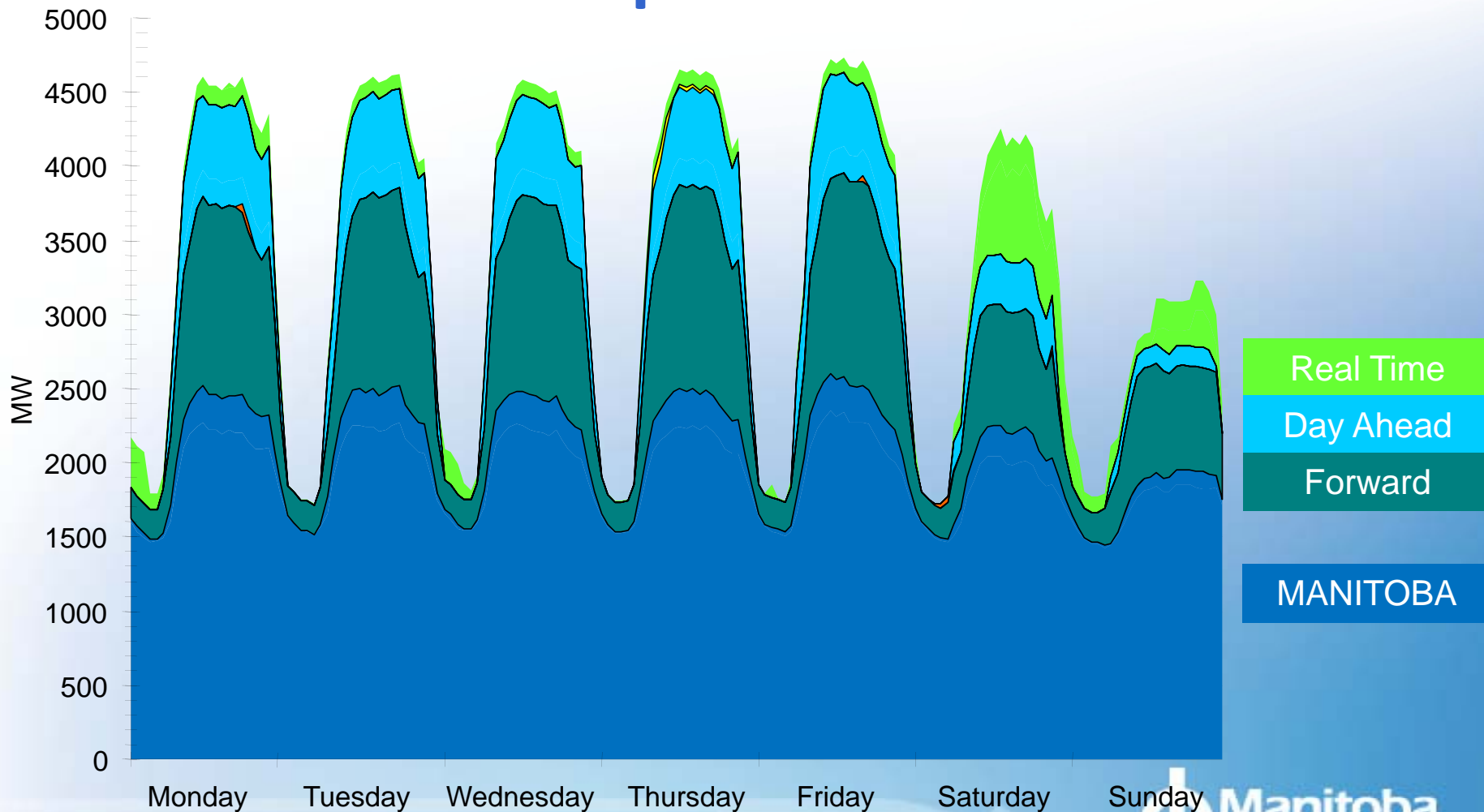


# EXPORT CONTRACTS FUNDAMENTAL TO PREFERRED PLAN

David Cormie



# Manitoba and Export Demand



# Recent Major Long Term Contracts

- **Northern States Power**
  - 325/375 MW from 2015-2025
  - 125 MW from 2021-2025
- **Minnesota Power**
  - 250 MW from 2020-2035
  - Commitment to build new Canada-US transmission line
- **Wisconsin Public Service**
  - 100 MW 2021-2029
- **\$7 Billion in Revenues**

