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ON BEHALF OF

OPTION CONSOMMATEURS

PRESENTED IN THE CASE OF

SOCIÉTÉ EN COMMANDITE GAZ MÉTRO'S REQUEST

RELATIVE TO THE MODIFICATION OF RATES AND CONDITIONS

AS OF OCTOBER 1ST, 2011

FILE R-3752-2011

PHASE 2

RÉGIE DE L'ÉNERGIE

JULY 8, 2011

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MANDATE

Following the filing by Société en commandite Gaz Métro (SCGM or Gaz Métro) of a request of the modification of rates and service conditions for the 2011/2012 rate year, Option consommateurs (OC) retained our services in order to assist OC with its intervention request and during its representations before the Régie, to represent OC during the ADR negotiations (*PEN*), and to produce an analyst report within the context of Phase 2 of the case. The report covers the following hearing subjects:

1. the profitable development of the residential market;
2. the Report on Cost Allocation, the Links between the Costs and the Rates, as well as SCGM's long-term vision for the rate strategy;
3. the 2011/2012 rate strategy (including correction of the cross-subsidization).

1. INTRODUCTION

This analyst report is primarily concerned with SCGM's proposal to correct the cross-subsidization of the first block (*palier*) of the D1 rate[1] (which contains over 80% of the residential customers). In this rate case, the Distributor is proposing to correct the cross-subsidization (a) as part of a long-term rate vision; and (b) in its rate strategy for 2011/2012. After over a decade of passivity with respect to the correction of the cross-subsidization, SCGM intends to begin this correction in 2011/2012 and to make progressive corrections on a year-by-year basis going forward. In response to the deterioration of profitability in residential market development, SCGM proposes to correct the cross-subsidization of the first block of the D1 rate, "which is the real problem" (according to the Distributor). SCGM justifies the level of the cross-subsidization correction for 2011/2012 based on the level of rate increase that would allow the residential development market to obtain its 9.5% profitability target.

SCGM's proposals regarding the correction of the cross-subsidization of the first-block D1 customers have potentially serious and long-term total bill impacts on residential customers, and particularly, on low-income customers. As such, we have focussed our report on the areas of SCGM's proposal that relate to the correction of the cross-subsidization. The report covers three main areas that reflect SCGM's three main exhibits related to the correction of the cross-subsidization:

1. the profitable development of the residential market;
2. the Report on Cost Allocation, the Links between the Costs and the Rates, as well as SCGM's long-term vision for the rate strategy;
3. the 2011/2012 rate strategy (including correction of the cross-subsidization).

[1] The first block of the D1 rate class, also designated as D1.1, is characterized by gas consumption of 0-10,950 m^3/year. In this report, we have translated *palier* as "block" and *sous-palier* as "sub-block".

For each area reviewed, we summarize our understanding of Gaz Métro's proposal; provide comments on the proposal as we understand it; and conclude with OC's recommendations.

2. PROFITABLE DEVELOPMENT OF THE RESIDENTIAL MARKET

2.1. Gaz Métro's Proposal

Gaz Métro's Exhibit on the Profitable Development of the Residential Market[2] aims to evaluate the state of profitability for this market and to determine if the development possible in 2008 is still possible today[3].

In its 2008 rate case (R-3630-2007), SCGM indicated that the objective of a 9.5% Internal Rate of Return (IRR) as the profitability measure for the development of the residential market was to "incrementally restore the profitability of the residential market to a level similar to that of past years".[4] Gaz Métro confirms that this objective of 9.5% is not based on any precise calculation, but rather a rate of return that SCGM judges as appropriate for this market (taking into account the overall investment plan, as well as the potential for cost recovery).[5]

In its evidence in this case, SCGM continues to use the IRR of 9.5% as its target for profitability in residential market development.[6] In Table 6,[7] SCGM measures the impact of different factors on the profitability in residential market development from 2008 to 2011. The key factors (excluding accounting changes affecting the IRR calculation)

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[2] GM-3, Document 3
[3] GM-3, Document 3.1, Answer to Régie IR 1.1, p 2
[4] R-3630-2007, GM-2, Document 7, p. 22 (our translation)
[5] GM-3, Document 3.1, Answer to Régie IR 1.1, p 2
[6] GM-3, Document 3, p. 17, lines 13-16
[7] Ibid, p. 15

include: declining potential for future infill sales; an 18.2% increase in the costs of gas mains; a 13.3% decrease in system connection costs for new construction; a 9.5% increase in system connection costs for infill; and a 5.6% cumulative rate increase. Although the effect of the implementation of a $300 connection fee is not explicitly quantified in Table 6, SCGM indicates that this fee has been implemented to attain the targeted IRR of 9.5%.[8] It is particularly noteworthy that the proportion of infill market sales (which represented a relatively stable proportion of residential sales over a number of years) dropped from 21% in 2008 to 15% in 2009 to 12% in 2010 and 10% in 2011.[9] Moreover, the number of conversions has plummeted by 61% since 2008.[10]

While some of these factors have improved the profitability, SCGM concludes that overall, it is currently in a situation where some of the projects that were previously profitable, are no longer so. Furthermore, the Distributor warns that the profitability situation has a strong risk of deteriorating if “no measure is taken”.[11]

For 2012, SCGM anticipates a 2.3% increase (i.e., the rate of inflation according to the Exhibit) of the costs of gas mains and system connections. This increase will have a negative impact on the profitability of residential market development.[12] Moreover, after its dramatic decline, the proportion of infill sales in the residential market is projected to remain at a flat 10% for 2011 and 2012.[13] Gaz Métro maintains that there is no sign that this market will rebound in the coming years given that the potential number of clients decreases with every conversion.[14]

Table 8 demonstrates how the IRR (revised for 2012) is affected by rate variations.[15] The second column shows the level of system connection fee necessary to maintain the

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[8] Ibid, p. 4, lines 6-9
[9] Ibid, Table 1, p. 8
[10] Ibid, p. 8, lines 21-22
[11] Ibid, p. 3, lines 16-19
[12] Ibid, p. 17, Table 7
[13] Ibid, p. 8, Table 1
[14] Ibid, p. 8, lines 16-24
[15] Ibid, p. 18

targeted IRR of 9.5% with a range of rate variations. SCGM is very concerned with the possibility of future rate decreases in the first block of the D1 rate (which is mainly comprised of residential customers) because this would result in a deterioration of its residential market development profitability, and hence hinder profitable development.[16] Table 8 demonstrates that a minimum rate increase of 2.04% is required in order to maintain the target IRR of 9.5% with the existing $300 system connection fee.

