Founded in 1852 by Sidney Davy Miller

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June 29, 2021

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

Re: Upper Peninsula Power Company

2022-2023 EWR Biennial Plan

Case No. U-20879

Dear Ms. Felice:

Enclosed for electronic filing in the above case, please find Upper Peninsula Power Company's Application and supporting Direct Testimony and Exhibits. Also enclosed are the Appearances of myself and Paul M. Collins.

Should you have any questions, please contact me.

Very truly yours,

Miller, Canfield, Paddock and Stone, P.L.C.

By: _		
•	Sherri A. Wellman	

SAW/ehk Enclosure

cc w/enc: Gradon Haehnel

Andrew McNeally Eric Stocking

37586844.1/130062.00001

#### 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	)	Case No. U-20879
<b>UPPER PENINSULA POWER COMPANY</b> to	)	
fully comply with Public Act 295 of 2008, as	)	
amended by Public Act 342 of 2016.	)	

#### **APPLICATION**

Upper Peninsula Power Company ("UPPCO" or the "Company") requests approval of the Michigan Public Service Commission ("MPSC" or the "Commission") of its Energy Waste Reduction ("EWR") plan and related surcharges for the 24–month period ending December 31, 2023. In support thereof, the Company respectfully represents as follows:

- 1. UPPCO is a Michigan corporation, with principal offices located at Marquette, Michigan, and is engaged as a public utility in the generation, purchase, distribution, and sale of electric energy in its service territory in the Upper Peninsula of Michigan. UPPCO serves certain cities, villages and townships located in the counties of Alger, Baraga, Delta, Houghton, Iron, Keweenaw, Marquette, Menominee, Ontonagon, and Schoolcraft.
- 2. Section 71 of 2008 PA 295, as amended by 2016 PA 342, requires UPPCO to file an EWR plan with the Commission. On November 19, 2020, the Commission issued an order in Case No. U-20874 *et al*, directing UPPCO to file its biennial EWR plan filing in Case No. U-20879 by July 1, 2021.
- 3. Section 71 of 2008 PA 295, as amended by 2016 PA 342, requires that an EWR plan: (a) proposes a set of EWR programs that include offerings for each customer class, (b)

specifies necessary funding levels, (c) describes how EWR program costs will be recovered, (d) ensures that, to the extent feasible, charges collected from a particular rate class are spent on EWR programs for that rate class, (e) demonstrates that the proposed EWR programs and funding are sufficient to ensure achievement of the applicable standards, (f) specifies megawatt hours of electricity used in the calculation of incremental energy savings will be based on the average number of megawatt hours of electricity sold by the provider annually during the previous 3 years to retail customers in this state, (g) demonstrates that the EWR programs will be cost-effective, (h) provides for the practical and effective administration of the proposed EWR programs, and (i) includes a process for obtaining an independent expert evaluation of the actual EWR programs to verify the incremental energy savings from each EWR program.

- 4. Consistent with the foregoing statutory requirements, UPPCO is sponsoring a EWR plan as set forth in the testimony and exhibits of Eric Stocking and Andrew McNeally. Specifically, the testimony/exhibits will (a) provide a regulatory and policy overview of UPPCO's proposed 2022 and 2023 EWR plan, (b) sponsor the Company's EWR surcharges for 2022-2023, and (c) describe the Company's requested EWR plan revenue offset provision. The Company's direct case also supports UPPCO's request for continuing to carry-forward unspent monies into the 2022-2023 EWR planning years for the benefit of its customers. Finally the Company's direct case will (a) describe the development of the 2022-2023 EWR plan cost-effectiveness modeling for UPPCO's EWR plan to comply with the statutory requirements of Public Act 342, and (b) provide the cost benefit results demonstrating that the energy efficiency portfolio is cost-effective using the Utility System Resource Cost Test ("UCT") (excluding the low-income customers).
- 5. UPPCO's testimony and exhibits demonstrate that the EWR plan is reasonable, prudent, and consistent with applicable statutory requirements.

6. UPPCO also requests the approval of surcharges designed to recover the costs of

its proposed 2022 and 2023 EWR plan from its customer classes, and approval of its EWR plan

revenue offset provision.

WHEREFORE, Upper Peninsula Power Company respectfully requests that this

Commission:

A. Find and determine that the Company's EWR plan, as set forth in the supporting

testimony and exhibits, is reasonable and prudent, and that it meets all of the

statutory requirements;

B. Authorize the Company, beginning January 1, 2022, to implement the revised EWR

surcharges as set forth in the supporting testimony and exhibits;

C. Approve the requested EWR plan revenue offset provision and authorize the

Company to carry-forward any unspent monies into the 2022-2023 EWR planning

years; and

D. Grant such other and further relief and authorizations as may be lawful and proper.

Respectfully submitted,

UPPER PENINSULA POWER COMPANY

Dated: June 29, 2021 By:

One of Its Attorney

Sherri A. Wellman (P38989) Paul M. Collins (P69719)

Miller, Canfield, Paddock and Stone, PLC

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Attorneys for UPPER PENINSULA POWER COMPANY

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#### **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		Case No. U-20879
<b>UPPER PENINSULA POWER COMPANY</b> to	)	
fully comply with Public Act 295 of 2008, as	)	
amended by Public Act 342 of 2016.	)	

# DIRECT TESTIMONY AND EXHIBITS OF ANDREW MCNEALLY

1	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	A.	My name is Andrew McNeally, and my business address is 1002 Harbor Hills Drive, Marquette,
3		Michigan 49855.
4		
5	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
6	A.	I am employed by Upper Peninsula Power Company ("UPPCO" or the "Company") as the
7		Energy Efficiency Program Administrator.
8		
9	Q.	BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EMPLOYMENT
10		HISTORY.
11	A.	I earned my Bachelor of Science in Surveying Engineering degree from the University of Maine
12		at Orono in 1993, which included a year-long exchange at the University of Melbourne, Victoria,
13		Australia in 1992. Within the regulated electric utility industry, I began my professional career at
14		Maine Public Service Company, as a Customer Service Representative in 2005. Beginning in
15		2006, I was the sole Energy Management Auditor and primarily responsible for residential and
16		small commercial energy conservation auditing and education, training of energy auditing field
17		service personnel, and responding to customer and Maine Public Utilities Commission ("MPUC")
18		requests. I had transitioned to a Rate and Regulatory Analyst responsible for load settlement,
19		transmission reservations, large customer billing, and governmental agency reporting to the
20		MPUC, Northern Maine Independent System Administrator ("NMISA"), Federal Energy
21		Regulatory Commission ("FERC") and North American Electric Reliability Corporation
22		("NERC") in 2009. By 2012, Maine Public Service Company had been acquired by Bangor
23		Hydro Electric Company, becoming a newly formed regulated transmission and distribution
24		utility in Maine, called Emera Maine. At the newly formed Emera Maine, I assumed the role of

25

Senior Rate Analyst, and was responsible for the annual and triennial Federal transmission rate

1		filings, the transmission Open Access Same-time Information System ("OASIS"), management of
2		the transmission interconnection queue, and providing specific project analytical support for ISO-
3		NE PTO-AC Rates Working Group. In addition, I assisted with the development of the Emera
4		Maine's heat pump pilot program and electric vehicle assessment. In 2015, I joined Birch Point
5		Software as a Business Analyst where I was responsible for developing custom solutions and web
6		service applications, and maintaining and building enterprise software applications. In late 2016,
7		I joined UPPCO as a Business Analyst, facilitating budgeting, load settlement, and sales and
8		revenue forecasting. In October 2017, I assumed the role of Energy Efficiency Program
9		Administrator for UPPCO. Since 2018, I am directly responsible for administration, contractor
10		management, and monitoring. I ensure the success of UPPCO's Energy Waste Reduction
11		("EWR") Portfolio by managing the relationship and progress of our implementing contractors,
12		regular meetings, review and approval of plan and program modifications and marketing
13		campaigns.
14		
15	Q.	HAVE YOU PREVIOUSLY TESTIFIED IN ANY REGULATORY PROCEEDINGS?
16	A.	Yes. I have provided testimony in several cases before the Commission, on behalf of UPPCO
17		including Case Nos. U-18265, U-20032, U-20350 U-20368, U-20376, U-20706, and U-20869.
18		
19	Q.	PLEASE IDENTIFY AND DESCRIBE THE EXHIBITS IN SUPPORT OF YOUR
20		TESTIMONY?
21	A.	Yes, I am sponsoring the following exhibits:
22		• Exhibit A-1 (AHM-1) – EWR Plan 2022-2023
23		• Exhibit A-2 (AHM-2) – EWR Plan Budget
24		• Exhibit A-3 (AHM-3) – Cost-Effectiveness Detail
25		• Exhibit A-4 (AHM-4) – Performance Incentive Mechanism

