

- 1   **Q.     Please provide Newfoundland Power’s final submission in the 1992 COS Hearing**  
2       **with respect to the Rural Deficit allocation methodology.**  
3  
4   A.     Attachment A provides a copy of Newfoundland Power’s final submission in the 1992  
5       COS Hearing with respect to the Rural Deficit allocation methodology.

**Newfoundland and Labrador Hydro's  
1992 Cost of Service Methodology Hearing:  
Newfoundland Power's Final Submission**

**IN THE MATTER** of a Generic Hearing  
into the Cost of Service Methodology  
to be used by Newfoundland and Labrador Hydro

**BEFORE** the Board of Commissioners of  
Public Utilities

**SUBMISSION ON BEHALF OF**

**NEWFOUNDLAND LIGHT & POWER CO. LIMITED**

Submitted by:



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It should be noted that Baker acknowledged that in recommending use of a CP method for allocating transmission costs, he intended that it be a multiple coincident peak (transcript p.484). Also, Hydro in its submission articulated no opposition to the alternative use of a multiple CP method as opposed to a single CP method.

#### Distribution

NP's position in support of using a non-coincident peak allocator for distribution plant costs has been set out at p.27-28 of Brockman's prefiled evidence. In view of Sarikas' caveat and qualifications as to what he terms to be a "coincident peak", Brockman did not disagree with Sarikas' recommendations on this point.

#### **E. Allocation of Hydro Rural Deficit**

To the extent that the deficit was not created by demand, energy or the number of customers, whatever recommendation is made on how to allocate the rural revenue deficit will be arbitrary. In view of the fact that, as Baker acknowledged (transcript p.477), it is a taxation problem not a cost of service problem dumped on the Board, it is hard to imagine how cost of service methodologies or scientific principles could be of much assistance. As Brockman has suggested, only the principle of fairness can assist in resolving this matter (prefiled p.28).

Therefore, in the absence of a causal theory upon which to base the allocation, NP recommends allocating the deficit on the basis of 50 percent energy and 50 percent revenue requirement.

Further, the result of Hydro's recommendation would be that certain customers, e.g. Labrador Interconnected, with very low rates would not pick up a fair share of the burden of this deficit. Baker also highlighted the result of implementing Hydro's proposed allocation on revenue requirement would amount to a value added tax. (transcript p.546)

There is another curiosity remaining on Hydro's approach to this issue which should be highlighted. In the response provided to GCB-22, it is apparent that Hydro acknowledged equal weighting to the multiple elements of customers, kWhr sales and revenue for the attribution of the total isolated systems deficit between the Island Isolated and Labrador Isolated systems. However, on the question of allocating the rural revenue deficiency between Hydro's non-rural customer classes, Hydro selects the single element of revenue.

Olsen recommended that the rural revenue deficiency be allocated on the basis of plant costs assigned to each class. The rationale for this suggestion, other than the fact that it reduces the allocation of the subsidy to the Industrial customers, assumed that the subsidy would largely result from plant related costs. However, a significant portion of the Hydro Rural customers are the isolated diesel areas which do not recover all the variable fuel or energy related cost. It therefore cannot be assumed that the subsidy would relate largely to plant.

A further problem with the assumptions upon which Olsen based his choice of plant factor allocator is that the Labrador Interconnected customers do not have an investment

in generating plant and would not therefore under Olsen's method share much of the deficit. (Baker, transcript p.575)

Hydro, on p.33 of its final argument, suggests that a utility comes before the Board without any urban/rural breakdown of costs. This would be a fair statement if the entire rural customers were interconnected, as is the case for NP rural customers. However, as in Hydro's case, where there are rural isolated diesel customers, most utilities have separate rates for these customers since the costs are extremely high compared to the interconnected rural customers. Further, at p.34, Hydro compares the rural deficit to cross subsidization within NP. However, it should be recalled that NP customers share the same cost base, NP has no isolated diesel customers and NP does not have access to cheaper sources of power, i.e. Labrador. Hydro, by contrast, has in reality three cost of service studies, i.e. Island, Labrador and Isolated Hydro Rural. NP has only one cost of service study. Therefore, the rural deficit is not a question of cross-subsidization between rate classes. This is precisely the point made by Baker in his testimony at p.478 of the transcript:

There's a very great difference between cross-subsidization in terms of cost of service and what has to happen here, somehow or another, in a cost of service study there are grave objections to cross-subsidization. But here we have two different cost of service studies. If you had included the Island Interconnected system and the Labrador Interconnected system in one cost of service study then you would have shared the benefits of the cheaper energy available from Churchill Falls to the Labrador system; with the more expensive energy available from Holyrood and the average costs would have flowed out, would have been allocated to Labrador customers, to Island customers, so on and so forth. And in that case I would, if that had been done, thoroughly support the allocation method proposed by Hydro. But that hasn't been what's done. Labrador costs have been isolated in one cost of service and the Island costs have been isolated in another cost of service and now we have the problem of splitting an extraneous cost between the two of them. So there isn't a

question of cross-subsidization between rate classes. What it boils down to, as I said, is a taxation problem.

**F. Impacts of Proposals on NP**

The individual recommendations by each of the parties on all of the above issues, as well as the overall allocation of revenue requirement on each party's approach, has been compiled from the evidence on Appendix I to this summation. The overall result of NP's recommendations on the appropriate cost of service methodology is an allocation of \$190,200,000 to NP. This is the impact of the final recommendation including all changes noted in testimony by Brockman as outlined in footnote 6 on Appendix I. The final recommendation is almost a million dollars higher than Brockman's prefiled evidence. The highest allocation to NP is recommended, not surprisingly, by the Industrials at \$201,300,000.

