



Dykema Gossett PLLC

Capitol View
201 Townsend Street, Suite 900
Lansing, MI 48933

WWW.DYKEMA.COM

Tel: (517) 374-9100

Fax: (517) 374-9191

Jason T. Hanselman

Direct Dial: (517) 374-9181

Direct Fax: (855) 259-3569

Email: JHanselman@dykema.com

March 6, 2026

Lisa Felice
Executive Secretary
Michigan Public Service Commission
7109 West Saginaw Hwy, 3rd Floor
Lansing, MI 48917

Re: U-21684 – *In the matter, on the Commission's own motion, regarding the regulatory reviews, revisions, determinations, and/or approvals necessary for UPPER PENINSULA POWER COMPANY to fully comply with Public Act 295 of 2008, as amended.*

Dear Ms. Felice:

Attached for electronic filing in this matter are SEMCO Energy Gas Company's Initial Brief and Proof of Service of same.

Please contact me if you have any questions. Thank you.

Sincerely,

Dykema Gossett PLLC

Jason T. Hanselman

Enclosure

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission's own motion,)
regarding the regulatory reviews, revisions,)
determinations, and/or approvals necessary for)
UPPER PENINSULA POWER COMPANY)
to fully comply with Public Act 295 of 2008, as)
amended.)

Case No. U-21684

SEMCO ENERGY GAS COMPANY'S INITIAL BRIEF

TABLE OF CONTENTS

I. INTRODUCTION1

II. PROCEDURAL HISTORY.....2

III. JURISDICTION AND STANDARD OF REVIEW3

IV. OVERVIEW OF UPPCO’S EFEL PLAN.....5

V. ARGUMENT7

 A. UPPCO’s EFEL Plan Exposes Customers To Undefined and Potentially Significant Costs.7

 1. UPPCO’s EFEL Plan Fails To Show By A Preponderance Of The Evidence That It Will Prevent Cross-Subsidization Between EWR and EFEL Programs.....7

 2. UPPCO Fails To Show By a Preponderance Of The Evidence That Its EFEL Plan Does Not Increase Rates For Non-Participating Customers.11

 B. UPPCO’S EFEL Plan Lacks Necessary Details And Is Insufficient To Properly Evaluate Whether Its EFEL Activities Will Satisfy Act 295’s Customer Benefits.....13

 1. The Commission Should Require UPPCO To Perform A Cost-Benefit Analysis As A Prerequisite To The Commission Evaluating The Reasonableness of Its EFEL Proposal.....15

 2. UPPCO’s Source Data And Modeling Assumptions Are Faulty And Fail To Prove By A Preponderance Of The Evidence That UPPCO’s EFEL Proposal Meets Best Practice Standards.17

 C. UPPCO’s EFEL Proposal Fails To Prove By A Preponderance Of The Evidence That Replacing Gas Stoves With Electric Induction Ranges Produces Significant Health Benefits.21

 D. UPPCO’s EFEL Proposal Raises Concerns For UPPCO’s System Reliability, Winter Capacity Constraints, and Non-baseload Grid Emissions.....24

REQUEST FOR RELIEF27

I. INTRODUCTION

SEMCO Energy Gas Company (“SEMCO” or the “Company”) respectfully asks the Michigan Public Service Commission (the “Commission”) to reject Upper Peninsula Power Company’s (“UPPCO”) Efficient Electrification Measures (“EFEL”) plan that is included as part of UPPCO’s Energy Optimization (“EO”) plan. UPPCO has failed to provide sufficient evidentiary support to reasonably assess the EFEL plan’s impact to customers or its compliance with the requirements set forth in the Clean and Renewable Energy and Energy Waste Reduction Act, Public Act 295 of 2008, MCL 460.1001, et seq. (“Act 295”), as amended by Public Act 229 of 2023 (“Act 229”).

UPPCO’s direct case failed to provide necessary evidentiary support for its EFEL plan. Consequently, the other parties and the Commission cannot assess the reasonableness and prudence of the proposal. Specifically, UPPCO has failed to demonstrate that its proposed EFEL plan will protect customer bills, avoid rate impacts, or deliver verifiable lifecycle GHG reductions, energy savings, and health and safety benefits. (3 Tr. 191-92). SEMCO, therefore, requests that the Commission reject UPPCO’s EFEL plan in its entirety at this time.

In testimony, the Michigan Public Service Commission Staff (“Staff”) also, recommends that the Commission reject UPPCO’s EFEL plan. (3 Tr. 136). Staff observed that UPPCO “lacks important details in its EFEL plan, including assessments of what it plans to spend, the measures it will focus on, and whether those measures can ensure that costs for other customers will not increase from the proposed spending.” (3 Tr. 130). Moreover, Staff found that UPPCO’s EFEL plan “misses the mark when it comes to providing the actual plan to be executed. [UPPCO] does not provide an estimated goal for efficient electrification installations per year, any estimations for

the total cost of the EFEL program for each year of the program, and any cost estimates for customers.” (3 Tr. 131).

As such, the Commission should reject UPPCO’s EFEL plan for failing to provide sufficient information to show it complies with statutory requirements set forth in Act 295, as amended by Act 229.

If the Commission were to allow UPPCO to undertake some EFEL activity, at a minimum, SEMCO requests that the EFEL plan be limited to clearly defined measures with capped budgets and separate EFEL accounting. UPPCO should be required to correct its emissions and energy savings modeling, perform measure-level cost-effectiveness tests, and file an Evaluation, Measurement, and Verification (“EM&V”) plan that includes pre- and post-installation billing data and, where appropriate, end-use and indoor-air measurements for a statistically valid sample. (3 Tr. 192). EFEL continuation and any future expansion should then be contingent on EM&V and benefit-cost test demonstrating that actual outcomes are reasonably consistent with modeled bill savings, energy and emissions reductions, do not have the effect of increasing electric rates for customers that do not participate in the program, and do not worsen winter capacity or marginal system costs. *Id.*

II. PROCEDURAL HISTORY

On July 1, 2025, UPPCO filed its application seeking Commission approval, pursuant to Act 295, as amended, of its 4-year EWR plan and related surcharges. As part of this filing, UPPCO addressed its Energy Optimization Plan (“EOP”), which encompasses the UPPCO’s EWR plan, EFEL plan, and Transportation Electrification (“TE”) plan. UPPCO sponsored the Direct Testimony and Exhibits of two witnesses in support of its application: Andrew McNeally,

Manager of Energy Services (3 Tr. 41-72) and Nicole E. Bell, Manager of Rates and Power Supply (3 Tr. 74-79).

