Task Force Report covering the post-Heritage Cost Allocation Method

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Advantages and Disadvantages of alternative Approaches Report

Supply costs allocation of heritage and post- heritage electricity

Meeting held on June 23 and 29, 2005(version of July 13)

Cost of Service Allocation Method Technical Committee

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Article 52.2 of the Law

- The costs of the electricity supply are established by adding the cost of the heritage electricity supply and the real costs of the procurement contracts.
- These costs are allocated between consumer categories according to their consumption characteristics (load factor and loss rates based on the consumption volumes by consumer category for the year).
- The heritage consumption volume corresponds to that of the Québec market including special contracts to the amount of 165 TWh with a loss rate of 8,4% (165 TWh not being determined by consumer category).
- In exceeding 165 TWh in 2005, the government fixes costs of heritage electricity supply by consumer category for the following years.

Decree of government 1070-2004

- Decree 1070-2004 (16/11/04) of the government establishes the costs of heritage electricity by consumer category such as file R-3541-2004.
- The Government applied the same method that was used from 2000 to the present to determine the costs established according to global treatment with the consumer category consumption characteristics (use factor and loss rates) that forecast the consumption volumes based on total volumes of the current year
- Forecasts that a new decree will fix the heritage costs and consumption by consumer category for 2006

Decision D-2005-34 of the Régie

- The Régie accepts the proposal for 2005 but no definitive decision given - Distributor interpretation of the Law (Article 52.2) too restrictive
  - The Law does not specify if the treatment retained by the Régie for the allocation of post-heritage procurement costs must be identical or different from that of the heritage block
  - The Law would allow recourse to different methods for the allocation of heritage and post-heritage electricity
  - The Régie must decide which method best corresponds to the spirit of the Law while adequately satisfying the principles of simplicity, applicability, and causality.
- According to the Régie, the total consumption profile of the Distributor could with time differ significantly from specificities and particular characteristics of the heritage product established in decree 1277-2001. In this context, the global treatment could not make it possible to reflect the causality of the costs adequately.
  - It is important that the adopted method determines, as accurately as possible, the bonds of causality between the supply costs and the consumers for whom the costs are incurred.
  - The methods of supply cost allocation must reflect, as accurately as possible, the strategy of procurement so as to establish a match between the consumption characteristics of the various rate categories and the products used to satisfy these needs.

Decision of the Régie D-2005 2005-34 (cont.)

- The Régie requires the Distributor:
  - To develop an alternative supply costs allocation method that distinctly allocates the costs of heritage electricity block from those of the post-heritage
    - To set a heritage electricity volume per consumer category based on the classified curve of decree 1277-2001 and to define adjustment methods
    - To distribute the post-heritage electricity costs based on the characteristics of products and users
  - To create a technical committee
    - To explore the various possible ways
    - To carry out a pros and cons analysis of the different methods
    - To submit for the next rate case:
    - Technical Committee Analysis
    - Proposal of a new supply costs allocation method

Work of the technical committee

- Following the Régie's decision, the Technical Committee undertakes the mandate to make a comparative analysis of the alternative scenarios of treatment at the margin
- Problems
  - To answer both the Governmental decree and the Régie's decision for the allocation of heritage electricity
  - To agree upon of a method of post-heritage electricity allocation that takes into account the load factors, the rates of losses and the characteristics of energy procurement
- Discussion items to make the alternative scenarios analysis report
  - Alternative scenarios to be evaluated
  - Evaluation criteria
  - Analysis chart to be completed
  - Compilation of comments of the interveners
- Subject to the government's decision for cost allocation and heritage volumes, the Committee submits four possible scenarios for treatment at the margin.

Scenario A: hourly cost

- Scenario A: hourly cost
  - In response to the Régie's concerns
  - Allocation of heritage electricity volumes to consumer categories on the basis of year 2006 and curve of Decree 1277-2001
  - Takes into account the characteristics of the products by integrating the contract costs on an hourly basis as established according to the Procurement plan
  - Cost allocation to each consumer category on an hourly basis according to their presence at each hour
  - No explicit use of load factors and loss rates at the margin
- For doing so, it is necessary to proceed in four stages:
  1. To determine the characteristics of heritage electricity by consumer category according to decree 1277-2001
  2. To determine the characteristics of post-heritage electricity by consumer category
  3. To determine the characteristics of the various procurement products
  4. To match the characteristics of products and users at the margin

Scenario A: (1) To determine the characteristics of heritage electricity by consumer category

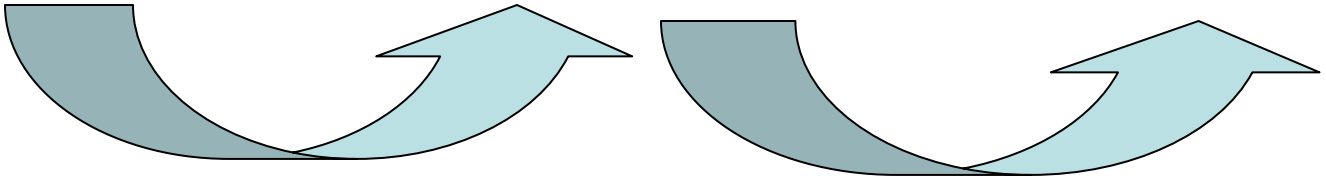
- To allocate the heritage electricity block by consumer category in order to approximate the best possible heritage curve of Decree 1277-2001
  - Two curves (2006 and decree) are not identical
  - Any change in the rate of losses of the allocation and transmission networks would be reflected in the heritage consumption volume and thus not of rate of losses at the margin
  - Adjustment methods of the heritage allocation block will have to be reviewed on an ad hoc basis (e.g.: labor strike of special contracts, rate changes and losses rates) and considered according to the government decree.
  - Regrouping of “satellite” consumer category with reference consumer category. Allows for a simplification of the treatment of the post-heritage electricity block and a reduction of revision cases
- Description of the characteristics of the curve of Decree 1277-2001
  - Curve of classified power curve (8760 hours) without precision by consumer category
  - Total of 179 521 GWh, maximum peak of 34 342 MW, including the consumption of power stations and transmission and allocation losses
  - Load factor (300 hours) of 67%
  - Losses rate of 8,4%
- Description of the characteristics the Distributor curve for 2006
  - Chronological load curve detailed by consumer category – 2006 deterministic forecast
  - Total of 185 345 GWh, maximum peak of 34 693 MW, excluding consumption from power stations, including transmission and allocation losses
  - No corrections related to the effect of the strike at ABI
  - Load factor (300 hours) of 68%
  - Losses rate of 7,5%

(1) To determine the characteristics of heritage electricity by consumer category

Process	Choice	Justifications
1. Determination of reference year	Projected year 2006	-Subsequent year of achieving the maximum heritage electricity volume from which the government sets the cost of heritage electricity by consumer category
2. Adjustment of heritage volume	-Proportional -Losses rate -Monthly payment	-The choice of year 2006 avoids adjustments related to the strike of ABI -The rate of losses remains unchanged for the moment - Adjustments related to the monthly-payment necessary to bind itself with procurement management
3. Adjustment to the curve of decree 1277-2001	-Adjustment of characteristics by consumer category - Proportional	-Uniform correction for all consumer categories -The evolution of characteristics is not taken into account, the modification of the characteristics is not equivalent to any years since 2000

(1) To determine the characteristics of heritage electricity by consumer category

Category of consumers	Stage 1: Year under review 2006				Stage 2: Adjustment to heritage volume				Stage 3: Adjustment to the curve of decree 1277-2001		
	Overall consumption (GWh)	Proportion of the sales (%)	Use Factor (%)	Rate of losses (%)	Heritage consumption (GWh)	Use Factor (%)	Rate of losses (%)	Unit cost (¢/kWh)	Heritage Consumption (GWh)	Use Factor (%)	Unit cost (¢/kWh)
Domestic	58 073	34%	47,9%	9,3%	56 041	47,9%	9,3%	3,19	56 041	47,7%	3,19
Low power	14 315	8%	63,6%	9,2%	13 814	63,6%	9,2%	2,87	13 814	63,2%	2,87
Medium power	26 616	15%	78,1%	8,4%	25 684	78,1%	8,4%	2,67	25 684	77,4%	2,67
High power	73 430	43%	96,9%	5,4%	70 861	96,9%	5,4%	2,45	70 861	95,9%	2,45
Total	**172 433**	**100,0%**	**67,7%**	**7,5%**	**166 400**	**67,7%**	**7,5%**	**2,77**	**166 400**	**67,2%**	**2,77**



Ref.: Sales forecast based on the revision of August 2004

(1) To determine the characteristics of heritage electricity by consumer category (cont.)

