

Recommendation 2:

That the structure adopted by Hydro for cost of service purposes comprising one study for the Island Interconnected System, one for the Labrador Interconnected System and one for all Isolated Rural Systems be approved.

SPECIFIC ASSIGNMENT OF TRANSMISSION PLANT

Prior to amendment of the Electrical Power Control Act, rural and isolated customers were served through the Board of Trustees of the Newfoundland and Labrador Power Distribution District (PDD), which constituted a single customer class for purposes of Hydro's cost of service studies.

A recommendation of the Board in its 1978 report established the principle that costs relating to plant and equipment dedicated to the service of a single customer should be specifically assigned to that customer, while costs of plant and equipment of substantial benefit to more than one customer should be apportioned between all customers. Pursuant to this recommendation, costs relating to all transmission lines serving the PDD exclusively were directly assigned to the PDD.

When the Electrical Power Control Act was amended to eliminate the PDD, all its customers, numbering more than 26,000, became customers of Hydro. For purposes of rate design, Hydro divided these customers into numerous classes according to the size and nature of their loads.

Under its proposed cost of service methodology, Hydro then treated the transmission lines serving the former PDD as common plant and allocated the costs between all customer classes.

NP and Industrial Customer (IC) witnesses took the position that nothing had changed but semantics: that in fact the lines in question still served Hydro's rural customers and that there was no need to treat them as common. The Board's consultant suggested that a sub-transmission function could be used in order to allocate the lines to the classes they served, but raised the question whether other transmission, jointly used by NP and IC, was treated as common and allocated in part to Rural classes.

Based on evidence that Howley-Cat Arm line supplies station service to the Cat Arm Generating Station, both NP and IC agreed that that line should be treated as common.

Regarding the remaining lines, Hydro submitted that each Hydro rural class is separate and distinct; that the concept of a single Rural class has no basis in fact; that arguments to the contrary rely on historical circumstances; that there is no precedent for long-term reflection of pre-existing conditions in costing methodology; and that Hydro correctly followed the Board's 1978 recommendation in treating the lines as common.

NP submitted that Hydro Rural was a single customer class under the Board's previous guidelines and there was no need to change them; that while Hydro Rural constituent classes need to be recognized for purposes of rate design, Hydro Rural remains a single class, as does NP vis a vis Hydro's overall cost of service. NP further argued that Hydro's approach would assign costs to NP and Industrials for lines serving only Rural Customers and that this contradicts the prefiled testimony, Page 9, Lines 1-4 of Dr. Sarikas, that each customer class should be allocated only those functions used in supplying service to it. (NP Final Argument, P. 3-4).

In rebuttal, Hydro asserted that Dr. Sarikas refers to assignment as classification, not functionalization, and there are no instances where he has proposed functionalizing plant to a customer who does not use that kind of plant.

The IC submission took a neutral position, recommending that the lines should be treated as the Board sees fit.

Direct assignment of cost entails diverting the assigned costs from the normal steps of cost of service analysis and charging them directly to the responsible class. (See Exhibit opposite Page 5 of this Report) If the cost responsibility is shared by more than one class, and the normal means of splitting such costs have been by-passed, extemporaneous measures would be necessary to distribute the assigned costs between the responsible classes. For this reason, direct assignment should be used only in the case of plant dedicated to the use of a single class. In the Board's opinion the criterion established in 1978 remains appropriate. With several classes of Rural customers, Hydro's decision to avoid direct assignment was proper.

However, the Board is not persuaded that the conversion of Rural Customers from one class to several should result in changing the costs allocated to NP and IC. The 1973 NARUC Cost Allocation Manual (P. 6-7) indicates that this sort of problem is often encountered: "Frequently the analyst is required to divide costs within a function to recognize non-utilization of certain facilities within the function by one or more customer groups." The manual then states that under such circumstances, sub-functions are used to ensure that the costs are borne by the classes responsible.

The 1992 NARUC Electric Utility Cost Allocation Manual also addresses briefly the subfunctionalized transmission plant method on Pages 71-72. The Board has noted the work required to implement such subfunctions is dependent upon the scale of subfunctionalization that takes place. The 1992 Manual indicates detailed plant accounts and schematic diagrams are required and where necessary subjective judgement when a function is not clear. In the opinion of the Board it will not be necessary to use micro-allocation methods since the refinement should not go beyond complete substations and complete line segments.

The Board considers that the cost of transmission lines dedicated to the service of Rural classes be included in a sub-transmission function and allocated to such classes. The principle that costs should be allocated to classes only for the facilities used by such classes would justify a second sub-transmission function for common lines used by NP and IC but not by Hydro Rural, provided the costs relating thereto were significant.

Recommendation 3:

That the Howley-Cat Arm transmission line be treated as common.

Recommendation 4:

That transmission lines dedicated to the service of Hydro Rural rate classes be included in a sub-transmission function, and the costs attributed thereto be allocated exclusively to such classes.

Recommendation 5:

That the methodology indicated in recommendation 4 be applied in the case of transmission serving both NP and IC but not the Rural classes, provided the costs total at least 2% of total transmission costs.

Recommendation 6:

That with the exception of the plant affected by recommendations 4 and 5, Hydro's method of functionalization be approved.

ALLOCATION OF GENERATING PLANT

Fixed costs relating to generating plant may be attributed to both the demand placed on the system and the energy requirement. The proportions in which such costs should be split between demand and energy classifications was a controversial issue. All expert testimony agreed that some component of energy cost exists, but individual estimates of the correct proportion varied widely.

Moreover, it was Dr. Sarikas' position that the Average and Excess (AED) method of allocation, which he proposed to use for generation, would result in further recognition of energy costs. This meant that the classification issues could not be considered in isolation. Dr. Olsen and Mr. Brockman agreed that the AED method does involve energy recognition. The Board's consultant disagreed. In view of the possible interrelated effects of classification and allocation the Board will first discuss allocation and related issues.