On August 4, 2025, SEMCO petitioned to intervene in this proceeding. On August 11, 2025, a prehearing conference was held before Administrative Law Judge Jonathan F. Thoits (“ALJ”). The Michigan Public Service Commission Staff (“Staff”) participated in this case, and on August 29, 2025 the ALJ granted SEMCO’s intervention in the case.

On November 19, 2025, Staff and Intervenor testimony was filed. Staff sponsored the Direct Testimony of Katie J. Smith (3 Tr. 124-137); Joshua S. Towslee (3 Tr. 139-146); Elizabeth A. Yeager (3 Tr. 148-156); and Shannon J. Withenshaw (3 Tr. 158-164). SEMCO sponsored the Direct Testimony and Exhibits of Patrick L. Leahy (3 Tr. 166-192). On January 9, 2026, UPPCO filed the Rebuttal Testimony and Exhibits of Andrew McNeally (3 Tr. 81-121). On January 16, 2026, SEMCO submitted a Motion to Strike rebuttal testimony of UPPCO Witness McNeally. On February 9, 2026 a hearing on the Motion to Strike was held before the ALJ. The ALJ granted the Motion in part and denied the Motion in part. An evidentiary hearing in this case was held on February 13, 2026, for the purpose of binding-in testimony and admitting exhibits.

III. JURISDICTION AND STANDARD OF REVIEW

Act 295, as amended by Act 229, requires all providers of electric and gas service in the State of Michigan to establish EWR programs by filing EWR plans as part of a customer EO plan with the Commission, an EO plan may also include an EFEL plan.¹ EO plans filed by rate-regulated providers are subject to Commission approval.² MCL 460.1071, MCL 460.1072,

¹ MCL 460.1071.

² MCL 460.1073.

and MCL 460.1073 provide the requirements of an EO Plan, premised on the goal of reducing energy consumption, greenhouse gas emissions, and the future costs of providing service to customers.

Act 295, as amended, also sets forth requirements for EFEL programs.

Specifically, Section 72, MCL 460.1072, states that:

[E]fficient electrification measures under the efficient electrification measures plan shall provide health and safety benefits to occupants of the premises or satisfy all of the following: (a) Reduce total energy consumption at the premises. (b) Reduce greenhouse gas emissions due to energy use over the life of the electrification measure. (c) For residential and commercial customers interconnected at secondary voltage, provide annual average energy cost savings.³

This section further states, “that an efficient electrification measures program under subsection (1) shall not have the effect of increasing electric rates for customers that do not participate in the program.”⁴

Here, UPPCO bears the burden proving that its EFEL plan meets the standards just described. Specifically, UPPCO must prove its case by a preponderance of the evidence.⁵ Preponderance of the evidence means “such evidence as, when weighed with that opposed to it, has more convincing force and the greater probability of truth.”⁶ According to the Michigan Supreme Court, preponderance of the evidence means “[n]o essential issue may be left to surmise,

³ MCL 460.1072(1).

⁴ MCL 460.1072(3).

⁵ *BCBSM v Governor*, 422 Mich 1, 88-89; 367 NW2d 1 (1985); *Aquilina v General Motors Corp*, 403 Mich 206, 210; 267 NW2d 923 (1978).

⁶ *People v Pugh*, 48 Mich App 242, 245 (1973).

guess, or conjecture”⁷ To meet this burden, UPPCO must prove its case with “thorough, detailed, and meaningful evidence.”⁸

Moreover, the Commission may disbelieve even uncontradicted evidence.⁹ In other words, regardless of whether UPPCO submitted “substantial evidence” (i.e., “more than a mere scintilla”) on a particular proposal, it does not make the validity of that proposal a forgone conclusion.¹⁰ When the burden of proving a fact falls on one party, the other party does not have the burden of proving the opposite fact.¹¹ Thus, even when there is no conflicting evidence, the Commission must still determine whether the evidence submitted by UPPCO meets UPPCO’s burden.

In sum, where UPPCO has failed to provide thorough, detailed, and meaningful evidence demonstrating that its proposals meet the statutory standards by a preponderance of the evidence, the Commission should reject those proposals.

IV. OVERVIEW OF UPPCO’S EFEL PLAN

Act 295 defines an efficient electrification measures plan as “a plan to offer and promote efficient electrification measures.”¹² The Act defines EFEL measure as:

[A]n electric appliance or equipment installed in an existing building to electrify, in whole or in part, space heating, water heating, cooling, drying, cooking, industrial processes, or another building or industrial end use that would otherwise

⁷ Case No. U-18224, Order dated October 25, 2017, at 14, quoting *Dillon v Lapeer State Home & Training Sch*, 364 Mich 1, 8 (1961) (quotation marks and citation omitted).

⁸ Case No. U-16794, Order dated June 7, 2012, at 13.

⁹ *Woodin v Durfee*, 46 Mich 424, 427; 9 NW 457 (1881). Accord, *Yonkus v McKay*, 186 Mich 203, 211; 152 NW 1031 (1915), and *Cuttle v Concordia Mut Fire Ins Co*, 295 Mich 514, 519; 295 NW 246 (1940).

¹⁰ Case No. U-18014, Order dated January 31, 2017, p. 8.

¹¹ *S C Gary, Inc v Ford Motor Co*, 92 Mich App 789, 803-804; 286 NW 2d 34 (1979).