- Comparison of heritage electricity

Consumer Categories	R-3541-2004 Year under review 2005			R-3541-2004 - Adjusted (1) Year under review 2005			Technical Committee 2005 Year under review 2006			Variation		
	Heritage consumption (GWh)	Unit cost (¢/kWh)	Total cost (M$)	Heritage consumption (GWh)	Unit cost (¢/kWh)	Total cost (M$)	Heritage consumption (GWh)	Unit cost (¢/kWh)	Total cost (M$)	Heritage consumption (GWh)	Unit cost (¢/kWh)	Total cost (M$)
Domestic	56 579	3,18	1 798,4	55 923	3,18	1 780,1	56 041	3,19	1 788,1	118	0,01	8,1
Small power	14 076	2,86	403,1	13 912	2,87	399,0	13 814	2,87	396,2	(98)	0,00	(2,8)
Average power	25 913	2,67	691,3	25 613	2,67	684,3	25 684	2,67	685,3	72	(0,00)	1,0
Great power	69 832	2,45	1 710,7	70 953	2,45	1 740,2	70 861	2,45	1 733,9	(92)	(0,01)	(6,3)
Total	**166 400**	**2,77**	**4 603,5**	**166 400**	**2,77**	**4 603,5**	**166 400**	**2,77**	**4 603,5**	-	-	-

(1) Adjustment of the special contracts for the effect of the ABI strike

Scenario A: (2) To determine the characteristics of post-heritage electricity by consumer category

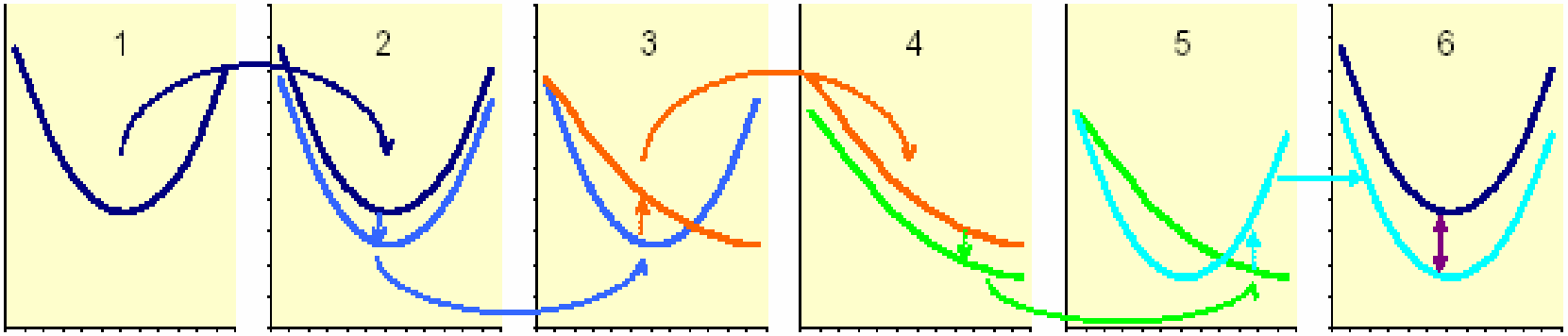
- Differential calculations between consumption characteristics of the total needs of the Distributor and consumption characteristics of fixed heritage electricity
  - Impossible to establish consumption characteristics at the margin using a consumption metering program
  - Impossible to calculate losses rate at the margin with a differential calculations. In any event, any losses rate variation will be adjusted on the whole of consumption, that is to say heritage and post-heritage electricity
- Consumption characteristics of the total needs for the Distributor are established starting from a consumption metering program of different consumer categories
  - The metering campaign makes it possible to establish the consumption profiles of the consumer categories that are gauged thereafter to correspond to the total sales forecast
  - Starting from these gauged profiles the consumption characteristics used for the purpose of allocation are established
  - Same treatment, no change compared to the previous years

Scenario A: (2) To determine the characteristics of post-heritage electricity by consumer category (cont.)

- As in the past, the total consumption characteristics by consumer category will evolve very slowly and gradually over time, depending on:
  1. The trend changes of the consumption volumes per consumer category
  2. The sales combination of the consumer category
- The characteristics at the margin of consumer categories are depending on:
  1. Total consumption characteristics by consumer category
  2. Consumption characteristics of heritage electricity of consumer categories, allocated according to the curve of Decree 1277-2001
  3. Procurement management which makes a classification of the Heritage Decree curve on a chronological basis

Scenario A: (2) To determine the characteristics of post-heritage electricity by consumer category (concl.)

- Process to determine the post-heritage needs by consumer category
  1. Curve of total needs of the Distributor by chronological order
  2. Deduction of base procurements for each chronological hour
  3. Classification by descending order of the new curve (curve of the classified powers of the total requirement minus the base)
  4. Matching of this CPC with the CPC of heritage electricity of Decree 1277-2001. The differential gives the CPC of the required additional procurement (procurement of short and very short term)
  5. The CPC of the heritage decree and the CPC of short term procurement are reclassified according to the same chronological order as the initial curve of the total needs
  6. The difference between the curve of total needs and the curve for heritage electricity makes it possible to establish the needs for post-heritage electricity by consumer category on an hourly and chronological basis



Scenario A: (3) To determine the various procurement products characteristics

- **Procurement products**
  - Heritage electricity
  - Post-heritage electricity – base load products

  Serve to fill all the needs of the Distributor (long term and short term base load, long flexible term)

  "Take or Pay" with high load factor except for dispatchable contracts. These base load products will progressively take more and more importance. Complete long term coverage.

  - Post-heritage electricity - short term and very short term products

  Necessary to provide for unforeseeable risks with multiple possible causes, in particular, fluctuations of demand, climatic risks, default of a supplier to honor a contract

  Short term dispatchable product, bilateral purchase transactions, very short term products, energy exchanges

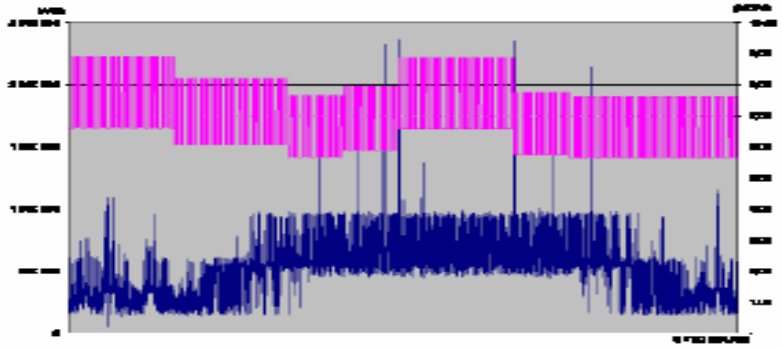
- **Considerations**
  - The contracts are confidential for the moment except HQ Production contracts
  - At the time of filing to the Régie, the requirements for consumers are not necessarily met completely by procurement agreements
  - Certain products are useful only in real time and are not considered at the time of forecasts (maneuverability margin associated with heritage electricity, interruptible electricity, global agreement with HQP)

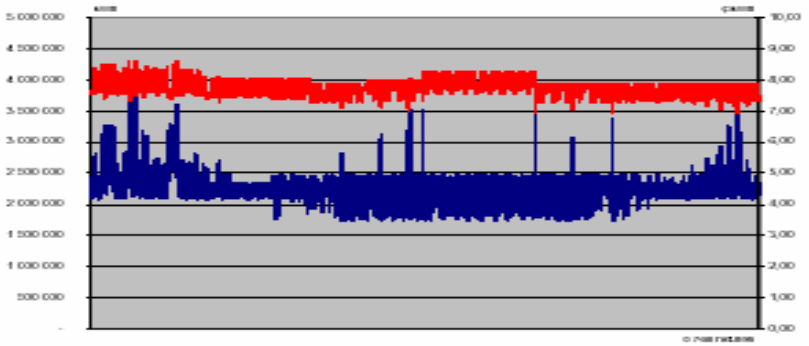
Scenario A: (3) To determine the characteristics of various procurement products (cont.)