1		• Exhibit A-5 (AHM-5) – Net Benefit Summary
2		• Exhibit A-6 (AHM-6) – Implementor Solicitation
3		• Exhibit A-7 (AHM-7) – Implementor Question and Answer
4		• Exhibit A-8 (AHM-8) – Revenue Requirement
5		
6	Q.	WHY IS UPPCO FILING THIS EWR PLAN?
7	A.	Pursuant to 2008 PA 295, as amended by 2016 PA 342, UPPCO is making this filing to request
8		approval of its 2022 and 2023 EWR Plan and to request authority to implement the
9		commensurate EWR surcharges.
10		
11	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
12	A.	The purpose of my testimony is to present UPPCO's EWR Plan for the 2022 and 2023 plan years.
13		
14	Q.	HOW IS YOUR TESTIMONY ORGANIZED?
15	A.	My testimony is organized into the following sections:
16		1. Overview
17		2. Statutory Compliance
18		3. EWR Plan Description
19		4. EWR Plan Program Budgets
20		
21	I. OV	<u>'ERVIEW</u>
22		
23	Q.	PLEASE DESCRIBE UPPCO's 2022-2023 EWR PLAN?
24	A.	UPPCO is proposing a self-administered EWR Plan for 2022 and 2023 plan years, with a target
25		of achieving 175% of the statutory incremental energy savings goals by helping customers reduce

electrical energy waste. UPPCO's proposed EWR Plan for 2022 and 2023 is in direct alignment with UPPCO's Integrated Resource Plan ("IRP") in MPSC Case No. U-20350.

#### Q. WHAT ARE SOME KEY HIGHLIGHTS OF UPPCO'S 2022-2023 EWR PLAN?

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A.

The proposed EWR Plan builds upon current program offerings for residential, commercial and industrial, and low-income customers. The Company's residential ENERGY STAR® Lighting and Appliance program will continue customer adoption of energy-efficiency products through direct delivery of energy saving kits, while encouraging energy-efficient and environmentally beneficial heat pump solutions for space heating and cooling, water heating, and clothes drying. UPPCO is expanding the multi-family program to address the energy-efficiency savings potential of residential customers that historically have limited opportunity to participate in energy waste reduction programs due to the predominance of low-income and tenant-landlord relationship issues. The focus of the multi-family program is the expansion of direct install measures to a holistic approach for the entire building or complex by including weatherization and high efficiency heat pump space heating and cooling systems. Another opportunity UPPCO is pursuing for energy-efficiency and environmental stewardship is the addition of a residential new construction program promoting high efficiency building shell construction, EnergyStar electric appliances, and cold-climate and variable flow heat pump systems. Small commercial customers will continue to receive the opportunity to participate in a low-interest small business finance program for installation of energy waste reduction measures. In addition, UPPCO is increasing its focus and spend on direct install measures for small commercial. UPPCO's low-income program is again increasing its spending range to target 14% to 18% of total plan budget, or said differently, UPPCO is targeting 35% to 45% of its residential budget for low-income programming. Finally, UPPCO's pilot programs will include assessment of both electric and other energy savings from weatherization measures (e.g., attic insulation, air sealing and duct sealing) offered to low income customers with heating systems that are delivered fuel based,

climate and variable flow heat pump systems. The proposed 2 assisting our most vulnerable customers address energy usage, measures that reduce energy usage, increasing the portfolio ave immediate and long-term savings for all customers, while bene	promotion and installation of
measures that reduce energy usage, increasing the portfolio ave immediate and long-term savings for all customers, while bene	
5 immediate and long-term savings for all customers, while bene	erage measure life to provide
	fitting the environment and
6 electrical distribution system.	
7	
8 Q. WHAT IS UPPCO'S RECENT EXPERIENCE WITH ENI	ERGY EFFICIENCY?
9 A. Since January 1, 2018, UPPCO has self-administered EWR in	order to customize a program that
will better meet its customers' energy efficiency needs by focu	sing on customer satisfaction, cost-
effectiveness and energy savings, in that order. UPPCO has acl	hieved and exceeded the statutory
first energy savings at a lower overall cost than originally budg	geted, as evidenced in EWR
13 Reconciliation Case No. U-20368, U-20706 and U-20869.	
14	
15 <u>II. STATUATORY COMPLIANCE</u>	
16	
17 Q. PURSUANT TO STATUTORY REQUIRMENTS LISTED	O IN 2008 PA 295, AS
18 AMENDED BY 2016 PA 342, PLEASE SUMMARIZE HO	W UPPCO'S PROPOSED EWR
10 ANIEMBED DI 2010 I A 542, I LEASE SUMMANIZE NO	
19 PLAN MEETS THESE REQUIREMENTS?	
	hall do all of the following:
19 PLAN MEETS THESE REQUIREMENTS?	Ç
PLAN MEETS THESE REQUIREMENTS?  20 A. PA 295, Sec.71(4) states that an energy waste reduction plan sh	clude offerings for each customer
PLAN MEETS THESE REQUIREMENTS?  A. PA 295, Sec.71(4) states that an energy waste reduction plan sl a) "Propose a set of energy waste reduction programs that inc	clude offerings for each customer 00 further stated the proposed

1	<ul> <li>UPPCO is compliant. UPPCO's proposed plan includes programs for residential,</li> </ul>
2	commercial and industrial customer classes, as well as low income single and multi-
3	family residential customers, and is for the 2-year period of 2022 and 2023. Please
4	reference Exhibit A-1 (AHM-1) EWR Plan 2022-2023.
5	b) "Specify necessary funding levels."
6	• UPPCO is compliant. UPPCO identifies the costs necessary to deliver its EWR Plan for
7	the 2022 and 2023 plan years. Please reference Exhibit A-2 (AHM-2) EWR Plan Budget.
8	As evidenced in Exhibit A-2 (AHM-2), Line 26, total program costs for 2022 and 2023
9	are \$4,068,451 and \$4,087,135, respectively.
10	c) "Describe how energy waste reduction programs costs will be recovered in Section 89(2)."
11	UPPCO is compliant. UPPCO proposes revenue surcharges to recover the necessary
12	costs to deliver its EWR Plan for the 2022 and 2023 plan years with volumetric rates for
13	residential customers, and per-meter charges for all other metered customers. As
14	evidenced in Exhibit A-12 (EWS-4) Rate Design – Surcharges and A-13 (EWS-5) Rate
15	Design – Self-Direct Surcharges.
16	d) "Ensure, to the extent feasible, that charges collected from a particular customer rate class are
17	spent on energy waste reduction programs that benefit that rate class."
18	• UPPCO is compliant. UPPCO's proposed revenue surcharges align benefits within rate
19	category (residential and commercial), and within rate classes, to the extent feasible.
20	e) "Demonstrate that the proposed energy waste reduction programs and funding are sufficient
21	to ensure the achievement of applicable energy waste reduction standards."
22	• UPPCO is compliant. UPPCO's proposed EWR Plan is cost-effective using the Utility
23	System Resource Cost Test ("UCT") excluding program offerings to low-income
24	residential customers with a UCT score of 2.39 as evidenced in Exhibit A-3 (AHM-3)
25	Cost-Effectiveness Detail.