SCGM argues against an increase of the existing system connection fee on the grounds that this would increase the inequity that already exists between current and future customers. Furthermore, Gaz Métro states that it is important to take into account the customers' ability to absorb these additional costs. The Distributor cites a consulting study conducted in the 2008 rate case, which concluded that the $300 connection fee would only have a marginal effect on sales, whereas a $500 connection fee would result in a 5-10% decrease in future sales.[17]

According to Gaz Métro, the solution to the deterioration of the residential market development profitability problem lies in the correction of the cross-subsidization of customers in the first block of the D1 rate, "which, in fact, is the real problem".[18]

2.2. OC Comments

2.2.1. Residential Market Development Profitability and Ratemaking

SCGM appears to be confusing the issue of the profitability of residential market development with its ratemaking strategy. The goal of ratemaking should be to cover

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[16] GM-3, Document 3, p. 18, lines 4-6.
[17] Ibid, pp 18-19
[18] Ibid, p. 19, lines 24-26

the costs of serving customers while ensuring that the applicable rates are fair and reasonable for these customers.[19]

In general, rates should not be set to increase residential market development profitability, nor should ratemaking be used with the goal of increasing sales in the residential market. This is particularly true in the case of SCGM's residential market, where (a) the incremental costs of serving new customers appear to be increasing as will be discussed in Section 2.2.3; (b) the demographics of the existing first-level D1 customers (characterized by a significantly higher proportion of urban-dwelling, captive/lower-price-elasticity low-income customers, who use gas mainly for cooking and heating) appear to be very different from those of the new customers (who tend to be more affluent, suburban, and who use gas for a large share of non-heating load, including a variety of peripheral luxury products such as barbecues and fireplaces).[20]

2.2.2. Correction of the Cross-Subsidization: a False Solution to the Problem of Residential Development Profitability

In response to the deterioration of profitability in residential market development, SCGM proposes to correct the cross-subsidization of the first block of the D1 rate, "which is the real problem." SCGM's analysis and the above statement are erroneous and problematic on a number of levels:

1. The correction of the cross-subsidization (which is an aspect of ratemaking) and the profitability of the residential market development are two separate issues and should be dealt with separately. The correction of the cross-subsidization should be driven by the principles of cost allocation and ratemaking. Correcting

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[19] Bonbright, James C., Principles of Public Utility Rates, New York: Columbia University Press, 1961, p. 291. See also An Act Respecting the Régie de l'énergie, Articles 49(6), 49(7) and 51.

[20] Our view of the demographics of the newer and older clients is based on: GM-3, Document 3.3, Answers to OC IRs 1.5 and 1.6, p. 3; R-3630-2007, GM-2, Document 7, p. 75, lines 20-22, and p. 24, lines 2-9 (related to differences in affluence); GM-3, Document 3.3, Answer to OC IR 1.7, pp. 3-4 (related to suburban/urban differences); GM-3, Document 3.3, Answers to OC IR 1.1 and 1.2, pp 1-2 (regarding the high non-heating load of new customers).

the cross-subsidization is just one aspect of ratemaking and should be considered in terms of the overall rate application on a case-by-case basis. This question will be further explored in Section 3.2.2.

A corollary of such a correction, in the current situation, would be an increase in the profitability of residential market development because more revenues would be generated. But the profitability of SCGM's residential market development should in no way constitute a justification or a driver to correct the cross-subsidization, or to set rates in any way. In a competitive market, a producer would be unable to increase prices for existing customers in order to increase sales to new customers. Given that one of the goals of regulation is to mirror a competitive market, tying increased rates to the profitability of system expansion is unacceptable regulatory practice.

2. An excessive focus on cross-subsidization as the "real problem" leads to an understatement of the serious longer-term economic challenges that SCGM is facing in the residential market. These challenges include a significant decrease in the profitable infill sales, and declining potential for future infill sales, coupled with a significant increase in the cost of gas mains, and the trend towards higher-cost lower-volume per unit sales (because more expensive system extensions are required for the most of the construction sales, which now include 44% non-heating sales). These economic challenges are discussed below in Section 2.2.3.

The level of cross-subsidization of the first block of D1, as recorded by SCGM, has been relatively high (over 33%) since 2001 (which is earliest year for which comparative data was provided),[21] even during years of very high returns in the residential market.[22] Most notably, the revenue/cost ratios for the first block of D1 have remained fairly constant between 2007/2008 and 20010/2011. In fact,

[21] GM-13, Document 8.2, Answer to OC IR 3.1, pp. 1-2
[22] GM-3, Document 3, p. 5, Graphic 1

SCGM records a slight improvement in the revenue/cost ratio for 2007/2008 (57.5%) vs. 2010/2011 (58.5%).

This comparison is relevant because 2008 and 2011 are the years of comparison used in the evidence to evaluate the state of profitability for this market and to determine if the development possible in 2008 is still possible today.[23] And it is SCGM's review of the period between 2008 and 2011, which is used to alert us about the deterioration of the residential market development IRR. The constancy of the revenue/cost ratios over this period is another element that weakens SCGM's portrayal of cross-subsidization as the "real problem." Clearly the cross-subsidization of residential customers has not caused the problem of deterioration in residential market development since 2008 because the levels of cross-subsidization of this market have been fairly constant since that time (and have been relatively high since 2001/2002).

3. The excessive focus on cross-subsidization as the "real problem" and its correction as the only solution to the problem of decreasing market residential development profitability overlooks other relevant and equitable solutions.

If SCGM is unable to maintain profitable development in the residential market, the Distributor could either reduce its profitability target for this market, and/or simply not invest in the projects that do not meet the existing target. An inequitable and unacceptable solution would be to increase the rates of existing customers to pay the incremental costs necessary for system expansion in order to sell more gas. Potential equitable solutions to SCGM's economic challenges will be further explored in Section 2.2.4.

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[23] See footnote 3.

