

Multeese Consulting Incorporated

**IN THE MATTER OF SECTIONS 10, 13(1) AND 20 OF THE ELECTRIC
POWER ACT (R.S.P.E.I. 1988, CAP. E-4)**

And

**IN THE MATTER OF AN APPLICATION BY MARITIME ELECTRIC
COMPANY, LIMITED FOR AN ORDER OF THE COMMISSION APPROVING
RATES, TOLLS AND CHARGES FOR ELECTRIC SERVICE FOR THE YEARS
MARCH 1, 2019 TO FEBRUARY 29, 2020 AND MARCH 1, 2020 TO FEBRUARY
28, 2021 AND MARCH 1, 2021 TO FEBRUARY 28, 2022 AND FOR CERTAIN
APPROVALS INCIDENTAL TO SUCH AN ORDER**

DIRECT EVIDENCE OF MEL WHALEN, P.ENG.

May 23, 2019

1 **MR. WHALEN, WOULD YOU PLEASE INTRODUCE YOURSELF?**

2

3 My name is Melvin E. Whalen. I am President of Multeese Consulting Incorporated. I am
4 a Professional Engineer, registered in the Province of Nova Scotia. I graduated from
5 Nova Scotia Technical College in 1970 with a Bachelor of Engineering (Electrical), and
6 from University New Brunswick in 1972 with a Master of Engineering in power systems.

7

8 Prior to establishing Multeese Consulting, I was employed by Nova Scotia Power, the
9 National Energy Board, and Bowater Power Company. Broadly speaking, my
10 responsibilities for each of these employers were of a planning nature, focused on topics
11 such as load research and forecasting, integrated resource planning, economic and
12 financial analysis, operational issues, cost of service studies and rate design. During the
13 last ten years of my employment with Nova Scotia Power, I was NSPI's principal witness
14 on cost of service and rate design issues.

15

16 I have presented testimony on behalf of Board counsel to the Nova Scotia Utility and
17 Review Board (NSUARB) in General Rate Applications by Halifax Regional Water
18 Commission, Heritage Gas and EfficiencyOne (formerly Efficiency Nova Scotia). I have
19 also provided consulting services to NSUARB Board counsel in matters related to Nova
20 Scotia Power in the areas of Integrated Resource Planning (IRP), Demand Side
21 Management (DSM), Fuel Adjustment Mechanism (FAM), General Rate Applications,
22 Annually Adjusted Rates, the Annual Capital Expenditure Plan and the development of
23 new tariffs (such as those required when the wholesale and retail markets were opened to
24 third party suppliers). Additionally, I have presented testimony before the New
25 Brunswick Energy and Utility Board (NBEUB) related to New Brunswick Power's cost
26 of service, and assisted NBEUB counsel with various aspects of NB Power's 2016
27 General Rate Application.

28

29 **WHAT IS YOUR ROLE IN THIS PROCEEDING?**

30

1 I was engaged by Commission counsel to review the cost of service and rate design
2 aspects of the Application from Maritime Electric Company, Limited (MECL). In
3 particular, my review focused on the following:
4

- 5 a) The Point Lepreau Cost Allocation Classification Study as filed by MECL on
6 April 27, 2017 (Exhibit M-2).
- 7 b) The 2017 Cost Allocation Study prepared for MECL by Chymko Consulting
8 Limited dated June 26, 2018 and filed by MECL as Appendix 14 of its November
9 28, 2018 Application (Exhibit M-5).
- 10 c) MECL's proposed changes to certain tariffs as discussed in Sections 13.4 of its
11 November 28, 2018 Application and the impact of those changes on customers, as
12 discussed in Section 15.0 of the Application (Exhibit M-1).

13
14 **WHAT ARE YOUR CONCLUSIONS?**

15
16 My conclusions are as follows:

- 17 a) MECL's proposal to classify 25 percent of the fixed costs of Lepreau as Demand
18 is reasonable and should be approved.
- 19 b) I support MECL's proposal to classify a portion of the fixed costs of wind
20 generation as Demand, with the portion to be classified as Demand equal to the
21 portion of wind capacity that is counted as firm capacity for system planning
22 purposes. Currently, this is 23 percent.
- 23 c) MECL's proposal to classify all fuel costs at the Charlottetown Generating Station
24 as Demand and to classify all CT fuel costs as Energy reflects actual and planned
25 operation of these units and should be approved.
- 26 d) I accept the results of MECL's Cost Allocation Study (CAS) as representing a
27 reasonably accurate picture of how the 2017 revenues provided by individual
28 classes compares to the cost of providing service to those classes in 2017.
- 29 e) MECL's average cumulative rate increase over the years 2019 – 2021 is 4.99
30 percent before adjustments for other amounts such as ECAM and RORA. With
31 these amounts included, the average cumulative increase drops to 3.3 percent.

- 1 f) MECL’s cumulative rate increases by class vary from 4.8 percent (Residential) to
2 6.4 percent (Large Industrial) before adjustments for other amounts such as
3 ECAM and RORA. With these amounts included, the cumulative rate increases
4 by class vary from 2.9 percent (Small Industrial) to 4.6 percent (Street Lights).
- 5 g) Because the R/C ratio for the General Service class is significantly above the
6 upper limit of MECL’s objective range of 0.9 – 1.1, I recommend that the rate
7 increase in this class be reduced to fifty percent of MECL’s proposed average
8 increase.
- 9 h) I recommend that the second block energy price in the Residential class be
10 increased in three steps to be equal to the first block energy price by March 1,
11 2021. The increased revenue from this adjustment offsets the revenue foregone by
12 reducing the General Service class increase by fifty percent.
- 13 i) I support MECL’s proposal to adjust the service charge for rural residential
14 customers to be equal to the service charge for urban residential customers.
- 15 j) The proposed changes to the Large Industrial tariff provide clarity with respect to
16 charges which may apply if service is provided at a delivery point other than the
17 delivery point which is the basis of the tariff design. I have no issue with these
18 clarifications.
- 19 k) I support a short to medium term objective of moving all class R/C ratios within
20 the 0.9 – 1.1 range, and a longer term objective of moving them within 0.95 –
21 1.05.
- 22 l) I recommend that MECL’s Cost Allocation Study (CAS) change from an
23 historical year basis to a future year(s) basis to provide R/C ratios for the year(s)
24 for which rate changes are being proposed.

25
26 **PLEASE DISCUSS THE POINT LEPREAU CLASSIFICATION STUDY.**

27
28 This study was ordered by the Commission as part of its Order UE16-04, dated February
29 29, 2016. It was to be completed by April 30, 2017¹. As noted by MECL in its study

¹ Order UE16-04, paragraph 12

1 submission, the Company chose to expand the scope of the report to include two
2 additional, but related, items²:

- 3 - A review of the appropriateness of classifying generation fuel costs at the
4 Company's oil-fired plants as fixed costs, and hence, Demand related; and
- 5 - Whether a portion of wind power purchase costs, currently classified as 100
6 percent Energy related, should be classified as Demand related.