1	f)	"Specify whether the number of megawatt hours of electricity [] used in the calculation of
2		incremental energy savings under section 77 will be weather-normalized or based on the
3		average number of megawatt hours of electricity [] sold by the provider annually during
4		the previous 3 years to retail customers in this state."
5		UPPCO is compliant. UPPCO calculated the incremental energy savings based on the
6		average number of megawatt hours of electricity sold during the previous 3 years. As
7		evidenced in Exhibit A-9 (EWS-1) Energy Savings Goals and Targets. Line 30, Columns
8		(f) and (g), the incremental savings goal is 7,839 megawatt hours and incremental savings
9		target is 13,457 megawatt hours, based on previous 3 year of retail sales.
10	g)	"Demonstrate that the provider's energy waste reduction programs, excluding program
11		offerings to low-income residential customers, will collectively be cost-effective."
12		• UPPCO is compliant. UPPCO's proposed EWR Plan is collectively cost-effective using
13		the UCT, excluding program offerings to low-income residential customers. As
14		evidenced in Exhibit A-3 (AHM-3) Cost-Effectiveness Detail, the EWR Plan excluding
15		program offerings to low-income achieves a UCT score of 2.39.
16	h)	"Provide for the practical and effective administration of the proposed energy waste reduction
17		programs."
18		• UPPCO is compliant. UPPCO maintains a full-time Energy Efficiency Program
19		Administrator for administration, contractor management and monitoring, plan and
20		program monitoring, plus customer relations. Please reference Exhibit A-2 (AHM-2)
21		EWR Plan Budget for residential and commercial administration, respectively.
22	i)	"Include a process for obtaining an independent expert evaluation of the actual energy waste
23		reduction programs to verify the incremental energy savings from each energy waste
24		reduction program for purposes of section 77."

1		<ul> <li>UPPCO is compliant. UPPCO's proposed EWR Plan includes independent expert</li> </ul>
2		evaluation of the actual programs to verify the incremental gross energy savings, as well
3		as net annual savings and net lifetime savings. Please reference Exhibit A-2 (AHM-2)
4		EWR Plan Budget for residential and commercial evaluation, respectively.
5		
6	Q.	DOES UPPCO'S EWR PLAN INCLUDE PLAN ELEMENTS THAT THE COMMISSION
7		SHOULD CONSIDER WHEN REVIEWING THE PLAN REQUIREMENTS?
8	A.	Yes. UPPCO's EWR Plan includes the following elements which are identified as Plan
9		Requirements or Plan Elements in Order U-15800 Attachment E, but not included in PA 295,
10		Sec.71(4) above:
11		a) "Allow for the coordination of energy [waste reduction] programs and services with those of
12		other utilities, agencies and the Commission-administered program."
13		• UPPCO is compliant. UPPCO's proposed EWR Plan includes the ability and flexibility
14		to coordinate and partner with other utilities, including DTE Gas and SEMCO,
15		community action agencies, and Efficiency United.
16		b) "Utilities may designate up to five percent of the energy [waste reduction] budget for pilot
17		programs, future energy optimization program development or to assess emerging
18		technologies."
19		• UPPCO is compliant. UPPCO's proposed EWR Plan includes a Pilot Program. One
20		pilot already identified is small business financing, and additional opportunities and
21		technologies are being reviewed.
22		c) "Up to three percent of the energy [waste reduction] budget may be used for the cost of
23		energy optimization education programs.
24		• UPPCO is compliant. UPPCO's proposed EWR Plan includes an Education Program
25		designed to help customers reduce energy waste and understand the benefits of energy

1		efficiency and conservation. UPPCO is continuing its partnership with National Energy
2		Foundation ("NEF") and other utilities to provide the Think! Energy curriculum to 4th
3		grade students across the Upper Peninsula. In 2022 and 2023, UPPCO will reach
4		approximately 1,200 students each year. In addition, UPPCO is adding the NEF electric
5		vehicle education program, rEV, for 8th through 12th grade students in 2022 and 2023.
6		
7	Q.	IS UPPCO REQUESTING APPROVAL OF A PERFORMANCE INCENTIVE
8		MECHANISM?
9	A.	Yes. As afforded in PA 295, UPPCO requests the Commission to authorize a financial incentive
10		mechanism to incentivize the utility to implement meaningful programs for its customers, focused
11		on deep energy savings and income-qualified customer spend.
12		
13	Q.	PLEASE DESCRIBE THE PROPOSED PERFORMANCE INCENTIVE MECHANISM?
14	A.	Consistent with PA 295, as well as the Order in Case No. U-18265, the proposed performance
15		incentive mechanism is based on a sliding scale with three separate metrics. The first metric
16		establishes the maximum potential incentive award based on first year energy savings, with the
17		second and third metrics, lifetime energy savings and low income spend, determining the actual
18		financial award. The baseline for the first metric, first-year annual savings, is the statutory energy
19		savings target per Section 77(5)(a) or (b) of Act 342 and calculated in Exhibit A-9 (EWS-1)
20		Energy Savings Goals and Targets as 7,839 MWh for 2022 and 2023. The baseline for the
21		second metric, lifetime savings, is the first metric target multiplied by an "average measure life"

spend range of 12% to 16%. Please see Exhibit A-4 (AHM-4) Performance Incentive

value of 12. Finally, the baseline for the third metric, low income spend, is the percentage range

of 14% to 18% of the actual EWR cost/spend, an increase over UPPCO's current low-income

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Mechanism.

1		
2	Q.	HAS UPPCO INCLUDED THE PROJECTED PERFORMANCE INCENTIVE
3		MECHANISM IN ITS PROPOSED BUDGETS?
4	•	A. Yes, as evidenced in Exhibit A-2 (AHM-2) – EWR Plan Budget, Line 23.
5		
6	Q.	WHAT ARE THE CRITERIA FOR EWR PLAN APPROVAL PURSUANT TO 2008 PA
7		295, AS AMENDED BY 2016 PA 342, AND DESCRIBE HOW UPPCO'S PLAN MEETS
8		THESE APPROVAL CRITERIA?
9	A.	Per PA 295, Sec.73(2), EWR Plan approval is dependent on determination that:
10		a) "the energy waste reduction plan meets the utility system resource cost test"
11		• UPPCO achieves this determination. As shown in Exhibit A-3 (AHM-3) – Cost-
12		Effectiveness Detail, UPPCO's proposed EWR Plan achieves a utility system resource
13		cost test ("UCT") score of 2.11 (all inclusive), and 2.39 (excluding low income and
14		financial incentive mechanism).
15		b) " is reasonable and prudent."
16		• UPPCO achieves this determination. The elements of UPPCO's proposed EWR Plan, in
17		aggregate, reduce the future cost of service for its customers by:
18		i) Influencing customers' electrical consumption patterns through educational
19		programs, incentives, and installation of energy-efficient measures.
20		ii) Analyzing the cost and benefit of individual measures, groups of measures at the
21		program level, groups of programs at the residential and commercial level, and
22		overall EWR Plan levels (as shown in Exhibit A-5 (AHM-5) Net Benefit Summary).
23		iii) Targeting 1.75% of annual retail electricity sales in accordance with UPPCO's
24		proposed long-range integrated resource plan as addressed in Case No. U-20350.

1		iv) Building program budgets to deliver benefits that are equitable by rate class, to the
2		extent feasible, based on billed kilowatt hour ("kWh") as shown in Exhibit A-9
3		(EWS-1) Energy Savings Goals and Targets \.
4		v) Expanding programs, including Multi-Family, Residential New Construction, Small
5		Commercial Financing, and Low-Income programs – to make energy-efficiency
6		more available, affordable, and useful for customers.
7		
8	III. I	EWR PLAN DESCRIPTION
9		
10	Q.	HOW WAS UPPCO'S 2022-2023 EWR PLAN DEVELOPED?
11	A.	The 2022-2023 EWR Plan development process was multifaceted. First, UPPCO began a Market
12		Characterization Study of its service territory to better understand its customers and their appetite
13		for energy efficiency, as well as to determine the penetration of energy efficiency within specific
14		segments of our customer base. Second, UPPCO developed a EWR Plan Implementor Request
15		for Proposal ("RFP") for competitive bidding and solicitation of innovative ideas to incorporate
16		into our next EWR Plan. Third, UPPCO and Morgan Marketing Partners ("MMP"), its EWR
17		Plan design consultant, worked closely with the selected implementor to update their proposal to
18		determine an appropriate mix of energy savings measures and incentive levels based on the
19		historic activities and successes of UPPCO's self-administered plan to achieve energy saving
20		targets, deliver program innovation and additional measures.
21		
22	Q.	WHAT WAS THE PURPOSE OF STARTING WITH A MARKET
23		CHARACTERIZATION STUDY?
24	A.	Although UPPCO has been collecting and reviewing data specific to customer participation in its
25		EWR Plans for several years, the data did not provide insight into energy efficiency opportunities