2.2.3. Higher Costs and Lower Returns: the Economic Challenges of a Changing Residential Market

SCGM recognizes that profitability is a balance between costs and revenues. If the projected costs increases are not compensated by revenue increases, the profitability of residential market development will decline, as well as the development potential.[24]

SCGM's evidence makes it clear that the company is facing some serious economic challenges in its residential market development:

Gas main costs have increased considerably from 2008 to 2011 (by 18.2%) and are projected to continue to increase at the rate of inflation in 2012.[25] While there has been a decrease in overall average system connection costs from 2008 to 2011, these costs are also now projected to increase at the rate of inflation in 2012.[26]

After a sharp decline in sales, the more profitable infill market appears to have flattened remaining at 10% of overall sales (since 2011), but may continue to decline in the future.[27] The less profitable new construction market, for which the majority of projects require a system expansion investment, continues to grow as a proportion of total sales (90%). Furthermore, SCGM estimates that in the period of 2005-2010, 79% of the new construction sales in Greater Montreal (which comprises 93% of new construction sales) since 2005 have been in suburban and exurban areas.[28] Since 2005, over 40% of the new construction market for each year has been made up of non-heating customers.[29]

Because more expensive system extensions are required for the most of the construction sales, which now make up 90% of residential sales, and of which 44% are

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[24] GM-3, Document 3, p 17, lines 5-8
[25] GM-3, Document 3, p. 9, Table 2.
[26] Ibid, p. 10, Table 3 and lines 7-10.
[27] Ibid, p. 8, Table 1 and lines 22-25)
[28] GM-3, Document 3.3, Answer to OC IR 1.7. pp. 3-4
[29] GM-3, Document 3.3, Answer to OC IR 1.2, p. 2

non-heating sales in 2009/2010,[30] SCGM's residential market is increasingly characterized by higher-cost and lower returns.

In summary, there appear to be four major factors putting downward pressure on SCGM's marginal returns in the residential expansion market:

1. New load is increasingly in outlying and presumably lower density areas such that more distribution investment and operating cost are required per unit of incremental gas sold;
2. The cost of system expansion investment has increased considerably, in particular with respect to the cost of gas mains;
3. The new load has a large share of non-heating load, which implies lower gas volumes per customer, compared to existing customers;
4. The incremental load has a large optional/luxury good component, typically characterized by more discretionary use.

With growth potential in the infill market continuing to decline in the future, SCGM appears to be facing a tougher market than in the past, and even since 2008. Given these economic challenges, it is not surprising that SCGM has been unable to maintain same levels of profitability in this market.

OC concludes that the economic challenges of a changing residential market as described above constitute the "real problem" causing the decline in profitability of residential market development – not the cross-subsidization of residential customers, which is a separate factor that should be addressed within the context of ratemaking.

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[30] GM-3, Document 3.3, Answer to OC IR 1.1, pp. 1-2

2.2.4. Longer-Term Equitable Solutions to Residential Market Development Profitability Problem

SCGM is facing long-term challenges in a residential development market characterized by higher distribution investment costs and declining profitability. Since SCGM returned to the residential market development at the end of the nineties, the market conditions have changed. Given these economic challenges, if SCGM wishes to maintain the 9.5% profitability target and continue to develop the residential market, it must either:

1. increase the $300 system connection fee; or
2. increase the rates for existing customers.

Neither solution is acceptable. The system connection fee is already relatively high and many of the new customers would be required to generate returns well in excess of the 9.5% IRR target in order to meet this target,[31] thus creating inequity among the new customers. Furthermore, as the SCGM consultations have shown in the context of the R-3630-2007, a significant increase in system connection fee could result in a decrease in new sales.[32]

As emphasized above, it is unacceptable and inequitable (from the perspective of sound ratemaking) to increase the rates of existing customers to cover the incremental costs necessary for system expansion.

Given the above limitations, as well as the changes in market conditions, SCGM has two main equitable solutions available to address its residential market development profitability problem, without penalizing existing customers:

1. reduction of the 9.5% profitability target; and/or

[31] On average, new customers required to pay a capital contribution for their system expansion need only to generate a minimum rate of return on the project equal to the prospective cost of capital (i.e., 6.55% as requested in the current filing) (GM-3, Document 3.4, pp 1-2, Answers to OC IRs 2.1 and 2.2).
[32] R-3630-2007, GM-2, Document 7, p. 80, lines 10-15

2. reduction of the residential market development growth by foregoing projects that do not meet the profitability target.

Reduction of 9.5% Profitability Target

Given the nature of the residential development market challenges and the higher-cost and lower-volume sales trend, it seems unreasonable for SCGM to expect to earn a 9.5% IRR on new sales. There is no clear evidence or rationale provided by SCGM as to why the 9.5% is an appropriate number. In answer to a Régie IR, Gaz Métro confirmed that this objective of 9.5% is not based on any precise calculation, but rather a rate of return that SCGM judges as appropriate for this market (taking into account the overall investment plan).[33] Hence the 9.5% target has a certain subjective quality. It is also worth pointing out that this target has been adjusted in the past.[34]

The fact that SCGM's capital contribution fees for system expansion are set in order to generate return a minimum rate of return on the project equal to the prospective cost of capital (i.e., 6.55% as requested in the current filing) provides another major reason to question the 9.5% target. Most Canadian gas distributors require new customers pay a system connection fee, which recognizes the incremental costs required to connect them. Typically, developers or customers are also expected to pay capital contribution charges beyond the system connection fees to cover the costs of system expansion if new development fails to generate a certain level of return for the distributor.[35]

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[33] GM-3, Document 3.1, Answer to Régie IR 1.1, p 2
[34] R-3630-2007, GM-2, Document 7, pp. 34-35
[35] This is true for all Ontario gas distributors, under the guidelines of E.B.O. 188. See Section 4.
http://www.ontarioenergyboard.ca/OEB/_Documents/Decisions/EBO%20188%20Decision.pdf
It is also the case for ATCO Gas in Alberta:
http://www.atcogas.com/rates/Terms_and_conditions/2011/Terms%20and%20Conditions%20for%20Distribution%20Service%20Connections.pdf .

