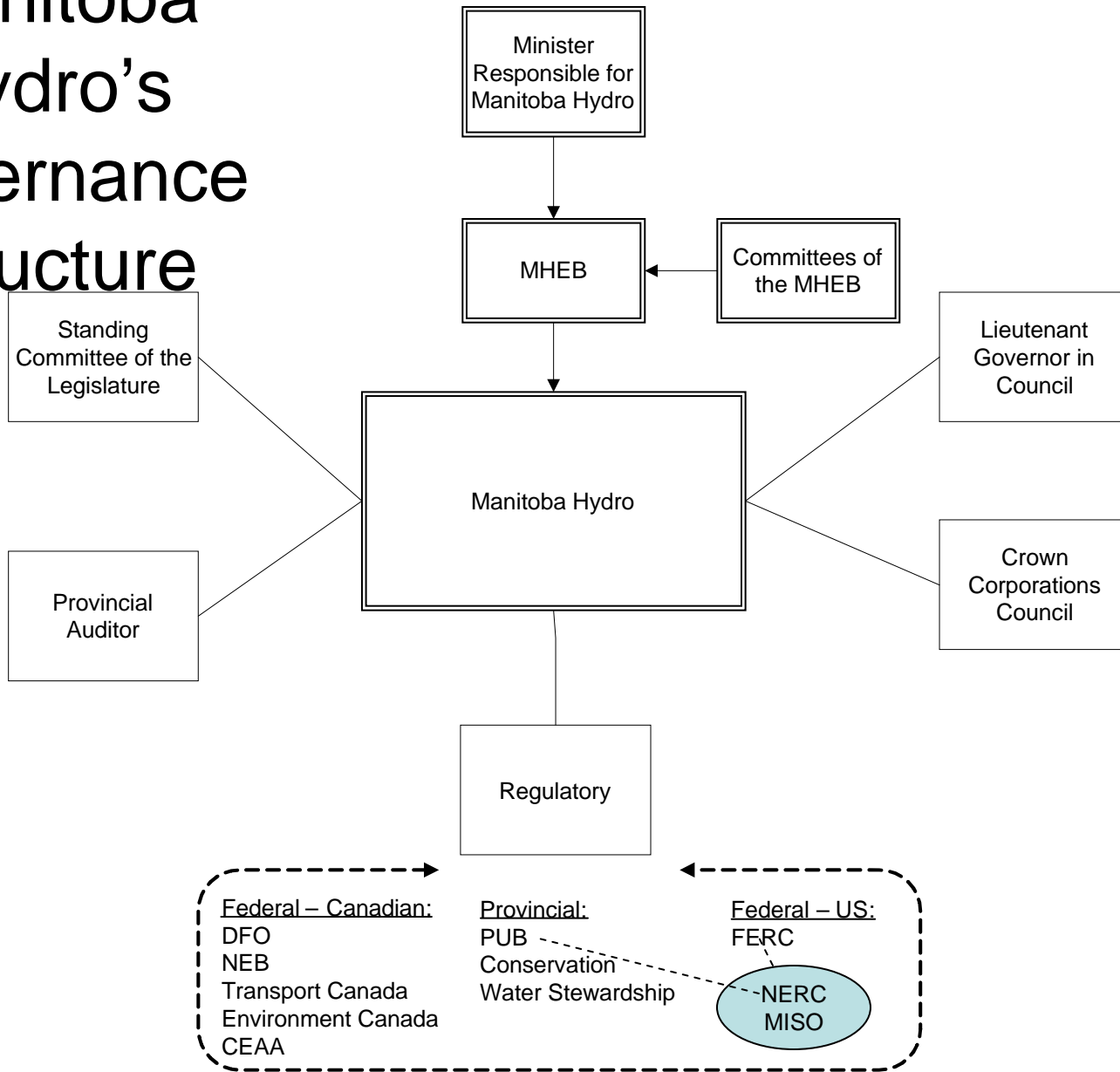


Manitoba Hydro's governance & planning processes

Presentation to PUB workshop
May 31, 2010

Lyn Wray,
VP Corporate Planning & Strategic Analysis

Manitoba Hydro's Governance Structure



Manitoba Hydro's Governance Structure (electricity)

