# Alberta's Electricity Marketplace Binding Day-Ahead Market ("BDAM")

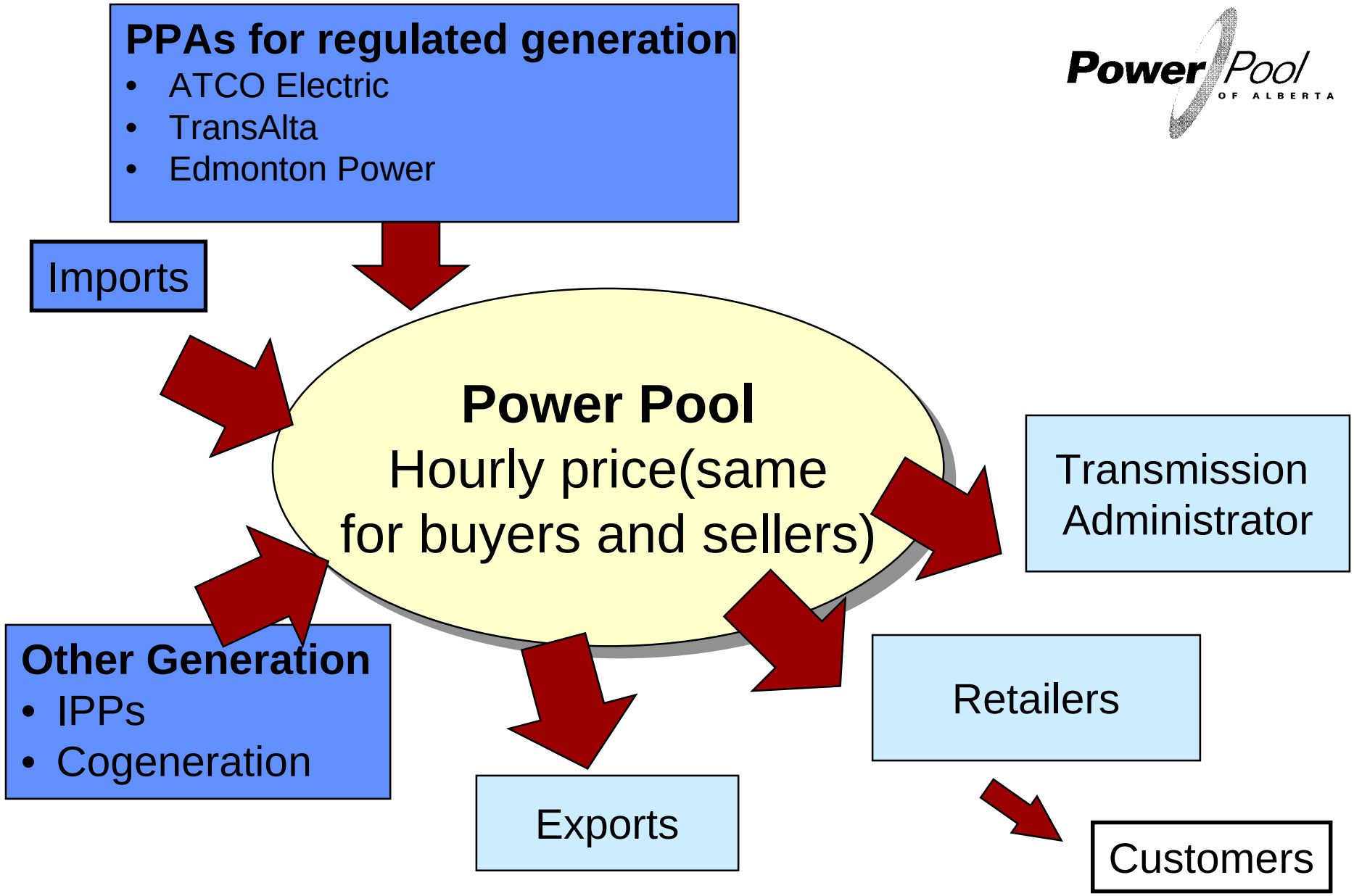
Economics Society of Calgary

May 10, 2000