- **Distributor establishes on an hourly basis and by chronological order its needs and its weighted unit costs by its post-heritage needs**
  - The average hourly unit cost is established for each contract according to the characteristics of the agreement
  - The same exercise is made for estimated needs not filled by invitations to tender and an average hourly unit cost is estimated
  - This average hourly balanced unit cost is established starting from the estimated volumes for each contract
  - Differentiated hourly costs are considered if they are specifically identified in the contracts
  - Globally weak signal of peak/off-peak price taking into account the prevalence of the principal contracts in the mid-term
  - No cost classification of power/energy contracts by using the load factor of the contracts and characteristics of post-heritage
  - No allocation exercise according for coincidence with the post-heritage consumption characteristics

Scenario A: (3) To determine the characteristics of various procurement products (concluded.)

- Illustration of the consumption profiles and unit cost at the margin for years 2006 and 2014 (portion of the 2004 needs covered by the short term)





Scenario A: (4) Matching the characteristics of various products and users at the margin

- Application at each hour of the average post-heritage cost to post-heritage volumes by consumer category
  - Treatment of the two preceding steps makes it possible to specifically identify the user needs at the margin and the offers of various products on an hourly basis, which makes this matching step feasible without too many complications
- Average before 165 TWh and average after 165 TWh
  - allocation of an average hourly cost per consumer category for post-heritage electricity gives a weighted cost for each consumer category according to his presence at each hour of the year
  - No matching of specific procurement contracts to specific consumer categories
- No specific use of the Load Factor nor the losses rate at the margin
  - Load Factor implicitly considered with a treatment on an hourly basis especially as the exercise avoids matching the contracts load factors to make them coincident with the post-heritage peak
  - Losses rate to the margin being similar to that of heritage electricity especially as the volumes considered in procurement management are at the generation level

Scenario B: Post-heritage Load Factor

- Scenario B: Post-heritage Load factor
  - Adaptation of treatment method at the margin submitted to the 2004 technical committee
  - Allocation of heritage consumption volumes identical to scenario A
  - Allocation of the post-heritage costs with the same formula as the global treatment: classification for power/energy and allocation with the load factors and loss rates
  - Adaptation of the treatment with the use of the post-heritage characteristics (load factors and loss rates) based on the consumption profiles at the margin
  - No use of specific product characteristics
- For doing so, the Distributor proceeds in three stages:
  1. To determine the characteristics of heritage electricity by consumer category according to decree 1277-2001 (at step 1 of scenario A)
  2. To determine the characteristics of post-heritage electricity by consumer category (at step 2 of scenario A)
  3. To allocate the post-heritage cost according to a calculation which integrates the load factor of the consumer category

Scenario B: Post-heritage Load Factor (concl.)

- Classification of post-heritage consumption profiles of the consumer categories by descending order
- Use of the 300 hours highest load of heritage electricity to determine the power used by each consumer category for more stability
- Calculation of load factors
- allocation of post-heritage cost with the global formula but using post-heritage characteristics components

Scenario C: Partitioning post-heritage power/energy

- Scenario C: Apportioning post-heritage power/energy
  - Scenario suggested by the FCEI during case R-3541-2004
  - Adaptation of the global treatment suggested by the Distributor in R-3541-2004
  - Heritage and post-heritage electricity volumes by consumer category in the same proportions as total volume
  - Heritage and post-heritage electricity supply cost allocation, using the formula: classification of power/energy and allocation with power factors and global loss rates
  - The power/energy share is different for heritage and post-heritage electricity
    - Heritage: Load Factor of the Distributor for 2006 (68%)
    - Post-heritage: Based on procurement agreements (for example 90%)

Scenario D: Hourly cost by Product Type

- Scenario D: Hourly cost by product type
  - Scenario suggested by FCEI within the framework of the 2005 technical committee
  - Adaptation of alternative treatment A of the Distributor
  - An average hourly unit cost is used for 2 procurement products : cyclical contracts and other products
  - These balanced average unit costs are established using with the estimated volumes in each contract
    - Cyclical: 6 TWh @ 8,9 ¢/kWh
    - Others: 13 TWh @ 6,6 ¢/kWh
- Product volumes allocated by consumer category:
  - Cyclical: According to the post-heritage load factor (as determined in the Scenario B)
  - Others: Difference between the total post-heritage and the cyclical post-heritage

Illustration of Scenarios Impact

- Illustration of supply cost allocation for 2014 according to alternative treatment A

Category of consumers	Heritage consumption			Post-heritage Consumption			Overall consumption		
	Unit cost (¢/kWh)	Sales (GWh)	Total cost (M$)	Unit cost (¢/kWh)	Sales (GWh)	Total cost (M$)	Unit cost (¢/kWh)	Sales (GWh)	Total cost (M$)
Domestic	3,19	56 041	1 788,1	7,43	4 998	371,3	3,54	61 039	2 159,5
Low power	2,87	13 814	396,2	7,35	1 102	81,0	3,20	14 916	477,2
Medium power	2,67	25 684	685,3	7,32	3 508	256,8	3,23	29 192	942,1
High power	2,45	70 861	1 733,9	7,14	8 840	631,3	2,97	79 700	2 365,2
Total	**2,77**	**166 400**	**4 603,5**	**7,27**	**18 447**	**1 340,4**	**3,22**	**184 847**	**5 943,9**

- Illustration of supply cost allocation by 2014 according to alternative treatment B

Category of consumers	Heritage consumption			Post-heritage Consumption			Overall consumption		
	Unit cost (¢/kWh)	Sales (GWh)	Total cost (M$)	Unit cost (¢/kWh)	Sales (GWh)	Total cost (M$)	Unit cost (¢/kWh)	Sales (GWh)	Total cost (M$)
Domestic	3,19	56 041	1 788,1	8,28	4 998	413,9	3,61	61 039	2 202,0
Low power	2,87	13 814	396,2	7,59	1 102	83,7	3,22	14 916	479,8
Medium power	2,67	25 684	685,3	7,16	3 508	251,2	3,21	29 192	936,4
High power	2,45	70 861	1 733,9	6,69	8 840	591,7	2,92	79 700	2 325,6
Total	**2,77**	**166 400**	**4 603,5**	**7,27**	**18 447**	**1 340,4**	**3,22**	**184 847**	**5 943,9**

Illustration of Scenarios Impact(cont.)