- **Crown Corporations Council**
 - Facilitates clarity of mandate and performance criteria
 - Reviews long term corporate plans and capital expenditure proposals
 - Hears submissions from persons regarding alleged failures of the Corporation to comply with any Act or policy of the CCC.
- **Lieutenant Governor in Council**
 - Statutory Authority requirement to approve many activities including development of new power generating stations
- **Standing Committee of the Legislature**
 - Reviews Corporation's annual report and seeks information from senior officers
- **Auditor General of Manitoba**

Manitoba Hydro's Governance Structure (electricity)

Regulatory – Manitoba

- **Public Utilities Board**
 - Approves changes in rates for services
 - Adjudicates certain reliability matters
- **Conservation**
 - Licensing and permitting of various corporate activities
- **Water Stewardship**
 - Generating station licensing and water management
- **Clean Environment Commission**
 - Forum for environmental assessment

Manitoba Hydro's Governance Structure (electricity)

Regulatory - Canada

- **Canadian Environmental Assessment Agency**
 - New major project licensing
- **Department of Fisheries and Oceans (DFO)**
 - Authorization for new in-stream works under *Fisheries Act*
 - *Species at Risk Act*
- **National Energy Board (NEB)**
 - International and designated interprovincial power lines
 - International export permits
- **Transport Canada (*Navigable Waters Act*)**
 - Approvals for physical works in stream and transmission lines that cross navigable waters
- **Environment Canada**
 - Emission reporting under *Canadian Environmental Protection Act*

Manitoba Hydro's Governance Structure (electricity)

