IEc

INDUSTRIAL ECONOMICS, INCORPORATED

Gaz Métro 2013-2015 Generic Cost Allocation Proceeding
Docket No. R-3867-2013
Information Requests Submitted on Behalf of ACIG/IGUA: 18 December 2014

Introduction

Attached are IEc's draft information requests in the referenced proceeding. There are an unusually large number of interrogatories, for a number of reasons.

- First, IEc has not participated in a Gaz Métro rate proceeding in many years, and is unfamiliar with many cost allocation methods that are in standard use. Moreover, it is IEc's understanding that all cost allocation methods are the subject of this proceeding, which serves to increase the issues that should be addressed.

- Second, while IEc understands that this is a generic *methodological* proceeding, many of these requests involve specific numbers and calculations. For technical cost allocation matters, IEc finds it valuable to see the specific formulae used by the applicant, in order to understand exactly how the methodology is implemented. Describing a methodology in ordinary language can often lead to incorrect interpretations, particularly in light of IEc's linguistic limitations.

- Third, while IEc attended two of the three information sessions regarding the methodology, IEc was not permitted to actively participate or solicit information. Moreover, while ACIG did request some supporting information in that process, many of the detailed requests were deferred to this discovery phase of the proceeding.

- Fourth, the Company has thus far provided relatively little with respect to the details of its methodology. The electronic "cost allocation studies" submitted as Exhibits B-0031 and B-0032 are not working cost allocation models, and provide less information than IEc would normally expect in a typical utility base rates proceeding. These filings contain only budget cost levels, allocation factors without supporting data or calculations, and virtually no formulae.

Thus, IEc determined that it was necessary to make numerous requests for backup information and calculations in order to avoid confusion and ensure a clear understanding of the proposed methodology. IEc notes that Gaz Métro proposes to make annual filings of the updated cost allocation study once the methodology is approved by the Régie, a proposal that IEc supports. IEc respectfully recommends that Gaz Métro work with the parties and the Régie to develop minimum filing requirements related to each cost allocation filing, in order to avoid future burdensome discovery processes.

Information Requests

1. Reference Exhibits B-0031 and B-0032:

    a. In live MS Excel electronic format with formulae intact, please provide a working version of the current method cost allocation study as applied to the 2013/2014 budget test year.

    b. In live MS Excel electronic format with formulae intact, please provide a working version of the proposed method cost allocation study as applied to the 2013/2014 budget test year.

    c. For all plant-related rate base items shown in these exhibits, please provide gross plant, accumulated depreciation and net plant values.

    d. For all O&M and A&G cost items, please report both total cost and labor cost components.

2. Reference Supplemental Filing, Exhibits B-0031 and B-0032, Operating Expenses:

    Between the current method and the proposed method, the Company proposes a substantial shift in the categorization of operating expenses that are allocated in the cost allocation study.

    a. Please provide a matrix with the cost categories in the current method on one dimension and the cost categories for the proposed method on the other dimension, showing the mapping of the $185.721 million in O&M costs from current to proposed rates for each category.

    b. Please provide the rationale for the proposed changes in cost categories.

3. Reference Exhibits B-0024 and B-0032, throughput allocators FB01D, FB01D' and FB01V:

    a. Please provide the actual budgeted throughput volumes by class by month for the 2013/2014 budget test year, for all three allocators, in MS Excel electronic format.

    b. Please specify which volumes are included in the green fund allocator, and provide the rationale therefor.

    c. In "live" MS Excel electronic format with formulae intact, please provide a 10-year history of monthly throughput by rate class by region (FB01D). Please indicate whether monthly volumes represent consumption or billings (consumption is preferred). Please also include heating degree days for each month for each region.

4. Reference Exhibits B-0024 and B-0032, revenues allocator FB07D:

   a. Please specify the nature of the $193,000 in the "other" category of "other revenues" which are allocated using FB07D.

   b. In "live" MS Excel electronic format with formulae intact, for the budget year, please provide a "proof of revenues" analysis of distribution revenues for each rate class, showing each specific rate charge, the billing determinant, and the revenues, for the 2013/2014 budget test year.