¹² MCL 460.1005(b).

be served by combustion of fossil fuel on the premises and that meets best-practice standards for cost-effective energy efficiency as determined by the commission.¹³

UPPCO is voluntarily including an EFEL plan as part of its EO plan as permitted by Section 71 of Public Act 295. (3 Tr. 67). Section 71 of Public Act 295, in part, states:

Beginning January 1, 2025, an electricity provider shall file its energy waste reduction plan as part of a customer energy optimization plan. A customer energy optimization plan shall include an energy waste reduction plan and may include an efficient electrification measures plan. This section does not prohibit an electric utility from offering transportation electrification programs as approved by the commission.¹⁴

UPPCO engaged 5 Lakes Energy to assist in the development of its EFEL plan. (3 Tr. 69). The 5 Lakes Energy report describes the analysis and development of the overall Energy Optimization (“EO”) Plan, including the EFEL plan. *Id.* The plan includes information related to potential residential, commercial, and industrial EFEL measures. (3 Tr. 130). It also provides strategies related to implementation, marketing, and evaluation. *Id.* The report from 5 Lakes Energy also included multiple recommendations, but the report did not specify whether UPPCO intended to adopt all of the recommendations. (3 Tr. 131).

UPPCO’s EFEL plan, however, is not comprehensive. (3 Tr. 130). It lacks important details, including assessments of the amount it plans to spend, the measures UPPCO will focus on, and whether those measures can ensure that costs for other customers will not increase from the proposed spending. *Id.* In other words, it lacks an actual plan to be executed. (3 Tr. 131). Finally, UPPCO did not provide an estimated goal for efficient electrification installations per year, any estimations for the total cost of the EFEL program for each year of the program, or any cost estimates for customers. *Id.*

¹³ MCL 460.1005(a).

¹⁴ MCL 460.1071(6).

V. ARGUMENT

A. UPPCO’s EFEL Plan Exposes Customers To Undefined and Potentially Significant Costs.

1. UPPCO’s EFEL Plan Fails To Show By A Preponderance Of The Evidence That It Will Prevent Cross-Subsidization Between EWR and EFEL Programs.

Act 295, as amended, prohibits EFEL plans from increasing electric rates for customers that do not participate in the program.¹⁵ That means EFEL plans cannot be cross-subsidized by other programs, such as EWR programs. Throughout this case, however, UPPCO has provided inconsistent information regarding its EFEL measures and expenses in its EWR plan, making it impossible to determine whether there is cross-subsidization between its EWR and FEEL programs. Put differently, UPPCO has failed to meet its burden of proof.

UPPCO’s application, testimony, and exhibits describe the Measured Savings Pilot as a mechanism to validate energy savings from electrification measures. (3 Tr. 171). Exhibit A-1, Section 5.3.1, specifically states, “UPPCO plans to include EFEL measures in its measured savings pilot.” Although UPPCO later contended in discovery that EFEL activity will not be included in the pilot, the record indicates otherwise. Exhibit SEM-2. This contradiction raises serious concerns about the accuracy of UPPCO’s cost accounting and the transparency of its program design. (3 Tr. 172). Moreover, the inconsistency makes it impossible to properly determine whether there is cross-subsidization between the EWR and EFEL programs.

UPPCO also has failed to demonstrate how shared costs between its EFEL and EWR programs will be distinguished to ensure no cross-subsidization in its EWR pilots, EWR marketing, and EWR EM&V infrastructure. *Id.* Concerns about cross-subsidization, or at

¹⁵ MCL 460.1072(3).

least uncertainty about the possibility of cross-subsidization, are exacerbated by the extent that UPPCO’s EFEL plan is intertwined with existing EWR program infrastructure. *Id.* For instance, regarding residential electrification, UPPCO states that it “will utilize existing EWR marketing channels to inform customers about electrification programs, measures, and incentives,” and that “EFEL measures” will be included in its measured savings pilot. *Id.* For Commercial and Industrial (“C&I”) electrification, UPPCO explains that electrification opportunities identified through its EWR Emerging Technology & Analytics pilot “will be referred to the electrification program for further project design and implementation,” that it will “leverage existing EWR marketing channels” for C&I electrification, and again that EFEL measures will be included in the measured savings pilot. *Id.* In other words, UPPCO is surreptitiously layering EFEL directly onto EWR pilots, EWR marketing, and EWR EM&V infrastructure that are funded today through EWR surcharges. *Id.*

UPPCO’s efforts to ensure prevention of cross-subsidization are materially insufficient. UPPCO claims that it will avoid cross-subsidization by “ensuring that customers who do not directly participate in electrification programs will not incur incremental costs attributable to those programs.” (3 Tr. 173). UPPCO further claims, however, that any future recovery of EFEL-related costs will be determined in a later case. *Id.* SEMCO requested UPPCO to describe all safeguards currently in place to ensure there is no cross-subsidization between participating and non-participating customers; and that only customers who explicitly choose to participate in the EFEL Plan will bear the costs associated with program design, marketing, outreach, equipment and installation incentives, administration, and overhead expenses. *Id.* UPPCO’s response included a high-level intent to avoid cross-subsidization, but failed to explain how it will actually do so. *Id.*

Notwithstanding general statements of intent, UPPCO fails to identify any concrete accounting rules, cost categories, or reporting requirements that show evidence of preventing cross subsidization. *Id.* Specifically UPPCO’s proposal fails to establish separate EFEL subaccounts, allocation methodology for shared labor and overhead, commitment to recover EFEL costs exclusively from participating customers, or a distinct EFEL surcharge for participants. *Id.* The record in this case belies UPPCO’s aspiration to not cross-subsidize these programs and UPPCO’s own evidence stating that its measured savings pilot will include EFEL measures directly contradicts its contentions.

Moreover, in its rebuttal testimony UPPCO misconstrues the Commission’s February 8, 2024 Order in Case No. U-21567 and erroneously argues that EFEL charges may be charged to nonparticipating customers. (3 Tr. 91). UPPCO, in its rebuttal testimony, rejects Staff’s recommendation that EFEL surcharge be charged only to participants. *Id.* at 91-92. UPPCO claims Staff’s recommendation is “contrary to Commission instructions” and “crucial to viability” and concludes that Staff’s recommendation contradicts the Commission’s February 8, 2024 Order. *Id.* In actuality, the February 8, 2024 Order in Case No. U-21567 states nonparticipating customers shall not be responsible for paying for an electric prower’s EFEL plan:

Section 72 of Act 229 provides the other requirements for EFEL plans, including that EFEL plans apply only to electric providers, and that costs for an approved EFEL plan are recoverable. The Commission finds that these costs will be recovered via a separate surcharge that will be added to the applicable EWR surcharge for purposes of including it on customer bills. **However, providers choosing to file an EFEL plan will be responsible for proving that the costs for the EFEL plan will not increase electric rates for customers who do not participate in an EFEL program.**¹⁶

¹⁶ The Commission’s February 8, 2024 Order, in Case No. 21567, p. 3 (emphasis added).

