.2
City of Lethbridge	4.5	4.4	4.4	4.3
TransAlta	3.1	2.3	2.3	2.8
Refund to the AESO	n/a	(9.9)	(9.9)	
Subtotal TransAlta Costs	3.1	(7.6)	(7.6)	
City of Red Deer	1.8	1.8	1.8	1.8
Fortis Networks (Farm)	1.9	1.9	1.9	2.5
Unassigned Capital Additions	0.0	0.0	0.0	0.0
Subtotal TFO Wires-Related Costs	435.0	390.2	389.8	336.6
Non-Wires Costs				
Invitation to Bid on Credits (IBOC)	1.9	2.1	3.2	2.4
Location Based Credit Standing Offer (LBC SO)	7.5	5.8	6.4	4.2
Subtotal IBOC/LBC SO Costs	9.4	7.9	9.6	6.6
Prior Period Adjustment				(0.3)
Total Wires Costs	444.4	398.1	399.4	342.9

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Preliminary AESO Cost Forecast for Ancillary Services (\$M)

	2005 Forecast (a)	2004 Projected (b)	2004 Forecast (c)	2003 Actual (d)
ANCILLARY SERVICES				
Operating Reserves				
Active				
Regulating	27.0	25.8	36.4	42.2
Spinning	29.2	24.5	38.8	45.5
Supplemental	15.1	7.5	8.5	8.4
	<hr/>			
Subtotal Active Reserves	71.3	57.8	83.7	96.1
Standby				
Regulating	4.1	4.3	8.4	9.8
Spinning	7.0	6.5	10.2	12.2
Supplemental	1.9	1.5	2.7	3.3
	<hr/>			
Subtotal Standby Reserves	13.0	12.3	21.3	25.3
Trading fees & other related charges				(1.4)
	<hr/>			
Subtotal Operating Reserves	84.4	70.5	105.0	120.1
Other Ancillary Services				
Generator Remedial Action Schemes (RAS)	0.4	0.4	0.4	0.4
Black Start	2.3	1.0	2.2	1.0
Transmission Must Run (TMR)	41.4	45.4	49.3	45.2
Under Frequency Mitigation	6.5	6.7	6.5	6.5
Hydro Motoring	0.0	0.0	0.0	2.8
	<hr/>			
Subtotal Other Ancillary Services	50.6	53.5	58.4	55.8
Poplar Hill/ILRAS				
Poplar Hill	1.9	1.9	1.8	2.5
Interruptible Load Remedial Action Scheme (ILRAS)	0.8	0.7	1.1	0.1
	<hr/>			
Subtotal Poplar Hill/ILRAS	2.7	2.6	2.9	2.6
	<hr/>			
Total Ancillary Services	137.7	126.6	166.3	178.5

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Preliminary AESO Cost Forecast for Losses (\$M)

	2005 Forecast (a)	2004 Projected (b)	2004 Forecast (c)	2003 Actual (d)
LOSSES				
Pool Payment	181.0	169.4	159.9	174.6
Total Losses Costs	181.0	169.4	159.9	174.6



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Preliminary AESO Volumes Forecast for Losses

	2005 Forecast (MWh)	2004 Projected (MWh)	2004 Forecast (MWh)	2003 Actual (MWh)
TOTAL	2,986,034	2,912,228	2,873,282	2,724,133



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Preliminary Forecast AESO Own Cost (\$M)

AESO OWN COSTS	2005 Forecast (a)	2004 Projected (b)	2004 Forecast (c)	2003 Actual (d)
General & Administrative Costs				
Total Administrative Costs	28.1	25.7	23.6	22.2
General Costs	1.7	1.2	1.1	7.0
Total General & Administrative Costs	29.8	26.9	24.7	29.2
Total Other Industry Costs	7.8	7.0	7.3	9.2
Total G&A and Other Industry Costs	37.6	33.9	32.0	38.4
Capital	4.4	3.2	3.3	1.8

Notes:

(1) Totals may be different due to rounding

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Commodity Prices

	2005 Forecast	2004 Projected	2004 Forecast	2003 Recorded
Average Pool Price (\$/MWh)	59.92	58.61	54.05	62.99
Average Gas Price (\$/GJ)	6.81	6.56	6.14	6.3
Average Market Heat Rate (GJ/MWh)	8.8	8.9	8.8	10

Source: Forecasts from EDC Associates Ltd.