7

8 Based on this study, MECL recommends that:

- 9 - 25 percent of the fixed costs of Lepreau be classified as Demand with the
10 balance classified as Energy.
- 11 - All fuel cost associated with combustion turbines be classified as Energy and
12 all fuel costs associated with the Charlottetown Thermal Generating Station
13 (CTGS) be classified as Demand.
- 14 - Wind power purchase costs be classified as Demand in the same proportion
15 that wind power nameplate capacity is counted as capacity for generation
16 capacity planning purposes. Currently this proportion is 23 percent.

17

18 As applied to the 2014 Cost Allocation Study (CAS), the combined effect of these
19 recommendations is a shift of \$10.8 million from Demand to Energy.

20

21 **DO YOUR SUPPORT MECL'S RECOMMENDATION WITH RESPECT TO**
22 **THE CLASSIFICATION OF LEPREAU'S FIXED COSTS?**

23

24 Yes, I do.

25

26 As is clear from the Company's Application, virtually all of its energy supply is
27 purchased from New Brunswick under various contracts which permit their direct
28 classification³, or from on-island wind generation, which is proposed to be classified

² Exhibit M-2, page 9

³ For example, MECL's Firm Energy Purchase costs are separated into an energy portion (Account 7050) and a capacity portion (Account 7002), whereas Secure Energy Purchases (Account 7046) and Assured

1 separately. This suggests that the classification of Lepreau fixed costs is most
2 appropriately considered on the basis of a stand-alone unit, rather than on a system wide
3 basis.

4
5 In its consideration of the classification of Lepreau, the Company considers nine options
6 for classification, including the Fixed and Variable method which the Company used in
7 its 2014 CAS. This method assigns 100% of the fixed costs of Lepreau to demand and
8 does not recognize that the higher capital (fixed) costs of base load plants such as
9 Lepreau are justified on an energy basis, and should therefore be classified, at least in
10 part, as energy. It was for this reason that the Commission ordered the Lepreau
11 classification to be reviewed.

12
13 Of the eight other options considered, three are applicable to a fleet of generation⁴ and are
14 inappropriate for a single unit such as Lepreau. Of the five remaining options, three are
15 variants of the Peaker Credit method, which seeks to reflect system planning
16 considerations in the classification decision, one (the Base-Intermediate-Peak method) is
17 based on the portion of the load curve served by the unit, and one (the Plant Factor
18 method) classifies on the basis of the portion of the load curve that is above the minimum
19 load.

20
21 The Base-Intermediate Peak method assigns 100 percent of Lepreau's fixed costs to
22 energy, and in that sense is the polar opposite of the current Fixed-Variable method
23 which classifies all of those costs as demand. The Plant Factor method, which does not
24 consider the costs of different types of generation and is not widely used, assigns 43
25 percent of the fixed cost of Lepreau to demand.

26
27 The Peaker Credit method classifies between 13 percent and 25 percent of the fixed costs
28 of Lepreau to demand, depending on whether the cost of the equivalent peaker is based

Energy Purchases (Account 7000) have no capacity related purchase costs, since the capacity associated with these purchases is provided by on-island generation.

⁴ These methods are the System Load Factor method, the Average and Excess method and the Peak and Average method.

1 on NB Power combustion turbine costs, combustion turbine proxy costs, or composite
2 peaking unit costs (where composite peaking units include combustion turbines as well as
3 other units that are used for load following).

4
5 Based on its review, MECL proposes 25 percent as an appropriate portion of the Lepreau
6 fixed costs to classify as demand. This proposal is in consideration of the results of
7 applying various classification methods, but is not tied to any particular method. Given
8 the uniqueness of the MECL supply and given that no classification method is without
9 drawbacks, I support MECL's recommendation.

10
11 **DO YOUR SUPPORT MECL'S RECOMMENDATION WITH RESPECT TO**
12 **THE CLASSIFICATION OF WIND?**

13
14 Yes, I do.

15
16 Wind is a non-dispatchable source of generation; i.e. the output of a wind generator
17 cannot be controlled in the same way that the output of a thermal unit can be controlled.
18 For this reason, wind generation has often been thought of primarily a source of energy,
19 rather than capacity, and in its 2014 CAS, MECL classified 100 percent of wind fixed
20 costs as Energy. However, there are times when wind generation is available to meet
21 system peak loads, and on that basis, classifying a portion of the fixed costs of wind as
22 Demand is appropriate. Based on its experience with wind, MECL has determined from
23 system planning reliability calculations⁵ that 23% of the nameplate capacity of a wind
24 generator can be counted as firm capacity for system planning purposes, and on this
25 basis, the Company proposes to classify 23% of the fixed costs of wind as demand. I
26 concur.

27
28 **DO YOUR SUPPORT MECL'S RECOMMENDATION WITH RESPECT TO**
29 **THE CLASSIFICATION OF COMBUSTION TURBINE AND**
30 **CHARLOTTETOWN GENERATING STATION FUEL COSTS?**

⁵ See MECL's response to Multeese IR-13 in Exhibit M-9.

1 I do. MECL’s analysis of the fuel used in its combustion turbines and at the
2 Charlottetown GS in 2014 is presented in Table 9 of the Point Lepreau Classification
3 Study. It shows that 35 percent of the Charlottetown GS fuel was used for system energy
4 supply, with the balance used for testing equipment or training operating personnel. For
5 CTs, the fuel used was 88 percent (Bordon) and 98 percent (Charlottetown) for energy
6 supply. Based on these results, the Company proposes to classify 100 percent of the costs
7 of fuel in the Charlottetown GS as demand, and to classify 100 percent of the fuel costs
8 of the CTs as energy. I concur with MECL’s proposal.

9
10 **WHAT GENERAL COMMENTS DO YOU HAVE WITH RESPECT TO THE**
11 **COST ALLOCATION STUDY AS PREPARED BY CHYMKO?**

12
13 The Cost Allocation Study (CAS) prepared by Chymko follows the normal CAS
14 procedure of functionalizing costs according to the function for which the cost is incurred
15 (Production, Transmission, Distribution, etc.), classifying the functionalized costs as
16 Demand, Energy or Customer, and then allocating the classified costs to rate classes on
17 the basis of class demands, class energy, or class customers. The CAS prepared for this
18 proceeding is the second such CAS prepared by Chymko. The initial CAS was prepared
19 in 2015 on the basis of 2014 costs, and was reviewed by the Commission as part of
20 Docket UE20942. That CAS was the first CAS done since at least 2010. It was required
21 because the Energy Accord was expiring and the Commission was required to again
22 approve MECL’s rates, effective March 1, 2016⁶. Order UE16-04, which provides the
23 Commission decision in Docket UE20942, did not explicitly approve the CAS
24 methodology. It did, however, direct MECL to “prepare and file with the Commission a
25 Point Lepreau cost allocation classification study” on or before April 30, 2017⁷.