The Commission’s February 8, 2024 Order is clear that EFEL plans will follow reconciliation and annual reporting requirements similar to EWR plans and that “post evaluations will be necessary to prove that customers who did not participate in the program did not realize increased electric rates.”¹⁷

UPPCO, however, misinterprets this Order and wrongfully argues that EFEL charges may be charged to nonparticipating customers. (3 Tr. 91). In accordance with this misinterpretation, UPPCO’s case provides no direct testimony, exhibits, or workpapers establishing any post-implementation evaluation methodology capable of proving nonparticipant rate neutrality, as contemplated by the Commission’s February 8, 2024 Order in Case No. U-21567. Instead, UPPCO’s proposal merely describes a project-level screening/log approach—i.e., maintaining measure-by-measure records and producing a “log” in reconciliation—which is not a demonstrated rate-impact evaluation method and does not “prove” outcomes for nonparticipants. (3 Tr. 175-76).

Again, UPPCO compounds its EFEL plan’s deficiency by rejecting Staff’s recommended participant-only surcharge as “contrary to Commission instructions” and “crucial to the viability” of EFEL, insisting the EFEL surcharge should be charged to all customers. (3 Tr. 91). UPPCO attempts to treat the Commission’s February 8, 2024 Order’s statement that EFEL costs will be recovered via a surcharge “added to the applicable EWR surcharge” as a “who pays” mandate. *Id.* Even though the same Order places the burden on providers to prove EFEL costs will not increase rates for customers who do not participate.¹⁸ Accordingly, Staff’s participant-only recovery recommendation is *not* contrary to the Commission’s February 8, 2024 Order, it is a

¹⁷ *Id.*

¹⁸ The Commission’s February 8, 2024 Order, in Case No. 21567, p. 3.

direct, readily administrable nonparticipant protection that aligns with the Order.¹⁹ UPPCO’s refusal to adopt that protection, paired with the absence of any post-evaluation methodology required to prove nonparticipant rate neutrality, underscores why UPPCO has failed to meet its burden in proving that nonparticipating customers will be protected from subsidizing UPPCO’s EFEL plan.

In sum, UPPCO has failed to meet its burden to prove that its EFEL plan will not be cross-subsidized by other programs.

2. UPPCO Fails To Show By a Preponderance Of The Evidence That Its EFEL Plan Does Not Increase Rates For Non-Participating Customers.

UPPCO’s EFEL plan fails to clearly explain its methodology to avoid increasing rates for customers that do not participate in the program, and by doing so, UPPCO fails to meet its burden of proof to show its EFEL plan meets the statutory standards. Act 295, as amended, states that an “efficient electrification measures program . . . shall not have the effect of increasing electric rates for customers that do not participate in the program.”²⁰ Despite being given an opportunity to address this shortfall in discovery, UPPCO still did not provide a clear explanation of how it would comply with the law. (3 Tr. 174). UPPCO instead stated that it defines “gross margin on increased sales” as distribution revenue from increased sales only, that this calculation is not regularly performed within its financial reporting, and that screening will be done on a per-project basis while recovery will be sought on a portfolio basis. *Id.*

UPPCO’s explanation raises serious concerns. First, its definition of “gross margin on increased sales” does not rule out the inclusion of non-participating customers. Additional load

¹⁹ *Id.*

²⁰ MCL 460.1072(3).

requirements from electrification load or any other incremental load requirements can affect generation, transmission, and, in some cases, distribution costs over time. *Id.* By excluding distribution cost impacts by assumption and ignoring generation and transmission cost changes, this “gross margin” construct does not provide a robust basis to conclude that non-participating customers are protected from rate impacts. *Id.*

For example, as referenced by SEMCO Witness Patrick L. Leahy, a recent study filed earlier this year in Washington State, Puget Sound Energy’s Updated 2023 Decarbonization Study (filed January 31, 2025), found that the costs of grid firming and electric system upgrades required to support electrification are projected to be in the billions for incremental transmission and distribution investments and significant winter peak capacity additions. (3 Tr. 175). That study demonstrates that electrification can materially increase system costs over time. *Id.* Mr. Leahy also notes that the U.S. Energy Information Administration (“EIA”) reports that in 2024 on average Washington’s electricity is cheaper and its electric grid is cleaner than Michigan’s, and both States had similar average annual temperatures. *Id.* Considering that the Upper Peninsula in Michigan averages lower winter temperatures than the state-wide average, Mr. Leahy found it reasonable to conclude that the incremental infrastructure and generation costs to serve increased electricity demand in winter would be even higher. *Id.* This Study illustrates that EFEL measures may materially impact non-participating EFEL customers’ rates.

Another reason UPPCO’s response raises concerns about increasing rates for non-participating customers is because UPPCO states it will screen EFEL “on a per project basis” but seek recovery “on a portfolio” basis. Staff Discovery 2-19. As witness Leahy outlined, if recovery is sought as a lump sum at the portfolio level, it becomes difficult for the Commission or intervenors to see which EFEL projects exceeded their gross margin, failed emissions criteria,

or did not deliver promised bill savings. (3 Tr. 175). In practice, that can allow poor outcomes, and measures that would not meet EFEL requirements on their own, to be hidden inside the portfolio average, while non-participants still face the risk that total EFEL costs exceed incremental revenues. (3 Tr. 175-76).

In sum, UPPCO fails to meet its burden of proof to show its EFEL plan will not raise rates for non-participating customers. UPPCO's EFEL plan does not establish a specific mechanism, tracking account, or reconciliation process that would ensure incremental revenues are actually applied to offset EFEL costs. (3 Tr. 176). It also does not explain how EFEL-related costs will be segregated from EWR and base-rate expenses, or how the portfolio-level recovery UPPCO describes in discovery will be reconciled to project-level screens. *Id.* Thus, UPPCO has failed to perform the minimum due diligence necessary to show that it will protect non-participating customers from EFEL-related rate impacts.