Variance of AESO Revenue Requirement: 2005 versus 2004 Forecast Costs

Cost Category	2005 Forecast (\$M)	2004 Forecast (\$M)	Variance (\$M) Under (Over)
Wires Costs	444.4	399.4	(45.0)
Ancillary Services	137.7	166.3	28.6
Losses	181.0	159.9	(21.1)
AESO Own Costs	37.6	32.0	(5.6)
Revenue Requirement	800.7	757.6	(43.1)



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Explaining Variances - 2004 to 2005 Forecast Costs

- **Wires** \$45.0 Million / 11.3% Increase
- **Ancillary Services** \$28.6 Million / 17.2% Decrease
 - \$20.6 Decrease in Operating Reserves
 - Primarily due to Increased Competition in the Operating Reserves Market
 - \$8.0 Decrease in Other Ancillary Services
 - Decrease in costs primarily due to a reduced reliance on less efficient TMR units



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Explaining Variances - 2004 to 2005 Forecast Costs (cont'd)

- **Losses \$21.1 Million / 13% Increase**
 - Volumes
 - Increase in Losses Volumes of 3.9% - Primarily due to the following:
 - Increase in load growth forecast of approximately 3.5%
 - Increase in exports forecast
 - Increased generation output forecast in certain areas
 - Cost
 - Increase in forecast Pool Price from \$54.05 to \$59.92



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Explaining Variances – 2004 Approved Forecast to 2005 Forecast Costs (cont'd)

- **Own Costs \$5.6 Million / 17.5% Increase**
 - Primarily due to the AESO's 2005 Initiatives – Which Include the following:
 - Transmission Projects (N-S 500 kV Upgrade, SW Upgrade, other area reinforcement, etc.)
 - Implementing Transmission Regulation (new loss factor methodology, redesign direct assignment process, development of operating standards, etc.)
 - North American Energy Reliability Council (NERC) and Western Electricity Coordinating Council (WECC) Compliance



aeso
ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Explaining Variances – 2004 Approved Forecast to 2005 Forecast Costs (cont'd)

- Redesign Interconnection Process Implementation (standards, streamline approvals, redesign contract framework, etc.)
- Which will result in the following:
 - Increase in number of staff to meet these initiatives and to reduce its reliance on consultants.
 - Increased information technology and telecommunications maintenance and licensing cost



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Variance of AESO Revenue Requirement: 2004 Projected versus 2004 Forecast Costs

Cost Category	2004 Projected (\$M)	2004 Forecast (\$M)	Variance (\$M) Under (Over)
Wires Costs	398.1	399.4	1.3
Ancillary Services	126.6	166.3	39.7
Losses	169.4	159.9	(9.5)
AESO Own Costs	33.9	32.0	(1.9)
Revenue Requirement	728.0	757.6	29.6

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Explaining Variances – 2004 Forecast to 2004 Projected Costs

- **Wires** \$1.3 Million Decrease (less than 1%)
- **Ancillary Services** \$39.7 Million / 24.9% Decrease
 - \$34.5 Decrease in Operating Reserves
 - Primarily due to Increased Competition in the Operating Reserves Market
 - \$5.2 Decrease in Other Ancillary Services
 - Decrease in costs primarily due to a reduced reliance on less efficient TMR units



aeso
ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Explaining Variances– 2004 Forecast to 2004 Projected Costs (cont'd)

- **Losses \$9.5 Million / 6% Increase**
 - Volumes
 - Slight increase in losses volumes
 - Cost
 - Primarily attributable to increase in forecast Pool Price to \$58.61 from \$54.05



aeso
ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Explaining Variances – 2004 Approved Forecast to 2004 Projected Costs (cont'd)

- AESO Own Costs \$1.9 Million / 6% Increase
 - Primarily attributable to the following:
 - An increase in staff and consultant costs required to deal with unanticipated initiatives, such as SW Wind Technical Studies
 - Rent for Calgary Place – Total savings anticipated for 2004 (via rent free period negotiated), savings to actually be realized / distributed over life of rent agreement (not 2004 only).