5. Reference Exhibits B-0024 and B-0032, customer count allocator FB08:

   a. Please provide the actual number of customers by rate class for the budget year.

   b. Please explain how customers who take service in multiple categories (e.g., both D4 and D5 categories) are counted for developing this allocation factor, and the basis therefor.

6. Reference Exhibits B-0024 and B-0032, revenue allocator FB09CL:

   a. Please specify where this allocation factor is used in developing other factors.

   b. In "live" MS Excel electronic format with formulae intact, for the budget year, please provide a "proof of revenues" analysis of supply, compression, transportation, load balancing, distribution and return on inventory-related investment revenues for each rate class, showing each specific rate charge, the billing determinant, and the revenues.

   c. Please explain how revenues related to gas supply, transportation or other services provided by entities other than Gaz Métro are incorporated into this allocator, and the rationale therefor.

   d. The FB09CL allocator values reported in the "FB09CL" worksheet within Exhibit B-0032 do not appear to total to unity. Please provide a corrected allocator, with the supporting underlying revenue values used.

7. Reference Exhibits B-0024 and B-0032, revenue allocator FB10:

   a. Regarding the "application" section of Exhibit B-0024, please specify where this allocation factor is used in developing other factors.

   b. In "live" MS Excel electronic format with formulae intact, for the 2013/2014 budget test year, please provide a "proof of revenues" analysis of transportation, load balancing, distribution and return on inventory related investment revenues for each rate class, showing each specific rate charge, the billing determinant, and the revenues.

c. Please explain how revenues related to gas supply, transportation or other services provided by entities other than Gaz Métro are incorporated into this allocator, and the rationale therefor.

8. Reference Exhibits B-0024 and B-0032, customer connections allocator FB11:

   a. Please explain how Gaz Métro derives the number of connections by rate class.

   b. Please provide the actual number of customer connections by rate class for the budget year.

   c. For the D4 and the D5 rate classes, please explain how Gaz Métro determines whether a customer connection is included in this allocator.

9. Reference Exhibits B-0024 and B-0032, value of services (connections) allocator FS21:

   a. In "live" MS Excel electronic format with formulae intact, please provide all supporting workpapers for the development of this allocator.

   b. Please provide the number of meters by type for each rate class.

   c. In "live" MS Excel electronic format with formulae intact, for each customer in the D4 and D5 classes (disguised as necessary), please specify the number of meters by type.

   d. Please explain how the "N_{BA}" connection count is determined, and provide the values for each rate class.

   e. Please provide the unit cost of connection by type of meter by rate class (Coût B_{Ai}), and explain how this cost item was developed (with supporting workpapers).

   f. Please provide the cost of a meter installation by type of meter by rate class (Coût P_{Ai}), and explain how this unit cost was developed (including supporting workpapers).

   g. Is Coût B_{Ai} a cost per connection by rate class by meter type, or a total connection cost by rate class by meter type? Please explain your response.

   h. Is Coût P_{Ai} a meter installation cost per connection by rate class by meter type, or a total meter installation cost by rate class by meter type? Please explain your response.

   i. Please confirm that Gaz Métro records meter installation costs in its services (branchements) plant account. If you cannot confirm, please explain why meter installation costs are included in this allocator.

10. Reference Exhibits B-0024 and B-0032, meters cost allocator FS22:

    a. In “live” MS Excel electronic format with formulae intact, please provide all supporting workpapers for the development of this allocator.

    b. Please provide the number of meters by type for each rate class.

    c. Please provide the average unit cost for meter acquisition for each of the last three years.

    d. Please provide the average unit cost for meter recycling for the last three years.

    e. Please show how recycling costs and acquisition costs are averaged for developing the average unit cost used in this allocator.

    f. Please provide the estimated lifespan for each type of meter, and the basis therefor.