B. UPPCO'S EFEL Plan Lacks Necessary Details And Is Insufficient To Properly Evaluate Whether Its EFEL Activities Will Satisfy Act 295's Customer Benefits.

UPPCO's proposed EFEL plan lacks defined parameters and, thus, fails to show whether it complies with the customer benefits required in Act 295. Act 295, Section 72, MCL 460.1072, requires EFEL plans to either "provide health and safety benefits to occupants of the premises" or provide all the following benefits for customers:

- (a) Reduce total energy consumption at the premises.
- (b) Reduce greenhouse gas emissions due to energy use over the life of the electrification measure.
- (c) For residential and commercial customers interconnected at secondary voltage, provide annual average energy cost savings.²¹

²¹ MCL 460.1072(1).

Without defined parameters, it is difficult, if not impossible, to evaluate whether UPPCO's proposed EFEL activities are likely to be beneficial for customers. (3 Tr. 170).

A responsible plan entails a defined set of measures, budgets, participation assumptions, and key performance indicators establishing a set of guardrails in which the utility is expected to operate ensuring value to its customers, compliance with the law, and a fair and equitable allocation of costs. *Id.* A responsible plan should establish measurable expectations for performance for which the utility must demonstrate compliance. *Id.* UPPCO's plan, however, does not meet these minimum standards. UPPCO's EFEL plan instead offers a generalized electrification "objective" and high-level concepts, and does not present proposed budgets, participation forecasts, or quantitative performance metrics. *Id.* As SEMCO witness Patrick L. Leahy put it, "an objective is aspirational; a plan is operational." *Id.*

Staff Witness Katie J. Smith agrees, stating that UPPCO has not filed a comprehensive EFEL plan. (3 Tr. 130). According to Ms. Smith, UPPCO's EFEL plan lacks important details, including assessments of what it plans to spend, the measures UPPCO will focus on, and whether those measures can ensure that costs for other customers will not increase from the proposed spending. *Id.* Although, as Witness Smith found, UPPCO's EFEL plan provides high level information related to administering the plan, Ms. Smith determined that it "misses the mark when it comes to providing the actual plan to be executed." (3 Tr. 131). "The Company does not provide an estimated goal for efficient electrification installations per year, any estimations for the total cost of the EFEL program for each year of the program, and any cost estimates for customers." *Id.* For these reasons in part, Staff recommends the Commission reject the EFEL plan.

UPPCO also seeks to defer program costs to future case proceedings by seeking authorization to record a regulatory asset for EFEL-related costs. However, again, as stated

by Staff, UPPCO’s plan as filed does not provide sufficient details regarding what UPPCO expects to occur. (3 Tr. 164). UPPCO’s request is not accompanied by defined cost estimates, participation projections, or measurable goals that would normally form the foundation of a Commission-reviewed program. (3 Tr. 170). Without these details, the Commission and other parties are unable to understand how large the costs might be that UPPCO is asking customers to defer, who will ultimately pay for them, and what benefits customers can expect to receive in return. *Id.*

In other words, UPPCO has failed to meet its burden of proof to show that its EFEL plan complies with Act 295’s customer benefit requirements.

1. The Commission Should Require UPPCO To Perform A Cost-Benefit Analysis As A Prerequisite To The Commission Evaluating The Reasonableness of Its EFEL Proposal.

As evidenced by UPPCO’s discovery response, UPPCO confirmed that it failed to conduct cost-benefit analyses or other cost-related studies, such as net present value (NPV), Total Resource Cost (TRC), or Utility System Resource Cost Test (USRCT), prior to filing its EFEL application. Exhibit SEM-5. UPPCO asserted that such analyses were unnecessary, citing the Commission’s November 7, 2024 Order in Case No. U-21567. (3 Tr. 175). However, the Commission’s November 7, 2024 Order in Case No. U-21567 does not relieve UPPCO of the obligation to demonstrate in this case that its EFEL plan is cost-effective.

Act 295, as amended, requires that EFEL measures meet “best-practice standards for cost-effective energy efficiency as determined by the commission.”²² The portion of the Order in

²² MCL 460.1005(a).

Case No. U-21567, which UPPCO misinterprets to relieve it of conducting a cost-benefit analysis, states:

Therefore, the Commission finds that an electric provider should consider providing the results of one or more cost-benefit tests, both pre- and post-plan implementation, to provide further evidence that the EFEL plan is cost-effective. [p. 27]

Although the above referenced Order does not explicitly require a cost-benefit analysis, it demonstrates the value that the Commission places on utilities undertaking cost-benefit analyses as a tool to support the reasonableness of EFEL proposals. (3 Tr. 177). That Order certainly does not hold that utilities should not undertake cost benefit analyses, particularly where a statute, like the EWR statute at issue here, specifically requires the Commission to determine cost-effectiveness.

The absence of a cost-benefit analysis or any similar analysis in UPPCO's evidentiary presentation makes it difficult to evaluate whether the proposed activities will deliver net benefits to participants or avoid unintended cost impacts on non-participants. *Id.* Without that information, the Commission is left without a factual basis to assess the financial prudence of the plan or its alignment with customer interests. *Id.* Staff Witness Smith agrees. (3 Tr. 133-34). Staff Witness Smith emphasized the statutory requirement to provide a cost analysis, stating, "some measure of cost-effectiveness is necessary to show that EFEL measures and the plans to provide them meet the definition provided by statute." *Id.* Ms. Smith went on to point out that UPPCO "has not addressed cost-effectiveness of its proposed EFEL measures." *Id.*

Thus, because UPPCO has failed to provide a cost-benefit analysis, UPPCO has failed to prove by a preponderance of the evidence that its EFEL plan is reasonable and beneficial to customers.

2. UPPCO’s Source Data And Modeling Assumptions Are Faulty And Fail To Prove By A Preponderance Of The Evidence That UPPCO’s EFEL Proposal Meets Best Practice Standards.

