

**DISTRIBUTOR'S COST OF SERVICE
ALLOCATION METHODS**

Table of Contents

1 BACKGROUND 4

2. PGEÉ 6

 2.1 Review 6

 2.2 Distributor’s Position 7

 2.3 Alternate Allocation Method 8

3 ALLOCATION OF TRANSMISSION COSTS 10

 3.1 Review 10

 3.2 Transmission Company’s Allocation Method Selected by the Régie 11

 3.3 Distributor-Specific Aspects 11

 3.4 Other Transmission Function Items 12

4 NEW ITEMS AND OTHER CHANGES 14

 4.1 Schefferville Supply Project 14

 4.2 Temperature Averaging Account 14

 4.3 Development Costs..... 14

 4.4 Transmission Component of Working Capital Cash..... 15

 4.5 Updating of Classification Rules and Allocation Factors 15

1 BACKGROUND

The Distributor hereby submits its cost-of-service allocation to customer classes for 2008. This cost-of-service allocation complies with the method approved by the Régie in decision D-2007-12. The decisions pertaining to the allocation method from previous rate cases are also considered.

Concerning cost allocation, two items must be revisited: the cost allocation methods for the Comprehensive Energy Efficiency Plan (PGEÉ) and for transmission.

In its last decision, the Régie asked the Distributor to propose an allocation method for the PGEÉ in this case. Accordingly, the Distributor is proposing a method intended as being in keeping with the method applied to date but taking account of today's avoided costs. The Distributor is also presenting, for discussion, an alternate method based on direct allocation of program costs to each customer class.

For the transmission cost allocation method, in the last rate case the Distributor proposed and justified the treatment that it had applied since the beginning: the method based on coincident peak. In decision D-2007-12, the Régie did not accept the Distributor's justification of the method based on coincident peak and asked the Distributor to use the function-based method approved by the Régie in the Transmission Company's rate case. This case therefore uses function-based allocation. In view of the amounts at issue and the small number of intervenors who addressed the subject in the last rate case, the Régie held that the subject must be debated more extensively before it makes its final decision.

In addition to the two changes discussed above, three new cost categories must be included in the Distributor's allocation methods: the Schefferville supply costs, the temperature averaging account, and the development costs. In addition, two other methodological changes are presented, concerning the transmission component of working capital cash and the update of the function-based classification rules and allocation factors. It should be noted that these last five items are essentially technical in nature, flowing from decisions and choices having implications for the cost allocation. For greater consistency and in compliance with decision D-2003-93, it is appropriate to incorporate them. In that decision, the Régie asked the Distributor to refine or modify the proposed methods, as applicable, once the data became available, for the sake of methodological transparency and to elucidate cost causation, preferring direct cost allocation wherever possible.

Moreover, the Distributor has provided the information necessary for the Government of Québec to establish, by decree, pursuant to the Act respecting the Régie de l'énergie, and as it has done three times since the heritage electricity volume was attained in 2005, the allocation of the cost of 2.79 ¢/kWh applicable for 2008 to the customer classes. This allocation is established pro rata to the projected 2008 volumes and characteristics of the customer classes and Distributor profile, taking account of the curve prescribed by Decree 1277-2001 as well. This order-in-council is given in Exhibit HQD-11, Document 2 and will be produced upon its approval by the Government of Québec.

Finally, the detailed results of the cost-of-service allocation for 2008 are given in Exhibit HQD-11, Document 3.

2. PGEE

2.1 Review

Case R-3473-2001 was the first time that the Distributor asked the Régie to approve a budget for implementation of energy efficiency measures. The analysis of energy efficiency programs is normally done using the concept of avoided costs of supply, transmission, and distribution associated with a reduction in a unit of demand. The Distributor mentioned that until the heritage consumption volume was attained at the 2005–06 horizon, the short-term avoided cost was 2.79 ¢/kWh, corresponding to the price paid by the Distributor for purchase, from its sole supplier (Hydro Québec Generation), of the electricity it needed to supply its customers. The transmission costs associated with the incorporation of the supply were considered to be nil, since the existing grid had the capacity to carry the heritage electricity.