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR



AESO 2005 Phase II Application Preview

John Martin

AESO Regulatory Stakeholder Workshop

September 22, 2004 — Calgary, Alberta

THE POWER OF POSSIBILITY

2005 Phase II Background

- Based on 2005 revenue requirement
- Application to be filed October 1, 2004
 - Presentation is still considered draft
 - Some items still being revised and clarified
- Effective no earlier than January 1, 2005
 - Maintains existing rate structure through 2005
 - Will not apply to any bills prior to effective date



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

2005 Phase II Background (cont'd)

- Responds to some customer concerns
 - Length of current 5-year ratchet
 - Complexity of current contribution policy
 - Lack of clarity on system- and customer-related costs
 - Complexity of interconnection application process
- Responds to some Transmission Regulation changes
 - Redefines system- and customer-related costs
 - Introduces Primary Service Credit



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Proposed 2005 Tariff Changes

- Reduces DTS demand ratchet level to 90% of the prior 24-month period
- Introduces Primary Service Credit to replace Customer-Owned Substation (COS) Credit
- Revises recovery of voltage control and under-frequency mitigation costs based on cost study
- Revises customer contribution policy for load customers to \$27,000/MW/year
- Updates and reorganizes terms and conditions



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

DTS Demand Ratchet

- Proposed ratchet is 90% of highest metered demand in past 24 months
 - Current ratchet is highest of:
 - 90% of highest metered demand in past 12 months
 - 85% of highest metered demand in past 24 months
 - 80% of highest metered demand in past 36 months
 - 75% of highest metered demand in past 48 months
 - 70% of highest metered demand in past 60 months
- Effect of ratchet change is 0.88% decrease in AESO revenue
- DTS interconnection demand charge increased 1.01% for all customers to keep revenue neutrality

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY



DTS Demand Ratchet (cont'd)

- Responds to customer concerns with 5-year ratchet
- Corresponds to typical interval between AESO Phase II applications and opportunity for review
- A few individual customers will see up to a 24% **decrease** in interconnection charges due to reduced ratchet
- A few individual customers will see up to a 6% **increase** in interconnection charges due to 1.01% increase in demand charge and increase from 85% to 90% ratchet for previous 13-to-24 months

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY



Primary Service Credit

- Rate remains \$700/MW/month of billing capacity
- Available only to customers if AESO roll-in would have covered transformer costs but customer purchases, owns, and operates its own transformer
 - Previous Customer-Owned Substation (COS) Credit was available to any customer who owned its own transformer
- Credit continues to be based on cost savings of typical transformer capital costs, levelized to determine a monthly credit



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Primary Service Credit (cont'd)

- Recognizes that no cost reductions exist to “fund” the credit unless costs would have been included in the AESO roll-in
- Customer who owns transformer sees lower transmission costs either through lower customer contribution or through Primary Service Credit, but not both
- Existing DAT and dual-use customers who currently receive the COS Credit to be reviewed to determine eligibility for Primary Service Credit



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Primary Service Credit — Example 1

	Transformer Owned By	
	TFO	Customer
DTS Load	10 MW	10 MW
Contract term	20 years	20 years
Maximum AESO roll-in	\$ 5,400,000	\$ 5,400,000
Cost to interconnect	\$ 5,200,000	\$ 5,200,000
Less cost of transformer	-	\$ 750,000
Actual AESO roll-in	\$ 5,200,000	\$ 4,450,000
Customer contribution	-	-
Reduction in AESO roll-in		\$ 750,000
Eligible for PSC?		Yes

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY



Primary Service Credit — Example 2

	Transformer Owned By	
	TFO	Customer
DTS Load	10 MW	10 MW
Contract term	20 years	20 years
Maximum AESO roll-in	\$ 5,400,000	\$ 5,400,000
Cost to interconnect	\$10,900,000	\$10,900,000
Less cost of transformer	-	\$ 750,000
Actual AESO roll-in	\$ 5,400,000	\$ 5,400,000
Customer contribution	\$ 5,500,000	\$ 4,750,000
Reduction in AESO roll-in		-
Eligible for PSC?		No

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY



Ancillary Services

- Board directed EAL to file a more detailed and accurate cost study for ancillary services
- AESO commissioned EnVision Energy Consulting to conduct study, to be included in 2005 tariff application
- Proposed tariff changes were based on study results, rate stability, simplicity of understanding, and economy of billing
- AESO proposes to unbundle ancillary services into charges for operating reserve, transmission must-run (TMR), and other ancillary services

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY



Ancillary Services (cont'd)