In Ontario, all gas distributors employ system expansion tests to determine capital contribution fees.[36] Each distributor's overall portfolio of system expansion projects must meet a minimum profitability index (for which a key input is the prospective cost of capital). Our understanding is that SCGM also employs a less formal and more flexible approach to determine the capital contribution fees, which also uses the prospective cost of capital (i.e. 6.55% in the current filing):

> « **Question :**
>
> **2.3** Les contributions financières pour une extension de réseau sont-elles fixées afin de rentabiliser l'investissement de Gaz Métro pour atteindre la rentabilité globale de 9,5% visée pour le marché résidentiel? Sinon, veuillez expliquer comment Gaz Métro fixe ces contributions financières.
>
> **Réponse :**
>
> Non, la contribution est fixée au cas par cas afin de générer une rentabilité suffisante selon les caractéristiques du projet. Règle générale, la rentabilité visée est au minimum du coût en capital prospectif à moins qu'un développement supplémentaire soit prévisible par la suite. »[37]

OC finds it notable that developers/customers are being asked for a capital contribution in order to generate a 6.55% minimum return on a system expansion project, whereas SCGM continues to target a profitability level of 9.5% in residential market development. It is not clear why SCGM should continue to expect a 9.5% overall profitability for the development of this market, particularly in light of the current market conditions.

Finally, it would appear from SCGM's evidence that the profitability of residential market development is declining, however OC notes that the 9.5% targeted IRR is well above the prospective cost of capital of 6.55%. Even without a rate increase, the revised 2008 IRR for 2012 is projected to be 9.28%,[38] which is still well above the prospective cost of

[36] See Appendix B, Ontario Energy Board Guidelines for Assessing and Reporting on Natural Gas System Expansion in Ontario, E.B.O. 188, op. cit.
[37] GM-3, Document 3.4, p. 2, Answer to OC IR 2.3
[38] GM-3, Document 3, Table 7, p. 17

capital. So while SCGM is facing more difficulty in maintaining a high target of profitability in its residential market development, the IRR remains fairly high.

Given the changing economic conditions for the residential market, SCGM may need to reduce its residential development profitability target of 9.5%, as long as the target remains above the prospective cost of capital (i.e. 6.55% as requested in the current filing).

Reduction of the Residential Market Development Growth

If SCGM chooses to maintain its residential market profitability target at 9.5%, the Distributor may be forced to reduce residential market development growth by foregoing projects that do not meet the 9.5% target. Growth at any cost is not the best solution. There is no imperative to continue to expand if new customers are unwilling to cover the incremental costs of connecting them and generate an adequate return.

Expansion of Sales and Development Efforts in the Profitable Conversion Market

Finally, SCGM points out that the possibility of rebounding in the more profitable conversion market is slim in the coming years because the number of potential customers is decreasing.[39] We question whether the more profitable urban conversion market is fully saturated or if opportunities in this area have been overlooked while SCGM's sales strategy has focussed on the new construction market in recent years. If SCGM has not done so already, we also encourage the Distributor to look for opportunities to expand in the urban conversion market.

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[39] GM-3, Document 3, p. 8, lines 16-24

2.3. OC Recommendations

1. It is misguided and limiting to focus solutions to residential market development profitability on the correction of the cross-subsidization of residential customers. This over-focus on cross-subsidization obfuscates the recognition of the real problem (the economic conditions) and limits the search for equitable and longer-term solutions.

2. Rates should be set to recover costs for existing customers. Rates should not be set to increase residential market development profitability.

3. Cross-subsidization and the profitability of residential market development are two separate issues that should be considered separately. The correction of the cross-subsidization should be driven by the principles of cost allocation and ratemaking. This issue will be further explored in Section 3.2.2.

4. SCGM should give greater consideration to longer-term and more equitable solutions to the problem of declining residential market development profitability. The two main equitable solutions that avoid penalizing existing customers are: (a) a reduction of the 9.5% profitability target for this market to a level less than 9.5% (but above the prospective cost of capital); and/or (b) a reduction residential market development growth by foregoing projects that do not meet the profitability target. An inequitable and unacceptable solution would be to increase the rates of existing customers to pay the incremental costs necessary for system expansion in order to sell more gas.

5. If SCGM has not done so already, OC encourages the Distributor to look for opportunities to expand in the more profitable urban conversion market.

3. REPORT ON COST ALLOCATION, THE LINKS BETWEEN THE COSTS AND THE RATES, AS WELL AS SCGM'S LONG-TERM VISION FOR THE RATE STRATEGY

3.1. Gaz Métro's Proposal

In GM-13, Document 8, SCGM provides a report on the cost allocation study, the links between the cost allocation study and the rate structure, as well as the Distributor's longer-term rate strategy vision. OC's interest in this document relates to the effects of the cost allocation study and related rate strategy on residential customers, so our comments will be restricted to these areas.

In the first section of the Exhibit, SCGM summarizes the demonstration of cost allocation methodology that was provided at the two technical meetings held in Winter 2011, as a result of Régie Decision D-2010-144[40]. The second section makes the links between the cost allocation study and the rates, and the third section presents SCGM's longer term vision of the rate strategy.

3.1.1. Quantitative Demonstration of the Cost Allocation

In the first section, SCGM evaluates its own cost allocation methodology, finds the costs to be equitably and reasonably allocated;[41] but suggests that about 25% of the distribution costs (i.e. $138 M out of $535 M in the 2009/2010 Budget) could be the "object of reflection" for potential allocation adjustment.[42] SCGM then presents a sensitivity analysis based on the reallocation of 10%, 20% and 30% of the $138 M, both to the advantage and disadvantage of the first-block D1 customers. The Distributor concludes from the results of this sensitivity analysis that the level of the cross-subsidization is far from "fair and reasonable."[43] According to SCGM, the cost allocation

[40] p. 26.
[41] GM-13, Document 8, p. 21, lines 26-27
[42] Ibid, pp. 21, line 28 - p. 22, line 3
[43] Ibid, p. 24, lines 11-17.

methodology is sufficiently “solid” to conclude that the cross-subsidization of the first block of D1 is “worrisome” and even cost allocation factor adjustments that are favourable to these customers will never correct the level of cross-subsidization currently observed.[44] SCGM concludes by acknowledging that the cost allocation study could be improved. The Distributor will consider adjustments to the cost allocation methods in the upcoming years.[45]

3.1.2. Links Between the Costs and the Rates

In the second section of GM-13, Document 8,[46] SCGM concludes that even if the customer charges for D1 do not reflect the same proportions as the fixed costs. the price structure remains reasonably aligned with the cost structure. In Table 2.4,[47] SCGM describes the cross-subsidization situation for the 2010/2011 budget, concluding that the level of cross-subsidization for the first-block D1 customers is 41%. Moreover, if the sub-blocks of first-block D1 customers (i.e. 1.1a/b, 1.1c and 1.1d) are considered separately, the customers in the smallest sub-blocks are reported to be even more highly cross-subsidized.