In the context of Phase 2 of case R-3492-2002, the Distributor filed a PGEE cost allocation method based on avoided cost of supply. Since the heritage electricity volume was not yet attained, the PGEE costs were allocated pro rata to the costs of heritage supply. The Distributor mentioned that the proposed method was in keeping with the arguments presented in the hearings for case R-3473-2001, i.e., that energy efficiency programs reduce electricity demand and that this avoided cost of supply benefits all consumers.

In decision D-2004-47 (R-3492-2002, Phase 2), the Régie accepted this allocation method for 2004. At that time, the cost corresponded to the heritage electricity cost for each customer class. Since the Distributor would eventually have to use post-heritage

electricity, the Régie refused to rule definitively on the PGEÉ allocation method until it had ruled on the cost allocation methods for post-heritage supply and transmission. In so doing, the Régie postponed its decision and provisionally accepted the PGEÉ cost allocation to customer classes pro rata to the costs of supply.

In decision D-2007-12, the Régie ruled on the method for allocating post-heritage costs of supply to customer classes and selected the hourly approach. In that same decision, it stated its preference for the transmission allocation method based on the Transmission Company's functions, but wished to resume the debate in this case before making a final decision. Insofar as it has ruled definitively on the post-heritage and transmission cost allocation methods, the definitive choice of PGEÉ cost allocation can now be made, and it is asking the Distributor to propose a method in this rate case.

2.2 Distributor's Position

The Distributor proposes a PGEÉ cost allocation method based on avoided costs that is in keeping with the method currently being applied. However, certain refinements are necessary in order to make the method consistent with the concept of avoided costs. Furthermore, for discussion, the Distributor is providing an alternate cost allocation method based on direct allocation of program costs to customer classes.

The avoided cost method consists in allocating the energy efficiency program costs proportionally to the costs avoided by the Distributor. To date, the avoided costs for purposes of allocation have been based on the cost of supply. Today, it would be more

appropriate to consider the entirety of avoided costs; i.e., the avoided cost of supply/transmission of post-heritage electricity, the avoided cost of transmission/native load, and the avoided cost of distribution; that is, the marginal costs serving to evaluate program profitability (HQD-14, Document 3, Appendix A). These avoided costs are then allocated to customer classes on the basis of their consumption characteristics.

This method is consistent with the PGEÉ avoided cost methodology approved by the Régie. Essentially, it better accounts for cost causation by matching the costs to benefits. At base, the programs are implemented when the Distributor's avoided costs exceed the costs of the energy efficiency measures. Therefore, it is appropriate to allocate the costs of these programs with a treatment parallel to the one used to evaluate the programs, i.e., the Distributor's avoided costs for each customer class.

This means, moreover, using the volumes saved for each customer class as a result of the implementation of the energy efficiency programs as a way to compare the costs of the programs with the benefits. The current method, which uses total consumption volumes, does not fully reflect marginal cost causation. If we use the volumes saved, then the program costs are allocated solely to the customer classes that specifically benefit from the programs.

The detailed cost allocation for the PGEÉ programs on the basis of avoided costs is illustrated in Table 25C of Exhibit HQD-11, Document 3.

2.3 Alternate Allocation Method

Another method might be to allocate PGEÉ costs directly to each customer class. In

many of its decisions, the Régie has stated its preference for direct cost allocation to customer classes where the information is available. Although various PGEÉ data (budget, depreciation, deferral account) are available for large groups of customers (domestic, small power, medium power, large power), they are not necessarily available by customer class (rates D, G M, L, etc.). However, rules of correspondence, such as the number of contracts, provide a reasonable allocation of these costs to customer classes and ensure that this approach can be operationalized.