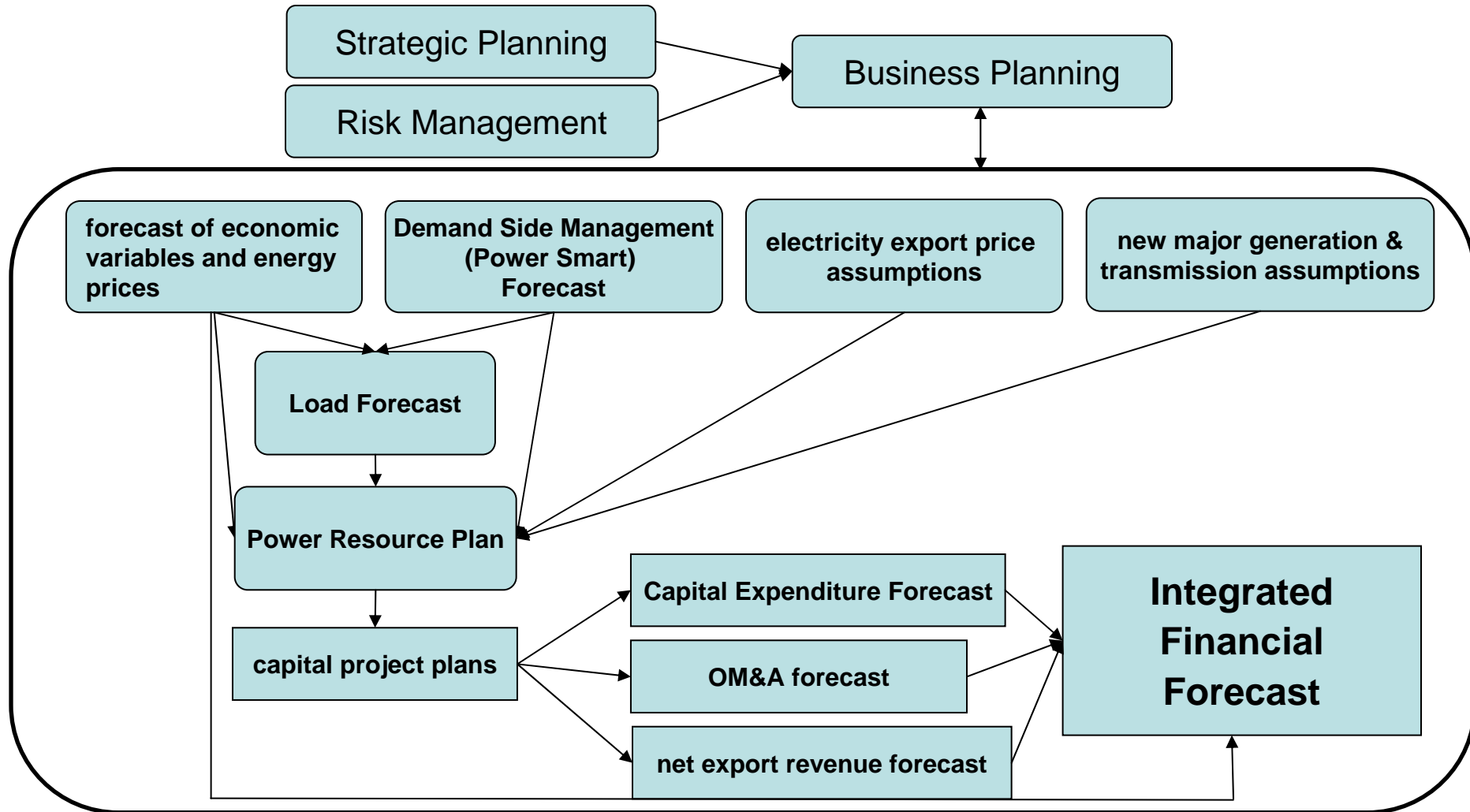
Regulatory - United States

- **FERC**
 - Governs wholesale market and transmission access in the U.S.
 - Reliability standards in the U.S.
- **NERC**
 - Develops reliability standards for the North American electricity grid for adoption / approval by North American regulators / jurisdictions.
- **MISO**
 - Develops tariffs governing transmission and energy markets subject to approval by FERC.

Manitoba Hydro Electric Board Objectives & Principal responsibilities

- Carry out the duties, powers and functions of Manitoba Hydro as set out in *The Manitoba Hydro Act*, including:
 - Provide for the continuance of a supply of power adequate for the needs of the province
 - Engage in and promote economy and efficiency in the development, generation, transmission, distribution, supply and end-use of power
 - Provide and market products, services and expertise related to the development, generation, transmission, distribution, supply and end-use of power, within and outside the province.
 - Market and supply power to persons outside the province on terms and conditions acceptable to the board.
- Has the statutory authority and obligation to provide policy direction to and oversee the management of the business and affairs of the Corporation and to ensure that the Corporation fulfils its statutory objectives in the public interest.

Manitoba Hydro's Integrated Planning Process



Chronology of the planning cycle

Corporate Strategic Plan	March
economic variables energy prices electricity export price assumptions	April
Load Forecast	May
Power Smart Plan	May
Power Resource Plan	July
Capital Expenditure Forecast Operating Forecast	August/September
Integrated Financial Forecast	October

Sensitivity analysis

The Power Resource Plan provides the economic justification for alternative development plans and may consider sensitivities to:

- Drought
- Electricity export prices
- Load growth
- Demand side management
- Capital cost of new generation and transmission
- Exchange rate
- Discount rate

Sensitivity analysis

- **The Integrated Financial Forecast (IFF)** tests financial sensitivity to various factors including:
 - Drought
 - Electricity export prices
 - Load
 - Exchange rate
 - Interest rate
- Financial analysis is also undertaken of major alternative scenarios to determine impacts on financial targets and rate levels.

Review forums at Manitoba Hydro

- Planning Review Committee
 - Rates Review Committee
 - Technical Review Committee
 - Export Power Risk Management Committee
 - Corporate Risk Management Committee
 - Strategic planning process
 - Executive Committee and Board

Planning Review Committee (PRC)

- Provides in-depth peer review of long-term planning reports, forecasts and analyses.
- Members appointed by the President & CEO from among MH's senior management.
- Review all major assumptions for the planning cycle plus other items of strategic interest
- Presenters are the staff most closely involved in directing or preparing the forecasts
- PRC provides feedback and commentary. The line area and sponsoring VP retain responsibility for the recommendation to Executive Committee.