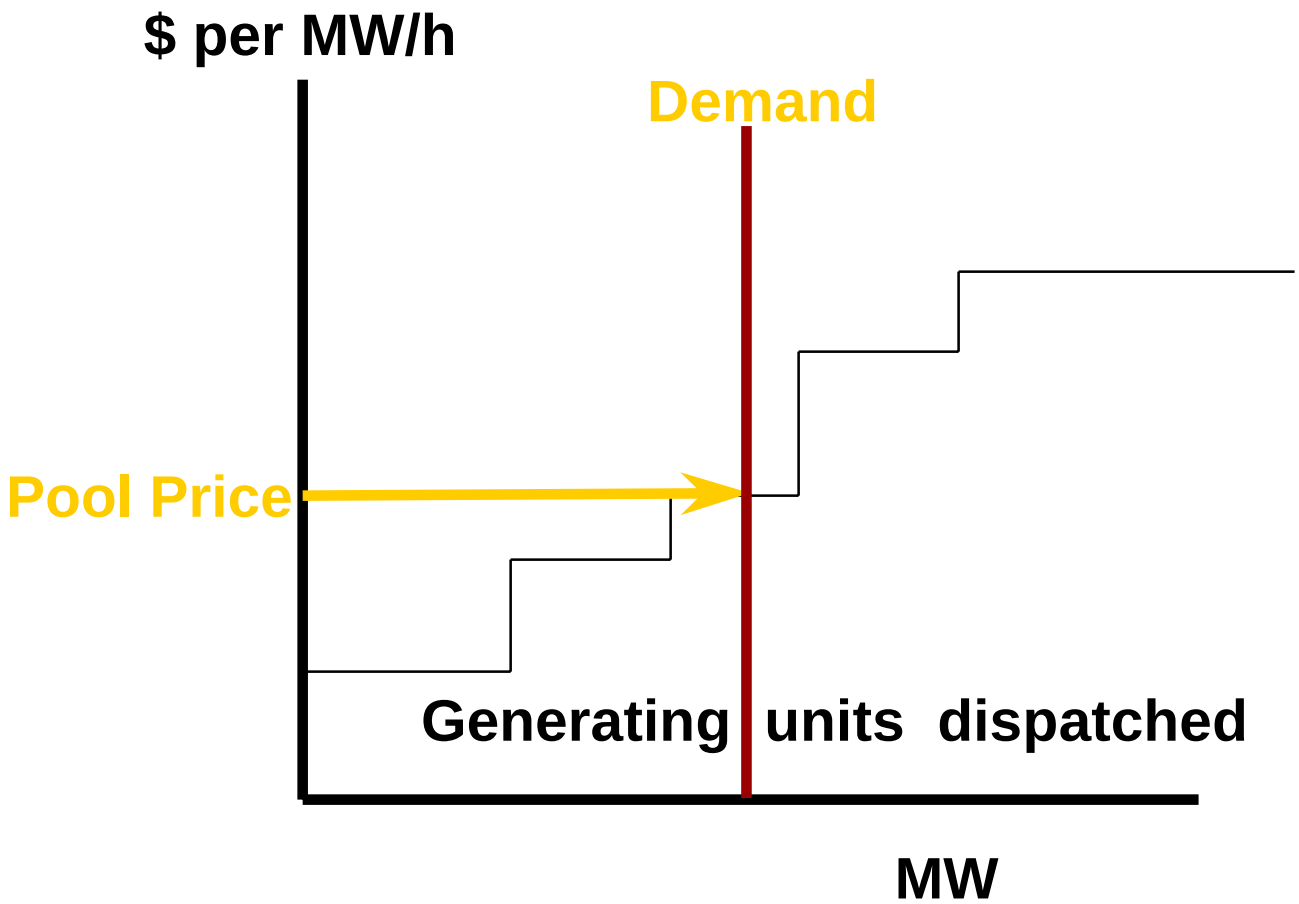
Power Pool OF ALBERTA

# Agenda

- **Today's Real-Time Market**
- **Market Developments**
- **Binding Day-Ahead Market**