1		nor the penetration of energy efficiency within various customer segments. In addition, UPPCO
2		knew of the Michigan Statewide EWR and DR Potential Study, which would provide high level
3		trends and forecasts, but not utility specific recommendations. By starting with the market
4		characterization study, UPPCO can better utilize the Statewide Potential Study results, when
5		available, to create customer centric EWR Plans tailored to its service territory.
6		
7	Q.	HAS UPPCO COMPLETED ITS MARKET CHARACTERIZATION STUDY?
8	A.	No, UPPCO's Market Characterization Study is a two-phase design. Phase 1 was an analysis of
9		energy consumption trends for residential and commercial customers, with the objective to
10		identify areas for deeper characterization in Phase 2. For Phase 1, residential foci included low-
11		income and manufacturer home customers, and commercial focus on small businesses. Phase 1
12		was completed in March 2021 with the results being shared with Commission Staff and the
13		Statewide EWR and DR Potential Study Team. Phase 2 began in March/April 2021 with the
14		development of phone surveys for residential and commercial customers that will be followed by
15		in-depth virtual audits. The surveys and virtual audits are in progress now with analysis to be
16		completed in the third quarter of 2021.
17		
18	Q.	WHY SOLICIT PROPOSALS FOR EWR PLAN IMPLEMENTATION AND NOT BOTH
19		IMPLEMENTATION AND EVALUATION?
20	A.	UPPCO chose to solicit EWR Plan implementation only because first, with the EWR Statute
21		changes occurring at the end of 2021, UPPCO anticipated a competitive market for
22		implementation contractors, and second, UPPCO's third-party evaluator has been reviewing the
23		program since 2009 which enables UPPCO to compare performance across the entire life of our
24		EWR program.

1	Q.	PLEASE DESCRIBE UPPCO'S RFP PROCESS.	
2	A.	UPPCO and MMP developed the RFP solicitation using UPPCO's historic EWR Plans as a loose	
3		framework and then setting specific first year and lifetime energy savings targets, as well as	
4		defining a maximum cost per kWh. Exhibit A-6 (AHM-6) Implementor Solicitation contains the	
5		full solicitation that was released on December 15, 2020. Following the release of the RFP,	
6		UPPCO received and responded to bidder questions with initial questions answered on December	
7		29, 2020 and all questions by January 13, 2021 (see Exhibit A-7 (AHM-7) Implementor	
8		Responses). Bidders submitted proposals starting in late January, and all proposals were received	
9		by February 1, 2021 @ 5:00 PM ET. The proposals were reviewed individually by Gradon	
10		Haehnel, UPPCO Chief Financial Officer, Rick Morgan President of MMP, and me, then an	
11		initial ranking completed. The top three bidders were invited to make a presentation and	
12		interview. All bidders were given the same presentation format and pre-interview questions.	
13		Following the interviews, references were verified and reviewed prior to a final proposal and	
14		bidder ranking process. UPPCO notified the selected and non-selected bidders of the decision,	
15		which was followed by an RFP de-briefing interview with each bidder for UPPCO to provide and	
16		receive bidder feedback regarding the process.	
17			
18	Q.	WHO HAS UPPCO SELECTED TO IMPLEMENT THE 2022-2023 EWR PLAN?	
19	A.	UPPCO has selected SEEL, LLC (Solutions for Energy Efficient Logistics), a nationally certified	
20		minority business enterprise, service-disable, veteran-owned energy efficiency program	
21		implementation for-profit business.	
22			
23	Q.	PLEASE PROVIDE MORE DETAILS OF UPPCO'S 2022-2023 EWR PLAN?	
24	A.	The proposed EWR Plan for 2022-2023 builds off the plan designs that were approved by the	
25		Commission in Case No. U-18265 and U-20376 to ensure a cost-effective plan that complies with	

1		Public Act 342. The process began with calculating the energy savings goals for 2022 and 2023
2		using the average number of megawatts sold during the 3 years preceding the EWR Plan in
3		compliance with PA 342 Sec 77(5)(b) to establish the 1.0% first year energy savings goal, then
4		calculated the 1.75% first year energy saving target set in UPPCO's IRP for 2021. The 1.75%
5		target defined in UPPCO's IRP for 2021 is being used for 2022 and 2023. Using this
6		information, a customized plan was developed for the UPPCO territory. The measure mix,
7		participation levels and incentive amounts are included in Table 1 of Exhibit A-1 (AHM-1).
8		
9	Q.	FROM A SUMMARY PROGRAM DESIGN PERSPECTIVE, HOW DOES UPPCO'S
10		2022-2023 PLAN COMPARE TO UPPCO'S PRIOR PLANS?
11	A.	As evidenced in Exhibit A-1 (AHM-1), the 2022-2023 EWR plan builds upon the current EWR
12		plan by utilizing: Morgan Marketing Partners for design and modeling and DNV Energy Insights
13		Inc. ("DNV") for independent third-party evaluation; Superior Watershed Partnerships for a
14		portion of low-income implementation; and National Energy Foundation for educational services
15		By self-administering the EWR plan since 2018, UPPCO has identified several opportunities to
16		improve incremental energy savings by focusing on increasing the portfolio average measure life
17		(via deeper energy saving measures like heat pumps), increasing low income spend and including
18		multi-family eligibility within low income, expanding multi-family and small business direct
19		install programs, expanding educational outreach, and adding residential new construction.
20		
21	Q.	WHAT IS THE 2022-2023 EWR PLAN AND WHAT DOES IT CONTAIN?
22	A.	As evidenced in Exhibit A-1 (AHM-1), the 2022-2023 EWR plan provides a roadmap for
23		UPPCO to achieve its energy savings goals and targets cost-effectively. The 2022-2023 EWR
24		plan describes the programs and their elements so that they can be implemented by UPPCO's
25		implementation contractor. It is important to note that even though the 2022-2023 EWR plan

1		provides direction for implementing the programs, the programs continue to be refined during the
2		development of the detailed operational plans with the implementation contractors and during
3		implementation. This is to be expected over multi-year program plans as technologies, markets,
4		and customer opportunities change. The plan's program descriptions include the program
5		objective, target markets, program description and duration, initial measures/services
6		recommended, implementation and delivery strategies, evaluation requirements, estimated
7		participation, savings, and budgets. From this program information, a cost benefit analysis is
8		completed to assure that the programs are cost-effective.
9		
10	Q.	DOES THE PLAN MEET THE STATUTORY SAVINGS GOALS?
11	A.	Yes. The UPPCO 2022-2023 EWR plan was developed to exceed the statutory goals of 1.0% as
12		set forth in 2008 PA 295, as amended by 2016 PA 342, Sec 77(1) by targeting 1.75%. The
13		modeled net energy savings for 2022 and 2023 are 13,472 MWH and 13,494 MWH, respectively.
14		
15	Q.	IS UPPCO'S 2022-2023 EWR PLAN CONSISTENT WITH THE TARGETED 1.75%
16		EWR PLAN SET IN U-20350.
17	A.	Yes. UPPCO developed the plan to meet the 2021 EWR savings target of 1.75% as set forth in
18		its IRP for the 2022 and 2023 plan years.
19		
20	Q.	HOW WAS COST-EFFECTIVENESS OF THE EWR PROGRAMS DETERMINED?
21	A.	MMP utilized the DSMore cost analysis tool to calculate and report cost-effectiveness for the
22		programs using the UCT as defined by PA 342. Per statute, UPPCO's programs must be cost-
23		effective utilizing UCT to receive Commission approval.
24		
25	Q.	PLEASE DESCRIBE THE MODELING TOOL USED BY MMP?