Rates Review Committee

- Reviews proposed electricity and gas rate tariffs, policies, strategies and applications
- Membership includes representation from Finance, Customer Care & Marketing, Distribution and other areas.
- Typical agenda items include prospective cost of service studies, energy intensive rates, curtailable rate program, rate design alternatives

Technical Review Committee

- Provides a forum for evaluating engineering matters to determine a proposal's technical acceptability.
- Examples of agenda items might include:
 - Transformer loading practices
 - Higher voltage limits

Export Power Risk Management Committee

- Provides oversight of the management of the energy supply and financial risks resulting from Manitoba Hydro's participation in the export power market.
- The Committee comprises the President & CEO, the senior VP of Power Supply, the senior VP Finance & Administration, and the Corporate Secretary.

Corporate Risk Management Committee

- Provides a forum for guiding and monitoring the processes whereby MH's principal risks are identified, assigned, assessed, managed and communicated.
- Broad senior membership from across the corporation
- Typical agenda includes updates from Corporate Risk Management department and discussion of selected risk topics presented by line areas

Risk management process

- Mission/Mandate
- Risk Identification
- Potential Impact
- Risk Treatment
- Residual Risk Assessment
- Reporting and Monitoring

Manitoba Hydro Risk Categories

A. Market

1. Domestic
 - 1 Competition
 - 2 Uneconomic Loads
2. Export
 - 1 Regulatory Environment
 - 2 Competition
 - 3 Transmission
 - 4 Special Interest Groups
 - 5 Protectionism
 - 6 Domestic Requirements
 - 7 Commodity Availability

B. Financial

- 1 Exchange
- 2 Interest Rates
- 3 Credit
- 4 Inflation
- 5 Gas Price Volatility
- 6 Gas Derivative Instruments
- 7 Capital Structure
- 8 Shortage Pricing / Fuel Price Volatility
- 9 Power Financial Instruments

C. Environmental

- 1 Water Supply / Drought
- 2 Climate Change / Kyoto
- 3 Operational Impact and Infrastructure
- 4 Reliability of Supply

D. Infrastructure

- 1 Loss of Plant (all property, all perils)
 - 1 Dam and Dike Structures
- 2 Insufficient Supply (drought peril)
- 3 Prolonged Loss of System Supply
- 4 System Shutdown (short term)
- 5 System Shutdown (Natural Gas – S.T.)
- 6 Technology
- 7 Special Interest Groups
- 8 Emergency Response / Business Continuity

E. Human

- 1 Safety and Health
 - 1 Infectious Disease
- 2 Union / Employee Issues
- 3 Succession Planning
- 4 Technology

F. Business Operational

- 1 Supply Chain
- 2 Operational Controls

G. Reputation

H. Governance / Regulatory / Legal

- 1 Regulation and Licensing
- 2 Export Market Access
- 3 Legal Compliance
- 4 Contracts and Ventures
- 5 NERC/MRO Reliability Standards