As such, SCGM is considering the possibility of subdividing the first block of D1 into distinct rate blocks in order to better define the cost variations among these small customers.[48] In answer to Régie IR 32.2,[49] SCGM further explains that it would be willing to reconsider the question of rate simplicity in order to better define the costs and better target rate variations.

[44] Ibid, p. 24, lines 18-22
[45] Ibid, p. 25, line 25 - p. 26, line 4
[46] Ibid, p. 43, lines 7-9
[47] Ibid, p. 50
[48] Ibid, p 51, lines 8-13
[49] GM-15, Document 3.1, pp. 3-4

3.1.3. SCGM's Longer-Term Vision of the Rate Strategy

SCGM's rate vision is divided into three main themes: cross-subsidization, the fixed portion of the distribution costs,[50] and the logical links between the rates and the rate blocks. We will restrict our review to the first theme, the question cross-subsidization, which is of particular relevance to residential customers.

SCGM proposes to progressively correct the cross-subsidization between the small and large D1 customers, on a yearly basis, starting in the current filing. This will imply smaller rate increases or bigger rate decreases for the bigger D1 customers with respect to the smaller ones. The correction could take the form of (a) rate variations (both with respect to the customer charge, as well as the volumetric rates); or (b) modifications to the D1 rate structure, including the subdivision of the first block of D1 into two distinct rate blocks.[51]

According to SCGM, corrections to the cross-subsidy must also take into account the competitive situation, the level of the rate impacts on the total bill, and the profitable development of new markets.[52] Furthermore, SCGM specifies that to establish the level of the annual correction, the Distributor will also take into account the variation of the revenue requirement, and the effect of other proposed rate modifications on the total bill.[53]

Both OC and the Régie asked IRs in an attempt to clarify the timetable for the implementation of SCGM's rate vision. In answer to Régie IR 28.1,[54] SCGM sets out a timetable with corresponding rate vision themes for the years of 2011/2012 through 2013/2014. SCGM also comments that for correction of the cross-subsidization, it is

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[50] GM-13, Document 8, p. 53, lines 22-23
[51] Ibid, pp. 64-65
[52] Ibid, p. 64, line 10 to p. 65, line 13.
[53] GM-13, Document 8.1, Answer to Régie IR 28.1, p. 2
[54] Ibid, pp. 1-3

difficult to define a timetable, but states that it wishes to correct the cross-subsidization levels gradually, each year, insofar as possible.

In response to an IR from OC regarding the acceptable level of cross-subsidization for distribution services, SCGM states that the ideal situation would entail no cross-subsidization between rate classes or customer groups. However, a level of cross-subsidization within a ratio of plus or minus 20% could be considered acceptable, but without giving up "the possibility of further potential improvements" (presumably to further correction of the cross-subsidization beyond the plus or minus 20% threshold).[55]

3.2. OC Comments

3.2.1. Quantitative Demonstration of the Cost Allocation

Based only on participation in the two Winter 2011 technical meetings on cost allocation and on the related report, presented in GM-13, Document 8.1, Section 1, and without a full expert review of the cost allocation study, we are unable to conclude (a) whether the distribution service costs are reasonably and equitably allocated; and (b) as a result, whether the level of cross-subsidization of the small D1 rates is indeed 41%.

Based on discussions during the technical meetings, as well as a number of IRs from various intervenors, it would appear that the cost allocation study contains a number of elements that are controversial and that there are still several outstanding questions remaining that have not been resolved to the satisfaction of the intervenors. By SCGM's own admission, there are a number of improvements still to be made to the cost allocation methodology and approximately 25% of the total distribution costs (i.e. $138 M out of $535 M in the 2009/2010 Budget) that could be considered for potential cost allocation adjustment.

[55] GM-13, Document 8.3, Answer to OC IR 4.1, pp 1-2

Nonetheless, given the broad range between the revenue/cost ratio of 59% for the first-block D1 rate from SCGM's cost allocation study and a revenue/cost ratio of 100%, it is reasonable to conclude that some degree of cross-subsidization of the first-block of D1 customers is likely to exist. The results of the sensitivity tests provide further evidence for this conclusion.[56]

In response to IR 3.1 by OC,[57] SCGM demonstrates the evolution of the level of the cross-subsidization on a consistent basis since 2001/2002 (with the exception of 2005/2006, which appears to be an oversight). The evolution paints a more fulsome picture of the level of cross-subsidy over time and also provides information on the cross-subsidy by sub-block within D1. This information is also presented in response to IR 3.2[58] for the revenue/cost ratios of all services (commodity, compression, transmission, load-balancing and distribution).

3.2.1. Links Between the Costs and the Rates

SCGM's proposal for the subdivision of the first block of D1 to create new and distinct rate blocks is not sound ratemaking policy for the following reasons:

1. From a ratemaking perspective, different rate blocks or classes are created because they have different characteristics, which impose different costs on the system. Within the first-block of D1 (i.e., the D1.1 rate block), the various sub-blocks (i.e., 1.1a/b, c and d) have similar characteristics with respect to meters, billing and average load factors[59]. Moreover, given that load factors are a significant basis for cost allocation, the similarity of load factors among the sub-blocks is a strong argument for not subdividing the D1.1 rate block.

