

# WMIC RTO Seams Workshop

## British Columbia Perspective

# Part I - B.C. and Alberta RTO Development

## B.C. Role in the NWRTO

- BC Hydro wants to be at the table on 15 October or very soon thereafter.
- Lawyers from the NWRTO and BC Hydro have been assigned to discuss structure.
- Recognition that U.S. jurisdictional utilities must file, while BC Hydro is considering voluntary membership - this is a difference.
- BC Hydro does not consider it practical to transfer its control area to the NWRTO at this time.
  - System security responsibility during curtailments.
  - Control area balancing.

# Why?

- B.C. and NW are one market.
- Powerex does 20 times as much business with the U.S. as with Alberta.
- Significant economic and environmental benefits from coordinated operation.

# B.C./Alberta Interface

- Alberta has a power pool and an independent grid operator which meets RTO requirements.
- Alberta market structure.
  - Day ahead offers and bids
  - Power Pool forecasts quantity day ahead
  - 5 minute market internally
  - Intertie is hourly dispatch
  - Settlement on ex-post price
- Intertie physical right provides tie breaker for hourly merit order.
- Alberta market structure is under review.

# Part II - Selected Seams Issues

# Congestion Management

- Significant congestion:
  - BC US Border
  - COB/NOB
- Congestion management process needs to:
  - Assign capacity to highest value users
  - Assign capacity to highest value paths (e.g. COI & PDCI, West of Borah & Path 15).
- Preference for firm physical rights, distributed by auction.
- Congestion management process must consider:
  - dominance of hydro generation
  - few large generation operators
- Need to coordinate NW and California.
- Cannot overlook transmission expansion free rider issues.

# Price Reciprocity

- NWRTO access fees and price reciprocity need to be structured so that all qualifying entities are treated equally.
- Ensure that tariff structure does not reverse economic efficiency of congestion management.
- Ensure that tariff charges and congestion charges do not amount to pancaking.

# Loop Flows

- Loop flow through BC Hydro is controlled with phase shifter by agreement with BPA.
- WSCC Unscheduled Flow Mitigation Plan works, but tie costs to beneficiaries if practical.
- Address other local loop flow problems in the NW.
- Are loop flow issues significant enough to drive the transmission market structure and congestion management process?
  - Utah major loop flow
  - Mid-Point - Summer Lake
  - Seattle area

## Commercial Practices

- Proliferation of different reservation and scheduling practices within the NW needs to be rationalized into a single NW practice.
- Coordination of TTC (not ATC).
- Reservation timelines and deadlines.
- Scheduling timelines.
- Release of firm capacity.
- Sometimes software limitations dictate practices.

# Curtailment Procedures

- Curtailment at the seams with other RTOs:
  - BC/Alberta seam
  - NWRTO/CAISO/Desert Star seams
- Consistent procedures for internal control areas.
- Major issues:
  - Emergency curtailments of schedules, not transmission contracts
  - Limitations poorly defined (e.g. North of John Day)
- Positive side:
  - Loop flow curtailments not as often as in the east.

# Coordinated Outage Planning

- NWPP Coordinated Outage System process
  - highest impact periods are avoided.
  - needs to be incorporated in the NWRTO.
  - extend the coordination horizon.
  - extended to other RTOs.
- Address maintenance impacts on the market.:
  - reduce outage durations with overtime and additional resources.
  - enhance outage flexibility.
  - eliminate maintenance outages by using live line procedures on constraining paths.