Meeting Notes #7 Cost Allocation Working Group

Thursday, May 1st, 2003 9:30 a.m. - 3:15 p.m.

1. Direct Allocation of Costs

A) Chris Amos did a presentation on the direct allocation of costs. She examined various accounts which potentially could be directly allocated. For instance:

- Transformer Stations [#1850 Equipment, #1808 (Building Portion)]
 - Direct allocation if dedicated TS to identifiable customer.
 - Only allocate TS' included in distribution rates? Post-2000 TS' built by utilities currently not in distribution rates and funding mechanism is still outstanding.
- Poles, Towers and Fixtures [#1830], Overhead Conductors and Devices [#1835], Underground Conduit [#1840], Underground Conductors and Devices [#1845]
 - If dedicated facilities, allocate directly to customer(s) class.
 - Allocation based on kilometers may be problematic:
 - Not all utilities have GIC systems, and even for those that have, it would be a labour intensive exercise. It would have to be explored if small utility would have the ability to allocate by kilometers by using their maps to determine the location of their customers and their associated customer class.
 - Issues of fairness and cost causality need to be addressed.
- Line Transformers [#1850]
 - Directly assign transformers where able (e.g. large customers).
 - Customer-owned transformers (customers who receive transformer allowance) should these be backed out of any allocation process? This information should be available in the billing system, as it is the basis for the monthly transformer allowance.
 - Consideration was given to using utility transformer databases (if available) whereby a report linking transformers to customers and their elated class (a new report may be required to be programmed) would then be weighted by installation cost.
- *Metering* [#1860]
 - Utilities will have meter databases (government requirement to track all meter serial/badges #'s), which track meters at the customer account/service address level. The information should also be able to be linked to the customer class. This may require a new report to be written.

- Contributed Capital [#1955]
 - Analysis required to determine source and class of funds i.e. source of funds may include:
 - Economic model capital contributions
 - Subdivisions assumed
 - Payments received for moving poles, etc.
- Billing and Collecting [# 5305 through 5340]
- Bad Debt Expense [# 5335] utilities should have records of the customers and their classes that were written off during the period.
- Collecting [#5320] if representative for the activity of the utility, the collection costs may be allocated in same proportions as the bad debt expense above. Care must be taken to remove large unusual bad debts before allocation of the remaining bad debt expenses to the classes.
- Billing costs [#5315] (billing activities, postage) should be fairly consistent to produce and send the bill, however, care needs o be taken to weight the allocation based on monthly and bi-monthly billings.
- Customer call centres determination of volume by class may be contained within the automated phone tracking system billing software. Otherwise, a manual tracking process for a limited period fo time every few months (i.e. spring, summer, fall, winter) may be undertaken. However, consideration should be given to determine if allocation by # of customers by class is a reasonable and cost effective approach.

Questions raised during the discussion included: Is there a difference between direct allocation to customers versus to classes? Are there distributors who still have water heater assets or are they in affiliates? Are there distributors with street lighting assets (a few utility group members indicated they did). Treatment of late payment charges was debated, with some wondering if should net, since not a cost.

- B) Ken Snelson filed a written discussion of direct allocation from the perspective of a large use customer. He suggested direct allocation is likely to be applicable where a customer class has few customers and easily identifiable supply facilities; this will apply to the Large Use Class in some utilities. The following example was cite as an illustration: "A utility is proposing a new customer class including three former Large Users that are now supplied by 115kV to 44kV transformer stations that have been built by the LDC specifically to supply these customers. Each customer has a dedicated transformer station with similar contractual provisions. The LDC assets used by each customer consist of the dedicated 115kV to 44kV transformer station and a few spans of 44 kV line to a customer owned station."
- C) Roger White gave an initial presentation on the potential use of using kilometers as an allocator (he explained this had been used in the past in Ontario sometimes, such as with large users). The presentation suggested greater use of this be explored, especially as underground distribution systems grew.

In the subsequent discussion, it was suggested the future write up of this topic include more on the data requirements of this technique (e.g. might be hard to gather costs per kilometer).

Concerns were raised about possible undue impact upon residential subdivisions of this proposal. And it was wondered is the proposal was consistent with a "postage stamp" approach to rates.

The group also suggested the title be changed so as not to confuse readers with direct allocation as traditionally understood by accountants. [Is was later suggested this material be placed under functionalization.]

Overall, use of the above was thought potentially most relevant for large users (Mr. White was asked to include reference to some of the key points from Mr. Snelson's presentation) and for LDCs with density rates.

2. Functionalization

Paula Zarnett did a presentation on the role of functionalization within the cost allocation process. Points raised included:

- In order to be able to categorize, utility costs must be put into groupings that are homogeneous in terms of the way that the costs are incurred.
- In cost allocation, such a homogeneous group is called a 'function', and the process that reviews the homogeneity of costs is 'functionalization'.
- U S of A accounts may be grouped into a cost function if they are homogeneous; if the U S of A account contains cost elements that are not homogeneous in terms of causality, they should be separated into different cost functions.
- The functionalization stage may also identify costs that are directly assignable to a customer class, and separate those from the shared components of the cost function.
- As the final product of functionalization, an LDC should have costs it can categorize.

By was of illustration, meter reading is unique cost function, related to number of customers (although cost or frequency may be different for different customers). And billing is a separate cost function, also related to number of customers.