11. Reference Exhibits B-0024 and B-0032, sales force allocator FS27:

    a. In “live” MS Excel electronic format with formulae intact, please provide all supporting workpapers for the development of this allocator.

    b. Please provide budged dollar expenses for the three rate class groups referenced in Exhibit B-0024.

    c. Please detail the specific expenses assigned to the D4 and D5 rate class groups, and the magnitude of each. Please detail the nature of sales activity related to D4 and D5 customers.

    d. Please detail the magnitude and specific nature of all of the general sales expenses allocated using factor FB09CL.

    e. Please provide the rationale for using FB09CL as the allocation factor for general sales expenses.

12. Reference Exhibits B-0024 and B-0032, advertising cost allocator FS28:

    a. In “live” MS Excel electronic format with formulae intact, please provide all supporting workpapers for the development of this allocator.

    b. Please provide budged dollar expenses for the three rate class groups referenced in Exhibit B-0024.

    c. Please detail the specific types of advertising expenses assigned directly to the D4 and D5 rate class groups, and the magnitude of each.

    d. Please detail the magnitude and specific nature of all general advertising expenses allocated using factor FB09CL.

e. Please provide the rationale for using FB09CL as the allocation factor for general advertising expenses.

13. Reference Exhibits B-0024 and B-0032, intervenor expenses allocator FS31:

a. In "live" MS Excel electronic format with formulae intact, please provide all supporting workpapers for the development of this allocator.

b. Please identify the costs associated with each of the intervenor categories for the budget year, and show how those costs are allocated.

c. Please identify the specific costs associated with the public interest, and show how those costs are allocated.

d. Please provide the basis for the proposed allocation factor for public interest costs.

14. Reference Exhibits B-0024 and B-0032, Exhibit B-0023 Section 5.4.1, capacity attributed (CA) allocator:

a. In "live" MS Excel electronic format with formulae intact, please provide all supporting workpapers for the development of this allocator. Please include the underlying data and the statistical analyses prepared including and excluding windspeed.

b. Please detail how design windspeed conditions were determined.

c. Please specify the historical period used for the statistical calculation of maximum daily demand, and the basis therefor.

d. Please indicate whether non-winter months are included in the statistical analysis, and the reason for your choice.

e. Please indicate whether the statistical estimation considered functional forms other than linear. If so, please explain why the alternatives were rejected.

f. Does Gaz Métro validate its statistically estimated peak daily demands with actual daily system sendout? If so, please provide comparisons of the statistically estimated daily peak demands with actual daily sendout for peak demand days for last winter.

g. Does Gaz Métro use the statistically estimated maximum day demands in its distribution system planning and its gas supply planning functions? If not, please identify how maximum day and/or maximum hourly demands are determined for those purposes.

h. Are distribution system planning and gas supply design conditions based on maximum daily demands or maximum hourly demands? Please explain.

i. Are customers on a daily reading cycle (Rates D4 and D5) metered on an hourly basis or a daily basis? Please explain your response as necessary.

j. To the extent not provided elsewhere, for each D4 and D5 customer (disguised as necessary), in MS Excel electronic format, please provide contract hourly demand and annual throughput for the 2013-2014 budget test year. Please include a rate class identifier.

k. To the extent that Rate D4 and D5 customers are metered on an hourly basis, in MS Excel electronic format, please provide the actual maximum hourly consumption and the maximum daily consumption for each customer (disguised as necessary) for each of the past three years. Please include a rate class identifier for each customer.

l. Please specify the penalties imposed on Rate D4 and D5 customers for overrunning maximum hourly contract demands, and explain fully how those penalties are calculated.

15. Reference Exhibits B-0024 and B-0032, capacity attributed and used (CAU) allocator:

a. In "live" MS Excel electronic format with formulae intact, please provide all supporting workpapers for the development of this allocator.

b. Please define "CU_{rc}" and show how it is calculated. Please identify any differences between CU_{rc} and the underlying values used for FB01D, and explain the reasons for the differences.

c. Please explain generally why the D410 class represents 9.70 percent of throughput (FB01D), 9.9 percent of maximum daily demand (CA), and 20.6 percent of CAU demand.

d. Please reconcile the values reported in Exhibit B-0032 for the CAU allocator with those shown in the Simulator (Exhibit B-0036), in the "DQM/DHM IZ" section of the "Tables" worksheet.

e. Please reconcile the values reported in Exhibit B-0032 for the CAU allocator with those shown in Exhibit B-0023 Table 17.