- Illustration of supply cost allocation for 2014 according to alternative treatment C

Category of consumers	Heritage consumption			Post-heritage Consumption			Overall consumption		
	Unit cost (¢/kWh)	Sales (GWh)	Total cost (M$)	Unit cost (¢/kWh)	Sales (GWh)	Total cost (M$)	Unit cost (¢/kWh)	Sales (GWh)	Total cost (M$)
Domestic	3,19	54 947	1 7518,9	7,70	6 092	468,8	3,64	61 039	2 220,7
Low power	2,87	13 427	385,7	7,43	1 489	110,6	3,33	14 916	496,4
Medium power	2,68	26 279	703,5	7,23	2 913	210,8	3,13	29 192	914,2
High power	2,46	71 746	1 762,3	6,92	7 954	550,2	2,90	79 700	2 312,5
Total	**2,77**	**166 400**	**4 603,5**	**7,27**	**18 447**	**1 340,4**	**3,22**	**184 847**	**5 943,9**

- Illustration of supply cost allocation for 2014 according to alternative treatment D

Category of consumers	Heritage consumption			Post-heritage Consumption			Overall consumption		
	Unit cost (¢/kWh)	Sales (GWh)	Total cost (M$)	Unit cost (¢/kWh)	Sales (GWh)	Total cost (M$)	Unit cost (¢/kWh)	Sales (GWh)	Total cost (M$)
Domestic	3,19	56 041	1 788,1	8,04	4 998	402,0	3,59	61 039	2 190,1
Low power	2,87	13 814	396,2	8,50	1 102	93,6	3,28	14 916	489,8
Medium power	2,67	25 684	685,3	7,63	3 508	267,8	3,26	29 192	953,0
High power	2,45	70 861	1 733,9	6,53	8 840	577,1	2,90	79 700	2 311,0
Total	**2,77**	**166 400**	**4 603,5**	**7,27**	**18 447**	**1 340,4**	**3,22**	**184 847**	**5 943,9**

Illustration of Scenarios Impact(cont.)

- Illustration of supply cost allocation by 2014 according to global treatment

Category of consumers	Heritage consumption			Post-heritage Consumption			Overall consumption		
	Unit cost (¢/kWh)	Sales (GWh)	Total cost (M$)	Unit cost (¢/kWh)	Sales (GWh)	Total cost (M$)	Unit cost (¢/kWh)	Sales (GWh)	Total cost (M$)
Domestic	3,19	54 947	1 751,9	8,37	6 092	510,1	3,71	61 039	2 262,0
Low power	2,87	13 427	385,7	7,55	1 489	112,3	3,34	14 916	498,1
Medium power	2,67	26 279	703,5	7,03	2 913	204,8	3,11	29 192	908,3
High power	2,45	71 746	1762,3	6,45	7 954	513,2	2,86	79 700	2 275,5
Total	**2,77**	**166 400**	**4 603,5**	**7,27**	**18 447**	**1 340,4**	**3,22**	**184 847**	**5 943,9**

Illustration of Scenarios Impact (concl.)

- Illustration of impacts of alternative scenarios on supply cost and cross subsidization index by 2014

Consumer Category	Supply cost (¢/kWh)						Index of cross subsidization					
	2005 Total	2014 Total	2014 Scenario A	2014 Scenario B	2014 Scenario C	2014 Scenario D	2005 Total	2014 Total	2014 Scenario A	2014 Scenario B	2014 Scenario C	2014 Scenario D
Domestic	3,25	3,71	3,54	3,61	3,64	3,59	80,9	80,1	82,0	81,5	80,6	81,7
Low power	2,93	3,34	3,20	3,22	3,33	3,28	120,5	119,9	122,8	122,6	120,0	121,6
Medium power	2,73	3,11	3,23	3,21	3,13	3,26	129,0	130,2	128,2	128,8	129,6	127,5
High power	2,52	2,86	2,97	2,92	2,90	2,90	116,5	118,4	111,4	113,1	117,0	113,7

Réf.: Financial framework based on the revision of August 2004. The impact on cross subsidization does not take into account differentiated rate increases nor their impact on consumption volumes.

Evaluation Criteria

- 11 criteria grouped into two categories: the Régie's requirements and generally recognized principles
- Respecting the requirements of the Régie
  - To abide by the spirit and letter of the Law: Insofar as the costs of post-heritage electricity can be treated distinctly, the Law specifies that they must be allocated according to the consumer categories consumption characteristics. Moreover, the Government could make a new decree to set the heritage electricity cost
  - Decree 1277-2001: allocation of heritage volumes by consumer category according to the Decree's curve
  - Adjustment methods: to define percentage adjustment methods of heritage block allocation
  - Procurement management: the method of allocation must reflect the procurement plan as accurately as possible
  - Product Characteristics : the method must take into account the particular characteristics of the procurement products used
  - Consumer characteristics: the method must take into account the consumption characteristics of the users of the procurement blocks

Evaluation Criteria (cont.)

- Generally recognized principles
  - Causality: principle of user/payer. To distribute with the various consumer category the cost associated with the service from which they benefit from, by establishing the cause and effect relationship which exists between, on the one hand, these consumer categories and, on the other hand, the costs engaged for the service
  - Fair and uniform treatment : the consumers in the same consumer category with the same consumption characteristics are treated the same and are allocated only one cost
  - Technical applicability/implications: the method must be established starting from rigorous and coherent calculations, to ensure a complete costs allocation, taking into account the consumer category load factors and loss rates
  - Simplicity: the method of allocation must be as simple as possible without compromising the other generally recognized principles
  - Stability: the method results stability with time while taking into account the current context to reflect a progressive costs evolution and trend

Analysis Table

Criteria of evaluation	Scenario A Hourly Cost	Scenario B Post-heritage Use Factor	Scenario C Post-heritage power/energy allocation	Scenario D Hourly cost by product type
Respect of the spirit and letter of Law	Hourly treatment more detailed and more precise than the one based only on the load factor which appears better adapted in a context of global treatment. Given that any variation of the loss rates will be integrated into heritage electricity, there are consequently loss rates at the margin but rather a total loss rate applicable to all consumption	Allocation on the basis of formula which integrates the distinct characteristics (Load factor and loss rates) from heritage and post-heritage electricity	Allocation on the basis of formula which integrates the global characteristics (load factor and loss rates) from heritage and post-heritage electricity but which makes specific treatment to the power and energy separation of post-heritage electricity	See comments of scenario A
Decree 1277-2001	Proportional to the year 2006 and adjusted to reflect the curve of the decree. The year 2006 will be the following year after the annual heritage energy maximum is exceeded. This treatment remains dependent on an eventual Government decree		Volumes determined proportionally to the total sales	See scenario A comments
Adjustment Methods	It is difficult to estimate adjustments and the nature of methods in advance. On the other hand these adjustments would have to be exceptional. Each adjustment will have to be progressively justified at their own merit. In particular, it will be necessary to estimate the impact of the methodology compared to the possible decree of the Government		Automatic and systematic adjustment	See scenarios A and B comments
Procurement Management	Integrate the treatment applied by the Distributor to determine post-heritage volumes and costs on a chronological basis	Exercise to be done with the overall costs of post-heritage electricity on an annual basis	The post-heritage costs are integrated into the overall costs before the allocation	See Scenario A while adding another distinction to the level of post-heritage volume between the cyclical and base commodities
Products Characteristics	Hourly costs weighted according to volumes required by the Distributor in its procurement management	The unit cost and the post-heritage volume electricity is considered on an annual basis rather than on an hourly basis	Takes into account of the power/energy allocation of post-heritage costs but does not take into account post-heritage hourly cost	
Consumers Characteristics at the Margin	Calculation of difference between the global characteristics of the Distributor and the characteristics of heritage electricity taking into account the management provisioning.	Calculations of difference between the total volumes and heritage volumes on an annual and classified basis	Based on the volumes determined in proportion to total sales	
Causality	Hourly cost signal based on specific association of post-heritage electricity cost at the consumption of heritage electricity at the margin	Cost signal based on a formula integrating the characteristics of post-heritage electricity determined at the margin	Signal based on a formula integrating the global characteristics determined and the power/energy allocation of post-heritage electricity	Post-heritage hourly cost signal by cyclical and other commodities
Fair and global Treatment	The consumer categories are allocated using the sum of the heritage and post-heritage costs		Cost based on variable and proportional volumes of heritage and post-heritage electricity	Distinction before/after 165 TWh with additional distinctio of the consumer categories justified by the characteristic of the products necessary to respond to the characteristics of each consumer category (characterization between the cyclical commodities and the base commodities)
Applicability-Technical Aspects	The hourly cost signal at the margin is adapted to context by using information relating to the supply plan. Given that, the exercise is based on a chronological classification of the costs and volumes of consumption, this scenario allows a more precise monthly treatment for taking into account the deferred expenses by consumer category	Use the formula of the total treatment integrating the load factors applied separately for respective characteristics of heritage and post-heritage electricity. Note that the formula for post-heritage electricity could give results which are not correct (ex: negative power). The formula is better suited for a global treatment	As per the global treatment, it applies twice the formula with the post-heritage power/energy allocation.	See comments on scenario A. Moreover with regard to Scenario A, the scenario associates the types of post-heritage commodities in relation to the volatile aspect of the demand for each consumer category in using a proportional separation based on the load factor for each consumer category
Simplicity	A technically well-defined treatment certainly comprising a	Complexity related to the adjustment of heritage to the	Slightly more complex than the global treatment	Scenario more complex than scenario A with distinction

