



OEB COST ALLOCATION REVIEW

Minimum System and PLCC Adjustment

November 2, 2005

John Vrantsidis

SUMMARY

- Why Peak Load Carrying Capability adjustment needed
- Suggestion for standard PLCC adjustment
- Size of prior PLCC adjustments
- Future implementation issues:
 - to what costs should adjustment apply
 - utility-specific calculation allowable
 - guidance on calculation

Concern with Minimum System

- “ the analyst must be aware that the minimum-size distribution system has a certain load-carrying capability, which can be viewed as demand-related cost”
(1992 NARUC Manual, page 98)
- Staff propose issue be addressed in order to use minimum system as standard categorization approach in upcoming filings

Issue Raised in Canadian Proceedings

In Nova Scotia Power's 2002 proceeding:

"The minimum-sized method assigns to all customers a share of the cost of a hypothetical distribution system that has real load-carrying capacity. It also assigns demand costs based on every kW of customer demand. The effect is to 'double count' the demand which could be met by the minimum-sized system."

PLCC Issue recognized in Ontario

The need for a PLCC adjustment has been raised in prior Ontario discussions:

- “When the group NCP is applied to poles and conductors, a per customer credit to the demand allocator should be made to recognize the *peak load carrying capability* of the minimum system”

(Recommendations for the Equitable Categorization of Distribution Costs, 1985, prepared for MEA Cost of Service Subcommittee)

Standard PLCC Adjustment

- Prior PLCC adjustments ranged up to 1 kW per customer; advisory team suggested default not be set at the highest end of this range
- Staff and advisory team discussed standard .4 kW per customer PLCC adjustment
- Further “fine tuning” of size of adjustment not thought helpful based on current information

PLCC Example: Hydro Quebec

- Intervenor's consultant recommended 2 kW adjustment, based on information from utility
- Regulator accepted 1 kW per customer, until calculation updated

PLCC Example: MEA Generic COS

Generic Cost of Service Analysis and Findings
(1988, prepared for MEA by EES):

“For this study it was found that a PLCC of .25 kW/customer for all strata was appropriate if the minimum system is assumed to be conductor constrained.”

“ A **larger** credit would have been appropriate if the minimum system was transformer constrained.”

PLCC Example: Ontario Hydro

Ontario Hydro Cost-of-Service Methodology Report (R-1985-13):

“The demand allocation estimates were adjusted to reflect the load carrying capability of the minimum system.”

“At the feeder level it is estimated the 180 watts per customer can be supplied by the minimum system and at the transformer level 300 watts per customer.”

Future Implementation Issue (I)

Advisory team agreed PLCC adjustment should apply to:

- Transformers
- Distribution Lines and Feeders Overhead and Underground
- Confirm no PLCC adjustment for Substations, Distribution Station Equipment, Subtransmission Feeders Overhead and Underground, because they are 100% demand

Future Implementation Issue (II)

Staff Discussion Paper:

“The use of distributor-specific figures will be allowed, as long as full supporting material analysis is provided and the proposed figure differs materially from the default figure.”

- May review suggestion in light of generic categorization proposal