26
27 The CAS prepared by Chymko in this proceeding was also ordered by the Commission as
28 part of its Order UE16-04, dated February 29, 2016, to be completed by June 30, 2018⁸. It
29 is essentially an update of a prior CAS it prepared based on 2014 costs. It is based on

⁶ Order UE16-04R, page 3, paragraph 10

⁷ Order UE16-04, paragraph 12

⁸ Order UE16-04, paragraph 13

1 2017 costs and incorporates the changes recommended by MECL in its Point Lepreau
2 Classification Study.

3

4 **PLEASE DISCUSS THE SPECIFICS OF THE CAS PROVIDED IN THIS**
5 **PROCEEDING.**

6

7 As noted above, the CAS includes the three major steps of Functionalization,
8 Classification and Allocation. I shall discuss each of these separately.

9

10 For the purposes of the CAS, MECL's costs are **Functionalized** to sixteen different
11 functions, as identified in Schedule 6.3 of the CAS. These functions are:

- 12 a) Generation
- 13 b) Purchased Power
- 14 c) Transmission
- 15 d) Substations
- 16 e) Primary Lines
- 17 f) Transformers
- 18 g) Secondary Lines
- 19 h) Service Lines
- 20 i) Meter Assets
- 21 j) Meter Reading
- 22 k) Billing
- 23 l) Remittance & Collection
- 24 m) Uncollectibles & Damage Claims
- 25 n) Service Connections
- 26 o) Late Payments
- 27 p) Lighting

28

29 The functionalization of the revenue requirement is presented in Schedule 3.1 of the
30 CAS. The majority of the revenue requirement (63 percent) is directly assigned to one of
31 the sixteen functions. This is possible because some components of the revenue

1 requirement, such as purchases from wind generation, are associated with a single
 2 function. The remaining portion of the revenue requirement (37 percent) is assigned to
 3 functions on the basis of allocators. This is necessary because some components of the
 4 revenue requirement, such as amortization or interest expenses, are associated with two
 5 or more of the sixteen functions.

6

7 The allocators necessary to functionalize the portion of revenue requirement that is
 8 associated with two or more functions are summarized in Schedule 5.0. Derivation details
 9 of those allocators are provided in Schedules 5.1 and 5.2, which in turn derive from
 10 detailed reviews of Labour (Schedule 3.2), Vehicle (Schedule 3.3), Rate Base (Schedule
 11 3.4), Contributions Related Distribution (Schedule 3.5), Amortization (Schedule 3.6) and
 12 Gross Plant (Schedule 4.0).

13

14 Based on Schedule 3.1, MECL’s revenue requirement is functionalized 69.1 percent to
 15 Production (Generation and Purchased Power), 6.7 percent to Transmission (Net of
 16 OATT revenue), 21.7 percent to Distribution (from step-down transformers with high
 17 side transmission voltage to service lines), and 2.5 percent to Other (Metering, Billing,
 18 etc).

19

20 MECL’s functionalized revenue requirement (Schedule 3.1) is **Classified** in Schedule
 21 3.0, using the classification assumptions presented in Schedule 2.4. These are
 22 summarized in Table 1.

23

24 **Table 1: Classification Percentages by Function**

25

Function	Demand (%)	Energy (%)	Site (%)
Generation	68	32	
Purchased Power	13	87	
Transmission (Including Substations)	100		
Distribution Primary Lines	50		50
Distribution Transformers	60		40

Distribution Secondary Lines	50		50
All Other Functions			100

1

2 The classification percentages shown for Generation and Purchased Power are weighted
3 averages derived by classifying individual Generation and Purchased Power accounts (or
4 portions thereof) as Demand, as shown in Schedule 6.0. The changes proposed in the
5 Point Lepreau Classification Study are reflected at the individual account level in that
6 Schedule.

7

8 Applying the classification percentages from Table 1 to the functionalized revenue
9 requirement results in 31.6 percent of total revenue requirement classified as Demand,
10 54.6 percent classified as Energy, and 13.8 percent classified as site-related.

11

12 MECL's revenue requirement is **Allocated** to individual rate classes in Schedule 1.4,
13 using allocators from Schedule 2.1. These allocators are developed from the basic class
14 data (such as class energy sales, coincident and non-coincident demands, number of
15 customers, etc.) presented in Schedule 2.2. While some of this data (such as class energy
16 sales or number of customers in the class) is directly available from the Company's
17 billing and metering records, a significant portion of it (such as demand data in classes
18 without interval metering) is calculated based on previous load studies, or is modified by
19 applying weighting factors to reflect differences in costs of providing a similar service
20 (such as metering and billing) to the different rate classes⁹.

21

22 Once the revenue requirement has been assigned to each rate class, the portion assigned
23 to each class can be compared to the revenues that class provides to the Company through
24 the rates it pays. This comparison, commonly referred to as the Revenue to Cost Ratio
25 (R/C Ratio), provides an indication of whether the rates being charged to the class result
26 in the class paying its fair share of costs. Given the judgments that are a necessary part of
27 the CAS, and given the uncertainties associated with some of the data used to assign

⁹ A more detailed discussion of the development of Schedule 2.2 is provided in MECL's response to Multeese IR-22, Exhibit M-9.

1 costs, it is generally accepted that if all R/C ratios are within some band around 1.0 (such
2 as 0.9 – 1.1), then all classes are paying a fair share of costs.

3

4 The results of the MECL CAS for 2017 are shown in Table 2.

5

6 **Table 2: MECL CAS Results for 2017**

7

Rate Class	Revenue (\$'000)	Costs (\$'000)	R/C (%)
Residential	83,860	91,806	91.4
Residential (S)	4,309	4,512	95.5
Residential (Farm)	6,868	8,372	82.1
Total Residential	95,037	104,690	90.8
General Service	58,151	47,880	121.5
General Service (S)	1,766	1,565	112.9
Total General Service	59,917	49,445	121.2
Small Industrial	11,675	11,402	102.4
Large Industrial	13,205	14,115	93.6
Lights	2,330	2,559	91.1
Unmetered	407	391	104.3

8

9 **WHAT ARE YOUR COMMENTS ON THE RESULTS OF MECL'S CAS?**

10

11 The CAS follows standard cost allocation procedures, the application of which requires
12 some interpretation and judgment. I accept the results as representing a reasonably
13 accurate picture of how the revenues provided by individual classes compares to the cost
14 of providing service to those classes. I would note, however, that these results are based
15 on 2017.

16

17 The results in Table 2 indicate that all classes except the General Service class have R/C
18 ratios that are within the 0.9 – 1.1 range that MECL generally considers acceptable. This

1 suggests that on a go forward basis, rate increases in the General Service class should be
2 less than the rate increases in other classes.