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[56] GM-13, Document 8, p. 24, lines 11-17.
[57] GM-13, Document 8.2, p. 2
[58] Ibid, p. 3
[59] GM-13, Document 8, p. 44, Table 2.3.2B, column 3

2. As SCGM has acknowledged, simplicity is one of the principles of a sound rate structure. Indeed, SCGM gone so far as to point out that "[…] sacrificing some economic efficiency for a customer class in order to maintain simplicity represents a reasonable compromise"[60]. Moreover, in D-2010-144,[61] the Régie also recognized the principle of simplicity in ratemaking with respect to small customers in its acceptance of SCGM's argument about the complexity engendered by a personalized load balancing rate for D1 customers consuming less that 75,000 m^3/year.

3. Another principle of sound ratemaking is administrative ease. The subdivision of D1.1 into new and distinct rate blocks would increase SCGM's administrative burden and costs and create the need to explain the new rate blocks to the 153,000 customers in D1.1. Subdivided rate blocks for small customers will also engender reclassification problems/burdens as customers change volume usage, and thus find themselves in a new rate block.

Finally, as discussed above, the demographics of the first-level of the D1 class are highly heterogeneous: existing first-level D1 residential customers appear to be characterized by a significantly higher proportion of urban-dwelling, captive/lower-price-elasticity low-income customers, who use gas mainly for cooking and heating while newer customers tend to be more affluent, suburban and use gas for a large share of non-heating load, including a variety of peripheral luxury products. This heterogeneity is likely even more extreme at the 1.1a/b sub-block, which contains an estimated proportion of 18.9% low-income customers.[62] This block is also estimated to be made

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[60] GM-13, Document 8, p. 74, line 21 – p. 74, line 4
[61] p. 57.
[62] The 1.1 a/b sub-block is comprised of an estimated 18.9% of low-income customers as indicated in R-3630-2007, GM-2, Document 7, p. 74, lines 19-21. Moreover, SCGM states that low-income customers are over-represented in this sub-block compared to the other D1.1 sub-blocks (which together are estimated to be made up of only 9.1% of low-income customers). It is possible that these proportions have changed since 2007, but it would be reasonable to assume that low-income customers continue to be over-represented in the 1.1a/b sub-block, compared to the other two higher-volume D1.1 sub-blocks.

up of 23% of non-heating condo owners.[63] It is reasonable to assume that more affluent customers who use gas occasionally for luxury peripheral products may also comprise a significant proportion of this sub-block. So combining generally higher rates in order to address the cross-subsidization with the proposed subdivision of the D1.1 class could create a real risk of particularly adverse impacts to certain customer groups, particularly the low-income customers in the 1.1a/b sub-block.

For all of the reasons indicated above relating to the principles of sound ratemaking as well as undue bill impacts on low-income customers, OC opposes the proposal to further subdivide the D1.1 block.

3.2.2. SCGM's Longer-Term Vision of the Rate Strategy

As emphasized in Section 2.2, above, the profitability of the residential market development and any correction of the cross-subsidization of the first block of D1 are separate issues and should be dealt with separately. The correction of the cross-subsidization should be driven by the principles of cost allocation and ratemaking.

As indicated above in Section 3.2.1, without a full expert review of the cost allocation, we are unable to conclude that the cross-subsidization of D1.1 customers is at the 41% level. However, it is reasonable to conclude that some degree of cross-subsidization of these customers is likely to exist. Because the cost allocation study is not fully accepted and has not been subject to a full expert review, it would be prudent for SCGM to apply a wider zone of reasonableness around what constitutes an acceptable level of cross-subsidization. SCGM has suggested that a level of cross-subsidization within a ratio of plus or minus 20% could be considered acceptable.[64] OC would oppose any attempts to further restrict the range of the acceptable cross-subsidization ratio (i.e. anything tighter than 20%) without a full expert review of the cross allocation study.

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[63] R-3630-2007, GM-2, Document 7, p. 75, lines 17-20.
[64] GM-13, Document 8.3, Answer to OC IR 4.1, pp 1-2

Within a wider zone of reasonableness (plus or minus 20% as suggested by SCGM), any acceptable correction of the cross-subsidization would have to be implemented in slow and well-considered steps to gradually decrease the level of cross-subsidization over time. The level of correction should be evaluated within the context of the overall rate application on a year-by-year basis. Furthermore, SCGM has qualified its own attitude towards the correction of the cross-subsidy as “passive” since the implementation of the incentive mechanism more than a decade ago.[65] After over ten years of failing to address the cross-subsidization of first-block D1 customers, no one should expect this situation to be corrected overnight.

Given these conditions (a zone of reasonableness of plus or minus 20% and a slow approach), any correction of the cross-subsidization of the first-block D1 customers should be implemented gradually. The evaluation of the level of correction of the cross-subsidization must take into account the overall rate application, including the following elements (as identified by SCGM):

- the level of the rate impacts on the total bill
- the variation of the revenue requirement
- the effect of other proposed rate modifications on the total bill

To these elements, we add that the evaluation of the level of correction to the cross-subsidy must also take into account:

- compliance with the incentive mechanism in place
- the potential for undue bill impacts on residential customers, particularly low-income customers, who are over-represented in the 1.1a/b sub-block[66]

[65] GM-13, Document 8, p. 56, line 23 to p. 57, line 2
[66] See footnote 62.

- public acceptability
- changes in the price of the commodity
- the extent to which the revenue/cost ratio is below 80% (i.e. the 20% boundary of acceptability).

OC does not agree with SCGM that the correction of the cross-subsidy should be automatically implemented every year, nor does OC agree that the profitable development of new markets should have any bearing on the level of correction of the cross-subsidy for reasons already discussed. With regard to an automatic annual correction of the cross-subsidy, OC strongly recommends that any correction of the cross-subsidization should be evaluated on a year-by-year basis taking into account the overall rate application and all the elements suggested above.

In the correction of the cross-subsidization, we are highly concerned with undue impacts on residential customers, and in particular, low-income customers. A rapid correction of the cross-subsidization could result in a rate shock, particularly at the 1.1a/b level.

SCGM itself has acknowledged the affordability issues for low-income customers associated with changes in rates in the R-3630-2007 filing. In that filing, SCGM proposed a significant increase in the customer charge to be implemented in one year. In consultations with customers, the bill impact on low-income customers in the 1.1a/b sub-block was deemed unacceptable and SCGM proposed a low-income credit to offset the impact.[67] In D-2007-116[68], the Régie rejected the low-income credit and instead ruled that the increase should be spread over four years.