Additional Comments per Evaluation Criteria

Additional Comments by Evaluation Criteria

Evaluation Criteria	Additional comments of ACEF	Additional comments of OC
Respect of the spirit and letter of the Law	The respect of the spirit and the letter of the Law is fundamental and, according to us, it requires to take into account the of consumption characteristics of the consumer categories stated in the Law that are the losses rate and the load factors, as specified in A. 52.2 of the LRÉ. The legislator has committed to specify the characteristics that must be taken into account, considering the experience with the allocation of heritage electricity costs and most possibly on the HQ suggestion for the post-heritage. This requirement limits our choices in the cost allocation method. According to us, if we do not want to take account these precise characteristics, it would be necessary to modify the text of the Law in order to respect it, as well as the spirit. It is important to be specific for transparency, rigor and intellectual honesty purposes as well as democratic respect of the laws and institutions. If the Régie would finally considered that the first method of marginal allocation suggested by H.Q. (scenario A, method of the hourly cost) respected the spirit and the letter of LRÉ, we think that this method could also be applied for the allocation of the costs of heritage volume instead of the allocation method based on the load factor and rate of losses only, which on the other hand would require an amendment of the LRÉ.	The Total treatment least respects the spirit of the law; according to OC, to well follow the spirit of the law, it will be necessary to and to differentiate the heritage consumption characteristics from the post-heritage consumption characteristics.
Decree 1277-2001	The respect of the decree 1277-2001, which fixes a classified power curve for heritage electricity for 2001, is desirable since it describes legislator requirement for the determination of the heritage block; now if the classified curve of the post-heritage year under review is significantly different from 2001, it would be necessary to either establish the year under review in 2001 in order to allocate the heritage block in 2001, by proportionally adjusting, for example, the existing demand in 2001 so as to reach total heritage volume, that is to say to modify the decree in order to adapt it to the reference post-heritage year realities (by ex. 2006) and the actual demand (e.g. in 2006). It would be interesting to compare these two methods, knowing among others that the industrial sector grew faster than the other customer categories since 2001. Adequately taking decree 1277-2001 into account depends on the method used "to reflect the curve of classified power fixed by the decree", to this effect it does not have a unique choice of adjustment. The method suggested by H.Q. is justifiable at first sight but from an equity point of view and protection of the residential consumer interests, I am not sure that that is the best choice.	According to our comprehension, none of these methods exclude a heritage allocation as issued by the Governi all respect the Decree 1277-2001.
Adjustment Methods	The requirement to define the adjustment methods for the heritage block allocation percentages does not seem restrictive since, a priori, any allocation method should be able to fulfill this requirement, on the other hand, possibly to a different degree of satisfaction for the selection criteria of an allocation method. The adjustment methodology of the heritage block allocation percentages appear more complex to us than the method adopted by H.Q. to allocate the heritage block for the scenarios A, B, D, whereas for the total scenario and C the adjustment is automatic, but it is precisely for this reason that we dispute it .	
Acquisition Management	It is first necessary to challange if the cost allocation can be done by integrating these elements while respecting the spirit and letter of the Law, then to wonder whether these elements are relevant to the cost allocation phase and finally to wonder whether there is interdependence between these two requirements and the criterion of causality. I do not believe that these elements are relevant with the allocation phase: these elements are upstream of the allocation process and are necessary in order to optimize the resources and to minimize the total costs of acquisition also taking into account the characteristics of the various demands (from the point of view of integrated resource planning), after having made the acquisition choices so as to optimize the resources and to minimize the costs, then one can thereafter allocate the costs in a just and equitable way. Moreover it appears to me that these elements are interdependent (because the acquisition management is done by taking into account the commodities characteristics) and are directly related to the costs causality criterion that seeks to allocate the costs according to the usage. If there is interdependence and redundancy that can give to these elements and the criterion of costs causality more weight in the decision-making than necessary, it is at least necessary to be conscious of this interdependence and the bias it can introduce. Considering this interdependence, it is at the very least necessary to gather these two requirements in only one element but to also reconsider their relevance within the framework of the costs allocation process and the selection of the most adequate costs allocation method. There is a significant difference between the estimated management and real time management which can involve differences in the hourly allocation of volumes and costs of post-heritage provisioning and in the use of heritage volume in conjunction with the classified curve set by decree: should these variations be taken into account to allocate the unforeseen post-heritage costs placed in the deferred expenses account? a priori, we believe yes. We repeat that it does not appear relevant to us to take into account the acquisition management in the cost allocation phase: it is rather a question of allocating the minimized costs (commodity characteristic), of the acquisitions decided in an optimization phase prior to cost allocation. Moreover in my opinion these two elements are interdependent and related to the cost causality criterion. In any event, the scenario C and total scenario do not take into account these aspects by allocating the total heritage and post-heritage costs without taking into consideration the specific various commodity characteristics, except that the scenario C introduces a difference into the power-energy allocation of the post-heritage compared to the total scenario but for the totality of the post-heritage acquisition.	Scenarios A & D better reflect the commodities characteristics, while the Global treatment doesn't include the p characteristics as good as the other scenarios because the allocation is based on the total HQD Load Factor.
Commodity Characteristics	The requirement to take into account the users consumption characteristics for acquisition blocks is redundant with the Law concerning the consumption characteristics, unless one does not want to add new characteristics to be taken into account, but adds a precision that taking these into consideration into account should be done according to provisioning blocks, whereas A. 52.2 of the LRÉ indicates that the total heritage and post-heritage costs must be allocated according to characteristics of consumption specified in the Law. One must understand that taking into account the consumption characteristics per acquisition blocks is an additional requirement of the Régie beyond what the Law requires and it should be verified that this respects the spirit and the text of the current Law.	
Consumer Characteristics at the margin	As for the consumers characteristics we recall that the characteristics of the demand to used to allocate the costs of provisioning are specified in the Law: Scenario B clearly respects, according to us, the spirit and the letter of the Law, whereas the scenarios C and the total scenario respects them if we are restrained to one global allocation based on the total characteristics of the demand for each customers category.	The Régie will have to choose between two various philosophies to determine what is the margin (methods kno e.g. Scenarios A-D, and the methods known as "global", e.g. global treatment
Causality	Scenario C and the total scenario do not ensure a cost signal differentiated for the components and characteristics of heritage and the post-heritage demands, treated distinctly.	The scenarios A & D better reflect causality. However neither one nor the other is perfect. "A" uses the average hourly unit cost propose a more precise way to allocate the hourly costs by differentiating the base load commodities and the cyclic commoditie several concerns with causality in A & D: (i) is this the proposed allocation adequately takes into account the allocation of comm considered in the forecast (e.g. 400 MW flexible)? If not, all the costs would not be completely allocated; (ii) even if all the pro account, a peak commodity which is only used a few hours of the year has the same value for all the consumers the other hours of the year. An allocation that takes into account only the direct use of commodities per consum particular hour does not collect the benefit of such reserves.
Fair and global Treatment	Concerning the equity criterion, it must be enriched: indeed it is necessary to take into account vertical equity, and not only horizontal, in order to make sure that the various	Scenarios A & D offer an equitable and uniform treatment for the consumers of the same category. While using only the load fa