UPPCO’s source data and modeling assumptions used in its EFEL proposal fall short in numerous areas in showing that the proposal meets best practice standards for cost-effectiveness and energy efficiency. As emphasized by Staff Witness Katie J. Smith, Act 295, as amended, requires EFEL measures meet “best-practice standards for cost-effective energy efficiency as determined by the commission.” (3 Tr. 134). For instance, Staff Witness Smith stated, “the heat pump or water heater installed as an EFEL measure must be an efficient version of the appliance and not merely converting from fossil fuels to an electric appliance.” *Id.* One of the Commission’s directives in Case No. U-21567 was that utilities maintain EFEL measures in the Michigan Energy Measures Database (“MEMD”) as the “most reasonable place to appropriately vet and incorporate EFEL measures and the values necessary to assist the development of EFEL plans.” *Id.* Staff Witness Smith went on to state that EM&V is an established best practice of the vetting process for energy efficiency measures in the MEMD and EWR plans; therefore, it must be a component of vetting EFEL measures as well. *Id.* As such, Staff Witness Smith points out that UPPCO falsely claims that EM&V is not required for EFEL plans. *Id.* The Commission’s February 8, 2024 Order in Case No. 21567 supports Staff Witness Smith’s claim, in which it stated that “post evaluations will be necessary to prove that customers who did not participate in the program did not realize increased electric rates as required under Act 229.”²³

Regarding where UPPCO’s EFEL plan falls short, first, UPPCO misclassifies the eGRID subregion in its lifecycle greenhouse gases (“GHG”) emissions calculations. (3 Tr. 178).

²³ The Commission’s February 8, 2024 Order, in Case No. 21567, p. 3.

UPPCO states that it used the RFC Michigan (“RFCM”) eGRID subregion as the basis for its electricity emissions factor. UPPCO’s Exhibit A-1, Section 5.1.4. This subregion, however, covers Lower Michigan only and does not include UPPCO’s service territory in the Upper Peninsula. (3 Tr. 178). Instead, UPPCO’s service area is actually located in the MRO East (“MROE”) eGRID subregion, which has higher emission rates than RFCM according to EPA’s eGRID summary tables. *Id.*

The EPA’s eGRID data is relevant to evaluating UPPCO’s EFEL proposal because the eGRID platform provides critical environmental data on electric power generation. (3 Tr. 178). It also reinforces the need for fuel-neutral analysis that transparently accounts for the upstream emissions and environmental costs associated with electricity use. *Id.* Without incorporating the correct eGRID emissions modeling, comparisons between proposed EFEL measures and alternatives are misleading. *Id.*

For instance, baseload total output emission factors for MROE have an approximately 45% higher CO₂ intensity than RFCM factors used by UPPCO. *Id.* MROE also has approximately 41% higher methane (CH₄) emissions and approximately 55% higher nitrous oxide (N₂O) emissions. *Id.* The problem with UPPCO’s approach is that, using RFCM instead of MROE understates the emissions intensities associated with increased electricity use from electrification in UPPCO’s modeling. *Id.*

Importantly, the EPA’s eGRID summary tables show that MROE has higher CO₂ and other GHG emission rates than RFCM on both baseload and non-baseload bases. (3 Tr. 178-79). As a result, UPPCO’s modeling overstates the GHG benefits of electrification measures, particularly those that add winter peak load served by non-baseload resources. (3 Tr. 179). Because UPPCO’s own exhibits show that using the correct MROE emission factors would

materially change lifecycle emissions results, the current modeling fails to provide a sufficient evidentiary basis for the Commission to conclude that the proposed EFEL measures will deliver lifecycle GHG reductions in UPPCO’s service territory. *Id.*

Act 295, as amended, requires EFEL plans to reduce greenhouse gas emissions.²⁴ By using eGRID emissions factors from a less emissions-intensive subregion, UPPCO artificially inflates the environmental benefits of its proposed EFEL measures, potentially qualifying measures that would otherwise fail the statutory test. (3 Tr. 179).

In addition to using the wrong subregion, UPPCO used baseload eGRID emission rates, not non-baseload (marginal) rates. *Id.* Baseload factors average all generation; EFEL affects incremental load, which is served by marginal units that are typically more carbon-intensive, especially in winter. *Id.* When comparing UPPCO’s modeled emissions rates to MROE non-baseload emission factors there is roughly a 77% higher CO₂ intensity, 94% higher CH₄ emissions, and 109% higher N₂O emissions. *Id.* As SEMCO Witness Leahy explained in his testimony, using baseload instead of non-baseload further understates EFEL emissions and makes the results of EFEL modeling look cleaner than the grid actually is. (3 Tr. 178-79).

Beyond emission factors, UPPCO relies on other modeling inputs that affect the credibility of UPPCO’s claimed GHG reductions. For example, UPPCO’s EFEL modeling relies heavily on national building stock datasets, specifically NREL’s ComStock and ResStock. (3 Tr. 180). These tools are not sufficient for detailed, location-specific analysis, such as verifying proposed EFEL impacts in rural service territories like UPPCO’s. *Id.* If the underlying building stock data is not representative of UPPCO’s territory, due to sparse sampling or generalized assumptions,

²⁴ MCL 460.1072(1)(b).

the modeled benefits may be inaccurate or overstated. *Id.* This undermines the integrity of the EFEL plan and the Commission’s ability to evaluate the actual benefits the proposal provides UPPCO customers. *Id.*

Another modeling input that affects the credibility of UPPCO’s claimed GHG reductions is UPPCO’s treatment of changes in space-conditioning load from heat pump installations. UPPCO’s calculations for heat pump “savings” appear to be limited to space heating demand only and do not account for situations where cooling may be an additional new electric load. *Id.* In other words, the modeling treats the heat pump as a more efficient heater but does not explicitly recognize that once a customer installs a heat pump, they may begin using electric cooling in a home that previously had none. *Id.* Moreover, there is evidence in UPPCO’s filing that many homes in its territory do not currently have air conditioning. UPPCO Exhibit A-1. Specifically, UPPCO cites a study that reports that approximately 62% of homes in UPPCO’s service territory do not have air conditioning. *Id.* That means a large share of EFEL-targeted homes could experience a net increase in annual electric use if heat pumps are installed and cooling is added where none existed before. (3 Tr. 182). UPPCO’s heating-only savings calculations do not capture this effect, and therefore, may understate both customer bill impacts and the additional seasonal load EFEL could place on the system. *Id.*