We support SCGM's view expressed in the R-3630-2007 evidence that bill impacts for low-income customers have to be taken into account when designing rate changes. In

[67] R-3630-2007, GM-2, Document 7, Sections 8.1.5.1 and 8.1.5.2, pp. 74-78.
[68] p. 54.

the case of the correction of the cross-subsidization, absent any mitigation strategy to offset the bill impacts on low-income customers, the only way to address the correction of the cross-subsidization is through a slow and gradual process.

3.3. OC Recommendations

1. The subdivision of the first blocks of D1 to create new and distinct rate blocks is not sound ratemaking policy for all of the reasons enumerated in Section 3.2.1.

2. Within a wider zone of reasonableness (plus or minus 20% as suggested by SCGM), any acceptable correction of the cross-subsidization would have to implemented in slow and well-considered steps to gradually decrease the level of cross-subsidization over time.

3. The evaluation of the level of correction of the cross-subsidization must take into account the overall rate application, and the following elements in particular:

    - compliance with the incentive mechanism in place
    - the cumulative level of the rate impacts on the total bill, arising from:
        - rate changes for distribution services
        - the effect of other proposed rate modifications
        - changes in the price of the commodity
    - potential for undue bill impacts on residential customers, particularly lower-income customers (who are over-represented in the 1.1a/b sub-block)
    - public acceptability

- the extent to which the revenue/cost ratio is below 80% (i.e. the 20% boundary of acceptability).

4. Any correction of the cross-subsidization, as well as the level of this correction, should be evaluated on a year-by-year or case-by-case basis.

5. OC emphasizes yet again that the profitable development of new markets should not have any bearing on the level of correction of the cross-subsidy for reasons already discussed.

4. 2011/2012 RATE STRATEGY (INCLUDING CORRECTION OF THE CROSS-SUBSIDIZATION)

4.1. Gaz Métro's Proposal

A highly relevant aspect of the 2011/2012 rate strategy for residential customers is that SCGM has begun to implement the correction to the cross-subsidization of the first-block D1 customers. To this end, SCGM is proposing a differentiated increase of 2% in the revenues generated at the first-block D1 rate class, which is compensated by a decrease in the other levels of D1.[69] The effects of this increase are described in Table 3.[70] Moreover, SCGM links this 2% increase for D1.1 with Table 8 of GM-3, Document 3,[71] which demonstrates how the IRR for residential market development (revised for 2012) is affected by rate variations. According to the table, in order to obtain the 9.5% profitability target, while maintaining the system connection fees at their current level, a 2% rate increase would be required at the first block of D1.[72] SCGM confirms that the 2% increase in revenues for D1.1 is obtained by modifying the volumetric unit rate of the

[69] GM-15, Document 3, p. 19, lines 13-14
[70] Ibid, p. 20
[71] Ibid, p. 18
[72] Ibid, p. 19, lines 8-12

rate grid.[73] The mechanics of the differentiated increase are further clarified in answer to the same IR.

SCGM is proposing an overall <u>decrease</u> in the revenue requirement for distribution services of 0.7%. For the regular D1 rate class, however, the revenue requirement will be subject to an increase of 2% before the transitory rebates, or a 0.3% increase overall. D1.1a/b will face a significant increase of 7.2% in the revenue requirement (more than three times the level of Quebec inflation for 2011/2012 of 2.2%[74]); D1.1c, an increase of 2.0% and D1.1d, a decrease of 0.1%.[75]

These variations in the revenue requirement are partly driven by SCGM's efforts to correct the rate of cross-subsidization of the first-block D1 customers. 2011/2012 is also the last year of a four-year increase in the customer charge for the D1 rates. This increase in the customer charge appears to be the main driver of the increase in the revenue requirement for the D1.1a/b in this rate case.

SCGM has provided information on the bill impacts of the proposed rate changes in answer to OC IRs 9.1 to 9.4.[76] The sample customers in almost every rate block in D1 are benefitting from total bill decreases, except for D1.1a/b (with a 4.3% increase, almost twice the Quebec rate of inflation used in this filing), and D1.1c (with a 0.4% increase). D1.1 overall is subject to a 0.3% bill increase.[77]

4.2. OC Comments

In Section 3.2.2 above, as part of the rate vision, we have emphasized that any acceptable correction of the cross-subsidization would have to be implemented in a slow, gradual and well-considered manner as part of the overall rate application.

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[73] GM-15, Document 3.2, Answer to OC IR 8.3, pp. 2-3
[74] 2.2% is the Quebec inflation rate for 2011/2012 according to GM-4, Doc 1, p. 22, Table 1.
[75] GM-15, Document 10, p. 2
[76] GM-15, Document 11.1
[77] GM-15, Document 11.1, p. 4, Table 2

Furthermore, any correction of the cross-subsidization, as well as the level of this correction, should be evaluated on a year-by-year or case-by-case basis. As stated above, the profitability of the residential market development should not have any bearing on the level of correction of the cross-subsidy for reasons already discussed. Any evaluation of the level of correction must take into account the overall rate application, with particular attention to the list of elements set out in OC Recommendation #3 of Section 3.3.

OC can now test the proposed correction of the cross-subsidization in SCGM's 2011/2012 rate strategy against the elements and conditions set out in OC's Recommendation #3 above.

4.2.1. Compliance with the Incentive Mechanism in Place

First, OC questions whether the proposed correction of the cross-subsidy complies with the provisions of Article 7.2 of the incentive mechanism, by virtue of which no correction of the cross-subsidization should result in a rate greater than the ceiling rate.[78]

SCGM has not answered OC's IR 8.2[79] on its compliance to the current incentive mechanism (stating that it would require several days of work for approximate results). Without performing the calculations ourselves, we are unable to determine with certainty whether the proposal for differentiated rate increases contravenes the provisions of the mechanism.

With respect to the pertinence of the information requested in the OC IR, the Régie asked an identical question in last year's rate case.[80] The question was sufficiently relevant to the Régie to require the information last year; and the information requested

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[78] R-3599-2006, *Mécanisme incitatif convenu par le group de travail à la phase 2 du PEN*, April 19, 2007, Article 7.2, p. 43).
[79] GM-15, Document 3.2, pp. 1-2
[80] R-3720-2010, Phase 2, GM-2, Document 3.4, Answer to Régie IR 2.1, pp. 1-3

made up the body of evidence, on which the Régie rejected the Working Group's similar request for a differentiated rate decrease for D1 customers.

