IR-4 At page 7 of the Application, MECL states that when RF meters were implemented, the number of meter department staff was reduced from twenty to six. Does MECL anticipate a further reduction in meter department staff if AMI is implemented? If no, please explain. If yes, please estimate the annual cost savings.

Response:

As AMI meters are deployed, there will be a reduction in specific service order types carried out by the meter department staff. Service order requests that include connects, disconnects and transfers will be automated. Service order requests for meter installation and removal will still require a site visit by metering personnel.

The AMI system will introduce a new communication system that will require corrective and ongoing maintenance. It is expected that the level of effort required for the new communication system and AMI meters will be comparable to the level of effort required to operate the Company's current metering system, resulting in a net-neutral impact to the metering department staffing level. However, AMI does have a back-office component that will require several new positions.

A new AMI Data Lead will prepare and monitor new configurations, similar to over-the-air software upgrades, as they are pushed out to all meters. This new position will also be responsible to ensure that the data, alerts and messages from the meters are being received, processed and stored properly.

A new Communications Lead will be responsible to monitor the new communication system, plan for maintenance or upgrades, and assign work to the existing meter technicians whose duties will be expanded to include maintenance on the communication system, as previously described.

Currently there is one Customer Service Representative that deals with metering issues (i.e., connects, disconnects, net metering, etc.) along with other non-metering tasks. The AMI system will require this person to retrain as an AMI Operator with the new position having increased responsibilities, possibly requiring more than one person.

As the Project is still in the preliminary stages and vendor scoping is not complete, the exact organizational chart cannot yet be provided. The Company has allowed for four additional employees (including the AMI positions described above) in operating and maintenance expenses after project completion. This additional cost has been included in the supplemental capital budget request application ("Application"), and is also discussed in the responses to IR-12 and IR-13. The Company intends to finalize organizational requirements as the vendor scoping is completed over the coming months.

IR-8 What is the cost per customer of the CIS/AMI Project? What is the average cost per customer for other comparable projects undertaken by other utilities?

Response:

TMG calculated the total cost per customer ("PC") to implement a new CIS based on the total project cost divided by the number of customers served, to be $232 as indicated on page 64 of its report dated November 24, 2022 and provided to the Commission as Appendix A of the Application. Also, on page 64, TMG states that "the MECL project at $232/PC is within TMG's project profile for a project of this nature." Based on past project experience TMG expects that a project of this nature would cost approximately $240/PC.

In a table titled "*Comparison of AMI Business Cases*" on page 24 of the Util-Assist Report and provided to the Commission as Appendix B of the Application, the all-in cost per meter of $392 equates to the cost per customer of implementing AMI. Util-Assist also provided comparisons with several other Canadian utilities implementing AMI in that same table, ranging from $269 for Nova Scotia ("NS") Power to $404 for BC Hydro.

The CIS and AMI costs per customer provided by the TMG and Util-Assist will be reduced significantly with the funding to be provided by Natural Resources Canada ("NRCan") through the smart renewables and electrification pathways ("SREP") program. Based on the TMG and Util-Assist cost estimates and a cost-based proration of the NRCan funding amount between the CIS and AMI components, the post-funding cost per customer to implement new CIS and AMI systems is $127 and $261, respectively.

IR-11 Refer to Table 5 at page 26 of the Application. Is the funding from Natural Resources Canada included in rate base?

Response:

The funding from NRCan has been included in Tables 5, 6 and 7 of the Application. The increase in rate base listed in Table 5 of the Application reflects a contribution in aid of construction of $19 million from NRCan, thereby offsetting the increase in rate base and the Company's annual return on rate base in the same table.

Funding from Natural Resources Canada

IR-14 MECL sought funding from Natural Resources Canada (NRCan) based on a total estimated project cost of $43 million. The project cost has now increased to $47,585,000.

a. Please explain the reason for the increase.

b. What efforts has MECL made to increase the Government funding in light of the increased project costs?

Response:

a. Maritime Electric originally submitted a project registration form for SREP funding to NRCan on June 28, 2021. This initial registration form included a project budget of $46.3 million. Following initial screening, the Company was asked to submit a full project application, which was completed on November 26, 2021 and the Company elected not to change the project budget at that time. In Appendix D – Financial Impact of the Application, the reference to a total estimated project cost of $43 million was a typo, Appendix D should have indicated a project budget of $46.3 million.