1	A.	The DSMore tool is an award-winning modeling software that is nationally recognized and used
2		in many states across the country to determine cost-effectiveness.
3		
4	Q.	PLEASE LIST THE COST-EFFECTIVE TESTS COMPLETED BY MMP?
5	A.	MMP tested the cost-effectiveness of UPPCO's EWR Plan in total, by residential and business
6		classes, and for each program using the following tests:
7		• Utility System Resource Cost Test ("UCT"): Defined as the ratio of the net benefits of the
8		programs to the program costs incurred by the utility for the programs. For a program to be
9		cost-effective, this ratio needs to be greater than one.
10		• Total Resource Cost Test ("TRC"): Defined as the total avoided cost divided by the program
11		costs plus the participant's costs. Incentives paid to the customer are in both the cost and
12		benefit sides of the equation, so they cancel each other out.
13		• Rate Impact Measure ("RIM"): Defined as the avoided cost benefits divided by the program
14		costs and lost revenues.
15		• Societal Cost Test ("SCT"): Defined as the ratio of the total avoided costs plus the
16		quantifiable benefits to society (such as saved water and reduced pollution) divided by the
17		program costs plus the participant costs.
18		• Participant Test: Defined as the participant's benefits in energy savings from their bill plus
19		their incentives divided by their costs to participate.
20		
21	Q.	ARE NON_ENERGY BENEFITS INCLUDED IN THE COST-EFFECTIVENESS TESTS?
22	A.	While the National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy
23		Resources discusses that the TRC, SCT and any other test that includes program participant
24		impacts should include participant non-energy benefits, no non-energy mechanisms or values
25		have been established in Michigan, so they are not included in the UPPCO analysis. Because

1		such non-energy benefits are not included in UPPCO's analyses, our TRC and SCT results
2		understate the cost-effectiveness of our efficiency programs.
3		
4	Q.	WHAT EXHIBIT DEMONSTRATES THESE COST-EFFECTIVENESS RESULTS?
5	A.	Exhibit A-3 (AHM-3) Cost-Effectiveness Detail shows the tests results of the various cost-
6		effectiveness tests performed by MMP.
7		
8	Q.	PLEASE IDENTIFY KEY MODELING ASSUMPTIONS USED BY MMP?
9	A.	In order for MMP to perform modeling for UPPCO's EWR Plan, a variety of inputs were utilized
10		including:
11		a) Participation rates, incentives paid, energy savings of the measure, life of the measure,
12		implementation costs, administrative costs, and incremental costs to the participant of the
13		high efficiency measure.
14		b) Free-ridership or Net-To-Gross ("NTG") values. UPPCO requested MMP continue to
15		assume the current NTG values of 1.0 for low-income, and 0.90 for most other programs,
16		consistent with the deemed values granted by the Commission.
17		c) Utility information including utility rates; escalation rates; discount rates for the utility,
18		society and the participant; and avoided costs.
19		d) Historical data including hourly prices and hourly energy savings from the specific
20		measures/technologies, 30 years of weather data, and program costs.
21		
22	Q.	WHAT WAS THE BASIS FOR SAVINGS USED FOR THE PLAN AND COST-
23		EFFECTIVENESS TESTING?
24	A.	Savings for the EWR Plan and cost benefit analysis were based on the Michigan Energy
25		Measures Database ("MEMD"). The adopted 2021 MEMD was the basis for the EWR Plan.

1	

A.

#### Q. HOW WERE PROGRAM COSTS DEVELOPED FOR THE PLAN AND COST BENEFIT

#### **ANALYSIS?**

Program costs for the 2022-2023 planning years are based on incentive, implementation, and administrative budgets and costs. The incentive budget development relies on historic program costs, adjusted for changes over time and the UPPCO territory, reviewed for reasonableness, and modified based on program best practices. The implementation budget is directly from the implementation contractor models developed during the EWR plan design process. Finally, the administrative budget was compiled based on internal and external needs, services, and contracts. In total, these separate budgeting processes assure that the EWR Plan budget is based on realistic historic operational costs and realistic levels that are proven in the market.

A.

#### Q. HOW DOES MMP ACCOUNT FOR AVOIDED ELECTRIC BENEFITS COMPUTED?

MMP calculated the avoided benefits for UPPCO's analysis utilizing historic hourly price data from the Midcontinent Independent System Operator ("MISO") market and hourly weather data, to determine the value of the saved kWh. The savings by measure were applied at specific hours over the year since prices vary by hour. These prices were weighted based on the probability of weather variations over 33 years of weather history so that the full range of weather and prices were properly captured. Each hour had a unique price which was then escalated over time. This assured that the savings reflect the value one would expect to see in the market over time from the avoided energy sales. In addition to capacity and energy, avoided transmission and distribution costs are included in the cost benefit models to reflect the total benefits of the savings.

#### Q. WHAT ARE THE NET BENEFITS?

1	A.	As evidenced in Exhibit A-5 (AHM-5) the net benefits are the computed avoided cost benefits
2		minus the program costs to acquire those benefits. The proposed EWR Plan has net benefits of
3		\$8,458,618, as modeled.
4		
5	Q.	PLEASE DESCRIBE THE COST-EFFECTIVENESS RESULTS FOR UPPCO'S 2022-
6		2023 EWR PLAN?
7	A.	UPPCO's EWR Plan is cost-effective with the Program Portfolio UCT score of 2.39, excluding
8		low-income programs. This means that the savings benefits are 139% greater than the program
9		cost. The cost-effective test result is 2.11 when including low income and financial incentive
10		mechanism, which means benefits are 111% greater than program cost.
11		
12	Q.	IS UPPCO'S 2022-2023 EWR PLAN COST-EFFECTIVE?
13	A.	Yes. Based on the analysis MMP performed using DSMore, UPPCO's 2022-2023 EWR plan
14		passes the cost-effectiveness test in accordance with the legislative requirements of PA 342. This
15		analysis was done in accordance with legislative guidelines and did not include low-income
16		programs.
17		
18	Q.	WHY EXCLUDE LOW-INCOME PROGRAMS FROM COST-EFFECTIVENESS
19		TESTING?
20	A.	Although statute excludes low-income programs from the cost-effectiveness test, UPPCO
21		believes that a low-income program that achieves a UCT score of 1.0, cost-effective, or higher,
22		results in a lower cost EWR for all customers and helps levelize the equity between surcharge
23		payment and rebate receipt across class. This focus on cost-effectiveness has resulted in the low-
24		income program achieving an UCT score of 3.25. This feat is accomplished by selecting an
25		implementor, SEEL LLC (Solutions for Energy Efficient Logistics) that is very knowledgeable in

1		delivering low-income programming, as well as partnering with Superior Watershed Partnerships
2		("SWP"), a local, environmental, low-income focused, community-based organization. SEEL
3		utilizes a people-focused approach to energy efficiency program and portfolio delivery,
4		knowledgeable of low-income programs, and collaborates with other utilities and trade ally
5		networks. SWP is a well-respected organization within the low-income community and delivers
6		services across the Upper Peninsula and northern Lower Peninsula of Michigan. In aggregate, the
7		low-income program delivery by SEEL and SWP results in avoided cost benefits exceeding
8		program costs, and a UCT score of 3.25. This demonstrates that the overall low-income program
9		can be cost-effective (UCT score 1.0 or greater) even with some individual measures that are not
10		cost-effective, and that UPPCO will continue to offer those measures while focusing on building
11		a cost-effective low-income program.
12		
13	IV. PI	ROGRAM BUDGETS
13 14	IV. PI	ROGRAM BUDGETS
	IV. PF	WHAT ARE THE ANNUAL PROGRAM COSTS OF UPPCO'S 2022-2023 EWR PLAN?
14		
14 15	Q.	WHAT ARE THE ANNUAL PROGRAM COSTS OF UPPCO'S 2022-2023 EWR PLAN?
14 15 16	Q.	WHAT ARE THE ANNUAL PROGRAM COSTS OF UPPCO'S 2022-2023 EWR PLAN?  The proposed budgets for the 2022 and 2023 EWR Plan are \$4,068,451 and \$4,087,135,
<ul><li>14</li><li>15</li><li>16</li><li>17</li></ul>	Q.	WHAT ARE THE ANNUAL PROGRAM COSTS OF UPPCO'S 2022-2023 EWR PLAN?  The proposed budgets for the 2022 and 2023 EWR Plan are \$4,068,451 and \$4,087,135,  respectively, to achieve 1.75% of the statutory energy savings goal, as evidenced in Exhibit A-2
14 15 16 17 18	Q.	WHAT ARE THE ANNUAL PROGRAM COSTS OF UPPCO'S 2022-2023 EWR PLAN?  The proposed budgets for the 2022 and 2023 EWR Plan are \$4,068,451 and \$4,087,135,  respectively, to achieve 1.75% of the statutory energy savings goal, as evidenced in Exhibit A-2
14 15 16 17 18	<b>Q.</b> A.	WHAT ARE THE ANNUAL PROGRAM COSTS OF UPPCO'S 2022-2023 EWR PLAN?  The proposed budgets for the 2022 and 2023 EWR Plan are \$4,068,451 and \$4,087,135, respectively, to achieve 1.75% of the statutory energy savings goal, as evidenced in Exhibit A-2 (AHM-2).
14 15 16 17 18 19 20	Q. A.	WHAT ARE THE ANNUAL PROGRAM COSTS OF UPPCO'S 2022-2023 EWR PLAN?  The proposed budgets for the 2022 and 2023 EWR Plan are \$4,068,451 and \$4,087,135, respectively, to achieve 1.75% of the statutory energy savings goal, as evidenced in Exhibit A-2  (AHM-2).  HOW HAS UPPCO CALCULATED THE REVENUE REQUIREMENTS?
14 15 16 17 18 19 20 21	Q. A.	WHAT ARE THE ANNUAL PROGRAM COSTS OF UPPCO'S 2022-2023 EWR PLAN?  The proposed budgets for the 2022 and 2023 EWR Plan are \$4,068,451 and \$4,087,135, respectively, to achieve 1.75% of the statutory energy savings goal, as evidenced in Exhibit A-2  (AHM-2).  HOW HAS UPPCO CALCULATED THE REVENUE REQUIREMENTS?  The EWR Plan costs are divided into three categories: residential; commercial & industrial, and