Additional Comments per Scenarios

Additional comments by scenario

Scenarios	Scenario A Hourly cost	Scenario B Post-heritage Use Factors	Scenario C Post-heritage power/energy allocation	Scenario D Hourly cost by type of products
Additional comments from AQCIE & CIFQ	The committee undertook the study of alternative approaches and we unfortunately had to note, without surprise, that they are, essentially, incompatible with the spirit and the letter of the legislation and the relevar regulation and the principles which must prevail on the matter. From this point of view, we ask you to record our opposition with the committee framework, regarding the implementation of such methods.			
Additional comments from AIEQ				
Additional comments from ACEF	It is true that this method is more detailed than methods based on the Load Factor (as far as I know, in first analysis or a priori, if it is more precise than the method based on Loads Factor I am inclined to say yes, but in fact that depends on the reliability of the forecasted volume and cost allocation process associated with the various products on an hourly basis, elements of which, us interveners, have little or not knowledge nor control). On the other hand the first problem of this method is that it does not directly use consumption characteristics stated in the Law (Lad Factor and rate of loss) thus it respects the spirit of Law (to take into account	This method best respects the text of Law according to our comprehension and interpretation of the Law (A. 52.2 of the LRÉ) by using demand characteristics stated in the Law, in a differentiated way for heritage and the post-heritage; on the other hand, this method incorporates the costs of various acquired products and does not specifically consider the acquisition management and of the product characteristics. The fact that one can obtain a priori aberrant results (Load factors higher than 1 and cost power negative, for the industrial sector in particular, with the methodology retained by H.Q. is a question mark. It would be necessary to look if there are any ways of avoiding such results.	To establish the price of post-heritage electricity by customer category method uses the same formula as for heritage but by allocating the cost of power and energy on the basis of average load factor for the post-heritage commodities. Normally there must be an after the fact way, but also on a provisional basis an adequacy between the average load factor of the average post-heritage production and the load factor of the post-heritage demand, if not we introduce two different concepts into the formula for determination the post-heritage price by category, which does not ensure consistency of the overall allocation treatment. The fact that characteristics of the post-heritage demand, specific to each customer category, are not used is a problem for us with regard to the	Distinction made between the cyclic and baseload commoditi appears arbitrary. In my opinion there is no direct bond betwe the load factor of a customer category and the hourly stability its demand, which would enable us to equitably allocate the u of the cyclic commodity with the intention of adjusting the offe to the demand on an hourly basis. The total demand for heatin space on an hourly basis appears more stable to us than som others believe, because the large number of customers heatir with electricity will statistically limit the hourly instability of the demand for space heating. It is true that the needs for space heating vary according to temperature, but it is possible to estimate the standardized owner demand for space heating a needs of acquisition for a standard winter. In order to adjust supply to demand on an hourly basis, cyclic commodities seer to be required by all the customer categories proportionally to their use of electricity. Finally, the addition of external considerations (demand stabili

Participants

- Present at the meetings from 23 and 29 June 2005
  - Régie : Laurent Pilotto and Sylvie Durand
  - The Distributor : Marcel Côté, Marie-Josée Lussier, Myriam Hudon and Françoie Mettelet
  - Acef de Québec : Richard Dagenais
  - AIEQ : Louis Bollulo
  - FCEI : Jean-Benoît Trahan
  - Grame :Jean-François Lefebvre and Thomas Dandres
  - Option Consumers : Brigid Rowan
  - RNCREQ : Jean Lacroix
  - SE-AQLPA : Jacques Fontaine and Richard Massicotte
  - UC : Charles Tanguay, Elisabeth Gibeau, Marc-Antoine Fleury and Co Pham
  - UMQ : Yves Hennekens, David Mapp
- Absent
  - AQCIE-AIFQ:. Mr. Luc Boulanger and Mr. Pierre Vézina did not attend the meetingssince they support a global treatment and that the two meetings were related to the alternative methods of treatment at the margin

Criteria of evaluation	Scenario A Hourly Cost	Scenario B Post-heritage Use Factor	Scenario C Post-heritage power/energy allocation	Scenario D Hourly cost by product type	Global treatment (R-3541-2004 reference) *
Respect of the spirit and letter of Law	Hourly treatment more detailed and more precise than the one based only on the load factor which appears better adapted in a context of global treatment. Given that any variation of the loss rates will be integrated into heritage electricity, there are consequently loss rates at the margin but rather a total loss rate applicable to all consumption	Allocation on the basis of formula which integrates the distinct characteristics (Load factor and loss rates) from heritage and post-heritage electricity	Allocation on the basis of formula which integrates the global characteristics (load factor and loss rates) from heritage and post-heritage electricity but which makes specific treatment to the power and energy separation of post-heritage electricity	See comments of scenario A	Allocation as per the formula integrating the global characteristics (load factor and loss rates) of heritage and post-heritage electricity
Decree 1277-2001	Proportional to the year 2006 and adjusted to reflect the curve of the decree. The year 2006 will be the following year after the annual heritage energy maximum is exceeded. This treatment remains dependent on an eventual Government decree		Volumes determined proportionally to the total sales	See scenario A comments	Volumes determined each year proportionally to total sales which do not represent the curve of decree 1277-2001
Adjustment Methods	It is difficult to estimate adjustments and the nature of methods in advance. On the other hand these adjustments would have to be exceptional. Each adjustment will have to be progressively justified at their own merit. In particular, it will be necessary to estimate the impact of the methodology compared to the possible decree of the Government		Automatic and systematic adjustment	See scenarios A and B comments	Automatic and systematic adjustment
Procurement Management	Integrate the treatment applied by the Distributor to determine post-heritage volumes and costs on a chronological basis	Exercise to be done with the overall costs of post-heritage electricity on an annual basis	The post-heritage costs are integrated into the overall costs before the allocation	See Scenario A while adding another distinction to the level of post-heritage volume between the cyclical and base commodities	The post-heritage cost is integrated into the overall costs before the allocation is made on an annual basis
Products Characteristics	Hourly costs weighted according to volumes required by the Distributor in its procurement management	The unit cost and the post-heritage volume electricity is considered on an annual basis rather than on an hourly basis	Takes into account of the power/energy allocation of post-heritage costs but does not take into account post-heritage hourly cost		
Consumers Characteristics at the Margin	Calculation of difference between the global characteristics of the Distributor and the characteristics of heritage electricity taking into account the management provisioning.	Calculations of difference between the total volumes and heritage volumes on an annual and classified basis	Based on the volumes determined in proportion to total sales		The cost is established with a formula based on global characteristics
Causality	Hourly cost signal based on specific association of post-heritage electricity cost at the consumption of heritage electricity at the margin	Cost signal based on a formula integrating the characteristics of post-heritage electricity determined at the margin	Signal based on a formula integrating the global characteristics determined and the power/energy allocation of post-heritage electricity	Post-heritage hourly cost signal by cyclical and other commodities	Signal of heritage and post-heritage cost globally determined
Fair and global Treatment	The consumer categories are allocated using the sum of the heritage and post-heritage costs		Cost based on variable and proportional volumes of heritage and post-heritage electricity	Distinction before/after 165 TWh with additional distinction of the consumer categories justified by the characteristics of the products necessary to respond to the characteristics of each consumer category (characterization between the cyclical commodities and the base commodities)	No distinction. Consumer categories are allocated proportionally to the total cost of supply
Applicability-Technical Aspects	The hourly cost signal at the margin is adapted to context by using information relating to the supply plan. Given that, the exercise is based on a chronological classification of the costs and volumes of consumption, this scenario allows a more precise monthly treatment for taking into account the deferred expenses by consumer category	Use the formula of the total treatment integrating the load factors applied separately for respective characteristics of heritage and post-heritage electricity. Note that the formula for post-heritage electricity could give results which are not correct (ex: negative power). The formula is better suited for a global treatment	As per the global treatment, it applies twice the formula with the post-heritage power/energy allocation.	See comments on scenario A. Moreover with regard to Scenario A, the scenario associates the types of post-heritage commodities in relation to the volatile aspect of the demand for each consumer category in using a proportional separation based on the load factor for each consumer category	Treatment the overall acquisition contracts with the heritage electricity that includes many commodities
Simplicity	A technically well-defined treatment certainly comprising a more elaborate calculation than the global treatment must be applied for the adjustment of heritage to the curve of decree 1277-2000 and with the chronological hourly cost schedules.	Complexity related to the adjustment of heritage to the curve of decree 1277-2001	Slightly more complex than the global treatment	Scenario more complex than scenario A with distinction of the costs and post-heritage volumes according to the types of commodities	The simplest treatment taking into account the use of data based on the global characteristics
Stability	The treatment at the margin will make the unit cost evolve for each consumer category according to their respective sales growth. Consumer categories who cause the biggest share of the sales growth will have their unit cost evolving more quickly than the consumer categories less responsible for the sales growth		Same degree of stability as global treatment with a cost evolution slightly more important	Same as scenario A, except that unit cost increase (estimated) will be different for each consumer category	The most stable method, gradually integrating the evolution of the total heritage and post-heritage costs with all the consumer categories