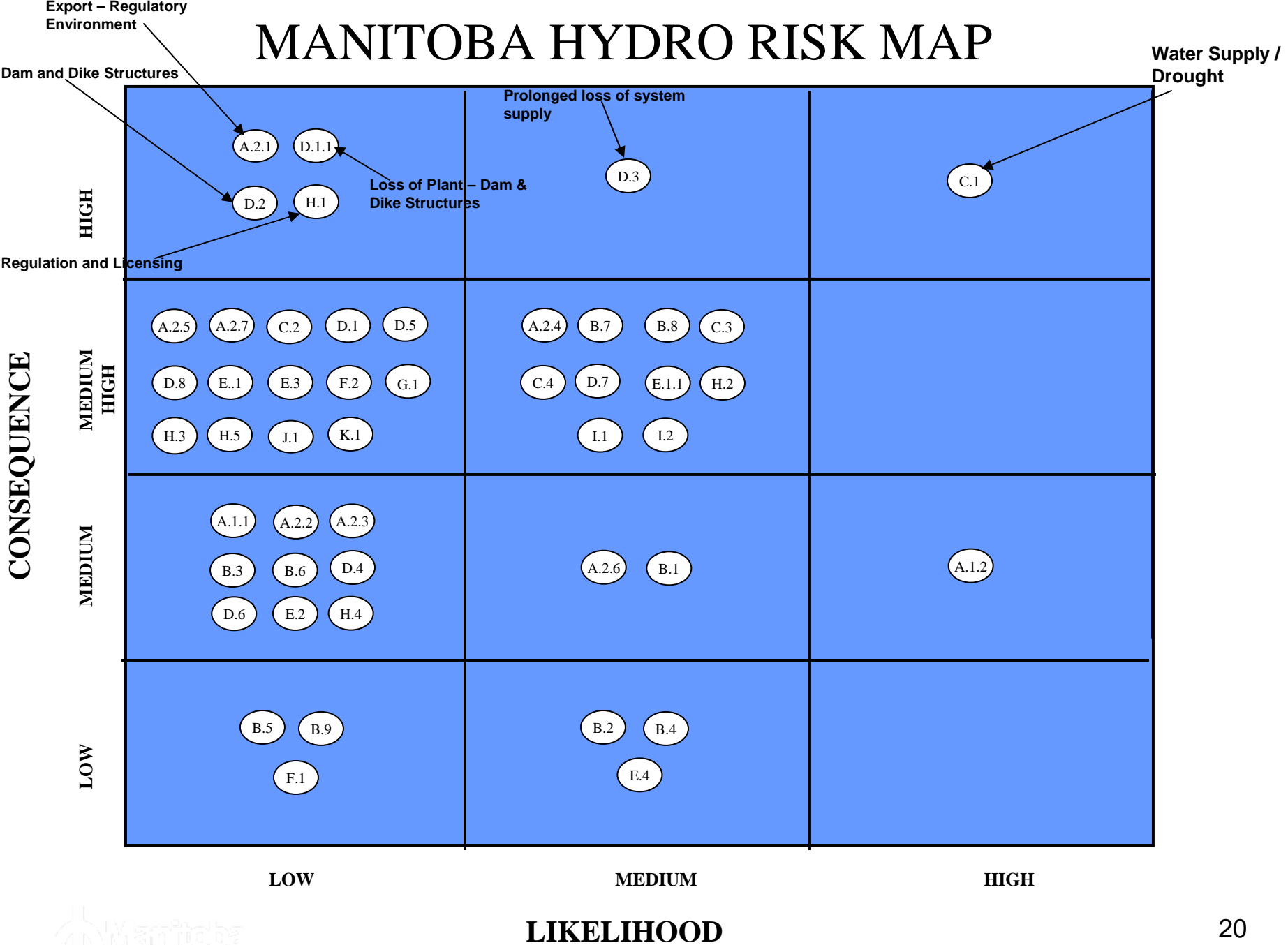
I. Aboriginal

- 1 Relationships
- 2 Legal

J. Emerging Energy Technologies

K. Strategic

MANITOBA HYDRO RISK MAP



Strategic Planning process

- Corporate Strategic Plan (CSP) is revisited annually
- Issue discussions are held with senior management in small groups and at executive session facilitated by Corporate Planning
- Goals and strategies are updated and reviewed by Executive Committee, considering emerging developments, opportunities and risks
- CSP is presented to the MH Board in January with final version approved in March

Strategic Planning Process

(continued)

- Business Unit, divisional & departmental plans are prepared in alignment with the Corporate Strategic Plan
- These functional plans feed into and are affected by the integrated planning and budgeting process
- Measures are tracked at various levels of the corporation to determine progress towards targets

CSP Goals

- Improve safety in the work environment.
- Provide customers with exceptional value.
- Strengthen working relationships with Aboriginal peoples.
- Maintain a strong financial structure.
- Extend and protect access to North American energy markets and profitable export sales.
- Attract, develop and retain a highly skilled and motivated workforce that reflects the demographics of Manitoba.
- Protect the environment in everything that we do.
- Promote cost effective energy sustainability, conservation and innovation.
- Be recognized as an outstanding corporate citizen and a supporter of economic development in Manitoba.

Summary: Manitoba Hydro's governance & planning processes

- Significant external & internal oversight
- Multiple stakeholders with opportunities to investigate matters of interest
- Many mechanisms for structured interdepartmental peer review
- Divisional plans & strategies aligned with the corporation's mission and goals
- Emphasis on line responsibility coupled with collaboration to achieve corporate objectives