25

industrial sector, including half of the performance incentive. The societal category includes all

1		low-income programming costs, 75% of multi-family direct install costs, and education and pilot					
2		program costs that are allocated across all customer classes. UPPCO renamed this cost category					
3		as societal because in Case No. U-20376, UPPCO referred to these costs as "portfolio" which					
4		caused confusion and misunderstar	nding. See Exhibit A	8 (AHM-8) Revenu	ue Requirement for		
5		details.					
6							
7	Q.	HOW ARE THE EWR SURCHA	ARGES CALCULA	TED?			
8		Witness Stocking's testimony defin	nes the allocation fac	tors, revenue require	ement allocation and		
9		surcharge calculations.					
10							
11	Q.	HOW DO THE PROPOSED PR	OGRAM COSTS I	MPACT TYPICAL	CUSTOMER EWR		
12		SURCHARGE RATES AND AVERAGE CUSTOMER BILLS?					
13	A.	As evidenced in Exhibit A-12 (EWS-4) the EWR Surcharge for Residential customers will see a					
14		decrease of 9%, Small Commercial customers will see a decrease of 6%, Medium Commercial					
15		customers will see an increase of 1%, Large Commercial customers will see an increase of 58%,					
16		Industrial customers will see an increase of 878% and 151%, and metered lighting customers will					
17		see an increase of 353%.					
18							
19	Q.	PLEASE PROVIDE A SUMMA	RY OF THE TYPIC	CAL BILL IMPAC	TS.		
20	A.	The typical bill impacts for custom	ers, based on the inc	remental differences	between UPPCO's		
21		current EWR surcharges (Case No.	. U-20706) and the p	roposed EWR plan,	are:		
22		Rate Category	Rate Class	Monthly	Yearly		
23		Residential (per 500 kWh)	A-1	-\$0.35	-\$4.20		
24		Small Commercial (per meter)	C-1	-\$0.41	-\$4.96		
25		Medium Commercial (per meter)	P-1	\$0.70	\$8.40		

1	Large Commercial (per meter)	CP-U	\$403.95	\$4,847.39
2	Industrial (per meter)	RTMP	\$70,213.13	\$842,557.58
3	Industrial (per meter)	WP-3	\$4,203.18	\$50,438.17
4	Lighting (per meter)	SL-3	\$13.18	\$158.20

A.

#### 6 Q. PLEASE EXPLAIN THE BIGGEST DRIVERS OF WHY EWR RATES ARE

#### **INCREASING?**

Proposed EWR surcharges are slightly decreasing for residential and small commercial rate classes while increasing for large commercial and industrial rates classes. The primary drivers are a focus on equitable distribution of plan costs based on electric sales which provides customers the appropriate pricing signal, and better alignment with the Energy Waste Reduction statute for distribution of societal costs to all rate classes. In addition, to reach UPPCO's energy savings target of 1.75% in 2022-2022 higher incentives are necessary to encourage participation and installation of longer-life measures, especially for low-income residential customers and small commercial customers to install deeper energy savings measures. Additional drivers include evaluation/verification, and performance incentive mechanism.

#### Q. DOES THIS CONCLUDE YOUR TESTIMONY?

19 A. Yes.

#### **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	)	Case No. U-20879
<b>UPPER PENINSULA POWER COMPANY</b> to	)	
fully comply with Public Act 295 of 2008, as	)	
amended by Public Act 342 of 2016.	)	

# DIRECT TESTIMONY AND EXHIBITS OF ERIC STOCKING

1	Q.	PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND NAME OF YOUR
2		EMPLOYER.
3	A.	My name is Eric Stocking and my business address is 1002 Harbor Hills Drive, Marquette,
4		Michigan 49855. I am employed by Upper Peninsula Power Company ("UPPCO" or the
5		"Company").
6		
7	Q.	PLEASE PROVIDE YOUR TITLE AND DESCRIBE YOUR JOB RESPONSIBILITIES.
8	A.	My title is Manager of Rates & Power Supply. My responsibilities in this role include a wide
9		variety of issues touching several aspects of UPPCO's business, including power supply, resource
10		planning, cost of service and rate design, sales and peak demand forecasting, and Renewable
11		Portfolio Standard ("RPS") compliance analysis.
12		
13	Q.	BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EMPLOYMENT
14		HISTORY.
15	A.	I graduated from Michigan State University in 2009 with a Bachelor of Science in Economics. In
16		February 2010, I entered employment with the Michigan Public Service Commission ("MPSC"
17		or the "Commission") Staff as an Economic Analyst in the Generation and Certificate of need
18		section with responsibilities related to generation resource adequacy, load forecasting, integrated
19		resource planning, capacity expansion modeling, and utility capital investment related to
20		compliance with Federal and State air quality regulations. In the Fall of 2016, I took on the role
21		of Economic Specialist in the Resource Adequacy and Retail Choice area of the MPSC Staff,
22		where I played an active role in the implementation of several aspects of PA 341 & 342 of 2016,
23		including the State Reliability Mechanism and Integrated Resource Planning. In November of
24		2017, I left my employment with the MPSC Staff and began working at UPPCO as a Rate
25		Analyst within the Regulatory Affairs department, and provided testimony in UPPCO's 2018 rate

1		case, 2019 Integrated Resource Plan ("IRP") proceeding, among others. In November 2019, I
2		assumed my current role within the Company.
3		
4	Q.	HAVE YOU PREVIOUSLY TESTIFIED IN ANY REGULATORY PROCEEDINGS?
5	A.	Yes. I have provided testimony in several cases before the Commission, both on behalf of the
6		UPPCO and the MPSC Staff
7		
8	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
9	A.	The purpose of my testimony is to present support of UPPCO's EWR Plan for the 2022 and 2023
10		plan years, specifically related to the identification of UPPCO's energy savings target, revenue
11		requirement allocation, rate design, and tariff sheets.
12		
13	Q.	ARE YOU SPONSORING ANY EXHIBITS IN YOUR DIRECT TESTIMONY?
14	A.	Yes, I am sponsoring the following exhibits:
15		• Exhibit A-9 (EWS-1) – Energy Savings Goals and Targets
16		• Exhibit A-10 (EWS-2) – Electricity Sales Allocation Factors
17		• Exhibit A-11 (EWS-3) – Revenue Requirement Allocation
18		• Exhibit A-12 (EWS-4) – Rate Design – Surcharges
19		• Exhibit A-13 (EWS-5) – Rate Design – Self-Direct Surcharges
20		• Exhibit A-14 (EWS-6) – Tariff Sheet
21		
22	Q.	HOW IS YOUR TESTIMONY ORGANIZED?
23	A.	My testimony is organized into the following sections:
24		1. 3-year Energy Savings Goals and Targets
25		2. EWR Plan Revenue Allocation and Surcharges