* note: The global treatment method is presented in the analysis table for comparison purposes and does not constitute one of the alternative scenarios analyzed by the technical committee.

ZE PowerGroup Inc.

Additional Comments by Evaluation Criteria

Evaluation Criteria	Additional comments of ACEF	Additional comments of OC
Respect of the spirit and letter of the Law	The respect of the spirit and the letter of the Law is fundamental and, according to us, it requires to take into account the of consumption characteristics of the consumer categories stated in the Law that are the losses rate and the load factors, as specified in A. 52.2 of the LRÉ. The legislator has committed to specify the characteristics that must be taken into account, considering the experience with the allocation of heritage electricity costs and most possibly on the HQ suggestion for the post-heritage. This requirement limits our choices in the cost allocation method. According to us, if we do not want to take account these precise characteristics, it would be necessary to modify the text of the Law in order to respect it, as well as the spirit. It is important to be specific for transparency, rigor and intellectual honesty purposes as well as democratic respect of the laws and institutions. If the Régie would finally considered that the first method of marginal allocation suggested by H.Q. (scenario A, method of the hourly cost) respected the spirit and the letter of LRÉ, we think that this method could also be applied for the allocation of the costs of heritage volume instead of the allocation method based on the load factor and rate of losses only, which on the other hand would require an amendment of the LRÉ.	The Total treatment least respects the spirit of the law; according to OC, to well follow the spirit of the law, it will be necessary to try to take into account and to differentiate the heritage consumption characteristics from the post-heritage consumption characteristics.
Decree 1277-2001	The respect of the decree 1277-2001, which fixes a classified power curve for heritage electricity for 2001, is desirable since it describes legislator requirement for the determination of the heritage block; now if the classified curve of the post-heritage year under review is significantly different from 2001, it would be necessary to either establish the year under review in 2001 in order to allocate the heritage block in 2001, by proportionally adjusting, for example, the existing demand in 2001 so as to reach total heritage volume, that is to say to modify the decree in order to adapt it to the reference post-heritage year realities (by ex. 2006) and the actual demand (e.g. in 2006). It would be interesting to compare these two methods, knowing among others that the industrial sector grew faster than the other customer categories since 2001. Adequately taking decree 1277-2001 into account depends on the method used "to reflect the curve of classified power fixed by the decree", to this effect it does not have a unique choice of adjustment. The method suggested by H.Q. is justifiable at first sight but from an equity point of view and protection of the residential consumer interests, I am not sure that that is the best choice.	According to our comprehension, none of these methods exclude a heritage allocation as issued by the Government, therefore they all respect the Decree 1277-2001.
Adjustment Methods	The requirement to define the adjustment methods for the heritage block allocation percentages does not seem restrictive since, a priori, any allocation method should be able to fulfill this requirement, on the other hand, possibly to a different degree of satisfaction for the selection criteria of an allocation method. The adjustment methodology of the heritage block allocation percentages appear more complex to us than the method adopted by H.Q. to allocate the heritage block for the scenarios A, B, D, whereas for the total scenario and C the adjustment is automatic, but it is precisely for this reason that we dispute it .	
Acquisition Management	It is first necessary to challange if the cost allocation can be done by integrating these elements while respecting the spirit and letter of the Law, then to wonder whether these elements are relevant to the cost allocation phase and finally to wonder whether there is interdependence between these two requirements and the criterion of causality. I do not believe that these elements are relevant with the allocation phase: these elements are upstream of the allocation process and are necessary in order to optimize the resources and to minimize the total costs of acquisition also taking into account the characteristics of the various demands (from the point of view of integrated resource planning), after having made the acquisition choices so as to optimize the resources and to minimize the costs, then one can thereafter allocate the costs in a just and equitable way. Moreover it appears to me that these elements are interdependent (because the acquisition management is done by taking into account the commodities characteristics) and are directly related to the costs causality criterion that seeks to allocate the costs according to the usage. If there is interdependence and redundancy that can give to these elements and the criterion of costs causality more weight in the decision-making than necessary, it is at least necessary to be conscious of this interdependence and the bias it can introduce. Considering this interdependence, it is at the very least necessary to gather these two requirements in only one element but to also reconsider their relevance within the framework of the costs allocation process and the selection of the most adequate costs allocation method. There is a significant difference between the estimated management and real time management which can involve differences in the hourly allocation of volumes and costs of post-heritage provisioning and in the use of heritage volume in conjunction with the classified curve set by decree: should these variations be taken into account to allocate the unforeseen post-heritage costs placed in the deferred expenses account? a priori, we believe yes. We repeat that it does not appear relevant to us to take into account the acquisition management in the cost allocation phase: it is rather a question of allocating the minimized costs (commodity characteristic), of the acquisitions decided in an optimization phase prior to cost allocation. Moreover in my opinion these two elements are interdependent and related to the cost causality criterion. In any event, the scenario C and total scenario do not take into account these aspects by allocating the total heritage and post-heritage costs without taking into consideration the specific various commodity characteristics, except that the scenario C introduces a difference into the power-energy allocation of the post-heritage compared to the total scenario but for the totality of the post-heritage acquisition.	Scenarios A & D better reflect the commodities characteristics, while the Global treatment doesn't include the product characteristics as good as the other scenarios because the allocation is based on the total HQD Load Factor.
Commodity Characteristics	The requirement to take into account the users consumption characteristics for acquisition blocks is redundant with the Law concerning the consumption characteristics, unless one does not want to add new characteristics to be taken into account, but adds a precision that taking these into consideration into account should be done according to provisioning blocks, whereas A. 52.2 of the LRÉ indicates that the total heritage and post-heritage costs must be allocated according to characteristics of consumption specified in the Law. One must understand that taking into account the consumption characteristics per acquisition blocks is an additional requirement of the Régie beyond what the Law requires and it should be verified that this respects the spirit and the text of the current Law.	
Consumer Characteristics at the margin	As for the consumers characteristics we recall that the characteristics of the demand to used to allocate the costs of provisioning are specified in the Law: Scenario B clearly respects, according to us, the spirit and the letter of the Law, whereas the scenarios C and the total scenario respects them if we are restrained to one global allocation based on the total characteristics of the demand for each customers category.	The Régie will have to choose between two various philosophies to determine what is the margin (methods known as "marginal", e.g. Scenarios A-D, and the methods known as "global", e.g. global treatment
Causality	Scenario C and the total scenario do not ensure a cost signal differentiated for the components and characteristics of heritage and the post-heritage demands, treated distinctly.	The scenarios A & D better reflect causality. However neither one nor the other is perfect. "A" uses the average hourly unit costs while "D" tries to propose a more precise way to allocate the hourly costs by differentiating the base load commodities and the cyclic commodities. We have however several concerns with causality in A & D: (i) is this the proposed allocation adequately takes into account the allocation of commodities which aren't considered in the forecast (e.g. 400 MW flexible)? If not, all the costs would not be completely allocated; (ii) even if all the products are taken into account, a peak commodity which is only used a few hours of the year has the same value for all the consumers categories during the other hours of the year. An allocation that takes into account only the direct use of commodities per consumer category in one particular hour does not collect the benefit of such reserves.
Fair and global Treatment	Concerning the equity criterion, it must be enriched: indeed it is necessary to take into account vertical equity, and not only horizontal, in order to make sure that the various customer categories assume an equitable share of the common costs, particularly when there is no theoretical or rigorous reference frame to lay down rules of optimal allocation of the shared costs. It is also necessary to consider in the simplicity criterion, the transparency and accessibility aspects and public information availability for the cost allocation exercise, so that the Régie and the interveners can have a certain level of control and a good comprehension over the treatments carried out and over the source of the results. If vertical equity is considered one must challenge if the variable allocation of heritage volume according to the proportions of overall consumptions is equitable, it should also be challenged who brings a certain instability in the division of the costs of heritage volume, moreover it is necessary to avoid introducing arbitrary and discriminatory rules into the cost allocation process by restricting certain acquisition products to one category or certain customers categories on the basis of external criteria not	Scenarios A & D offer an equitable and uniform treatment for the consumers of the same category. While using only the load factor, Scenario B and the Global treatment do not adequately distinguish between the consumption characteristics and the consumer categories. However, the Global offers an equitable and uniform treatment between the various consumer categories.
Technical Applicability/implications	We note a redundancy owing to the fact that the criterion "Technical applicability/implications" also repeats the concept of taking into account load factor and rate of losses of different customer categories.	Scenario B and the global treatment are most transparent, but lack technical precision (see the comments on causality). Conversely, A & D technically are the most rigorous scenarios, but are the least transparent. Calculations for these two scenarios cannot be checked.
Simplicity	The comments provided by H.Q. on the simplicity criterion appears to be correct but they are otherwise considered insufficient, except that the weight which we grant to this criteria is less than the criteria of causality and equity.	
Stability	It is necessary to differentiate the stability in the total costs allocation by customer category and the stability of the separate costs allocations of heritage and post-heritage acquisition. Because the C method and total method bring an instability in the division of the heritage volume costs which one does not find in the other compared methods. Theoretically if the demand for a customer category were fixed in time, the C method and Total method should make the unit cost of this category vary more than the other methods.	Scenarios A & D are most unstable because they have more elements which vary year by year (e.g. the hourly costs, time consumption by rate category).