Finally, SEMCO Witness Leahy performed an independent check using the Carbon Management Information Center (“CMIC”) Source Energy and Emissions Analysis Tool (“SEEAT”) a DOE-aligned platform developed by GTI Energy. (3 Tr. 182). The results of Witness Leahy’s independent check directly contradict UPPCO’s EFEL modeling. (3 Tr. 184). The results also demonstrate how sensitive electrification outcomes are to fuel type, climate, emission factors, and prices. *Id.*

In his independent check, Witness Leahy modeled whole-home energy consumption, emissions, and costs for a typical residential home in Sault Ste. Marie, Michigan, consistent with the MEMD weather zone that covers the entire Upper Peninsula and using emissions factors from UPPCO’s actual eGRID subregion, MROE. (3 Tr. 182). In short, Witness Leahy compared a common delivered-fuel baseline to a high-end, high-efficiency electrification package to see how emissions and bills change when electric technologies perform near the upper end of current offerings in UPPCO’s climate. (3 Tr. 182-83). Witness Leahy found that, even with top-of-the-line electric technologies, average Michigan energy prices for electricity and propane, and baseline MROE eGRID emissions factors, the all-electric home produced higher total emissions and higher total energy cost than the baseline propane configuration without energy efficient heating and water heating appliances. (3 Tr. 183).

Witness Leahy also found that, in a realistic Upper Peninsula scenario, a high-efficiency electric package can still yield higher emissions and significantly higher customer bills than a conventional delivered-fuel baseline. (3 Tr. 184). This is concerning given that UPPCO’s EFEL proposal does not include a concrete EM&V plan. *Id.* Without EM&V, there is no mechanism to check whether modeled bill savings or emissions reductions are actually realized by EFEL participants. *Id.*

In sum, UPPCO’s proposed EFEL plan fails to prove by a preponderance of the evidence that it meets best practice standards for cost-effectiveness and energy efficiency, as required by Act 295, as amended.

C. UPPCO’s EFEL Proposal Fails To Prove By A Preponderance Of The Evidence That Replacing Gas Stoves With Electric Induction Ranges Produces Significant Health Benefits.

As an alternative to satisfying the customer benefits outlined in the above Section of this Brief, Section 72 of Act 295, as amended, states that EFEL plans may instead “provide health

and safety benefits to occupants of the premises.”²⁵ UPPCO, however, also fails to satisfy this statutory requirement. By leaning on a single, UPPCO-commissioned analysis to characterize stove replacement as a high-value “health and safety” strategy for its customers, UPPCO’s EFEL proposal fails to support its assertion that replacing gas stoves with electric induction ranges produces significant health benefits. To begin with, neither the U.S. Consumer Product Safety Commission (“CPSC”) nor the EPA currently classifies gas stoves as a major health hazard in their technical or public information materials. (3 Tr. 184). Additionally, the Federal Interagency Committee on Indoor Air Quality (“CIAQ”), which is comprised of two dozen federal agencies including the EPA, CPSC, DOE, National Institute for Occupational Safety and Health, and Occupational Safety and Health Administration, routinely addresses indoor air quality issues of public importance. *Id.* The CIAQ has not identified natural gas cooking emissions as a principal driver of asthma or respiratory illness in its guidance. *Id.*

Moreover, UPPCO’s evidentiary presentation does not support its claim that replacing gas stoves with electric induction ranges produces significant health benefits. UPPCO relies heavily on a single cost-benefit literature review prepared for UPPCO by students at the University of Wisconsin–Madison, “Transitioning to Induction Stoves in Michigan: A Cost-Benefit Analysis” (the “UPPCO Stove Analysis”). (3 Tr. 184). The UPPCO Stove Analysis is a modeling study that attempts to convert various health and safety findings into dollar values for switching from gas to induction stoves. (3 Tr. 185). UPPCO cites this report as primary support for its claim that gas-to-induction stove replacements under EFEL will deliver large, quantifiable health benefits.

²⁵ MCL 460.1072(1).

Id. In effect, UPPCO leans on this single, UPPCO-commissioned analysis to characterize stove replacement as a high-value “health and safety” strategy for its customers. *Id.*

The overarching issue with UPPCO relying on the UPPCO Stove Analysis to support its EFEL health claims is that the UPPCO Stove Analysis takes varied indoor-air and health research contemplating a variety of contributing factors including but not limited to cooking and attempts to collapse it into a single “net benefit” number per stove replacement, even though its own Monte Carlo results show an extremely wide range of possible outcomes. *Id.* That single number is then treated as if it were quantitative evidence that fuel-switching stoves will reliably produce large benefits in UPPCO’s territory. *Id.*

The UPPCO Stove Analysis assigns a total benefit of \$9,960.71 per household per year for switching from gas to induction. (3 Tr. 186). Of that amount, \$8,030.97 is attributed to “PM_{2.5} Health Impacts,” which is over 80 percent of the total claimed benefit. *Id.* That means the overall case for stove replacement as a health and safety benefit in the UPPCO Stove Analysis rests predominantly on assumed reductions in fine particulate matter. *Id.* Moreover, to estimate PM_{2.5} benefits from switching stoves the UPPCO Stove Analysis relied on four papers that vary in scope and are over a decade old. *Id.* The UPPCO Stove Analysis also provides no screening protocol for selecting or excluding studies. *Id.* Specifically, the study lacks a transparent, systematic screening process for literature selection, such as a PRISMA flow diagram. *Id.* As SEMCO Witness Leahy points out, without transparent inclusion/exclusion criteria, it is difficult to assess selection bias, reproducibility, or whether higher-quality, more recent, or Michigan-relevant studies were omitted. *Id.*

The UPPCO Stove Analysis’s presentation of PM_{2.5} evidence is also concerning. The study effectively averages four incompatible numbers (23.4%, 19.3%, 77.7%, 0%) to claim an “≈30%”

PM_{2.5} reduction from fuel switching. (3 Tr. 187). That single figure collapses very different study designs, spaces, and behaviors into one “benefit” that is not Michigan- or UPPCO-specific. *Id.* This presentation is misleading to a reader because it implies comparability and a common intervention. *Id.* However, none of the four studies isolates stove fuel switching as a treatment. *Id.*