PPAs for regulated generation
• ATCO Electric
• TransAlta
• Edmonton Power
Imports
Power Pool
Hourly price(same for buyers and sellers)
Transmission Administrator
Other Generation
• IPPs
• Cogeneration
Retailers
Exports
Customers

# Today's Market



# Issues in Today's Market

- **Inadequacy of risk management tools**
- **Market Power**
- **Lack of price certainty**
- **Limited demand side risk or participation**
- **High price volatility**
- **Limited alignment with other markets**

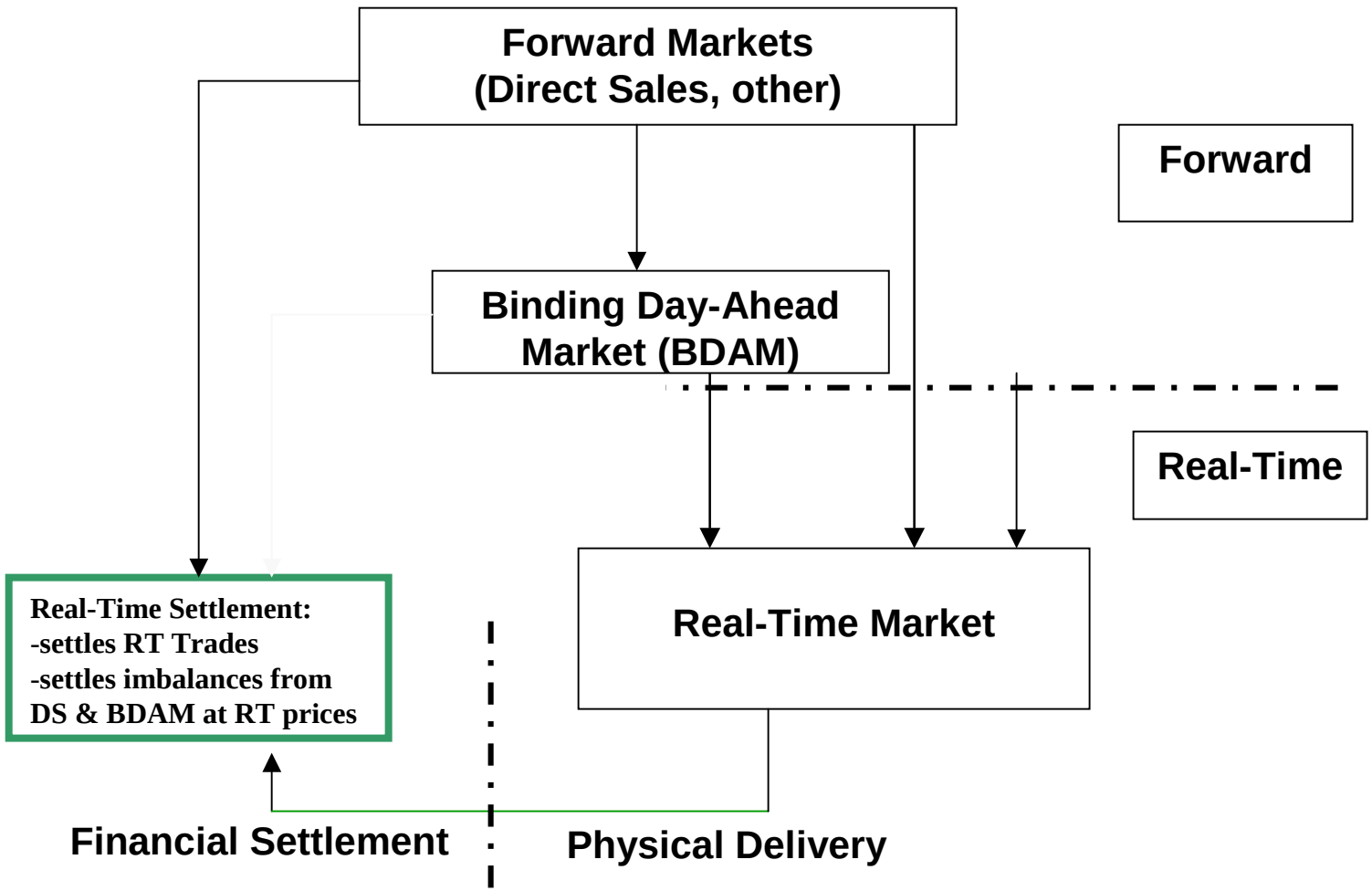
# Post 2001: The Vision

- **A market of many suppliers & many buyers**
- **Removal of legislative hedges**
- **Competitive procurement for SSS**
- **A portfolio of choices available for market participants**
  - **Direct Sales, CfDs, Forwards, Futures Exchanges, BDAM, & Real-Time**