We reject SCGM's contention in answer to the same OC IR that Article 7.2 is not applicable because the correction of the cross-subsidy is the result of a follow-up request made by the Régie in its Decision D-2010-144. In this Decision, the Régie indicated that it was concerned with the level of cross-subsidization among the rate classes, particularly with respect to the first block of D1. As such, the Régie authorized the Winter 2011 technical meetings on cost allocation and requested a report on potential improvements, if applicable, that could be made to the rate structures.[81] Nowhere in the Régie's decision does the Régie endorse a correction of the cross-subsidization in 2011/2012.

4.2.2. The Other Elements

If the Régie rules that the differentiated rate increase is in compliance with the provisions of Article 7.2, we estimate that the other elements (as per OC's Recommendation #3 of Section 3.3) that should be taken account in the evaluation of the level of correction of the cross-subsidization are not unfavourable to the correction proposed by SCGM within the overall context of the 2011/2012 rate case.

In terms of undue impacts on low-income customers, there is some concern about the bill impact on the 1.1a/b rate sub-block (4.3% increase or an increase of $17/per year for a sample customer in this sub-block), as well as the increase in the revenue requirement for distribution services (7.2% increase). Both of these increases are well above the Quebec rate of inflation for 2011/2012 of 2.2% as provided in this filing. Even if the inflation rate is adjusted upward, as is now likely, these increases are well above current expected inflation. As indicated above, low-income customers are over-

[81] D-2010-144, p. 26

represented in the 1.1a/b sub-block (which is made up of an estimated 18.9% proportion of low-income customers).[82]

However, most of the increase in the revenue requirement and the bill impact for 1.1a/b appears to be driven by the increase in the customer charge (as approved by the Régie in D-2007-116, p. 54), not the differentiated rate increase.[83]

Moreover, SCGM has identified that there are many low-income consumers, who are bulk-metered. From OC's series of IRs to SCGM on multi-unit consumption patterns, it would appear that the vast majority multi-unit building owners pay commercial rates.[84] Consequently, these owners may benefit from overall bill reductions this year, partly due to the correction of the cross-subsidization. While it is unlikely that these bill reductions will be reflected in the rental decreases to the tenants, these bill reductions to the owners can limit the upward pressure on the rents of low-income consumers, who are bulk-metered at commercial rates.

Taking into consideration the total bill impact, the fairly low impact of the correction of the cross-subsidization on D1.1a/b and the potentially positive impact of this correction on bulk-metered low-income consumers, OC believes that SCGM's proposal to correct the cross-subsidy appears to meet the criterion of public acceptability.

The effect of other rate modifications on first-block D1 customers is not unduly high this year, and increases in the revenue requirement for the regulated services are somewhat offset by a decrease in commodity prices. According to SCGM's estimates, the correction of the cross-subsidy results in a revenue/cost ratio of 61% for first-block D1 in 2011/2012. Even allowing for some correction of the cost allocation study, it is reasonable to conclude that the revenue/cost ratio for this customer rate block remains under 80% (the lower threshold of the 20% boundary).

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[82] See footnote 62.
[83] GM-15, Document 3.3, Answer to OC IR 11.2, pp. 2-3
[84] GM-13, Document 8.5

4.2.3. Level of Correction of the Cross-Subsidy

In light of our test of SCGM's 2011/2012 rate strategy proposal against the elements and conditions set out in OC's recommendations with respect to the correction of the cross-subsidization, OC accepts SCGM's proposal to correct the cross-subsidy for 2011/2012 (subject to its conformity with the provisions of the current incentive mechanism).

It should be noted, however, that on the grounds of public acceptability, the correction of the cross-subsidy in 2011/2012 should be no higher than the amount proposed by SCGM in this year's application. Most residential customers, and particularly those in the 1.1a/b sub-block, in which low-income customers are over-represented, and the 1.1c sub-block will be subject to bill increases at a time when 1.1d and all the other D1 rate blocks are benefitting from bill decreases. As pointed out above, a sample customer in the 1.1a/b sub-block is subject to a 4.3% increase in their bill. This sub-block is also subject to a 7.2% increase in the revenue requirement for distribution services.

In its decision D-2010-144,[85] the Régie ruled against differentiated rate decreases for the D1 class to correct the cross-subsidy on the grounds that there was no need to apply an additional correction because the D1 class was already subject to a third consecutive customer charge adjustment as approved by the Régie. SCGM finds itself in a similar situation this year with a fourth and final consecutive customer charge adjustment, so OC could make the argument that there is no need to apply an additional correction this year either.

However, after testing SCGM's proposal against the elements and conditions recommended by OC for the correction of the cross-subsidization, OC acknowledges

[85] p. 26

that the level of the correction is cross-subsidization in 2011/2012 is fairly moderate. The bill impact is also mitigated by the decrease in the commodity prices.

OC emphasizes that this acceptance of the correction of the cross-subsidization in the 2011/2012 case in no way implies automatic approval of annual progressive corrections of the cross-subsidy. As stipulated above, OC believes that the level of correction to the cross-subsidization must be re-evaluated on a year-by-year basis, taking into consideration the various elements described in Section 3.3, Recommendation #3.

Finally, for all the reasons described in this analyst report, residential market profitability and correction of the cross-subsidization are two separate issues and should be considered separately. It is unacceptable to link the level of the correction of the cross-subsidization for this year or any other year with the level of rate increase required to obtain the target 9.5% IRR.

4.3. OC Recommendations

1. In light of our test of SCGM's 2011/2012 rate strategy proposal against the elements and conditions set out in OC's recommendations for the correction of the cross-subsidization, we accept SCGM's proposal to correct the cross-subsidy for 2011/2012 (subject to its conformity with the provisions of the current incentive mechanism).

2. On the grounds of public acceptability, the correction of the cross-subsidy in 2011/2012 should be no higher than the amount proposed by SCGM in this year's application.

3. The level of correction to the cross-subsidization must be re-evaluated on a year-by-year basis, taking into consideration the various elements described in Section 3.3, Recommendation #3.