Since the original project registration was submitted to NRCan in June 2021, Project estimates have increased by $1.3 million. This increase reflects updated information provided by Util-Assist in August 2021 and an inflationary adjustment to the labour component of the budget.

b. Maritime Electric applied for SREP funding under the program's grid modernization stream, which has a maximum eligible contribution of 50 per cent toward total project costs. During briefing calls with NRCan leading up to and following the receipt of a project approval letter on March 22, 2022, NRCan indicated that the grid modernization stream was nearing full subscription and although there were some funds left, there would not be enough to cover the full 50 per cent of expected projects costs. At the time, the $19 million indicated in the approval letter was the maximum contribution available.

Since project approval by NRCan, Maritime Electric continued to work with NRCan providing updates to timelines and budgets on request. Throughout this process, Maritime Electric has been told that the funding available for the grid modernization stream continues to be fully subscribed.

Maritime Electric and NRCan recently signed a conditional contribution agreement, which secures the $19 million in funding, contingent on regulatory approval. Maritime Electric will continue to monitor the funding status of SREP and other programs, to ensure that any further support that may be available for the Project is pursued.

IR-15 What is the status of the contribution agreement with NRCan?

Response:

Standard contribution agreements with NRCan are contingent on regulatory approvals and, as such, cannot be signed until the Project is approved by the Commission. Maritime Electric is aware that the Commission would prefer to make the details of the funding available to the public ahead of its decision on the Application; however, as per the project approval letter received from NRCan, no public announcements about project funding are permitted until a contribution agreement is signed.

To address this conflict, NRCan has drafted a conditional contribution agreement, as requested by Maritime Electric. This conditional contribution agreement is similar to the final contribution agreement except the funding will be considered conditional to the Project receiving regulatory approval. The conditional contribution agreement was fully executed on July 13, 2023. The Company is presently working through the details of a public announcement with NRCan and will advise the Commission when the funding details are permitted to be made public.

IR-16 The Project received conditional funding approval from NRCan on March 22, 2022. At that time, MECL was advised that the funds would need to be used within a three year period. In the Application, MECL states that the NRCan funds "*must be used by March 31, 2025 and any Project costs after that date are not eligible for reimbursement*".

a. The availability of funding is time-limited and time-sensitive. Although MECL received conditional funding approval in March 2022, this Application was not filed until November 25, 2022. Please explain the reason for the delay in filing.

b. What steps has MECL taken, or does it intend to take, to ensure the full amount of the NRCan funding is utilized by March 31, 2025?

c. How will MECL fund the Project in the event the full amount of the NRCan funding cannot be utilized due to Project delays?

Response:

a. When Maritime Electric applied for SREP funding, it did so based on the information available at the time. While this was expedient, the project had not been fully scoped and final documents had not been received from the Company's consultants. The TMG Report was received shortly after the receipt of the SREP approval letter, which enabled the Company to finalize the project scope and begin working on the Application.

Between the receipt of the SREP approval letter and the submission of the Application, the Company was also involved with other regulatory filings which limited the Company's ability to dedicate resources to the Project. These filings included:

- 2023 General Rate Application – filed June 20, 2022
- 2022 Supplemental Capital Budget Request for the purchase of certain 138 kV overhead transmission assets – filed July 6, 2022
- 2023 Annual Capital Budget – filed July 6, 2022

In September and October 2022, regular Company work was severely impacted when all employees were required to help with the system restoration following Fiona. This event also delayed the completion of the Application.

b. Concurrent with completing the Application, Maritime Electric continued to advance the Project. In December 2022, the Company issued RFPs to vendors for the AMI and CIS components. The Company received proposals from vendors in the first quarter of 2023 and has since been working towards vendor selection. The Company intends to continue with vendor selection, project scoping and contract development, and intends to be in a position to sign contracts in the fourth quarter of 2023, pending Commission approval.

The Company has shared the project timeline with vendors and will consider the ability of each vendor to meet the required timelines when making the final vendor selections. The Company has requested that the hardware be received prior to, or during, the first quarter of 2025 and will attempt to include liquidated damage protection, associated with project delivery and the possible impact on funding, in vendor contracts.