16. Reference Exhibits B-0024 and B-0032, CONDPRIND and CONDPRIN allocators:

a. In "live" MS Excel electronic format with formulae intact, please provide all supporting workpapers for the development of these proposed allocation factors.

i. As part of your response, please show specifically how the values provided in Exhibits B-0033 and B-0034 are used to derive the proposed mains classification factor and the CONDPRIND and CONDPRIN allocation factors.

b. In deriving the CONDPRIN allocator, are the % Customer and % Demand factors adjusted such that the sum of the % Customer, % Demand and % Transmission is unity? Please explain your response.

17. Reference Exhibit B-0031, CONDPRIN allocator:

a. In "live" MS Excel electronic format with formulae intact, please provide all supporting workpapers for the development of the current CONDPRIN allocation factors.

i. As part of your response, please show specifically how the values provided in Exhibits B-0033 and B-0034 are used to derive the proposed CONDPRIN allocation factor. Please include all data relied upon, and provide supporting zero-intercept statistical analyses for each region.

18. Reference Exhibits B-0024 and B-0032, EXPLOITD allocator:

a. Please provide the rationale for applying the EXPLOITD factor to non-tax working capital costs.

b. Please provide a copy of the Company's most recent lead lag study.

c. Please provide the bill payment lag by rate class for each of the past three years.

19. Reference Exhibits B-0024 and B-0032, BIOGAZ allocator:

a. Please describe the nature of the facilities associated with providing biogas to the D408 customer(s).

b. Are the throughput and maximum day demand allocators for the D408 class adjusted to exclude biogas supplies? Please explain your response.

20. Reference Exhibits B-0024 and B-0032, PGEÉ and PGEÉ-FR allocators:

a. In "live" MS Excel electronic format with formulae intact, please provide all supporting workpapers for the development of these allocators.

b. Please provide budgeted financial assistance (incentives) by PGEÉ program by rate class. Please include a brief description of each PGEÉ program.

c. Please provide operating budgets for development, marketing, monitoring and evaluation, by PGEÉ program for each of the three rate class groups.

d. Please provide supporting calculations for allocation of operating budgets within the three rate class groups.

e. Regarding other operating budgets, please explain how weighting factors were developed, and provide all supporting calculations.

f. Please explain why the PGEÉ-FR allocator is not derived as the forecast PGEÉ costs incurred by rate class less the actual PGEÉ costs incurred by rate class.

21. Reference Exhibits B-0024 and B-0032, PRC, PRCA and PRCVN allocators:

a. Please summarize the purpose and nature of Gaz Métro's consumption rebate programs, or provide reference to explanatory materials.

b. Please explain the differences between the PRC, PRCA and PRCVN allocators.

c. Please explain why the rate base item "Subvention - P.R.C. - P.R.R.C. 10 ans" is identified as being allocated with the PRCVN allocator but appears to be allocated with the PRCA allocator in Exhibit B-0032.

22. Reference Exhibits B-0024 and B-0032, AEÉ allocator:

a. Please provide supporting workpapers for the development of this allocator, including a listing of each program and class allocators for each.

b. Please explain in more detail the nature of "the allocation keys defined for each program."

23. Reference Exhibits B-0030, pages 11 to 12, B-0032, allocation of taxes and duties:

a. Please identify the specific plant to which the $13.191 million in network taxes (taxe sur le réseau) apply. Are the taxes limited to mains, or are service lines, meters, and any other plant also subject to the tax?

b. Please identify the specific plant to which the $3.033 million in transmission network taxes apply.

c. Please explain why the ratio of transmission taxes to distribution taxes appears to be much higher than the ratio of transmission plant to distribution plant.

d. Please explain the specific nature of fees included in the $5.242 million in "Redevance à la régie bâtiment/énergie" line item, and explain why these costs are allocated on the basis of throughput.