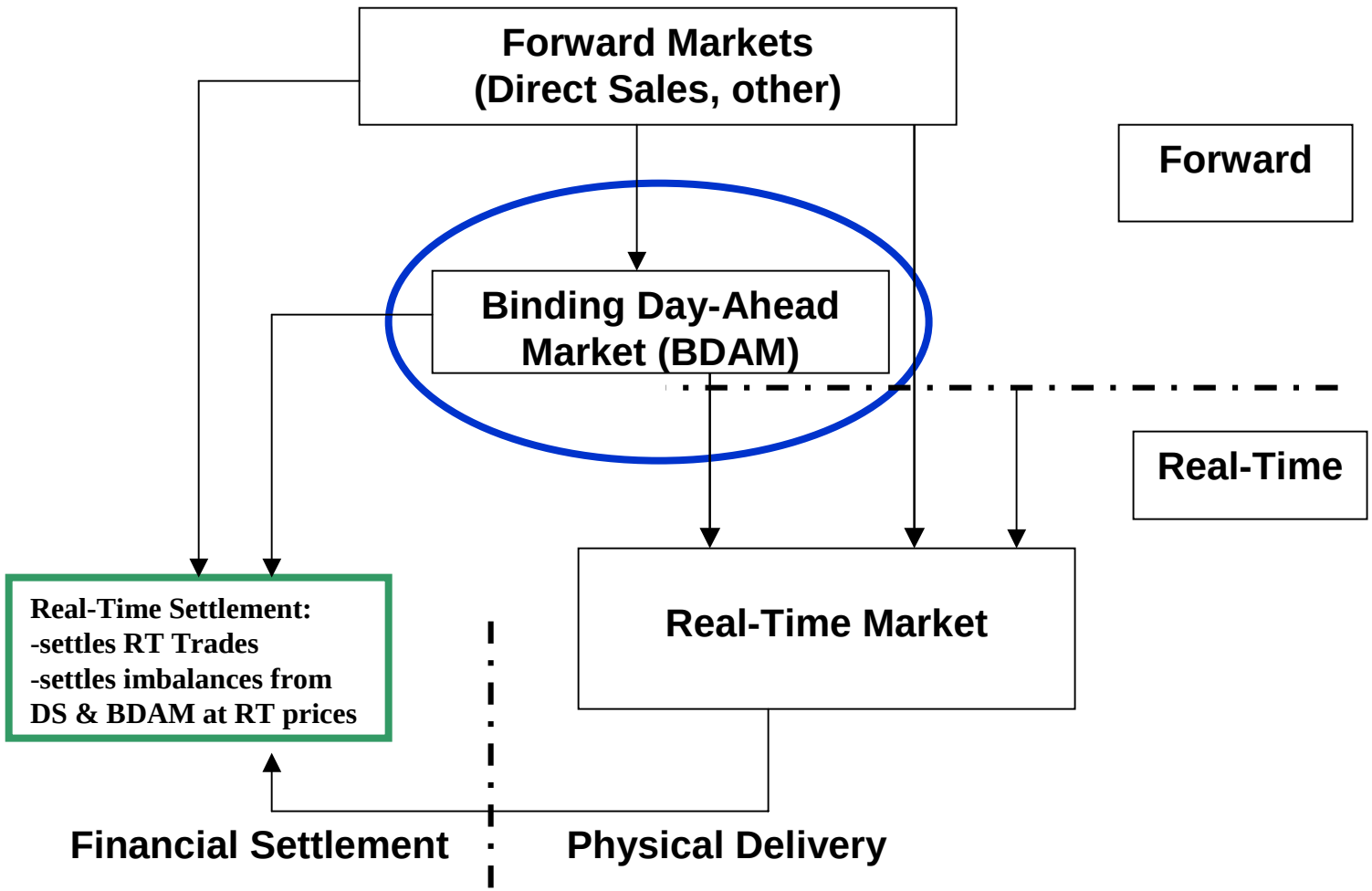
Power Pool OF ALBERTA

# Multi-Settlement Systems Binding Day-Ahead Market “BDAM”

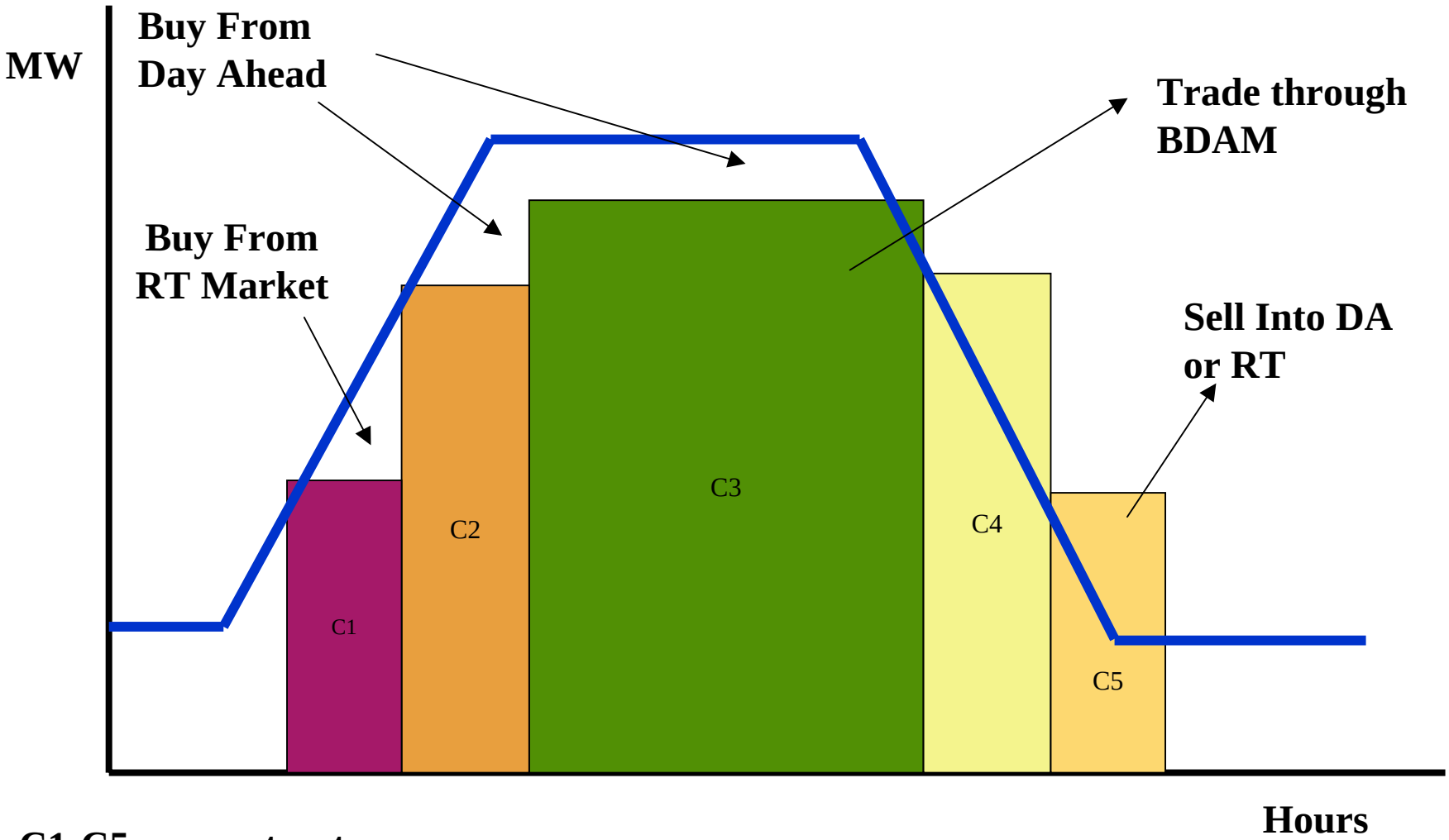
# The Vision: Choice in Energy Market



# BDAM is *one* of the building blocks for a maturing marketplace



# BDAM as a marginal risk market




**C1-C5 are contracts**

# Value of the BDAM:

- **Offer the ability to secure energy prices and quantities in advance of the Real-Time market through a facilitated exchange or marketplace (BDAM);**
- **Provide risk management at the margin (to unwind contract positions);**
- **Provide reliable price discovery, not only for market participants but also as a price signal or index for other forward or financial markets (a reference market);**

# Value of the BDAM (Continued):

- **Provide better alignment with other markets in the Pacific Northwest;**
- **Provides market efficiencies (price transparency, participation by even smaller players)**
- **Useful market to facilitate demand side participation; and**
- **Facilitates the System Support Services market**