Although the timelines are tight, Maritime Electric is confident that if Commission approval is received in 2023, the Company will be able to progress the Project such that the full amount of SREP funding can be accessed.

c. As stated in the response to IR-16b, the Company intends to include liquidated damage protection related to late delivery or project execution in vendor contracts, reducing the risk to the Company and its ratepayers. The Company will closely monitor the project schedule and will address any slippage in a timely manner by working with contractors and vendors to rectify any delays. If no solution is possible, the Company would work with NRCan to see if an agreement can be reached to extend the funding timeline. In the unlikely event that an extension is required but not received, the Company would expect that the additional required funds would be treated similar to cost overruns, as described in the response to IR-7.

Util-Assist Report

IR-21 Util-Assist refers to a business case model and a comprehensive financial model in Excel format. Please provide a copy of the Excel(s) in native/workable form.

Response:

The Util-Assist business case model and comprehensive financial model in Excel format is provided as CONFIDENTIAL IR-21 – Attachment 1.

IR-22 Util-Assist states that, overall, the AMI project is not cost effective.

a. Did Util-Assist include the funding from NRCan in its analysis?

b. What impact does the NRCan funding have on the cost-effectiveness of the AMI project?

Response:

a. No, the Util-Assist Report was received in August 2021, prior to the Company's knowledge of the NRCan funding.

b. In Section 1.2 of the Util-Assist Report – Summary of the Business Case, Util-Assist states that the net present value ("NPV") of the full 20-year business case is $31 million in costs and $28.1 million in benefits, resulting in a negative $2.9 million-dollar business case. Assuming a cost-prorated division of the $19 million funding contribution towards each the AMI and CIS components of the Project, approximately $10.2 million would be applied to the costs of the AMI component. Applying this contribution would result in the NPV of the full 20-year business case for AMI having $20.8 million in costs and $28.1 million in benefits, resulting in a positive $7.3 million-dollar business case.

IR-27 Section 5.2, Table 8 provides a Comparison of AMI Business Cases. Please explain why both the Nova Scotia Power and New Brunswick Power All-in Cost per Meter is considerably lower than MECL's anticipated cost per meter.

Response:

The differences in all-in cost per meter are primarily related to inflation and economies of scale.

Table 8 summarizes the all-in cost per meter for Maritime Electric, NB Power and Nova Scotia Power, with the actual costs at the time of occurrence adjusted for inflation to the current equivalent amount.[1]

TABLE 8
Comparison of AMI Business Cases
All-In Cost Per Meter with Inflation Adjustment

	Maritime Electric	NB Power	NS Power
Number of Meters	79,000	360,000	495,000
All-in Cost Per Meter (without inflation)	$392	$304	$269
All-in Cost Per Meter (with inflation)	$392	$314	$284
All-in Cost Per Meter (with inflation and Government funding)	$261	$314	$284

The all-in cost per meter is also influenced by the number of meters in the upgrade. Similar to most products, vendors typically reduce pricing as quantities are increased. This pricing reduction can be related to an increased desire to secure an order but there are also fixed costs associated with sales, regulatory compliance, and product configuration that are built into the overall cost for the meters.

Referring to the budget included in Section 7.1.1 of the Util-Assist Report, there are fixed costs for the overall AMI project which do not increase proportionally as the number of meters increases. Examples of fixed costs include costs for the head-end system infrastructure, additional professional services, utility staff charged to the project, system upgrade costs, customer education/marketing, and consulting and legal services. Fixed costs increase on a cost-per-meter basis as the number of meters decreases.

As per the comparison included in Section 5.2, Table 8 of the Util-Assist Report, the number of meters in the Maritime Electric project is significantly less than all other referenced projects, and therefore, the all-in cost-per-meter is expected to be higher for Maritime Electric.

The all-in cost for the AMI component of the Project is reduced substantially with the approximate $10.2 million funding contribution from NRCan, referenced in the Company's response to IR-22, which reduces the all-in cost from $392 to $261 per meter.

[1] Based on the Bank of Canada Inflation Calculator - https://www.bankofcanada.ca/rates/related/inflation-calculator/