- Operating reserve charge will continue to be recovered as a varying energy charge based on a percentage of all-hours pool price
- TMR charge will be recovered as a flat energy charge
 - Currently recovered as a varying energy charge based on a percentage of all-hours pool price
- Other ancillary services include under frequency mitigation, Poplar Hills voltage control, and remedial action schemes (including ILRAS)



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Ancillary Services (cont'd)

- Under-frequency mitigation costs will be recovered as a demand charge from load, and a flat energy charge from supply
 - Currently recovered as a varying energy charge based on a percentage of all-hours pool price
- Poplar Hills voltage control costs will continue to be recovered as a demand charge
- Remedial action scheme costs will continue to be recovered 60% as a demand charge and 40% as a flat energy charge (similar to wires charges)



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Ancillary Services (cont'd)

- Net impact is a relatively small shift in how costs are recovered
- Proposed TMR cost recovery shifts \$50 million (7% of revenue requirement) to flat energy from varying energy charge
- Proposed under-frequency mitigation cost recovery shifts:
 - for load, \$3 million (1% of revenue requirement) to demand from varying energy charge
 - for supply, \$3 million (1% of revenue requirement) to flat energy from varying energy charge



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Customer Contributions

- AESO contribution policy to:
 - harmonize with DISCOs
 - provide economic siting signal
 - not disturb postage-stamp pricing
 - apply consistently to all load
- Proposed changes mainly affect load customers
- Existing contribution policy for generators remains in place until Transmission Regulation becomes effective on January 1, 2006
 - Generators continue to pay all customer-related costs, as defined in 2004 terms and conditions



Load Customer Contributions

- Interconnections costs re-classified
 - All direct costs continue to be classified as customer (customer substation and new radial line)
 - All bulk system costs continue to be classified as system (upgrades to existing looped network)
 - All local costs to be classified as system (upgrades to existing breakers and protection; previously local or system depending on who was identified as benefiting)
 - Effect will be to reduce amount of costs classified as local (and potentially paid by customer) for some projects
- Contribution policy applicability depends on final Construction Commitment Agreement (CCA) date

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY



Load Customer Contributions (cont'd)

- Contribution = customer cost – AESO roll-in
- AESO roll-in proposed to be \$27,000 per MW of DTS contract capacity per year of DTS contract term up to customer cost
 - Currently \$400,000 per year of DTS contract term after first five years, plus 3 times levelized annual revenue
- Proposed AESO roll-in will generally be greater than current roll-in for more than 15 MW of DTS capacity, and less than current roll-in for lower DTS capacity



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Load Contributions — Example 1

	Current	Proposed
DTS contract capacity	6 MW	6 MW
DTS contract term	20 years	20 years
AESO roll-in level	\$400,000/yr + 3x revenue	\$27,000/MW/yr
Maximum AESO roll-in	\$5,080,000	\$3,240,000
Customer cost	\$5,060,000	\$5,060,000
Actual AESO roll-in	\$5,060,000	\$3,240,000
Customer contribution	-	\$1,820,000

Customer contribution increases by \$1,820,000

Reclassified direct/local costs may also reduce customer cost



Load Contributions — Example 2

	Current	Proposed
DTS contract capacity	55 MW	55 MW
DTS contract term	20 years	20 years
AESO roll-in level	\$400,000/yr + 3x revenue	\$27,000/MW/yr
Maximum AESO roll-in	\$12,200,000	\$29,700,000
Customer cost	\$14,400,000	\$14,400,000
Actual AESO roll-in	\$12,200,000	\$14,400,000
Customer contribution	\$2,200,000	-

Customer contribution decreases by \$2,200,000

Reclassified direct/local costs may also reduce customer cost



Load Customer Contributions (cont'd)

- Proposed AESO roll-in set so that 80% of projects would not require contribution
 - Currently more than 90% require no contribution
 - Based on analysis of 10 recent projects and 50 scenarios
- 80% guideline confirmed in Decision 2001-06:
 - “The level of the Roll-in Ceiling appears to have been chosen...so that 80% of system expansion projects would not require a contribution.... The Board considers this to be a fair manner to set the roll-in level as it preserves a balance between the need of new customers for service without a need for subsidy from existing customers.”



