

**Réponses de William Harper aux demandes de renseignements  
de l'Union des Consommateurs**  
Dossier R-3492-2002 – Phase I  
5 février 2003

**1. Référence: Rapport de M. William Harper, page 27**

**Préambule:**

*«For example, Hydro One Networks uses 12 NCP to allocate distribution station costs to customer classes.»*

**Question 1.1:**

Veillez indiquer les raisons pour lesquelles Hydro One Networks utilise les puissances mensuelles non-coïncidentes (12 NCP) au lieu de la puissance annuelle non-coïncidente (1-NCP).

**Réponse 1.1:**

The decision to allocate distribution station costs using the 12-NCP was made by Ontario Hydro over 15 years ago and at a time when the Utility's retail rates were not subject to oversight by the OEB. As a result, public documentation regarding the underlying rationale is not available.

**Question 1.2:**

Veillez indiquer si Hydro-One Networks utilise aussi les puissances mensuelles non-coïncidentes (12 NCP) pour répartir entre les catégories tarifaires des coûts autres que celui des postes de distribution (« distribution station costs »). Dans l'affirmative, veuillez les identifier clairement.

**Réponse 1.2:**

In its most recent Distribution Rate filing with the Ontario Energy Board (January 2001, OEB File RP-2000-0023), Hydro One Networks also used 12-NCP to allocate the demand-related costs associated with:

- a) Sub-Transmission Lines (i.e., lines between 44 kV and 27.6 kV) – based on 12-NCP as measured at the Transformer Station, where power is stepped down from transmission level voltages (above 50 kV) to distribution levels (below 50 kV),
- b) Distribution Overhead Lines – based on 12-NCP as measured at the customers' meters weighted by customer density,
- c) Distribution Marine/Underground Lines – based on 12-NCP as measured at the customers' meters weighted by customer density,
- d) Transformers – based on 12-NCP as measured at the customers' meters.

**Question 1.3:**

Veillez nous fournir une liste des entreprises et des juridictions qui utilisent les 12-NCP comme mesure de puissance.

**Réponse 1.3:**

Mr. Harper is not directly aware of any other company that uses 12-NCP to allocate demand-related distribution costs.

## 2. Référence: Rapport de M. William Harper, page 29

### Préambule:

*« Minimum system methodologies vary across jurisdictions in terms of how the minimum sized poles, conductors, transformers, etc. are determined and how the assets are grouped for reporting purposes. However, it is possible to make some comparisons. At an overall level, HQD's analysis results in roughly 38% of distribution poles, lines, transformers and related equipment being classified as customer-related – a percentage which is comparable to that for studies done by other Canadian utilities.»*

### Question 2.1:

Veillez indiquer si, à votre connaissance, il existe des entreprises canadiennes et américaines qui ont reçu l'approbation réglementaire pour utiliser la méthode du réseau de taille minimale et, si oui, veuillez identifier les organismes de régulations.

### Réponse 2.1:

Yes, Canadian electric utilities that have received regulatory approvals for cost allocation methodologies incorporating the minimum system method include:

- BC Hydro
- Alberta Power (now ATCO Electric)
- TransAlta Utilities Corporation (whose distribution business is now owned by Utilicorp Networks Canada (Alberta) Ltd.)
- Newfoundland Power

In addition, the minimum size (or minimum plant) method is one of the two methods identified in the NARUC Electric Utility Cost Allocation Manual – January 1992 (page 90) for classifying distribution plant into demand and customer-related costs. The other method discussed in the Manual is the minimum (or zero) intercept method.

**Question 2.2:**

Veillez nous fournir une liste des entreprises et juridictions nord-américaines qui n'utilisent pas la méthode du réseau de taille minimale.

**Réponse 2.2:**

Canadian electric utilities that do not use the minimum system method include:

- New Brunswick Power
- Manitoba Hydro
- Newfoundland & Labrador Hydro.

### 3. Référence: Rapport de M. William Harper, pages 31-32 et 50

#### Préambule:

*« However, HQD has not been able to provide sufficient information to determine whether the use of 1 NCP is appropriate or whether the use of customer peaks over a number of months would be more appropriate.*

*For facilities closer to the customer, such as secondary feeders and line transformers, the load diversity will be much lower. As a result, in these situations, the demand-related costs of the facilities are often allocated to customer classes based on the sum of the individual customer's maximum demands. HQD's proposed cost allocation methodology does not make this distinction. » (nos soulignés)*

Et à la page 50 :

*« Determination of NCP Allocators*

*HQD should be directed to compile the necessary system loading data (e.g., monthly peak loads by delivery point) in order to establish that 1 NCP is the appropriate allocation factor for the Distribution sub-functions' demand-related costs.»*

#### **Question 3.1:**

Quelle mesure intérimaire recommanderiez-vous à la Régie, dans l'attente qu'on démontre clairement que la 1 NCP est appropriée pour le cas d'Hydro-Québec ?

#### **Réponse 3.1:**

It is anticipated that the next 6-10 months should provide sufficient time for Hydro Québec Distribution to assemble and analyze the system load data required to assess this issue and, thereby, allow the findings to be incorporated into its 2004-2005 rate proposal. See the Response to Régie 5.2 in exhibit OC-2.

## 4. Référence: Rapport de M. William Harper, page 32

### Préambule:

*« Finally, there is a load carrying capability associated with the minimum system. HQD has indicated that it is in the order of 1-2 kVA (or 1-2 kW) per connection. Since the costs associated with this minimum load are allocated to customer classes as a customer-related cost it is necessary to adjust the 1 NCP values used to allocate demand related costs in order to avoid double counting. This is generally done by reducing the 1 NCP value for each customer class by the product of the per customer load carrying capability of the minimum system and the number of customers served. However, HQD has not done so. Furthermore, making this adjustment would have a material impact on the relative 1 NCP values used for each customer class (e.g. using a 2 kW/customer load carrying capability reduces the overall percentage of costs allocated to the Domestic customer classes by roughly 10 percentage points when applied to the Medium Voltage sub-function – see Schedule 1).» (nos soulignés)*

### Question 4.1:

On mentionne qu'on corrige généralement le phénomène de « double comptage » causé par la méthode du réseau de taille minimale : l'impact du double comptage semble être très négatif et important pour la catégorie Domestique (D et DM). Pourriez-vous nous fournir une estimation de l'impact (en millions de dollars) ?

### Réponse 4.1:

The schedules attached in exhibit OC-4.1 estimate the impact of adjusting the demand allocators for the Medium Voltage and Low Voltage function's costs and rate base based on a 2 kW per customer load carrying capability and summarize the overall results. It is to be noted that it is assumed all other things remain equal.

**Question 4.2:**

Devrait-on comprendre que la recommandation no. 1.5, à la page 44 vise à corriger cette situation ?

**Réponse 4.2:**

Yes.

**Question 4.3:**

Sans cette correction, la méthode du réseau de taille minimale est-elle acceptable dans le cas d'Hydro-Québec ?

**Réponse 4.3:**

In my view, no. Given that the information exists to implement the proposed adjustment and that the mechanics are straightforward, there is no reason why the correction should not be made.