Direct allocation comes at the principle of cost causation from a different angle, since each class is allocated the costs specific to it. Thus, the costs allocated to a class may vary from class to class and from year to year according to the complexity of the programs, the magnitude of the energy savings, the number of customers concerned, and the amounts of money spent.

Compared to an avoided-cost approach, direct allocation of PGEÉ costs essentially amounts to treating energy efficiency as another commercial program without taking account of its relative impact on cost-of-service reduction, which is the basic justification for such programs. The difference between the two methods concerns the value of kWh saved for each program, allocated to the different customer classes. Currently, the difference is not very significant, but this difference could increase as more costly programs are put in place.

This being the case, regardless of the origin and cost of each kWh saved, the initial objective of these programs is to reduce supply costs for all the customers, and it is therefore appropriate to allocate the costs on the basis of avoided costs — that is, a fair measure of anticipated benefits. Therefore, in economic terms, the avoided-cost method

is the one that best reflects cost causation and is fairest to all customers.

These two scenarios, along with the scenario corresponding to the current method, are presented in Table 25C of Exhibit HQD-11, Document 3.

3 ALLOCATION OF TRANSMISSION COSTS

3.1 Review

The transmission cost allocation method was first presented in case R-3492-2002 – Phase 1. In that case, the Distributor proposed an allocation method based on coincident peak that reflected the way in which the Transmission Company's rates were determined. In decision D-2003-93, the Régie mentioned the need to conduct a detailed study of the transmission grid and the Transmission Company's cost allocation method before adopting the appropriate method for the Distributor, even though it found that the two cost allocation methods (Transmission Company's and Distributor's) were not necessarily linked. The Régie would then accept the coincident peak method proposed by the Distributor.

In case R-3549-2004 – Phase 2, the Transmission Company presented its cost allocation method based on coincident peak. At the Régie's request, it also provided an alternate scenario in which assets were separated into well-defined functions. In decision D-2006-66, the Régie accepted this latter approach, although it made major modifications to it.

With the completion of the review of the Transmission Company's cost allocation, the Distributor resubmitted its transmission cost allocation proposal to the technical committee in the summer of 2006 and in rate application R-3610-2006. As in previous cases, the Distributor's view remained that the method based on coincident peak was

the one that best respected the principle of cost causation, allocating the transmission costs in the manner in which the Distributor incurred them. The Distributor also provided the alternate function-based method selected by the Régie in the Transmission Company's case.

In decision D-2007-12, the Régie maintained the coincident peak method for 2007, postponing its final decision to the case at hand. However, it rejected the Distributor's arguments relating to this method and asked it to apply the Transmission Company's function-based method for 2008. The Distributor hereby presents the method chosen by the Régie, adjusting it for aspects specific to the Distributor.

Moreover, the year 2008 involves additional factors relating to the transmission function for which an allocation method must be chosen.

3.2 Transmission Company's Allocation Method Selected by the Régie

At the outset, it is important to specify that the Transmission Company's cost allocation method applies to the elements of the Transmission Company's rate base and cost of service. The Distributor has to transpose the method selected for the Transmission Company to its own billing context. Therefore, even though this bill is determined on the basis of coincident peak, it must first be broken down pro rata to the Transmission Company's functions and its power and energy factors. Then, the Distributor allocates these amounts to customer classes on the basis of its own allocation factors.

3.3 Distributor-Specific Aspects

The specific method chosen by the Distributor for transposing the Transmission Company's cost allocation method to its own context was first presented to the technical committee in the summer of 2006 and was used for purposes of sensitivity analysis in

rate case R-3610-2006. In the case at hand, the Distributor is using the same approach, adjusted to take account of the new data submitted by the Transmission Company in its 2008 rate case. This approach comprises two particularities enabling it to be applied to the Distributor's context.

First, the Transmission Company's cost allocation method represents more costs to the Distributor than the amount it bills as such. Thus, for test year 2008, the native load bill is \$2,540 M, whereas by the Transmission Company's cost allocation method, a cost of \$2,706 M is allocated. This \$166 M difference, double the difference observed in the previous case, is allocated based on the cost of each function.

