Q. (Expert Evidence – JT Browne Consulting, page 8) With respect to the four regulatory principles listed, is economic efficiency as achieved by marginal cost pricing a relevant principle? How, if at all, is that notion of efficiency embodied in any of the four principles identified in the report?

A. This response has been provided by JT Browne Consulting.

In answering this question it is assumed that economic efficiency is defined as the optimum allocation of resources. Although optimal allocation is often evaluated from the perspective of society as a whole, it is assumed that in the context of the question that optimal allocation of resources is to be evaluated primarily from the perspective of the utility and its customers. Based on this definition, economic efficiency is an objective that regulators should seek to achieve.

In theory, price equal to marginal cost will generally tend to result in economic efficiency. However, practical issues will often arise in implementing this policy such as:

- There is the issue of defining the marginal unit.
- There is the issue of defining the time period over which marginal cost will be evaluated.
- There can be large variations in the marginal cost, and therefore price, especially where fixed costs are large and "lumpy" (i.e., the fixed costs can vary significantly from one period to the next). For example, where a capital expenditure is necessary to provide the marginal service (whether to maintain

or expand capacity), the marginal cost would include the full amount of the capital expenditure.

Also, where marginal cost pricing does not provide service providers with an opportunity to recover their costs of providing service, marginal cost pricing would generally not be sustainable. It would also be inconsistent with setting just and reasonable rates and the principle of intergenerational equity.

With regards to economic efficiency being reflected in the four regulatory principles, it is a factor that should be considered in setting "just and reasonable rates" and is reflected in the prudence standard. The prudence standard modifies the cost of service standard, and is often implied. In accordance with the prudence standard, a utility should only have an opportunity to recover its prudently incurred costs of providing service, and economic efficiency would be a factor in evaluating prudence.