3
4 **DO THE RESULTS OF THE CAS INDICATE THAT RATE DESIGN CHANGES**
5 **ARE NECESSARY?**

6
7 The results of the CAS as summarized by R/C ratios do not indicate that changes to rate
8 design¹⁰, per se, are necessary. However, an analysis of the costs classified and allocated
9 on the basis of demand, energy and customer, combined with other considerations such as
10 class metering technology, marginal costs, or price signals and their consistency with
11 corporate objectives, can provide additional insight. In the Residential class, for
12 example, customer consumption is metered and billed totally on an energy basis, so all
13 costs of serving those customers, other than the costs recovered through a fixed monthly
14 service charge, are recovered through energy charges. Currently, there are two energy
15 charges, the first of which applies to monthly consumption up to 2000 kWh, with the
16 second, lower charge applying to all other consumption. As MECL explains in its
17 evidence, this “declining block” rate structure is inconsistent with MECL’s marginal
18 energy cost, it is at odds with the corporate objective of encouraging energy efficiency,
19 and appears to provide larger users with service at a cost which is less than the cost to
20 serve them.

21
22 **WHAT TARIFF CHANGES IS MECL PROPOSING AS A RESULT OF ITS**
23 **UPDATED CAS?**

24
25 Based on the CAS results, the Company makes a number of recommendations, as
26 outlined in Section 13.4 of its Application. The recommendations relate to the
27 Residential, General Service, and Large Industrial classes. They “constitute the
28 Company’s undertaking of a rate design study as ordered by the Commission”¹¹.

29

¹⁰ Rate design addresses the rate structure, and is concerned with issues such as what charges should be included (service charge, demand charges, energy charges) and whether any charges should be tiered.

¹¹ Exhibit M-1, page 126

1 Within the Residential class, MECL is proposing two changes¹²:

- 2 a) Eliminate the differential in service charge between urban and rural year-round
3 residential customers, and reduce the rural customer service charge from \$26.92
4 per month to be equal to the \$24.57 per month urban customer charge.
- 5 b) Increase the second block in the residential rate from the current level of 2000
6 kWh per month to 5000 kWh per month beginning March 1, 2021, and then
7 eliminate the second block entirely, beginning March 1, 2022.

8
9 The CAS does not distinguish urban and rural residential customers, so the first change is
10 primarily a matter of policy, as confirmed in MECL’s response to Multeese IR-37(b),
11 supported by MECL’s belief that with changes in meter reading technology and increases
12 in customer density throughout PEI, the cost difference between urban and rural is “no
13 longer considered significant”¹³. This change lowers the monthly service charge for
14 42,000 rural customers by \$2.35 per month, lowers the total revenue from the residential
15 class by \$990,000, and lowers the R/C of the total residential class from 91% to 89%¹⁴.

16
17 The second change recognizes that the declining block rate structure is no longer
18 appropriate and provides a response to the Commission’s concerns with respect to the
19 second block as expressed in paragraphs 57- 60 of its Order UE16-04R. The increase of
20 the second block to 5000kWh per month would generate an additional \$1.25 million
21 (using 2017 data), thus offsetting (two years later) the revenue lost from the lowering of
22 the rural service charge, and increase the residential R/C ratio from 90.8 percent to 91.2
23 percent¹⁵.

24
25 With respect to the General Service class, MECL recognizes that its R/C ratio is above
26 the upper limit of its 0.9 – 1.1 objective for all rate class R/C ratios, but is not proposing
27 any adjustments to address this issue at this time because it is of the view that further load

¹² Exhibit M-1, page 127

¹³ Exhibit M-1, page 128

¹⁴ See Response to Multeese IR-36 in Exhibit M-9

¹⁵ Exhibit M-1, Schedule 13-12, page 139

1 and consumption data analysis is required¹⁶ before any changes are made. These studies
2 are in progress, focusing on the Residential and General Service classes, with special
3 consideration of whether farms should remain part of the Residential class or become part
4 of the General Service (or some other) class. Because of the potential effects of such
5 changes on R/C ratios, the Company proposes to defer any changes designed to address
6 the General Service R/C ratio until its next General Rate Application for rates effective
7 March 1, 2022, based on a CAS using 2020 financial results.

8
9 With respect to the Large Industrial class, no changes are required as a result of the CAS.
10 However, MECL proposes modifications to the Large Industrial Rate “to reflect a more
11 accurate and complete description of the charges that may be applied to the Large
12 Industrial customer based on the voltage level of service provided”¹⁷. As noted by the
13 company, the Large Industrial rate is based on a transmission voltage delivery point, but
14 there may be cases where the customer or the Company determines that delivery at
15 distribution voltages (either primary or secondary) is more appropriate. In such cases,
16 additional charges are proposed for the additional transformation that is required, and if
17 the customer metering is at these reduced voltages, readings are adjusted to account for
18 losses in transformation between the transmission voltage and the metering point.

19
20 **DO YOU SUPPORT MECL’S PROPOSED TARIFF CHANGES?**

21
22 I support the modifications to the Large Industrial tariff, as these are being made simply
23 to make the tariff more clear and complete. The other proposed changes, however, need
24 to be considered in the wider context of the changes in rates that are being proposed by
25 MECL to meet its revenue requirements over the next three years. These are discussed
26 below.

27
28 **WHAT TARIFF CHANGES IS MECL PROPOSING AS A RESULT OF**
29 **CHANGES TO ITS REVENUE REQUIREMENT?**

¹⁶ Exhibit M-1, page 141

¹⁷ Exhibit M-1, page 142

1 As noted on page 11 of the November 28 Application, the Company “is proposing a
 2 general rate adjustment that will result in an annual increase in electricity cost (before
 3 taxes) of 1.1 percent in each of the next three years for a typical customer in the
 4 Residential, General Service, Industrial and other rate classes”. This increase in
 5 electricity costs is the result of adjustments to the “basic rates” inherent in each Rate
 6 Code, plus adjustments for ECAM, Provincial Costs Recoverable, Provincial Energy
 7 Efficiency Program, Cable Contingency Fund, and RORA. It does not include HST or the
 8 Provincial Rebate. This is demonstrated for urban residential customers, with average
 9 monthly consumption of 650kwh, in Schedule 15-3 of Exhibit M-1, and summarized in
 10 Table 3¹⁸.

11

12 **Table 3 – Derivation of the 1.1 Percent Annual Increases for Urban Residential**
 13 **Customer Consuming 650 kWh per Month**

14

	2018	2019	2020	2021
Service Charge + Basic Energy Charge (\$)	1393.86	1416.48	1446.12	1464.06
Increase over Prior Year (%)		1.62	2.09	1.24
Adjustments (\$)	21.53	14.35	0.63	-1.00
Total Annual Bill, Excluding HST and Rebates (\$)	1415.40	1430.83	1446.75	1463.06
Increase over Prior Year (%)		1.09	1.11	1.13

15

16

17 A couple of observations are apparent from this Table 3 (and similar results in Schedules
 18 15-2 and 15-4):

19 a) They show rate increases for a specific customer within the class, but provide no
 20 information on how the total class revenue is proposed to change.

¹⁸ Similar results for a rural residential customer consuming 650 kWh per month are provided in Schedule 15-2, and similar results for a General Service customer with a demand of 50 kW and a monthly energy consumption of 10,000 kWh are provided in Schedule 15-4.