24. Reference Exhibit B-0033:

a. Please provide an updated version of this exhibit which reflects plant costs incurred through 2014 (as available).

b. Please state the difference between mains identified as “CP-Plast.direct” and “CP-Plast.ins.,” and indicate how these plant types were categorized in the Company’s zero-intercept and minimum system analyses.

c. Where new plastic pipe has been inserted in existing steel pipe, was the steel pipe included or excluded in developing the database reported in Exhibit B-0033? Please explain your response.

d. In MS Excel electronic format, please provide a version of this exhibit with costs segregated by operating pressure, to the extent available. At a minimum, please segregate each item in the dataset into the operating pressure categories reported in Exhibit B-0034 (if available). Please include plant data through 2014.

e. In MS Excel electronic format, please provide a version of this exhibit with gross plant, accumulated depreciation, and net plant values. Please include plant data through 2014.

25. In MS Excel electronic format, for each rate class as defined in the cost allocation study, please provide the number of customers (FB08), the number of connections (FB11), the maximum day demand (CA) and the annual throughput (FB01D) segregated by the operating pressure at which the customer takes service.

26. For each D4 and each D5 customer (disguised as necessary), in MS Excel electronic format, please provide:

a. Maximum day demand;

b. Gaz Métro transmission system footage (in meters) by size of main and type of main (steel/plastic) serving the customer (including joint use main);

c. Supply (alimentation) system footage operated at pressures from 2400 to 4400 kPa, by size and type of main serving the (including joint use main);

d. Supply (alimentation) system footage operated at pressures from 1000 kPA up to 2400 kPA, by size and type of main serving the customer (including joint use mains);

e. Distribution system footage operated at pressures below 1000 kPA.

Please include a rate class identifier with each customer.

27. Reference B-0023, section 5.2.2:

a. Was the Z factor calculated separately for plastic and steel mains, and separately by pipe diameter? Please explain any negative response.

28. Reference B-0023, Graph 1:

    a. Please provide the supporting data for this graph, and any supporting workpapers. Please identify the specific assumptions regarding the length of the mains for which data are reported in this figure.

29. Reference B-0023, Appendix 1, cost deflators for construction costs. The Company proposes to use the Handy-Whitman Index of Gas Utility Construction Costs ("HW Index") in place of its current methodology.

    a. In MS Excel electronic format, please provide annual values for all cost deflators evaluated by the Company, including the current factor (please specify), the HW Index, and any other Canadian and/or US dollar based factor considered.

    b. Please provide all analysis prepared by the Company or Black & Veatch in support of the recommendation to use the US dollar-based HW Index over all other alternatives evaluated.

30. Reference B-0023, Table 3:

    a. Please explain what each of the four categories of 60.3 mm diameter plastic mains represents in this table.

    b. Please explain what causes the wide variation in mains cost per meter for the four categories shown.

31. Reference B-0023, Table 5:

    a. Regarding the steel pipe plant presented in the table, please identify (or estimate) the percentage of the plant (in length) that would be replaced by plastic pipe if it were installed today, for each diameter shown.

    b. For each category of mains shown, please provide the gross book, accumulated depreciation and net book values, unadjusted for cost inflation.

    c. In MS Excel electronic format, please reconcile the values shown in this table with those reported in Exhibit B-0033. Do the differences result from the data "cleaning" process, differences between accounting and engineering data sets, or both?

32. Reference Exhibit B-0033:

    a. Is it correct that 46 percent of the footage (in meters) of steel mains in this exhibit were installed in a single year, namely 1979? Please explain any negative response.

33. Reference Exhibit B-0034:

    a. Please identify the various operating pressure levels at which Gaz Métro operates its distribution system, in the "<1000" kPa level shown in this exhibit.

    b. For the budget cost allocation year, please provide the number of customers in each rate class and the associated CA maximum day demand who take service at each of the operating pressures shown in your response to part(a), as well as at the other higher operating pressure levels reported in the referenced exhibit.

34. Reference Exhibit B-0023, Section 5.3.5, allocation by connection:

    a. Would a single building with multiple residential customers and multiple meters, with total building load in excess of 36,500 cubic meters per year, be assigned demand-related mains costs under the Company's proposed method? Please explain.

