



December 15, 2022

Crystal Henwood
Regulatory Affairs Officer/Clerk of the Board
Nova Scotia Utility and Review Board
3rd Floor
1601 Lower Water Street
Halifax, Nova Scotia B3J 3S3

RE: M10830 – EfficiencyOne - 2022 Rate and Bill Impact Analysis Report (E-ENS-R-21)

Dear Ms. Henwood:

Synapse Energy Economics, Inc. (Synapse) respectfully submits the following comments regarding the 2022 Rate and Bill Impact Analysis (R&BIA) filed by EfficiencyOne (E1) on October 31, 2022.

E1 made three changes to the 2022 historical R&BIA including: (1) the incorporation of avoided costs of carbon, (2) the inclusion of demand response activities, and (3) the use of more precise measure life assumptions. These changes reflect changes included for the first time in the forward-looking R&BIA for the 2023–2025 DSM Plan. The R&BIA report provides the results for energy efficiency and demand response combined. These results are summarized as follows:

- Average rate impacts range from +0.2 to +3.0 percent (as compared to +1.8 to +4.0 percent in the 2021 historical R&BIA).
- Average participant bill impacts range from -10.2 to -1.9 percent (as compared to -6.3 to -1.4 percent in the 2021 historical R&BIA)
- Average non-participant bill impacts range from -0.03 to +2.4 percent (as compared to +1.7 to +3.2 percent in the 2021 historical R&BIA)
- Average total customers bill impacts range from -8.9 to -1.9 percent (as compared to -5.3 to -1.4 percent in the 2021 historical R&BIA).
- Net impacts to Nova Scotia ratepayers are \$2.5 billion in bill savings (as compared to \$1.5 billion in the 2021 historical R&BIA).

We find the magnitude of the rate increases are lower than in the 2021 historical R&BIA, mostly due to the inclusion of the avoided cost of carbon. (In the 2021 historical R&BIA, carbon was modeled as a sensitivity). The levels of rate increase are reasonable and are resulting in higher bill savings. We continue to assert that the rate classes with higher rate increases (such as Small General and Small Industrial) are also the rate classes with the higher bill reductions for participants. Therefore, every effort should be made to maximize participation by customers in these rate classes.

It is important to note that this is the last historical R&BIA that E1 intends to file for several years. E1 stated that the preparation and development of the historical R&BIA consumes considerable amount of E1's time and resources, has limited utility to stakeholders during a three-year plan cycle, and is generally treated as informational in nature. In its application for approval of the 2023–2025 DSM Resource Plan, E1 proposed to file historical R&BIA reports only in DSM Resource Plan application years. This means the next historical R&BIA would be filed in 2025, with E1's proposed 2026–2028 DSM Plan and forward-looking R&BIA. As the historical R&BIA will be filed less often moving forward, our comments are focused on areas that are likely to be relevant to the forward-looking R&BIA in addition to the historical R&BIA. These areas include: avoided costs, cost of carbon, modeling of demand response resources, and model transparency.

Avoided costs

We continue to assert that a “no DSM” case is necessary for accurate R&BIA modeling. NSPI is in the process of updating the 2020 IRP to reflect the impacts of recently adopted legislation and other changes. As part of the updates, we request the addition of a “no DSM” case that does not include energy efficiency and demand response. We request that the DSMAG be engaged in these updates and the IRP development more generally moving forward.

Cost of carbon

We emphasize the need for discussion and analysis of the impacts of the adoption of Act 57 on DSM and other clean energy investment planning. We also note that DSM planning needs to be integrated with the planning for other clean energy resources. For example, the DSMAG should be aware of the cost of other clean energy resources and how these costs compare to the cost of DSM resources. We request that NSPI provide the DSMAG with this data.

Demand response

Synapse reviewed the analysis of impacts of demand response. While we did not find specific issues based on this review, we are not aware of other jurisdictions addressing demand response in an R&BIA or of any best practices in that regard. We encourage E1 to monitor methodology for incorporating demand response into R&BIA in other jurisdictions.

Model transparency

We did not find any calculation or formula errors in our review of the R&BIA model. Synapse appreciates the improvements made over last year's model and recommends E1 continue to increase the model's transparency in the years to come. We have two specific recommendations towards transparency.

Our first recommendation is that, in the Total Savings tab of the historical rates model, E1 make it easier to understand the savings from energy efficiency and how they impact rates. In the current model, the full DSM package is the base case, and the energy savings from energy efficiency only show up when the “demand response” scenario is selected. These results show up as positive, which is counterintuitive

because the demand response case includes no energy efficiency. We recommend either changing the base case in the model to *no DSM* or making these energy savings show up as negative when the demand response case is selected in the model. In the short term, we think a note on this would suffice.

Our second recommendation relates to documentation. Going forward, we would appreciate E1 documenting any formula changes made to the model. While we do not want to overburden the process of updating the model, documentation alerting stakeholders that calculations have changed or that previous calculations may have been incorrect would help with transparency.

We thank the Board for the opportunity to provide these comments.

Sincerely,

Jennifer Kallay, Senior Associate

Alice Napoleon, Principal Associate

Kenji Takahashi, Senior Associate

Elijah Sinclair, Research Associate