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Load Customer Contributions (cont'd)

- Contribution waived for expansion projects for distributors at multiple-user PODs
 - Where 20-year agreement signed
 - Not applicable if expansion attributable to end-use sites of 2 MW or larger
 - Recognizes that siting signal cannot be sent for DISCO expansion projects and that DISCOs and AESO coordinate systems for lowest overall cost
- Contribution revisited if project costs change, DTS contract capacity changes, or facility classification changes



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Load Customer Contributions (cont'd)

- Contribution may be refunded if facilities used to serve additional customers within 20 years
- Contribution policy can be applied directly to dual-use (load and generation) customers, on a “load first” principle
- Contribution policy can be applied to staged loads by taking the present value of the roll-in corresponding to the incremental load for the remaining contract term



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Terms and Conditions

- System access application process revised
 - New process established through stakeholder consultation and will continue to be developed
 - Allows TFO service provider and customer to work directly together
 - Goal is to streamline application and make process more efficient
 - AESO continues to oversee interconnections



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Terms and Conditions (cont'd)

- Application fees simplified and reduced
 - No longer charged for expansion projects at multiple user PODs
 - Fees are refundable when service is energized
 - Single fee rather than two stages, consistent with single stage interconnection process
 - Minimum \$10,000 for up to 15 MW (previously 10 MW)
 - Maximum \$50,000 over 25 MW (previously \$90,000)



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Terms and Conditions (cont'd)

- Customer contribution policy revised as already presented
- Ancillary services revised to accord with amendment application
- Contract capacity allocation introduced at time of commitment agreement, with re-allocation possible if delays occur
- Contract capacity reductions may result in additional customer contribution
- Peak demand waivers made distinct to distribution facility owners

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY



Terms and Conditions (cont'd)

- Transmission system expansion article deleted in accordance with Transmission Regulation
- Proformas of System Access Service Agreements and Construction Commitment Agreements deleted to enable non-material changes
- Language simplified
- Definitions updated
- Articles reorganized and renumbered
 - Article 24 is now Article 11



aeso
ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Changes to DTS Rate

	Current	Proposed
Interconnection	\$1,248.62/MW \$1.75/MWh	\$1,499.00/MW \$2.10/MWh
Operating Reserve	4.22% × Pool Price	1.40% × Pool Price \$0.40/MWh
Other System Support Services	\$20.53/MW	\$50.00/MW



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Changes to STS Rate

	Current	Proposed
Interconnection	\$2.35/MWh	\$2.90/MWh
Losses	Location-Specific Factor × Pool Price	Location-Specific Factor × Pool Price
Operating Reserve	4.0% × Pool Price	1.30% × Pool Price \$0.40/MWh
Regulated Supply	\$348/MW	\$340/MW

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Directions Addressed

- On-peak and off-peak ancillary service charges (Decision 2001-41)
 - EAL explained the difficulties in implementing on-peak and off-peak percentages for ancillary service charges in its 2001 GTA
 - AESO reiterates these conclusions and continues to recommend an all-hours pool price multiplier
- Non-compliance with System Controller directive (Decision 2001-15)
 - Fairness of Article 24 pricing addressed in Decision 2003-033 and direction no longer relevant



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Directions Addressed (cont'd)

- Transmission cost of service study (Decision 2001-32)
 - AESO commissioned a transmission cost causation study from PS Technologies Inc.
 - Study circulated in stakeholder consultation process on September 16, 2004
 - Allow for more stakeholder input and discussion
 - Avoid delay in implementing other Phase II changes
 - Minimize changes prior to Transmission Regulation
 - Process to conclude December 2004 and results to be incorporated into AESO 2006 GTA



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Directions Addressed (cont'd)

- Customer contribution policy (Decisions 2001-06 and 2001-25)
 - Examples of discount rate calculations for cost of advancement provided
 - Other specific directions addressed in proposed customer contribution policy
- Customer-owned substation (COS) credit (Decisions 2001-32, 2001-68, and 2003-077)
 - Total credits summarized for 2002-2004
 - Case-by-case analysis of eligibility for proposed primary service credit being completed



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Directions Addressed (cont'd)

- Firm import/export service (Decision 2002-99)
 - Firm import/export service as well as other interconnection matters are reviewed in report to be circulated in stakeholder consultation process
 - Results to be incorporated into AESO 2006 GTA
- Loss factor methodology (Decisions 2000-1, 2000-27, and 2002-104)
 - Review of loss factor methodology completed and available on AESO web site
 - Transmission Regulation provides for locational loss factor methodology to be set through ISO Rules process