Therefore, the Distributor is using the same classification by function and component as the one presented in the Transmission Company's case in Exhibit HQT-12, Document 2 (R-3640-2007), adjusting them proportionately to correspond to the total native load bill. The detailed calculation is given in Table 9C of Exhibit HQD-11, Document 3.

The second particularity has to do with the subtransmission plant function. The Distributor begins by making the distinction between equipment serving medium- and low-voltage customers and equipment serving high-voltage customers. Then, the respective costs of these two subfunctions are allocated to the targeted customer groups using non-coincident peak, as was suggested in the 2007 rate case.

3.4 Other Transmission Function Items

There are three new items in the transmission function for which an allocation method must be agreed upon: deferred transmission costs, the Transmission Company's point-to-point variance account, and connection projects. The deferred transmission cost item

corresponds to the unrecovered balance of transmission costs relating to 2005, 2006, and 2007. Since these are transmission costs pertaining to previous years, the proposed method is to allocate these amounts on the same basis as the function-based method submitted in this case for allocation of the Distributor's native load bill for 2008.

The Transmission Company's point-to-point variance account enables the Distributor to recover any revenue differential between the Transmission Company's projected point-to-point revenues and real revenues. The Distributor proposes to apply the same treatment to this variance as for the deferral account, i.e., to allocate it using the function-based method.

Connection projects concern, among others, that of Waskaganish. As mentioned in the Distributor's 2006 annual report, this item corresponds to the contribution paid by the Distributor to the Transmission Company in the context of the connection project for the Cree village of Waskaganish (D-2003-114), for which the equipment was commissioned in November 2006. The Distributor proposes to allocate this account by distinguishing the functions of which it is composed so as to apply the specific allocation factors already determined for each of these functions. The same applies to the other connection projects: Arthabaska-Kingsey, Marie-Victorin, Mgr-Émard, Ste-Thérèse, Chénier, Normétal, Baie-des-Sables, St-Ulrick/Anse à Velleau, and Carleton/Cartier. The detailed calculation for the three new items is given in Tables 9D and 9E of Exhibit HQD-11, Document 3.

4 NEW ITEMS AND OTHER CHANGES

4.1 Schefferville Supply Project

As of 2008, the Distributor will take charge of supplying Schefferville. The Distributor has reached agreement with Newfoundland and Labrador Hydro for supply of the region. In terms of cost allocation, the amounts stipulated in this contract will be allocated to the remote community generation function. Consequently, the allocation factors for this function will apply in a manner similar to the other remote community generating facilities, which are treated as a group. The detailed calculation is given in Tables 30 and 31 of Exhibit HQD-11, Document 3.

4.2 Temperature Averaging Account

Another item appearing in the rate base is the temperature averaging account. The amount of this account has been allocated to customer classes and accrued since January 2006, pursuant to the allocation calculations and methods selected by the Régie in decision D-2007-12. This data is given in Table 26B of Exhibit HQD-11, Document 3.

4.3 Development Costs

This item corresponds to a development project whose purpose is to improve the diagnostic methods for underground lines using dielectric tests to establish the lifetime of certain types of cables. These development costs are allocated similarly to those of the underground lines themselves, i.e., to the distribution function, and are allocated in the same way as plant and equipment and intangible assets relating to underground lines. This data is given in Table 2 of Exhibit HQD-11, Document 3.

4.4 Transmission Component of Working Capital Cash

To date, the portion of cash relating to transmission costs was allocated using the same allocation factor as the one used to allocate the transmission bill: coincident peak. This method must be reassessed in light of the function-based method preferred by the Régie for transmission cost allocation. Thus, the transmission-related portion of cash takes into account the function-based allocation of transmission costs related to the native load bill, deferred transmission charges, and the Transmission Company's variance account. The detailed calculation is given in Table 26B of Exhibit HQD-11, Document 3.