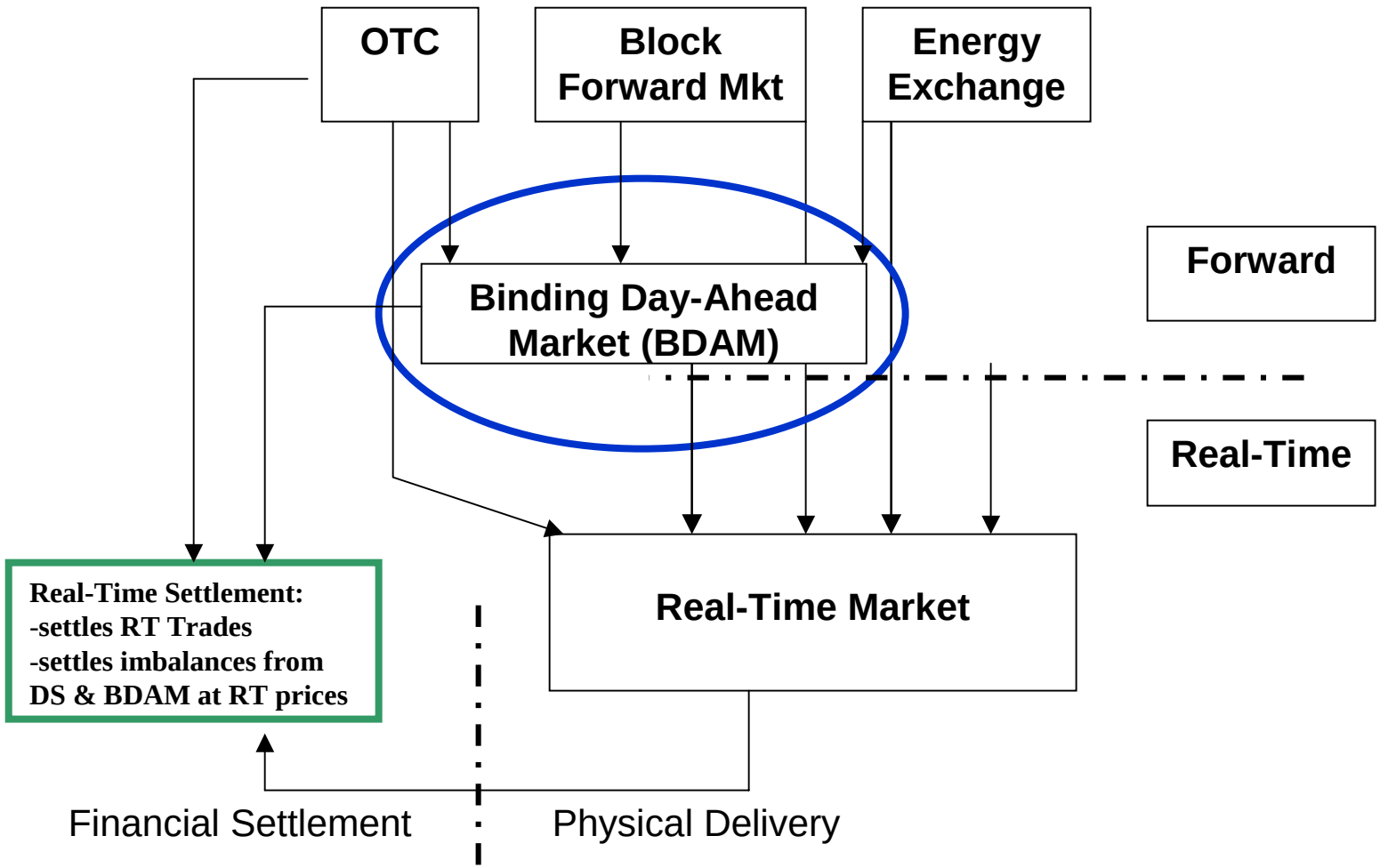
# Project Progress

- **Feasibility Study (Phase I) complete**
- **Phase II:**
  - **Design work**
  - **Coordination of Markets**
  - **Market Operator BDAM**
  - **Forward Portfolio**
  - **Pilot during 2000**
  - **Business Case and Workplan for Phase III**

# Evaluation of BDAM Operator

- **Examine Alternative Operators**
  - **Timing and Conditions for entry**
  - **Design considerations**
  - **Estimated Trading Charges**
  - **Experience Elsewhere**

# Pool operated BDAM supported by forward market developments



# The new Energy Trading System facilitates a multi-settlement world.

| Market | Power Pool Roles & Functions | |
|---|---|---|
| | **System Controller** | **Pool Administrator** |
| **Direct Sales (Physical Bilaterals)** | Real-Time Management | Scheduling, Financial Settlement (net Invoice) |
| **BDAM** | RT Management | Scheduling<br>Financial Settlement<br>Accepts Bids/Offers<br>Establish Clearing Price |
| **Real-Time (Spot Market)** | Dispatch<br>Establish Clearing Price | Scheduling<br>Financial Settlement<br>Accept Bids/Offers |
| **System Support Services** | SSS Directives / Dispatch | |

# Operator Recommendation

- Pool Operated BDAM supported by market "forwards"
  - BDAM requirements are an extension of the services & systems the Pool currently provides
  - Pool can provide a timely solution
  - Pool is a neutral body - no barriers to other markets
  - Pool will lead/facilitate the design development

# Guiding Principles for further development

- Non-restrictive model
  - Supports development of other forward markets
- Creates value for Stakeholders
  - Evaluate value vs. risk equation
  - Supports efficient market development

# BDAM Project Timeline

- **May:**
  - **Phase II interim report**
  - **May 17 - workshop**
- **June 30: target completion of Phase II**
- **Phase III targets**
  - **Pilot during 2000**
  - **Completion late 2000 for full start up January 1, 2001**
  - **Forward trading can commence in fall, 2000**