* Note: The method of Total treatment is presented in the analysis table under a comparative title and does not constitute one of the alternative scenarios analyzed by the technical committee.

Additional comments by scenario

Scenarios	Scenario A Hourly cost	Scenario B Post-heritage Use Factors	Scenario C Post-heritage power/energy allocation	Scenario D Hourly cost by type of products	Global treatment (R-3541-2004 reference) *
Additional comments from AQCIE & CIFQ	The committee undertook the study of alternative approaches and we unfortunately had to note, without surprise, that they are, essentially, incompatible with the spirit and the letter of the legislation and the relevant regulation and the principles which must prevail on the matter. From this point of view, we ask you to record our opposition with the committee framework, regarding the implementation of such methods.				
Additional comments from AIEQ					Regarding causality, the cost signal of heritage and post-heritage globally determined, independent from the sales growth for each consumers category, growth which is at the origin of the costs of supply increases. Stability wise, the method softens the growth effect of the unit costs of the consumer categories with high sales growth by allocating them to the other consumer categories.
Additional comments from ACEF	It is true that this method is more detailed than methods based on the Load Factor (as far as I know, in first analysis or a priori, if it is more precise than the method based on Loads Factor I am inclined to say yes, but in fact that depends on the reliability of the forecasted volume and cost allocation process associated with the various products on an hourly basis, elements of which, us interveners, have little or not knowledge nor control). On the other hand the first problem of this method is that it does not directly use consumption characteristics stated in the Law (Lad Factor and rate of loss) thus it respects the spirit of Law (to take into account the demand characteristics but not the letter of the Law in the strict sense of the term. On the other hand the hourly demands schedules of each consumer category being used, this method is more rigorous, and a priori more precise, than methods based on the global demand characteristics (Load Factor and % of losses).	This method best respects the text of Law according to our comprehension and interpretation of the Law (A. 52.2 of the LRÉ) by using demand characteristics stated in the Law, in a differentiated way for heritage and the post-heritage; on the other hand, this method incorporates the costs of various acquired products and does not specifically consider the acquisition management and of the product characteristics. The fact that one can obtain a priori aberrant results (Load factors higher than 1 and cost power negative, for the industrial sector in particular, with the methodology retained by H.Q. is a question mark. It would be necessary to look if there are any ways of avoiding such results.	To establish the price of post-heritage electricity by customer category method uses the same formula as for heritage but by allocating the cost of power and energy on the basis of average load factor for the post-heritage commodities. Normally there must be an after the fact way, but also on a provisional basis an adequacy between the average load factor of the average post-heritage production and the load factor of the post-heritage demand, if not we introduce two different concepts into the formula for determination the post-heritage price by category, which does not ensure consistency of the overall allocation treatment. The fact that characteristics of the post-heritage demand, specific to each customer category, are not used is a problem for us with regard to the respect of the Law, equity and causality. Differentiated demand characteristics between the heritage and post-heritage is not taken into account unlike the interpretation that one makes of the Law and with the requirement of the Régie.	Distinction made between the cyclic and baseload commodities appears arbitrary. In my opinion there is no direct bond between the load factor of a customer category and the hourly stability of its demand, which would enable us to equitably allocate the use of the cyclic commodity with the intention of adjusting the offer to the demand on an hourly basis. The total demand for heating space on an hourly basis appears more stable to us than some others believe, because the large number of customers heating with electricity will statistically limit the hourly instability of the demand for space heating. It is true that the needs for space heating vary according to temperature, but it is possible to estimate the standardized owner demand for space heating and needs of acquisition for a standard winter. In order to adjust supply to demand on an hourly basis, cyclic commodities seem to be required by all the customer categories proportionally to their use of electricity. Finally, the addition of external considerations (demand stability or total load factor) to the process of hourly cost allocation acquisitions appears to me to add an arbitrary and discriminatory dimension to the process of base load allocation (hourly basis): because on an hourly basis, all the customers who require electricity for such an hour are the cause of the specific costs to this hour and should not be penalized (or be better of) for the only fact that they have a lower load factor (high) or a less stable demand (more). For some particular customers, a smaller load factor or a less stable demand will involve some higher costs insofar as these customers consume a greater proportion of the more expensive products at the peak hours. In this approach, to allocate the most expensive products and to not having access to the less expensive products at peak hours appears to us as an additional discriminatory operation that doubly and wrongfully penalizes them.	
Additional comments from CPU			This way is, as per our understanding, identical to that adopted for the global method. It thus does not respect the cost causality principle.		Does not answer the two most fundamental criteria of evaluation, that is to say the respect of the spirit and the letter of the Law of the Régie de l'énergie and the costs causality principle generally recognized in any worthy costs allocation.

* note: The method of Global treatment is presented in the analysis table under a comparative title and does not constitute one of the alternative scenarios analyzed by the technical committee.