4.5 Updating of Classification Rules and Allocation Factors

Finally, it is necessary to update the function-based classification rules in the allocation method so that they are harmonized with the ones used for internal administration purposes, and to update the allocation factors. For certain items in the rate base and the cost of service, the financial information system for management now allows for the use of the numbers in allocating the different amounts. These changes are reflected in the documentation and the impact of these changes is relatively slight.

In addition, this updating of the classification and allocation factors obviously takes account of the new elements described above as well as those of the generation and transmission functions and the PGEÉ. Appendices 5 and 6 of Exhibit HQD-11, Document 3, summarize the different classification and allocation factors.

5 IMPACTS OF METHODOLOGICAL MODIFICATIONS

Table 1 presents the impacts of the modifications to the Distributor's cost-of-service allocation method for test year 2008. Apart from the new features, the modifications

having an impact concern the PGEÉ, transmission, including the transmission component of working capital cash, and updating of the function-based classification rules. For each item, the cost of service for each customer class is calculated with and without the modifications, the difference constituting the impact of the measure.

Table 1
Sensitivity analysis of modifications to the allocation method
Projected test year 2008

	(1)	(2)	(3)	(4)	(5)	(6)
Customer class	Cost of service before adjustments	Methodological changes			Cost of service in HQD-11, Document 3	
		PGEÉ allocation method	Transmission allocation method	Updating of allocation rules and factors		
1 Domestic						
2 Rates D and DM	5 052.9	12.3	(126.5)	1.6	4 940.2	
3 Rate DH	0.3	0.0	(0.0)	0.0	0.3	
4 Rate DT	183.2	0.7	8.3	(0.0)	192.1	
5 Total	5 236.4	13.0	(118.3)	1.5	5 132.7	
6 Small and medium power						
7 Rate G and flat rate	935.8	0.0	6.9	(1.0)	941.7	
8 Rate G9	76.1	0.0	2.0	(0.1)	78.1	
9 Rate M	1 476.3	0.8	24.5	(0.5)	1 501.1	
10 Public and Sentinel lighting	35.4	0.0	2.1	(0.0)	37.5	
11 Rate BT	50.7	-	-	-	50.7	
12 Total	2 574.3	0.8	35.5	(1.6)	2 609.1	
13 Large power						
14 Rate L	1 695.4	(8.5)	53.0	(0.1)	1 739.8	
15 Rate H	0.7	(0.0)	0.1	(0.0)	0.8	
16 Rates LD and LP	1.1	(0.0)	-	(0.0)	1.1	
17 Special contracts	901.4	0.0	0.0	0.0	901.4	
18 Total	2 598.6	(8.5)	53.0	(0.1)	2 643.1	
19 Total	10 409.4	5.2	(29.7)	(0.1)	10 384.8	
20 Reference:		Section 2.2	Sections 3.3 and 4.4	Section 4.5		

Note that the data in this table previously served for calculation of the cross-subsidization benchmarks. With the Régie's most recent decision, tracking of these benchmarks is no longer required. However, this process remains useful as a means of justifying the rate adjustments differentiated by customer class. The data necessary for the differentiated increases are presented in Table 2. For 2008, the data are those of Exhibit HQD-11, Document 3, while for 2007, the data correspond to those submitted in Exhibit HQD-11, Document 4, case R-3610-2006, as modified to take account of the Régie's decision D-2007-12 as well as the methodological changes described previously.

Table 2
Cost of service for calculation of differentiated increases

(1)	(2)	(3)	(4)	(5)
Customer class	Cost of service		Sales volume	
	2007 *	2008	2007	2008
1 Domestic	4 845.8	5 132.7	59 232	59 760
2 Small power	1 030.1	1 057.3	14 620	14 600
3 Medium power	1 418.8	1 501.1	27 129	27 331
4 Large power	1 767.1	1 740.6	45 567	43 569
5 Total	9 061.8	9 431.6	146 548	145 261

* R-3610-2006, HQD-11 Document 4, modified to reflect decision D-2007-12 and 2008 methodological changes