1 b) The rate increases are a function of modifications being made to both the basic
2 energy charges as well as to the other adjustments.

3

4 A more complete picture of how class revenues are proposed to change can be developed
5 from system level considerations.

6

7 **HOW CAN CLASS REVENUE CHANGES BE DETERMINED?**

8

9 The determination of an average rate increase across all rate classes begins with the
10 revenue requirements projected for the next three years. A portion of this will be provided
11 by Other Revenue (such as OATT revenue, late payment charges, etc.) and the balance
12 will be provided from Electric Revenue resulting from the application of tariff rates to
13 basic billing determinants. MECL provides its total revenue requirement in Schedule 14-
14 4 and its “Other Revenue” estimates in Schedule 14-5. These are summarized in Table 4.

15

16 **Table 4 – Revenue Requirement (\$ Millions)**

17

	2018	2019	2020	2021
Revenue Requirement	200.83	212.66	221.76	229.10
Other Revenue	11.14	12.16	12.32	12.45
Revenue Required from Rates	189.69	200.50	209.44	216.65

18

19 Even if the current rates were to remain unchanged, MECL will receive additional
20 revenue as billing determinants (such as kWh sales or number of customers) increase.

21 The change required in rates is the difference between the revenue that will be provided if
22 current rates continue to be applied, and the revenue that MECL requires to meet its
23 financial obligations. This can be determined from a comparison of Schedules 14-6
24 (which shows projected revenue at current rates) and 14-7 (which shows projected
25 revenue at proposed rates). The Total Gross Electric Revenues from these schedules are
26 as provided in Table 5.

27

1 **Table 5 – Gross Electric Revenues at Current and Proposed Basic Rates (\$ Millions)**

2

	2018	2019	2020	2021
Schedule 14-6 (Existing Basic Rates)	193.48	198.60	203.28	206.34
Schedule 14-7 (Proposed Basic Rates)	193.48	200.50	209.44	216.65
Cumulative Increase Required (%)		0.96	3.03	4.99

3

4 Two things should be noted from this table:

- 5 a) The Gross Electric Revenue provided in Schedule 14-7 (proposed rates) matches
6 MECL Revenue Required from Electric Rates in Table 4 above¹⁹.
- 7 b) The cumulative average rate increase of 4.99 percent is higher than MECL's
8 proposed increases which provide a 1.1 percent per year (3.3 percent cumulative
9 over three years) increase for representative class customers.

10

11 The reconciliation of MECL's 3.3 percent cumulative rate increases with the 4.99 percent
12 Gross Electric Revenue increase from Table 5 lies in MECL's accounting for (and
13 management of) other adjustments, such as ECAM and the RORA. The response to
14 Multese IR-69(b) provides the Energy Charge per kWh – Revenue Requirement (A) and
15 the Energy Charge per kWh – Other Amounts (B). In developing Schedules 14-6 and 14-
16 7, only the (A) charges were used. However, the sum of the charges (A) + (B) provides
17 the charges proposed in Schedule 15-1, and for which MECL seeks Commission
18 approval.

19

20 If Schedules 14-6 and 14-7 are recalculated to include the effects of the Other Amounts
21 (B), then Table 5 would be revised as shown in Table 6.

22

23

24

25

¹⁹ There is a mismatch in 2018 because current rates provided more than was required to meet revenue requirement, as shown in Schedule 14-6.

1 **Table 6 – Gross Electric Revenues at Schedule 15-1 Rates (\$ Millions)**

2

	2018	2019	2020	2021
Schedule 14-6 (Existing Basic Rates)	193.48	198.60	203.28	206.34
Other Amount (B) Adjustment ²⁰	3.24	3.24	3.24	3.24
Re-Calculated Schedule 14-6	196.73	201.84	206.53	209.58
Schedule 14-7 (Proposed Basic Rates)	193.48	200.50	209.44	216.64
Other Amount (B) Adjustment	3.24	2.55	0.54	-0.12
Re-Calculated Schedule 14-7	196.73	203.05	209.98	216.53
Cumulative Increase Required (%)		0.60	1.67	3.32

3

4 As Table 6 shows, the Other Amount adjustment in the current rates (\$3.24 million) is
 5 proposed to decrease over the next three years to become \$ - 0.12 million in 2021. It is
 6 this adjustment which allows a cumulative rate increase of 3.3 percent (rather than 4.99
 7 percent) across all classes to meet MECL’s revenue requirement.

8

9 An analysis similar to the above performed on a rate class level is instructive. The
 10 resulting annual and cumulative rate increases are derived in Appendix MCI-1 and shown
 11 in Tables 7 and 8.

12

13 **Table 7 – Class Rate Increases (Percent) Excluding “Other Amount” Adjustment**

14

	Residential	GS	Sm Ind.	Lg. Ind.	Street Lights	UM	System
2019	0.50	1.42	1.43	1.81	1.62	1.69	0.96
2020	1.93	2.10	2.07	2.89	2.18	2.51	2.05
2021	2.32	1.42	1.37	1.54	1.46	1.69	1.91
Cumulative	4.80	5.02	4.95	6.36	5.35	6.01	4.99

²⁰ The data provided in IR-68 is on a fiscal year basis. The adjustment shown here was calculated on a calendar year basis to be applicable to Schedules 14-6 and 14-7, which are both calculated on a calendar year basis.

1 **Table 8 - Class Rate Increases (Percent) Including “Other Amount” Adjustment**

2

	Residential	GS	Sm Ind.	Lg. Ind.	Street Lights	UM	System
2019	0.21	1.03	0.93	1.12	1.44	1.29	0.60
2020	1.05	1.12	0.88	1.12	1.80	1.55	1.07
2021	2.03	1.13	1.06	1.08	1.33	1.42	1.61
Cumulative	3.33	3.31	2.90	3.35	4.63	4.32	3.32

3

4 As indicated by Tables 7 and 8, the “Other Amounts” adjustments are applied to produce
 5 a cumulative 3.3 percent rate increase in the Residential, GS, and Large Industrial, with a
 6 lower cumulative increase in the Small Industrial class and higher cumulative increases in
 7 the Street Lighting and Unmetered classes. It also shows that the variation in annual
 8 percentage increases is much higher in the Residential class than in any other class. In the
 9 Residential class, the first year increase of 0.21 percent is reflective of the reduction in
 10 monthly Service Charge to rural customers, and the third year increase of 2.03 percent is
 11 reflective of the increase in the first block energy from 2000 kWh to 5000 kWh.

12

13 Table 9 sets these cumulative increases in the context of each class’s contribution to total
 14 revenue and each class’s R/C ratio.

