Bulk Transmission Cost Allocation

History & Policy



Why bulk transmission?

Because generation energy sources are distant from the load they serve

> **HYDRO COAL & CONVERSION** COGEN WIND & SOLAR SIMPLE-CYLE GAS **COMBINED CYCLE GAS**



The Old World

- Generators central station service
 - Must meet instantaneous system peak
 - CP methods fit generation reasonably well
- Transmission uses generator method
 - Province wide Gen & Trans cost pooling
 - Same costs everywhere by law
 - EUA 30(3)(a) Rates not locationally different
 - Shields remote loads from true costs



Interlude: 1999 - 2005

- Transmission 50/50 to Generators / Load
 - Generator STS rate = energy charge
 - Common cost reduction incentive
- BUT 2003 Transmission Policy changed:
 - -~ All costs to load
 - Split NEED & FACILITIES applications
 - The dance of unintended consequences



Critical Transmission Infrastructure (CTI)

- Edmonton-Calgary line sparks protest
 - EUB 'spying', decision voided, AUC formed
- Government concerned about delay
 - Cabinet determines 'CTI' facilities
 - Largest ever bulk transmission additions
 BUT

CTI "Cost causation" not public



Renewables Policy

"The longer term transmission developments will be primarily influenced by coal fired generation retirement and the pace/magnitude at which renewable generation is added to the interconnected electric system."

[LTP p.57]



Bulk Cost Causation

13,900 MW of new capacity by 2037 (excludes CTG conversions) 2,400 MW Peak demand forecast growth from 11,458 MW in 2016 13,947 MW in 2037 AESO LTO p.3

"What's load got to do with it?"

(T. Turner)



If all you have is a hammer...

- Effective cost causation tariff is blocked
 - No generation location signals
 - No transmission local marginal pricing
- Fair cost sharing is the goal
 - Fairness is subjective
 - Everyone talks their book...but
 - The community often finds consensus, given enough time