Key issues raised at the functionalization stage of a CoS study include:

- In many cases the accounts will be sufficient for functionalization, but not always.
- In some cases the functionalization of an account will be utility-specific.
- Actual cost-tracking is best, but a sample or management judgement might be the best data available.
- May involve breakdown of employee functions and responsibilities. Large utilities may look at department functions; small utilities may have more work to do because employees are less specialized.
- Every part of the revenue requirement must be allocated as part of the study, and therefore will need to be functionalized; this includes net income.

Some of the points raised in the group discussion included:

- Should the Board set defaults, and then a distributor would have to justify changes?
- How far should subfunctionalization be forced?
- Problem of how to deal with modifications (e.g. distribution system voltage conversion).
- Should there be functionalization by voltage levels? Also, treatment of subtransformers?
- Contribute capital for example, split by function?
- Use of vehicles what function does a specific vehicle serve to a specific class?
- Working capital allowance?
- Functionalization of depreciation and OM&A expenses (except for things like meter reading and billing that are by customers) done on same basis as related assets?
- How should functionalize if an affiliate involved in the activity.

During discussion, the following passage from the NARUC Cost Allocation Manual 1992 was cited: "The distribution function is normally extensively subdivided in order to recognize the non-utilization of certain plant by particular customer classes. Since customers served at the primary distribution voltage do not utilize the plant necessary to transform the voltage to the secondary levels. The cost causation criteria requires that they not be allocated the cost associated with the secondary distribution system."

The most detailed discussion of functionalization known to group was that found in the 1973 APPA Cost Allocation Manual (see pages 15-46). Page 15 therein cautions: "The functionalization and grouping of the total cost of service is the most difficult and time consuming part of the cost allocation ... The larger the power system the greater the amount of work involved in preparing the functionalization and cost groupings."

Note the present discussion did not have the opportunity to consider any Canadian CoS decisions that have reviewed a utility's proposed functionalization.

3. Financial Assumptions

Gary Parent did a presentation which raised the following points:

- Are LDCs to base studies on "Regulated Costs" or "GAAP Accounting Costs"
 - which set of books?
 - how to deal with variances, PILs, etc. (need to have the Board rule on this)
 - materiality issues.
- Is would be erroneous to assume that the distributors use of the APH and US of A is interpreted uniformly (also commented that other accounting systems may be in day-to-day use, with the results mapped onto APH for regulatory filings). It was later suggested something similar to former MEA accounting subcommittee be set up to assist discussion of accounting issues. A specific case study was also thought very useful.
- How to regulatory cost get allocated?
- Should "normalization" of costs take place (for example, blend over 3 years to take out impact of unusual events)?
- Use of a past versus future test year?
- Should there be a separate class for retailers (and what costs should be going to that class)?
- The costs associated with services provided by the distributor to which a charge is made should be "backed out" to be consistent with the determination of the rates (and subsequent revenues received) for these services.
- Because of changes in technology, costs are getting put into different buckets than before (e.g., with the introduction of interval metering, costs previously included in the meter reading section's pot are now included in the meter shop/meter service section's pot).

4. Customer Cost Allocation Methods

Jim Fallis presented on this topic. Issues raised included:

- Weighting of billing on number of bills v. simply number of customers (to reflect monthly general service v. bi-monthly residential billing).
- Determination of appropriate weighting factors
 - Utility specific or industry standard?
 - Need to track them.
 - Need Board guidance to at least give parameters (e.g. is one week's customer service call centre data sufficient).

- Need to track capital and operational cost for interval metering.
- Tracking some measures for retailers, such as time and involvement, collection of account activities and customer service work (all by class?).
- Embedded generation customers require more work than regular customers. How is this addressed?

5. Miscellaneous

- A) The relationship between Specific Service Charges (Miscellaneous Charges) and cost allocation was raised. Points discussed included:
- Recognition that not all Specific Service Charges are cost driven; some are to influence customer behaviour as well (e.g. late payment charges, reconnection charges, repeat meter dispute tests, etc.).
- There is a need to track both the costs and revenues of specific services (but by total or by class?). Results in different levels of charges by class?
- B) It was mentioned that distribution systems are dynamic and therefore if a system is reconfigured (e.g. locate a new TS or DS, or change supply configuration), will this require a redoing of the entire CoS study? Similarly, if a new significant customer (e.g. large user or residential sub-division) comes in to the system?
- C) The question was raised as to whether "wheeling" should be treated as a separate class. This led to whether load transfers, embedded distributors, and retailers should also be separate classes, and how (and what) data should be obtained to collect or justify these.
- D) Bruce Bacon led a case study. Regarding street lighting and sentinel lighting, the question was raised whether should use customer v. connection v. account as basis.

Attendance

Bluewater Power - Kathy Gadsby
Brantford Power - Heather Wyatt
CNPI - Doug Bradbury
Hamilton - Terry Karp
Hydro One - Mike Roger
Milton Hydro - Don Thorne
Oakville - Gary Parent
Toronto - Anthony Lam
Thunder Bay Hydro - Cynthia Domjancic
Veridian - Laurie Stickwood

Econalysis - Bruce Bacon, Bill Harper ECMI - Roger White, Andy Bateman EDA - Maurice Tucci RCS - Peter Ioannou Upper Canada Energy Alliance - Jim Richardson Chris Amos Barker, Dunn & Rossi - Paula Zarnett, Neil Winger AMPCO - Ken Snelson (afternoon only)

Board Staff: John Vrantsidis Lee Harmer