15

16 **Table 9 - Class Revenues (\$ Millions) and R/C Ratios**

17

	Residential	GS	Sm Ind.	Lg. Ind.	Street Lights	UM	System
2017 Revenue	95.04	59.92	11.68	13.21	2.33	0.41	182.57
% of Total	52.05	32.82	6.39	7.21	1.28	0.22	100.0
R/C Ratio (%)	90.8	121.2	102.4	93.6	91.1	104.3	100.0
Cumulative Rate Increase (%)	3.33	3.31	2.90	3.35	4.63	4.32	3.32

1 In addition to the fact that the R/C for GS is outside MECL’s target range of 0.9 – 1.1 (as
2 noted earlier) two other things are apparent from Table 9:

3 a) There is no correlation between the cumulative rate increases proposed and the
4 class R/C ratios. For example, the system average cumulative 3.3 percent increase
5 is proposed for the Residential class with an R/C ratio of 90.8 percent, the Large
6 Industrial class with an R/C ratio of 93.6 percent and the GS class with an R/C
7 ratio of 121.2 percent.

8 b) The Residential and GS classes are much larger (in terms of revenue) than the
9 other classes. The GS class, for example, is larger than the Industrial classes,
10 Street Lights and Unmetered combined, and the Residential class is larger than all
11 other classes combined.

12
13 **WHAT CONCLUSIONS CAN BE DRAWN FROM TABLE 9?**

14
15 Table 9 indicates that in the absence of changes to rate design, and in the absence of
16 major changes to MECL’s cost composition or customer mix, over three years the R/C
17 ratios for Residential, GS and Large Industrial will likely remain largely unchanged,
18 while the R/C ratio for Small Industrial will drop slightly and the R/C ratios for Street
19 Lights and Unmetered are likely to increase. Table 9 also indicates that the recovery of
20 any revenue transfers from the GS class to lower its R/C ratio is much more limited in the
21 smaller classes than it is in the Residential class. If a ten percent reduction (approximately
22 \$6 million) in GS revenue, for example, to bring its R/C closer to the upper limit of 1.1,
23 were to be recovered totally from the Residential class, the effect in that class would be
24 an increase of 6.3 percent (\$6 million divided by \$95.04 million), and its R/C ratio would
25 increase to about 96.5 percent²¹. If that same ten percent reduction were to be recovered
26 from the Large Industrials, however, the effect in that class would be an increase of 45
27 percent and its R/C ratio would be well above the upper limit of 1.1.

28

²¹ Table 2 shows total revenue for the class to be \$95.04 million, total costs of \$104.69 million, and an R/C ratio of 90.8 percent. If the revenue is increased by \$6 million, the R/C ratio increases to 96.5 percent.

1 **WHAT GUIDELINES ARE APPROPRIATE TO DETERMINE HOW RATES**
2 **SHOULD BE ADJUSTED ACROSS AND WITHIN CLASSES?**

3

4 There are many factors which can come into play in the assignment of required revenue
5 increases across classes, and judgement is obviously required. However, I believe the
6 following to be reasonable guidelines²²:

7

8 a) Classes whose R/C ratio is above the upper limit of the range deemed appropriate
9 by the regulator should be assigned an increase that is less than the system
10 average increase, but not less than fifty percent of the system average.

11 b) Classes whose R/C ratio is below the lower limit of the range deemed appropriate
12 by the regulator should be assigned an increase that is more than the system
13 average increase, but not more than one hundred and fifty percent of the system
14 average.

15 c) Rate increases or decreases to all other classes should be between 50 percent and
16 150 percent of the system average rate increase.

17 d) Within classes, no customer should receive an increase of more than one hundred
18 and fifty percent of the class average, except in unusual circumstances.

19

20 It is within this context, that I consider MECL's proposals with respect to the Residential
21 and GS classes.

22

23 **PLEASE DISCUSS MECL'S PROPOSAL TO MAKE NO ADJUSTMENTS TO**
24 **REDUCE THE GENERAL SERVICE R/C RATIO.**

25

26 I do not support this proposal. In my view, the rate increase to the GS rate should be
27 reduced to fifty percent of the system average; i.e, the cumulative rate increase over three
28 years should be 1.66 percent, rather than 3.3 percent. If this is accomplished by reducing
29 the annual increases proposed by MECL by fifty percent, the revenue requirement in this
30 class would be reduced by approximately \$0.33 million in 2019, \$0.7 million in 2020,

²² Guidelines similar to these were used by the Nova Scotia Utility and Review Board in 2002.

1 and \$1.1 million in 2021²³. This does not reduce the R/C ratio to the upper limit of 1.1,
 2 but it does reduce it from 1.21 to about 1.19, all else being equal. The application of this
 3 fifty percent guideline will, in time, tend to reduce the GS R/C ratio to an acceptable
 4 level.

5
 6 To keep MECL whole from a revenue requirement perspective, the revenue reductions I
 7 propose to the GS class have to be recovered from some other class. I propose recovering
 8 this from the residential class, as discussed below.

9
 10 **PLEASE DISCUSS MECL’S PROPOSAL TO MAINTAIN THE FIRST BLOCK**
 11 **AT 2000 KWH UNTIL MARCH, 2021 AND MAINTAIN THE SECOND BLOCK**
 12 **PRICE TO BE APPROXIMATELY 21 PERCENT BELOW THE FIRST BLOCK**
 13 **PRICE UNTIL AT LEAST 2021?**

14
 15 I do not support this proposal. Rather, I propose increasing the second block pricing
 16 beginning now, to phase it out by March 1, 2021, so that as of that date, there would be
 17 no difference between the first and second block price, and the second block could be
 18 discarded.

19
 20 I propose adjusting the second block energy price to recover the revenue lost if the GS
 21 rate is adjusted as proposed above. This would increase the second block rate and provide
 22 additional revenue as shown in Table 10.

23
 24 **Table 10: Alternative Second Block Rate Proposal**
 25

Effective Date	Second Block Price As Proposed by MECL (\$)	Alternate Second Block Price (\$) ²⁴	Incremental Revenue from Alternate (\$M) ²⁵
----------------	---	---	--

²³ These numbers can be calculated as 50 percent of the annual differences in GS revenues as provided in Appendix MCI-1.

²⁴ Including “Other Amounts” energy charges as per IR-69(b)

²⁵ Incremental Revenue calculated on calendar year basis.

March, 2019	0.1155	0.1223	0.34
March, 2020	0.1168	0.1301	0.86
March, 2021	0.1184	0.1498	1.07

1

2 As Table 10 shows, the incremental revenues match the revenue reductions proposed for
3 the GS class in 2019 and 2021. For 2020, the incremental revenue exceeds the GS
4 revenue reduction by \$160,000²⁶.

5

6 **WHAT IS THE EFFECT OF THIS CHANGE ON CUSTOMERS IN THE**
7 **RESIDENTIAL CLASS?**

8

9 Because the proposed changes relate only to second block, they affect only customers
10 whose monthly consumption exceeds 2000 kWh. All other customers would be
11 unaffected by this change, and would experience only the increases proposed by MECL.

12

13 For customers with average monthly consumption above 2000 kWh, rate increases would
14 vary by consumption. Rate increases for a range of customer consumption are calculated
15 in Appendix MCI-3 and provided in Table 11.