1		3. Tariff Sheet Update
2		
3	<u>I. 3-</u>	YEAR ENERGY SAVINGS GOALS
4		
5	Q.	WHAT ARE THE PLAN STATUTORY SAVINGS GOALS?
6	A.	The UPPCO 2022-2023 EWR plan was developed to exceed the statutory goals of 1.0% as set
7		forth in 2008 PA 295, as amended by 2016 PA 342, Sec 77(1). The energy savings goal required
8		by statute for the current plan cycle is 7,839 MWh,as shown in Exhibit A-9 (EWS-1) Energy
9		Savings Goals and Targets.
10		
1	Q.	PLEASE DESCRIBE THE SAVINGS GOALS INCLUDED IN UPPCO'S 2022-2023
12		PLAN.
13	A.	The calculation of UPPCO's EWR Plan savings goals are included for each rate class in column
14		(g) of Exhibit A-9 (EWS-1) Energy Savings Goals.
5		
6	Q.	PLEASE DESCRIBE HOW THE SAVINGS CONTRIBUTION OF SELF-DIRECT
7		CUSTOMERS IS ACCOUNTED FOR IN THE CALCULATION OF UPPCO'S 2022-2023
8		PLAN SAGINGS GOALS.
9	A.	Customers who have opted to self-direct their EWR Plan are assumed to deliver the one percent
20		statutory minimum savings goal in contribution to UPPCO's overall plan savings goal.
21		
22		
23	II. E	WR PLAN REVENUE ALLOCATION AND SURCHARGES
24		
25	0.	PLEASE DESCRIBE UPPCO's 2022-2023 EWR PLAN BUDGETS?

1	A.	As described by witness McNeally, UPPCO is proposing a self-administered EWR Plan for 2022
2		and 2023 plan years with budgets of \$4,068,451 and \$4,087,135 for 2022 and 2023, respectively.
3		
4	Q.	HOW HAS UPPCO CALCULATED THE RATE CLASS REVENUE REQUIREMENTS
5		FOR ITS PROPOSED EWR SURCHARGE RATES?
6	A.	The total revenue requirements are based on the forecasted 2022 and 2022 EWR Plan costs as
7		identified by Witness McNeally in Exhibit A-2 (AHM-2) EWR Plan Budget. The energy and
8		meter counts are based on 2020 actual data, along with forecasted 2022 and 2023 data. The rate
9		class revenue requirements for 2022 and 2023 are developed through the application of an
10		allocation factors derived using 2020 rate class electricity sales. As evidenced in Exhibit A-10
11		(EWS-2) Electricity Sales Allocation Factors, the allocation factors are derived based on the 3-
12		year average of UPPCO's filed P-521 Reports. The program allocation factors assign the
13		residential and commercial revenue requirements to the individual rates classes within the
14		residential or commercial sectors, respectively. The societal allocation factors assign the low-
15		income and portfolio related costs to the individual rate categories. For the large commercial and
16		industrial customers, the societal allocation factors also assign the revenue requirement to be
17		collected via Self-Direct surcharges, if a customer opts to Self-Direct.
18		
19	Q.	HOW HAS UPPCO PERFORMED RATE DESIGN FOR ITS PROPOSED EWR
20		SURCHARGE RATES?
21	A.	The rate class revenue requirements calculated in Exhibit A-11 (EWS-3) Revenue Requirement
22		Allocation serves as the basis for calculating the proposed EWR surcharges for 2022 and 2023.
23		To calculate the proposed surcharge rate, each rate class revenue requirement was divided by the
24		respective number of energy volume or meters listed in Exhibits A-12 (EWS-4) Rate Design –
25		Surcharges and A-13 (EWS- 5) Rate Design – Self-Direct Surcharges.

#### 1 III. TARIFF SHEET UPDATE

2

- 3 Q. WHAT EXHIBIT REPRESENTS UPPCO'S TARIFF UPDATE?
- 4 A. UPPCO's proposed tariff sheet incorporating the attributes of the 2022-2023 EWR plan are
- 5 included Exhibit A-14 (EWS-6) Tariff Sheet.

6

- 7 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 8 A. Yes.

Case No. U-20879 Exhibit A-1 (AHM-1) Witness: Andrew McNeally



### **Upper Peninsula Power Company**

### **Energy Waste Reduction Plan**

2022-2023

**Program Descriptions** 

Case No. U-20879 Exhibit A-1 (AHM-1) Witness: Andrew McNeally

#### **UPPCO Proposed Energy Waste Reduction Programs**

The Upper Peninsula Power Company (UPPCO) was a part of the Efficiency United program between the passage of SB295 until 2018. In 2018, UPPCO took the EWR effort in-house to customize programs to its unique territory and reduce overall costs while still reaching goals. The 2022-2023 plan continues that inhouse management of proposed programs and is presented within this plan filing. The primary programs currently offered will continue though some measures and incentive levels may change to respond to market, technology and customer changes. One additional program has been added, Residential New Construction to address the new homes being built in the territory. A second program, Small Business Financing, will be piloted in 2021-2022 and if successful, implemented in 2023. The proposed programs consist of the following.

#### **Residential Programs:**

- Income Qualified Services
- ENERGY STAR® Products
- Appliance Recycling
- Home Performance
- New Construction
- Multi-Family Direct Install

#### **Business Programs:**

- Business Prescriptive
- Business Custom
- Small Business Direct Install
- Small Business Financing

UPPCO will also continue its education and pilot programs as outlined in the EWR law and guidelines.

The majority of UPPCO customers do not heat with electricity. UPPCO will focus on the electric heat market to help those customers improve their structures and reduce costs. For customers with natural gas heating, UPPCO will work with their gas distribution company to seek joint programs where applicable.

One of the goals of UPPCO is to grow local skills and jobs as part of the EWR efforts. To accomplish this, UPPCO will build upon the relationships established with local market providers and trade allies. Emphasis will be placed not only on program participation, but on educating these allies on new technologies and appropriate application of known efficient technologies.

B	
Program Element	Residential Income Qualified Services
Objective	Provide recommendations, energy efficient measures, financial assistance and education to customers with limited income to assist them in reducing their electric energy use and managing their utility costs.
	Coordinate income qualified services with local weatherization providers and other agencies in order to provide comprehensive assistance at lower administrative costs.
	UPPCO targets spending at a minimum 15% of its total budget focused on this market.
Target Market	Residential customers whose income is estimated to be below 200% of poverty level. Services will be targeted to diverse segments of the population including those living in single family, manufactured and multi-family buildings, homeowners and renters.
	Residential electric heat customers that are in arrears or at risk of falling behind on bill payments will be a key target market for the home energy assessments. These include income-eligible customers who have or may receive shut off notices and those that are eligible for the Winter Protection Plan.
	It is expected that additional refinement of the target market will occur using the new market research data available 2021.
Program Duration	This program is an ongoing element of the program portfolio.
Program Description	UPPCO will help income qualified customers get access to existing programs that can assist them and if appropriate, provide a home energy assessment that includes education and the direct installation of efficiency measures to assist customers in reducing their energy use. UPPCO will partner with other agencies and utilities to provide customers with coordinated closely related programs when applicable.
Eligible Measures	Electric measures that will be permissible for this program include replacement of inefficient lighting/equipment with ENERGY STAR® labeled products including LED's, dehumidifiers, replacement of inefficient refrigerators over 10 years, heat pump water heaters, attic insulation, weatherization materials, duct sealing, and infiltration reduction for electric heat customers and ECM heating water circulator pumps. In addition to energy efficiency measures, the program will allow up to \$500 investment per home for health and safety improvements that are related to the energy efficiency improvements and construction.
Implementation Strategy	The utility will work with one or more implementation contractors to conduct the home energy assessments and install measures in homes and multifamily properties. This program will be coordinated with local agencies to subsidize the delivery of the program when possible.
Marketing Strategy	Marketing will be closely coordinated with the local weatherization agencies and UPPCO's implementation contractors. Key elements of the marketing strategy include:
	Targeted outreach through local agencies  Proportions in the community.
	<ul> <li>Presentations in the community</li> <li>UPPCO website and newsletter</li> </ul>
	Press releases