Directions Addressed (cont'd)

- Short interval demand (SID) metering (Decision 2001-32)
 - Study of short interval demand metering included with application
 - Short term variations in demand do not generally impact requirements for transmission facilities
 - The 15-minute, 8-minute, and 1-minute monthly ranges of demand show high positive correlation
 - Conclusion: there is no advantage to allocating costs over shorter intervals than the current 15-minute metering



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Directions Addressed (cont'd)

- System planning/operations (Decisions 2001-06 and 2002-99)
 - Direction for zonal tariffs superceded by Transmission Regulation
 - AESO proposes three-stage congestion management protocol
 - Reliability objectives determined by AESO participation in Western Electricity Coordinating Council



aeso
ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Directions Addressed (cont'd)

- Totalization (Decision 2001-68)
 - Terms and conditions state AESO will consider totalizing points of connection (POCs) when:
 - Multiple POCs are lower-cost solution
 - Customer is an EUB-designated industrial system
 - It is legally, technically, and economically viable to build a transmission bypass connecting two or more POCs



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Directions Addressed (cont'd)

- Fort Nelson Settlement (Decision 2003-077)
 - Recommendations of AESO study:
 - Change DTS contract with BC Hydro to a separate rate based on interruptible service
 - Change STS contract with BC Hydro to an interruptible service contract under existing AESO rate structure
 - Include incremental TMR cost related to serving the Fort Nelson load in separate rate under DTS contract



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Directions Addressed (cont'd)

- Public consultation before 2004 GTA (2003 Settlement)
 - Discussions initiated before and continuing through GTA process
- Study of reactive power (2003 Settlement)
 - Completed and posted on AESO web site (Mar 2003)
- Bill STS to PPA Buyers rather than PPA Owners (Decision 2002-48)
 - All prior billing to PPA Owners re-issued to PPA Buyers in Jun 2002
 - STS charges continue to be billed to PPA Buyers

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY



Directions Addressed (cont'd)

- Stakeholder discussion on contract term discounts/surcharges (Decision 2001-32)
 - AESO requests relief because of lack of stakeholder interest
- Cost responsibility for commercial upgrades (Decision 2001-32)
 - Decision 2002-099 retracted commercial class designation
- Demand waivers for distribution maintenance and emergencies (Decision 2001-32)
 - Waivers provided in Article 16 of terms and conditions



Directions Addressed (cont'd)

- Cost summary and related details (Decision 2001-21)
 - Provided in 2004 Own Costs application and Phase I GTA
- Insurance cover notes (Decision 2001-21)
 - Included in previous and current GTA (as long as competitive procurement of insurance policies is not jeopardized)



aeso
ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Outstanding Matters

- Limitations of liability (Decision 2003-109)
 - Implications of Liability Protection Regulation still being assessed
 - If possible, will include in proposed terms and conditions
- Rider C by revenue category (Decision 2003-099)
 - Rider C charged by revenue category throughout 2004
 - Recommendation for 2004 and 2005 reconciliation still to be filed



aeso
ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Outstanding Matters (cont'd)

- DAT customer eligibility for COS credit (Decision 2003-077)
 - Case by case evaluation to be completed for filing
- Proposal for self-supply of system support services (Decision 2001-32)
 - Component of Wholesale Market Review currently underway; to be addressed at future date
- All other Board directions have been addressed in previous or current application
 - Subject to final review and check



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY



Stakeholder Discussion

Rob Senko

AESO Regulatory Stakeholder Workshop

September 22, 2004 — Calgary, Alberta

THE POWER OF POSSIBILITY

Options for Process

- Identify areas of application that can be settled through:
 - negotiation
 - written proceeding
- Oral hearing process would take six to nine months to complete, resulting in proposed tariff and terms and conditions not being effective until April 2005 or later
 - 2006 tariff to be filed February 1, 2005 and effective January 1, 2006
- What options exist to shorten or modify process?



Questions and Comments



PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY

Contact Us...

- Regulatory

Rob Senko
Director

Phone (403) 539-2786
Fax (403) 539-2524

John Martin
Manager

(403) 539-2465
(403) 539-2524

- Maureen Morhalo

Regulatory Administrator

Phone (403) 539-2466
Fax (403) 539-2524

www.aeso.ca

PREVIEW (DRAFT 2004-09-22)

THE POWER OF POSSIBILITY



aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