# Why do we have Export Contracts?

- Define Product, Quantity, Price and Term
  - MOU
  - Term Sheet
  - Power Purchase Agreement
- Set out all Terms and Conditions
  - Definitions
  - Transmission Arrangements
  - Scheduling and Curtailment Rights
  - Billing and Payment, Currency and Credit
  - Disputes, Defaults, Bankruptcy
  - Confidentiality
  - Conditions Precedent and Approvals
  - General Commercial

# Products

- Supply and Purchase Obligations
  - Capacity and Reserves, MW
  - Energy, MWh
  - Quality of Supply: Accreditation
  - Delivery Point
- Environmental Attributes
  - Source
  - Tracking
  - Ownership and Transfer
  - Substitution

# Pricing

- Capacity -  $\$/\text{MW-mth}$
- Fixed Priced Energy -  $\$/\text{MWh}$
- Market Priced Energy -  $\$/\text{MWh}$
- Escalation and the Index
  - Fixed
  - General inflation tied to CPI

# Scheduling and Delivery

- Transmission Service
  - Define Quality and Quantity of Service
    - Manitoba
    - US
    - Who pays
  - Changed Circumstances
- Curtailment Rights
  - Generation and Transmission Events
- Curtailment Priority Criteria

# MP Sale Agreements

- System Power Sale
  - 250 MW capacity and associated energy
  - Major new interconnection
- Energy Exchange Agreement
  - Energy purchase from MP
    - 250 GWh annually
    - necessary for MH to reserve US northbound network service transmission
  - Wind Storage Services
    - 250 GWh annually



# System Power Sale

- 15 year term
  - May 1, 2020 to April 30, 2035
- 1,460 - 2,190 GWh/year
  - 36% - 54% Keeyask annual generation
- Pricing
  - Includes both
    - Energy price
      - Fixed
      - Market
    - Capacity price
  - Price escalates over time

# Energy

- Normal water conditions
  - Monday to Sunday, 16 hrs/day (7x16)
  - Overnight deliveries at MH's option
  - No transmission use cost to MH
- Adverse water conditions
  - Reduce to Monday to Friday, 16 hrs/day (5x16)
  - MH's option
- Force majeure
  - Curtail to zero if necessary
  - Includes drought worse than record

# Major New Interconnection

- MP committed to championing new 500 kV line
  - will build 230 kV line if necessary
- MH responsible for costs of Canadian portion of new interconnection
- MP responsible for costs of US portion of new 230 kV interconnection

# MH Conditions and Options

- No requirement to build
  - Requirement triggered with Keeyask cofferdam first rock
- MH has the option to delay contract term up to two years
  - Delay in start of Keeyask cofferdam
  - Delay in start of MB transmission facilities
  - Agreement terminates without penalty if either condition is not satisfied by June 1, 2016

# Other Provisions

- System Participation Sale
  - served from entire MH generating system
  - MP is exposed to MH's generation and transmission risks
  - Manitoba load has first priority to energy
  - no liquidated damages
- All hydraulic environmental attributes transferred to MP

# Approvals

- Manitoba Hydro
  - MHEB approval
  - MB Order in Council of the Lt. Governor – 60 days
  - National Energy Board of Canada
    - export permit for electricity sale – Dec 2016
    - new international power line – Dec 2016
- Minnesota Power
  - MP Board approval
  - Minnesota Public Utilities Commission
  - Midwest ISO approval of capacity as capacity resource

# Questions

