

Reliable: Our Commitment to Albertans

Reliable **Power**

Reliable **Markets**

Reliable **People**



Todd Fior
Vice-President, Finance

Annual General Meeting
May 17, 2007



2006 Revenues



<i>(in millions of \$)</i>	<u>Actual 2006</u>	<u>Actual 2005</u>
Revenues/Expenses	\$ 965	\$ 862
 <i>Revenue source:</i>		
Transmission		
Transmission operations	95.0 %	94.7%
General and administrative	3.1%	3.5%
Energy market	1.4%	1.5%
Load Settlement	0.5%	0.3%
 Total Assets/Liabilities		
at December 31	\$ 366	\$ 170

2006 General & Administrative Costs



<i>(in millions of \$)</i>	<u>Actual 2006</u>	<u>Budget</u>	<u>Actual 2005</u>
Salaries and Benefits	\$ 28	\$ 29	\$ 27
Professional Fees and			
Consulting	5	4	5
Office and Administration	<u>8</u>	<u>9</u>	<u>7</u>
Total	<u>\$ 41</u>	<u>\$ 42</u>	<u>\$ 39</u>

2006 Transmission Operating Costs



<i>(in millions of \$)</i>	<u>Actual 2006</u>	<u>Budget</u>	<u>Actual 2005</u>
Wires Costs	\$ 445	\$ 440	\$ 420
Transmission Line Losses	232	131	201
Ancillary Services	235	151	190
Other Costs	<u>4</u>	<u>8</u>	<u>5</u>
Total	<u>\$ 916</u>	<u>\$ 730</u>	<u>\$ 816</u>

Energy Market Trading Charge



2007 Trading Charge

Energy Market Trading Charge	11.1 ¢ / MWh
MSA Recovery	<u>2.5 ¢ / MWh</u>
Total Trading Charge	<u>13.6 ¢ / MWh</u>

2006 Trading Charge

Energy Market Trading Charge	11.1 ¢ / MWh
MSA Recovery	<u>1.8 ¢ / MWh</u>
Total Trading Charge	<u>12.9 ¢ / MWh</u>

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Dale McMaster

President and CEO

AESO Annual General Meeting

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AESO: Our Core Business



- Markets: development and operation of Alberta's real-time electric energy market to facilitate the fair, efficient and openly competitive market for electricity
- Electric System Operations: direct the operation of Alberta's power grid to ensure reliability
- Transmission System Development: plan development of Alberta's transmission system to ensure reliability and to facilitate the competitive market and investment in new supply
- Transmission System Access: provide system access for both generation and load customers

Our Vision



The AESO will be seen as a key contributor to the development of Alberta and the quality of life for Albertans, through our leadership role in the facilitation of fair, efficient and openly competitive electricity markets and the reliable operation and development of the Alberta Interconnected Electric System.

Powering Alberta



- **Load Growth -- Energy**
 - Demand for power is up 28% since 2000
 - Year over year load growth 2006: 4.7%
 - Power demand growth is equal to adding two cities the size of Red Deer each year
 - Current projections -- about 3% per annum
- **Load Growth – Peak**
 - Six new summer peaks in 2006
 - New winter peak of 9,661 megawatts
- **Growth in Supply**
 - More than 3,000 MW added since 2001
 - About 3,800 MW of new supply needed by 2016

Transmission System Development

- **Most recent 10-year Transmission System Plan**
 - \$1.5 billion in transmission reinforcements underway
 - \$3.5 billion potential upgrades by 2016
- **Major transmission reinforcements approved**
 - City of Edmonton reinforcement
 - Edmonton to Calgary 500-kV reinforcement
 - Southwest transmission reinforcement
 - Northwest system reinforcement
- **Planning: Need Application Development Stage**
 - Southeast region for reliability, interconnection of wind generation and restoration of the inter-tie with Saskatchewan
 - North of Fort McMurray to service oilsands
 - Northeast and Fort McMurray to meet load growth
 - Heartland region for planned bitumen upgraders
 - Second Edmonton – Calgary 500 kV
 - Additional Interties
- **Merchant transmission lines**

Edmonton – Calgary 500-kV Transmission Reinforcement



- **The ‘need’ was approved by the EUB in May, 2005**
- **The reinforcement is required by 2009 to:**
 - ensure the ongoing reliability of service
 - to connect additional generation in the Lake Wabamun area
 - improve overall power system efficiency
 - partial restoration of the capability of the intertie with B.C.
- **Without this reinforcement, there is an unacceptable level of risk of:**
 - Controlled outages to customers to remain within safe system operating limits
 - A major system outage

Operations and Reliability

- **System Control Centre**
 - New AESO System Coordination Centre commissioned
 - Upgrading our SCADA and Energy Management System
- **Challenging system operation**
 - Operating at or near system limits more often and for longer durations
 - Increased export capability
 - Enhanced outage coordination with generators
 - Generator reactive power
- **Compliance monitoring and enforcement**

Customer Interconnections

- **Ongoing improvements in transmission access process**
 - Improved project timelines while improving quality and customer satisfaction
- **Collaboration with EUB**
 - Streamlined process for small system projects of less than \$10 million and customer interconnections
 - The appropriate level of regulatory oversight while expediting approvals
- **Currently working on 120 customer interconnection requests**

Market and Regulatory Framework



- **Market policy framework**
 - Rule changes enhance price fidelity & visibility of supply
 - Long term adequacy metrics
- **Wind integration: collaboration with CanWEA**
 - Comprehensive wind forecasting study
 - Market and Operational Framework Discussion Paper
- **General Tariff Application**
 - Extensive consultation on tariff application
 - Successful stakeholder Budget Review Process for AESO's "own costs"

Looking Ahead.....



- **Transmission Regulation: implementation**
- **Market:**
 - **Five-year Market Roadmap: certainty and stability**
 - **Review of ancillary services market**
 - **Out of market commitment of generation**
- **Regulatory Framework: creation of the**
 - **Energy Resources Conservation Board**
 - **Alberta Utilities Commission**
- **AESO authoritative documents: comprehensive review**
- **Mandatory reliability standards**

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- **There are many challenges ahead for the electric industry and the AESO**
 - Major transmission system reinforcements
 - Challenging system operations
 - Heavy demand for customer interconnections
 - Major investment in new supply
 - Continuing evolution of the competitive market for electricity
 - Changes to the Policy and Regulatory framework
- **Reliability: it's our commitment to stakeholders, Market Participants and Albertans**