16

17 **Table 11: Rate Increases (Percent) for Selected Residential Urban Customers if**
18 **Second Block Pricing is Phased-Out By March 1, 2021**

19

Consumption (kWh /mo.)	2500	3500	4500	7500	12000
2019 vs 2018	-0.23	1.56	2.65	4.30	5.30
2020 vs 2019	2.20	3.28	3.91	4.85	5.41
2021 vs 2020	3.81	6.82	8.57	11.11	12.59
2021 vs 2018	5.85	12.05	15.81	21.51	24.96

20

²⁶ Relative to the total system electric revenue, this is not significant. However, it could be offset by a slight reduction in first block energy charge in 2020, if necessary.

1 Table 12 shows the number of customers in each category.

2

3 **Table 12: Residential Customers in Selected Ranges of Monthly Consumption²⁷**

4

Consumption (kWh /mo.)	2500	3500	4500	7500	12000
Number of Customers	1594	345	165	231	84
% of Total Residential	2.38	0.51	0.25	0.34	0.13

5

6

7 **PLEASE DISCUSS THE RESULTS OF TABLES 11 AND 12 IN LIGHT OF YOUR**
8 **GUIDELINES FOR RATE ADJUSTMENT.**

9

10 As illustrated earlier, the average rate increase being proposed by MECL is 3.3 percent.
11 My guideline of no class experiencing a rate increase greater than 150 percent of this
12 limits the rate increase in the Residential class to 4.95 percent. If the GS rate increase is
13 reduced as I propose, and if the revenue foregone in the GS class is recovered in the
14 Residential class, the Residential class increase is 4.26 percent, so the first guideline is
15 not violated.

16

17 My fourth guideline is that no customer within the class should experience a rate increase
18 greater than 150 percent of the class increase, except in unusual circumstances. In this
19 case, the upper limit for customer increases is 150 percent of 4.26 percent, or 6.4 percent.
20 Table 11 shows that the increase for customers whose average monthly consumption
21 exceeds 3500 kWh per month is greater than this. Table 12 indicates that such customers
22 constitute 1.23 percent of the customers in class.

23

²⁷ From MECL’s response to Multeese IR-64

1 **ARE YOU OF THE VIEW THAT THERE ARE UNUSUAL CIRCUMSTANCES**
2 **WHICH WARRANT ACCEPTANCE OF THESE INCREASES?**

3
4 Yes, I am. There are several considerations:

- 5 a) The declining block rate structure in the Residential class has been under
6 discussion for several years, dating back to at least Order UE10-03²⁸, and in
7 paragraph 59 of its Order UE16-04R, the Commission was clear that “any
8 proposed continuation of the residential second block rate in future rate
9 applications will require compelling evidence of its equity to rate payers”.
- 10 b) In 2015, MECL’s proposed increasing the second block from 2000kWh per
11 month to 3000kWh effective March 1, 2016, to 3800kwh on March 1, 2017 and to
12 5000kWh on March 1, 2018²⁹; i.e. a partial phase-out of the second block over
13 three years. MECL now proposes to increase the first block to 5000 kWh on
14 March 1, 2021 and to eliminate the second block entirely on March 1, 2022. This
15 again defers dealing with the second block issue.
- 16 c) The second block energy price is approximately 21 percent below the first block
17 energy price, so its elimination, either through adjustments to the first block
18 definition (as MECL proposes) or through price adjustments (as I propose)
19 necessarily entails increasing the price of what is currently categorized as second
20 block energy by approximately of 25 percent. MECL’s proposal to increase the
21 first block to 5000 kWh on March 1, 2021 and to eliminate the second block
22 entirely on March 1, 2022 subjects customers to this 25 percent price increase
23 over two years, rather than over the three years that I propose.
- 24 d) The impact of the elimination of the second block on any given customer is
25 directly proportional to the percentage of that customer’s total energy
26 consumption that is second block energy. A customer whose average monthly is
27 2500 kWh, for example, has 20 percent of consumption in the second block,
28 whereas a customer whose average monthly consumption is 12,000 kWh has 83.3
29 percent of consumption in the second block. Obviously, the second customer is

²⁸ See Order16-04R, paragraph 58.

²⁹ Order UE16-04R, page 11, paragraph 48.

1 affected more than the first by any change to the second block price, but this in
2 unavoidable.

3

4 **MECL IS OF THE VIEW THAT CHANGES TO THE GS TARIFF AND TO THE**
5 **RESIDENTIAL ENERGY BLOCKS SHOULD AWAIT THE RESULTS OF ITS**
6 **LOAD RESEARCH AND ITS FARM CLASSIFICATION STUDY. IS THIS NOT**
7 **A REASONABLE APPROACH?**

8

9 It is not unreasonable if the results of the current work will provide a clear path to
10 resolving the GS R/C ratio issue and the Residential declining block issue. However, this
11 is unlikely.

12

13 With respect to the GS R/C ratio issue, MECL notes that the load research results may
14 result in a shift of more costs to the GS class, hence reducing the R/C ratio. Additionally,
15 MECL contemplates the possibility of at least some farm customers moving to the GS
16 class. Were this to occur, it too could lower the GS R/C ratio.

17

18 With respect to the load research, it is important to understand the focus of the study and
19 how it could affect CAS. Currently, MECL uses demand data that is derived as described
20 in the responses to Multeese IR-12 and Multeese IR-60. This demand data is derived
21 from measured energy data using class load factors that are based on studies done by
22 other utilities or a load study done by MECL in 1990. This approach provides reasonable,
23 but uncertain results. From a CAS perspective, the load research study will provide better
24 demand data for each class; however, it will not change the class data related to energy or
25 number of customers, since this data is already measured or counted. Given that the load
26 research study focus is to improve reasonable demand data which is already in use within
27 the CAS, and considering that only about thirty two percent of the CAS cost is classified
28 as demand³⁰ and allocated using class demand data, it is unlikely that the load research
29 results will have a significant impact on the CAS results. A ten percent increase in GS

³⁰ MECL's CAS Schedule 3.0 shows that of the total \$182.6 million revenue requirement, \$57.76 million is classified as Demand.

1 ICP Demand, for example, with a corresponding decrease in Residential ICP Demand³¹,
2 and with proportional adjustments to other GS and Residential demands within the CAS,
3 decreases the GS R/C ratio from 1.21 (Base Case) to 1.18 and increases the Residential
4 R/C ratio from 0.91 to 0.93. Similarly, if GS demands used to allocated costs are
5 decreased ten percent, with corresponding adjustments to the Residential demands, the
6 GS R/C ratio changes from 1.21 to 1.25 and the Residential R/C ratio falls from 0.91 to
7 0.9.