For example, the 77.7% figure attributed to the Wallace & Ott (2011) study is a personal-exposure study examining ultrafine particle levels from diverse sources, such as hair dryers, automobiles, indoor cigarette smoking, and cooking, without regard to fuel type. *Id.* It does not measure PM_{2.5} reductions specifically tied to replacing a gas stove. *Id.* Using its values as a proxy for stove-switch benefits, and then averaging them with unrelated tests, conflates distinct outcomes and contexts into a single “benefit,” which misrepresents the original intent of the study. *Id.*

The practical effect of presenting PM_{2.5} evidence this way is that it invites misinterpretation by suggesting the four papers demonstrate a stove-switch PM_{2.5} reduction. *Id.* They do not. Absent empirical data, the claimed PM_{2.5} benefit should be treated as hypothesis-level and not relied upon for blanket EFEL approval to replace stoves. *Id.*

In sum, UPPCO’s EFEL proposal fails to prove that replacing gas stoves with electric induction ranges produces significant health benefits.

D. UPPCO’s EFEL Proposal Raises Concerns For UPPCO’s System Reliability, Winter Capacity Constraints, and Non-baseload Grid Emissions.

Electrification, specifically of heating load, as UPPCO has proposed in this case would raise winter electric load precisely when UPPCO’s system is already short on capacity, increasing reliability risk, and wholesale energy costs, and rely on non-baseload peaking plants with higher emissions. (3 Tr. 188). UPPCO’s Integrated Resource Plan (Case No. U-21809),

through testimony by its Director of Regulatory Affairs and Power Supply, Eric W. Stocking, explicitly acknowledges a persistent winter season capacity shortfall, despite generation additions to UPPCO’s capacity. (Testimony of Eric W. Stocking – UPPCO IRP page 38 beginning line 13, Case No. U-21809). In a meeting with the Michigan Department of Environment, Great Lakes, and Energy (“EGLE”) to discuss electric vehicle (“EV”) charger deployment, UPPCO stated that “the distribution lines were the limiting factor,” explaining that they rely on “single-phase 12.4 kV / 7,200 V lines” and that some locations would require “extensive build up” to serve higher loads.²⁶

These admissions undercut UPPCO’s suggestion that incremental electrification load can be absorbed without consequence and underscore why a distribution-level engineering and cost analysis is required, not optional. Winter heating electrification would compound UPPCO’s shortfall, leading to higher reliance on MISO emergency purchases during peak cold events when non-baseload electric generation is introduced and emissions are higher, greater exposure to volatile spot-market prices, and increased risk of service interruptions during extreme weather. (3 Tr. 189). These outcomes would be inconsistent with the Act 295’s requirement that an EFEL measures plan “shall not have the effect of increasing electric rates for customers that do not participate in the program,” absent a robust demonstration that incremental EFEL load does not worsen winter capacity needs or upward pressure on rates.²⁷ *Id.* Thus, higher capacity and energy prices would affect all customers, not just participants. (3 Tr. 189).

UPPCO also failed to quantify these distribution upgrade costs in its direct case. *Id.* In discovery, UPPCO defined “gross margin on increased sales” narrowly as distribution revenue

²⁶ <https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Programs/MMD/Energy/NEVI/Meeting-Notes-Regional-Utility-Meetings-2022-11-3.pdf>

²⁷ MCL 460.1072(3).

and acknowledged distribution costs were not expected, a screening approach that omits exactly the kinds of upgrades its EGLE discussion implies would be necessary. (3 Tr. 190). Without cost quantification, EFEL rate and bill impacts are understated, and risk of rate impact to all customers is high. *Id.* Finally, UPPCO baselessly states that the electric grid is getting cleaner, emissions are decreasing, and the lifecycle emissions reduction will increase over time. *Id.* This claim is questionable and not grounded in historical data. (3 Tr. 191). Over the most recent eGRID data years, non-baseload emission rates in MROE have not shown a consistent downward trend and non-baseload emissions have increased overall, not decreased. *Id.* This history cautions against assuming rapid decarbonization of the marginal, non-baseload generation serving winter peak load in the Upper Peninsula without evidence. *Id.*

In sum, UPPCO's EFEL plan would raise winter electric load precisely when UPPCO's system is already short on capacity, increasing reliability risk, and wholesale energy costs, and rely on non-baseload peaking plants with higher emissions.

REQUEST FOR RELIEF

Based on the foregoing, SEMCO Energy Gas Company respectfully requests the Michigan Public Service Commission issue an order that:

1. Determines UPPCO’s EFEL plan is insufficient to ensure the achievement of applicable EFEL standards as set forth in MCL 460.1072.
2. Finds that UPPCO’s EFEL Plan fails to satisfy all of the statutory requirements of 2008 PA 295, as amended, and reject the EFEL Plan.

Respectfully submitted,

Date: March 6, 2026

DYKEMA GOSSETT PLLC

By: _____

Richard J. Aaron (P35605)
Jason T. Hanselman (P61813)
Hannah E. Buzolits (P84702)
Josh L. Kluzak (P87970)
Counsel for SEMCO Energy Gas Company
DYKEMA GOSSETT PLLC
201 Townsend Street, Suite 900
Lansing, MI 48933
(517) 374-9100
RAaron@dykema.com
JHanselman@dykema.com
HBuzolits@dykema.com
JKluzak@dykema.com

109461.000073 4898-9096-4369.9

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission’s own motion,)
regarding the regulatory reviews, revisions,)
determinations, and/or approvals necessary for)
UPPER PENINSULA POWER COMPANY)
to fully comply with Public Act 295 of 2008,)
as amended.)

Case No. U-21684

PROOF OF SERVICE

Cassandra A. Jackway, an employee of Dykema Gossett PLLC, says that on the 6th day of March 2026, she served SEMCO Energy Gas Company’s Initial Brief upon the following parties at the email addresses indicated:

ALJ

Jonathan F. Thoits

thoitsj@michigan.gov

MPSC Staff

Amit T. Singh

singha9@michigan.gov

Adam M. Cozort

cozort1@michigan.gov

Upper Peninsula Power Company

Michael G. Oliva

moliva@fosterswift.com

Cassandra A. Jackway