35. Reference Exhibit B-0023, pages 52 and 53:

    a. Please provide a copy of Ms. Chown's testimony cited in footnote 50.

    b. Please provide a copy of Mr. Vander Veen's testimony cited in footnote 51.

36. Reference Exhibit B-0023, Table 21:

    a. In MS Excel electronic format, please provide supporting data for the calculations shown in this exhibit, including statistical results. Please segregate mains cost data by diameter and between plastic and steel mains.

37. Reference Exhibit B-0023, Table 23:

    a. In MS Excel electronic format, please provide supporting calculations for the values shown in the table.

    b. For distribution system and supply planning purposes, does the Company rely on regional or system-wide maximum daily demands? Please explain.

38. Reference Exhibit B-0023, Section 6:

    a. Please identify interruptions related to transmission system constraints by date, duration and demand interrupted in each of the past three years.

    b. Please estimate the incremental transmission cost that Gaz Métro would incur if interruptible customers immediately converted to firm service. Please include supporting calculations.

39. Reference Exhibit B-0023, Graph 3 (Section 7.5):

    a. Please reconcile the allocation of regulatory, accounting and public affairs costs shown in this figure with the CA-Client allocation factor shown in Exhibit B-0032.

40. Reference Exhibit B-0023, Section 8:

    a. Does Gaz Métro track unaccounted for gas at any level other than the entire system, such as between transmission, supply and distribution systems? If so, please provide the details.

    b. Please provide meter accuracy levels by type of meter (as meter types are defined for developing allocation factor FS22).

    c. To the extent that Gaz Métro has outdoor meters, are the recordings corrected for temperature? Please explain.

    d. Please provide Gaz Métro's most recent detailed analysis of the causes for its unaccounted for gas.

    e. Please provide a 5-year history of Gaz Métro's unaccounted-for gas rate.

    f. Please provide the evidence available to Gaz Métro that the unaccounted for gas rate for a large industrial customer taking service at transmission or supply pressure is the same as that for a small residential or commercial customer.

41. Reference Exhibit B-0023, section 8.4.3:

    a. Please explain briefly how over-earnings and revenue shortfalls are derived. To what extent, if any, are these amounts related to weather variances?

42. Reference Exhibit B-0023, Section 8.10:

    a. Please explain fully why changing the customer segmentation in the second part of this application has caused the Company to modify its thinking with respect to the allocation of SAP2B project costs from that presented in the discussion paper.

    b. Please show the quantitative impact of the alternative allocation methods for SAP2B costs evaluated by Gaz Métro and its consultants on budget costs for 2013-2014..

43. Reference Exhibit B-0005, Table 1:

    a. Please indicate whether the reported costs are based on inflation-adjusted or nominal dollars.

b. Please indicate whether the values in the table are based on steel pipes, plastic pipes, or a combination.

c. Please provide supporting calculations for the carrying capacity of 1 km of pipe at 400 kPa.

44. Reference Exhibit B-0005, pages 13 to 15, Models 1 to 5:

a. In MS Excel or other electronic format, please provide the data set used for each model and the statistical results for each of the formulations, including (but not necessarily limited to) R-squared, adjusted R-squared, estimated coefficient standard errors and T-statistics, and regression F-statistics.

45. Reference Exhibit B-0023, Appendix 4, allocation of costs related to customers directly attached to the transmission system:

a. Please identify the number of customers and maximum day demand in each rate class who are attached directly to transmission mains.

b. Please explain where the taps and laterals associated with serving those customers are recorded and allocated in the proposed cost allocation methodology.

c. Please provide the specific gross and net plant costs associated with the taps and laterals serving customers attached to the transmission system, by rate class.

d. In Dr. Overcast's response as reported in this appendix, he indicates that, "It may be worthwhile to test my intuition by costing the transmission main at the current size, meter and service that would be the direct cost assuming the customer is the only customer on the line (the original conditions) and calculating the revenue requirement per GJ of contract demand and then comparing that to the allocated cost including distribution mains per GJ of contract demand." To the extent that Gaz Métro has undertaken this analysis, please provide the analysis in MS Excel electronic format with all supporting workpapers.

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