8
9 With respect to the potential movement of farm customers from Residential to GS, there
10 are at several considerations:

- 11 a) Farm customers represent only a fraction of the large residential customers. As
12 shown in Schedule 13-9 of Exhibit M-1, in February 2017, 7552 customers
13 consumed more than 2000 kWh. Of these, only 635 (8.4%) were farm customers.
14 Similarly, in July 2017, 1035 customers consumed more than 2000 kWh, 280
15 (27%) of which were farm customers. This data indicates that any transfer of farm
16 customers to another class still leaves the vast majority of large residential
17 customers within the Residential class.
- 18 b) If farms are added to the GS class, the GS R/C ratio drops from 1.21 to 1.16, as
19 per MECL's response to Multeese IR-41(f). This indicates that even with the
20 addition of farms to the GS class, the R/C ratio will continue to be well above the
21 upper target of 1.1.
- 22 c) The result in b) assumes no change in farm costs or revenue. The transfer of farms
23 to GS does not change the cost of serving them, so the carryover of farm costs is
24 reasonable. However, if revenues remain unchanged, the farm customers will
25 continue to have an R/C ratio well below the lower limit of 0.9, so some rate
26 increase will be required.
- 27 d) If the farm customers are transferred to the GS class and pay GS rates, the bill
28 increases are comparable to what they would be if these customers stayed in the
29 Residential class with the second block eliminated. Some examples of this are

³¹ The assumed change to GS is assumed to be offset by a similar change in Residential because 89 percent of costs classified as demand is allocated across these two classes.

1 calculated in Appendix MCI-4, using MECL's proposed rates for 2020. A sample
2 of the results is provided below.

3
4 The CAS shows a Farm class demand of 14756 kW and an average class load
5 factor of 43.7 percent. It also shows 2094 customers in the class, so the average
6 demand is 7.05 kW and the average monthly energy (assuming 720 hours per
7 month) is 2202 kWh. Applying 2020 Residential and GS proposed rates shows a
8 Residential bill of \$343.62 (excluding rebates) and a GS bill of \$425.86, an
9 increase of 23.9 percent.

10
11 Many farm customers would be much larger than the average customer in this
12 class. Bill increases for some of these assumed customers can be calculated as
13 follows:

- 14 - A 50 kW customer operating at 40 percent load factor would see an increase
15 of 38 percent.
- 16 - A 100 kW customer operating at 50 percent load factor would see an increase
17 of 32 percent.
- 18 - A 500 kW customer operating at 75 percent load factor would see an increase
19 of 22 percent.

20

21 **COULD FARM CUSTOMERS BE SEPARATED FROM RESIDENTIAL TO**
22 **CREATE A NEW CLASS?**

23

24 Yes, they could be. The current CAS identifies the cost to serve these customers (\$8.37
25 million) and the revenues they provide (\$6.87 million), and calculates an R/C ratio of
26 0.82. To get these customers to the minimum R/C of 0.9, a revenue increase of 9.7
27 percent would be required.

28

29 One of the questions to be addressed if this approach is taken is whether other large
30 Residential customers who are not farm customers should also be included in the new

1 class, and if so what would the new class R/C ratio would be, and what rate increase
2 would be required to get to at least the minimum R/C ratio of 0.9.

3
4 **MECL'S THIRD RATE ADJUSTMENT IS TO EQUALIZE THE MONTHLY**
5 **SERVICE CHARGE FOR RURAL AND URBAN RESIDENTIAL CUSTOMERS?**
6 **DO YOU SUPPORT THIS CHANGE?**

7
8 Yes, I do. This adjustment to the rural Service Charge is a matter of policy³², to make
9 MECL's rates common throughout its service territory. The adjustment reduces total
10 class revenue by less than one percent, so its effect on the total class is small.

11
12 **GIVEN YOUR SUPPORT FOR THE ELIMINATION OF THE DECLINING**
13 **BLOCK ENERGY CHARGES IN THE RESIDENTIAL CLASS, PLEASE**
14 **COMMENT ON THE TWO BLOCK ENERGY CHARGE IN THE GS CLASS?**

15
16 The GS rate design is different from the Residential rate design. In addition to the Service
17 Charge, the rate includes a Demand Charge for demands greater than 20 kW, a first block
18 energy charge applicable to the first 5000 kWh per month, and a second block energy
19 charge which applies to all additional energy. This design essentially recognizes that it
20 may not be economically desirable to incur the cost of a demand meter to measure the
21 demand of some portion of customers whose demand is estimated to be below some
22 threshold (in this case, less than 20 kW); or, if a demand meter is in place, it recognizes
23 that low load factor customers may pay a cost per kWh that is prohibitive. These
24 considerations lead to a rate design which foregoes a demand charge below the threshold,
25 and recovers the foregone revenue through an addition to the energy charge. Typically,
26 this addition results in a tiered energy charge, because the additional charge is biased
27 toward the lower range of consumption to ensure that all customers, including smaller
28 customers in the class, contribute to its recovery.

29

³² See response to Multeese IR-37(b).

1 In the GS rate design, the forgone monthly revenue associated with 20 kW is 20 kW x
2 \$13.43 = \$268.60. If this is recovered over 5000 kWh, the additional charge would be
3 \$0.0537. This compares to the differential between the first and second block energy
4 charge of \$0.0626 in 2019. It is appropriate that the energy price differential is higher,
5 because the foregone demand revenue is recovered in part from customers whose
6 monthly consumption is less than 5000 kWh; e.g. a customer with a 20 kW demand and a
7 load factor of less than 35 percent.

8
9 Given that the declining block energy charge in GS class results from the recovery of
10 foregone demand revenue in the first block, it is an appropriate rate design for this class.

11
12 **ARE THERE OTHER COMMENTS WITH RESPECT TO THE CAS OR RATE**
13 **DESIGN?**

14
15 Yes, there are two further comments:

- 16
17 a) MECL states on page 125 of Exhibit M-1 that with respect to R/C ratios, “it is the
18 Company’s position that achieving RTC ratios of between 90 per cent and 110 per
19 cent over an appropriate transition period is a reasonable objective”, with the
20 transition period “balanced against the impact on customer electricity costs and
21 the risk of rate shock to customers”. In support of these statements, the Company
22 quotes excerpts from the Chymko CAS. These indicate a long term objective of
23 R/C ratios equal to 100 percent to be appropriate for MECL’s specific
24 circumstances, with a 90 percent to 110 percent a more reasonable short to
25 medium term objective.

26
27 I support the short to medium term objective of getting all R/C ratios within the
28 90 percent to 110 percent range, and a longer term objective of moving this closer
29 to unity by narrowing the range to 95 percent to 105 percent. Given the nature of
30 the CAS and the differences in class sizes, it is unrealistic, in my view, to expect
31 that all R/C ratios in any given year could ever be unity. Even if such a result

1 could be achieved, it is unlikely to be sustained beyond the specific year for which
2 it is calculated. However, given MECL's specific, contract-based power supply
3 situation, and given that power supply accounts for approximately seventy percent
4 of MECL's costs, a 95 percent to 105 percent range is not an unreasonable
5 expectation once adjustments have been made to address the current rate class
6 anomalies.

7

8 b) MECL's CAS is based on an historic year, but rates are being set prospectively. In
9 my view, a CAS based on the year(s) for which rates are being proposed would be
10 more helpful for rate design and adjustment purposes.

11

12 **DOES THIS CONCLUDE YOUR EVIDENCE?**

13

14 Yes, it does.