While NP's recommendations result in the lowest overall revenue allocation to NP, Brockman testified that several individual recommendations would attribute more cost to NP than other methodologies which were available but which he did not recommend. The six recommendations which had a negative impact on NP were enumerated by Brockman at p.372 of the transcript.

There was a suggestion by the Industrial intervenor that the impact of Hydro's proposal would be less onerous to individual NP customers than to individual industrial customers. NP's view is that the ultimate impact in dollar terms on the individual NP consumer or industrial consumer is not determinative of what cost of service methodology is

appropriate or justified on sound regulatory principles. NP and its customers experience a lower impact in percentage terms relative to the shift in millions of dollars of revenue responsibility to NP because NP is Hydro's single largest customer. (Brockman prefiled p.36)

A result of cost of service studies which is determinative of what methodology is appropriate or justified is per unit costs. As Brockman has testified, the unit costs for demand, energy and customers derived from a cost of service study are compared to the components of demand, energy and customers from rates to determine the extent to which each rate will recover the costs of each class (Brockman prefiled p.36).

Brockman presented a comparative analysis of the unit costs which would result from Hydro's recommended methods and NP recommended methods. The analysis demonstrated that the energy costs of NP's recommendation are roughly equal to marginal energy costs from Holyrood and would therefore be more useful for rate design than unit costs from Hydro's recommendations. As Brockman indicated, it is common practice to make sure that the energy run-out rate (rates for the last energy block) are close to short-run marginal energy costs (prefiled p.37 and transcript p.350).

Hydro's witness, Sarikas, implied under cross-examination that unit costs were not a consideration in assessing cost of service methodologies (transcript p.119). Brockman responded in supplementary evidence that it was a problem to set aside the question of unit costs. At p.226 of the transcript, he stated:

Setting aside unit costs see -- raises several questions in my mind. To say that we feel that we have somehow done a fair job of allocating revenues

to classes, classifying cost between demand and energy sufficiently to do a cost of service study which results in fair revenue allocation to classes, and then to say we don't really believe the unit cost that came out, which are demand, energy, and customer related costs, seems to me to raise a lot of questions about whether we really believe what we did in the first place. You can do rate design, by simply looking at marginal costs, or simply making judgements about the rates that you set without using a cost of service study, but you lose an awful lot of information, so I don't think I would recommend a cost of service study that I had to set aside the unit costs on to do rate design."

It is interesting to note that while Sarikas on one hand implied unit costs were not a consideration, he also testified that they were important. In speaking of allocation by coincident peak versus average and excess demand, Sarikas at p.160 of the transcript said:

"Where I'm concerned with the approach, where you would classify a portion of this cost as energy related, instead of average demand related, is that you can end up with a lot of cost assigned to energy. And if you then go the next step and start basing rates on that you may get yourself into a situation where you're giving too much away to energy and the rate design process, at rates that - energy rates that exceed marginal cost of energy. That would be my only concern about going from one method to the other. I think I was just not trying to change everything. I was just trying to make a minimum of change."

The witness for the industrial intervenor, Olsen, admittedly did not even look at the unit costs resulting from his recommendations (transcript p.418). This was notwithstanding the fact that he testified that it was good guidance that unit price should recover marginal energy costs (transcript p.419).

In any event, in NP's view the entire testimony of Olsen, as to the appropriate cost of service methodology for Hydro, should be disregarded. It was obvious that his evidence was prepared without the requisite and objective review of Hydro's system and circumstances. In fact, he revised almost the entirety of his prefiled recommendations

while on the stand, half of his support for which was reliance upon another witness' analysis. If there were any lingering doubt as to whether any weight should be given to Olsen's evidence, it can probably be removed on recalling his admission of having limited exposure in systems where hydraulic composed the bulk of the generation (transcript p.400).

**G. Capacity Credit For NP Gas Turbine in the Cost of Service Study**

Hydro has acknowledged, p.41 Hydro's final submission, that the evidence in its last rate referral was that the NP gas turbine at Port aux Basques has in recent years been connected to the grid the majority of the time. Baker raised the evidence from the last Hydro rate referral on this issue in his prefiled evidence, noting that the unavailability of this gas turbine was of the same order as that of other generation plant which Hydro does include in its system capacity. (Baker prefiled evidence p.31)

Further considerations on this issue have not been introduced by the parties at this proceeding. NP agrees with Baker's opinion that it would be appropriate to include the mobile gas turbine capacity as part of NP's gross generation before adjusting for reserve capacity in the Cost of Service Study.

**H. Recommendations on Cost of Service Methodology**

The recommendations of NP as to the appropriate cost of service method for Hydro are as follows:

- (1) That Hydro functionalize transmission and distribution plant, with the exception of the transmission line from Coney Arm to Howley, serving only Hydro Rural customers only to Hydro Rural, and not as common;
- (2) That Hydro classify hydraulic and thermal production plant between demand and energy based on an equivalent peaker method;
- (3) That Hydro classify transmission lines as 50% related to demand and 50% related to energy, and substation and transmission terminal equipment as 100% related to demand;
- (4) That Hydro allocate the demand related portions of hydraulic and thermal production plant and transmission plant to the rate classes based on a 5 CP demand allocator. Energy related costs should be allocated on energy weighted for losses;
- (5) That Hydro allocate the Hydro Rural revenue deficit between Labrador and Island Interconnected customer classes, 50% on revenues and 50% on energy; and,
- (6) That at the time interruptible customers become a reality, the exact details of the impact on cost allocation among customer classes should be reviewed by the Board.