	Targeting of multi-family rental property owners					
EM&V Requirements	Evaluation activities for the residential low-income program will focus on verification and assessment of electric energy impacts for the installed measures.					
Estimated Participation	Participation (	Participation (in Units of Installed Measures)				
	2022	2023				
	39,458	69,696				
Estimated Budget		Annual Budget	s			
	2022	2023				
	535,231	536,965				
Savings Targets	Energy S					
	2022	2023				
	3,072,806	3,091375				

Program Element	Residential ENERGY STAR® Products			
Objective	Produce long-term annual energy savings in the residential sector by promoting ENERGY STAR® rated high-efficiency lighting and appliances.			
Target Market	Residential customers seeking to purchase and install new lighting products, dehumidifiers, clothes washers and dryers, TVs, and air purifiers. Residential rental property owners and customers living in rental properties are also eligible.			
Program Duration	This is an ongoing element of the program portfolio during this period.			
Program Description	The Residential ENERGY STAR® program will leverage the nationally recognized ENERGY STAR® brand, when applicable, to promote products that can reduce electric energy use. Energy efficient choices can save families about a third on their energy bill, without sacrificing features, style or comfort. The ENERGY STAR® brand helps consumers make the most energy efficient choice.			
	The lighting efforts in the program will provide opportunities for customers to use efficient ENERGY STAR® lighting products by receiving the products directly and/or by providing upstream market incentives and market support through retailers to build market share and usage of ENERGY STAR® lighting products. The program targets the purchase of lighting products through in-store promotion as well as special sales events. As technology and lighting standards change, focus will be more towards specialty lighting options over the plan period.			
	In addition to utilizing the retail lighting market, UPPCO will add the additional option of receiving high efficiency lighting through energy savings "kits" that will be distributed by mail. These free kits will be available one per household per year on a limited basis. This will help increase penetration of lighting in rural areas where there are fewer retail options.			
	Appliance efforts will focus on retail sales of clothes washers and dryers, TVs, air purifiers and dehumidifiers. The program will work through local appliance retail stores and provide incentives to customers to encourage them to replace their older, inefficient equipment with high-efficiency units.			
Eligible Measures	Eligible measures include:			
	ENERGY STAR® lighting products (LEDs and LED Fixtures, and Ceiling Fans).			
	ENERGY STAR® TVs			
	ENERGY STAR® Dehumidifiers			
	ENERGY STAR® Clothes Washers and Dryers (with moisture sensor)			
	ENERGY STAR® Air Purifier			
	ENERGY STAR® Room Air Conditioners			

	Energy Savings kits will have lighting and water measure savings items.				
	Measures may change over time as technology, markets and standards change.				
Implementation Strategy	<ul> <li>Lighting strategies. The Lighting program employs multiple delivery strategies, including upstream, midstream, and downstream offers. The upstream offers use manufacturers to apply incentives that are passed on to customers; midstream offers use distributors, retailers, or contractors; downstream offers provide incentives and/or products directly to the end-use customer.</li> <li>Retailer recruitment, education and outreach. The utility's implementation contractor will utilize a field representative to facilitate the recruitment of local appliance retailers to participate in the program.</li> <li>Application processing: The utility's implementation contractor will coordinate processing of all incentives and rebate applications.</li> <li>Energy Savings kits. Kits will be provided through the mail by an energy fulfillment house and through direct community events.</li> </ul>				
Marketing Strategy	High efficiency lighting and appliances will be marketed through local retailers. All marketing materials will carry a strong consumer education message emphasizing the cost of operating older, inefficient equipment and the benefits of early replacement with ENERGY STAR® qualified models (lifetime dollar savings, energy savings, lower noise, etc.). Marketing materials will leverage the ENERGY STAR® brand, which enjoys a high level of consumer recognition and favorable associations. Kits will be marketed through direct mail and the website.  Key elements of the marketing strategy include:  Direct consumer marketing through the UPPCO website and newsletter  Point-of-purchase displays				
EM&V Requirements	Cooperative advertising with retailers  Savings values are based on documented values from the Michigan Energy Measures Database. Evaluation activity will focus on verification of installation and estimates of deemed savings.				
Estimated Participation	Participatio	n (in Units of Ins	talled Measures)		
	2022	2023			
	54,552	54,881			
Estimated Budget	Annual Budgets				
	2022	2023			
	469,831	471,151			

Savings Targets	Energy S	avings (Annual I	NET kWh)
	2022 2023		
	1,282,825	1,290,577	

Program Element	Appliance Recycling Program
Objective	The objective of the Residential Appliance Recycling Program is to produce cost-effective, long-term energy savings and demand reduction by removing from the utility grid secondary operable, inefficient appliances in an environmentally safe manner and to prevent those appliances from being resold in the secondary used appliance market.
Target Market	All residential customers are eligible for the program. The primary target market will be those with working second and third refrigerators and freezers, inefficient room air conditioners and inefficient dehumidifiers.
Program Duration	This program is an ongoing element of the program portfolio.
Program Description	The Appliance Recycling Program will produce cost-effective long-term annual energy savings in the residential market by removing operable, inefficient refrigerators, freezers, room air conditioners (room ACs) and dehumidifiers from the utility grid in an environmentally safe manner. Older room ACs, refrigerators, freezers and dehumidifiers can be some of the least efficient electrical appliances in the home. Often these older inefficient appliances are used when they are not functioning properly and as a result, they use electricity very inefficiently.
	A certified recycling agency will be responsible for the recycling process of dismantling the refrigerators, freezers, room ACs and dehumidifiers and removing oils and refrigerants and other recyclable components.
	Barriers exist to the replacement of old existing appliances with energy-efficient products, including difficulty in finding places to recycle old appliances, inability to deliver appliances to the drop-off location, lack of financial resources, competition for funds with other household budget items, and lack of awareness/knowledge about the benefits and costs of new energy efficiency measures. The Appliance Recycling Program is designed to minimize these market barriers and encourage customers to dispose of old inefficient appliances and to increase the market share of ENERGY STAR® appliances by offering incentives, convenient scheduling of appointments, cost-free pick-up of qualifying equipment or convenient drop-off locations at special events.
Eligible Measures	Technologies included in the program are:  Refrigerators  Freezers  Dehumidifiers  Room Air Conditioners  Eligible measures may be revised over time as needed to reflect changes in current market conditions, EM&V results, and program experience.
Implementation	UPPCO will provide program oversight. An appliance recycling (sub)contractor will provide
Strategy	turnkey implementation services, including the pick-up services, drop-off events, and proper

disposal of the appliances in an environmentally safe manner, application and incentive processing, incentive payments, education and training, community outreach, tracking, verification, and marketing. Customers will receive an incentive to have their old appliance recycled. Appliances will be collected in two ways, special drop-off events and free pick-up. Special Recycling Drop-Off events will be held in target communities. These have been found to be a cost-effective way to get appliances recycled due to special marketing around the events. The pick-up service will be available for people who cannot drop off their appliance. Room air conditioners and dehumidifiers will only be picked up with a refrigerator or freezer. All qualifying appliances can be dropped off at the special events. Incentives may vary based on market and program responses. Marketing Strategy Consumer education and marketing will be key components that emphasize the benefits of savings associated with retiring old, inefficient appliances and the importance of ensuring proper disposal and recycling. The marketing and communications strategy will be designed to inform customers of the availability and benefits of the program and how they can participate. To control the implementation of this program and scheduling of the appliance pick-up and special events, direct marketing will be a key source of communication. Key elements of the marketing strategy include: Direct consumer marketing through the UPPCO website and newsletter. Brochures that describe the benefits and features of the program including program contact information. The brochures will be available for various public awareness events (presentations, seminars, etc.). Bill inserts, bill messages and email messages to targeted customers. Special event community promotions. Savings values are based on documented values from the Michigan Energy Measures EM&V Requirements Database. Evaluation activity will focus on verification of appliances recycled **Estimated Participation (in Units of Installed Measures) Participation** 2022 2023 879 884 Estimated Budget Annual Budgets 2022 2023 86,993 87,222

Savings Targets	Energy Savings (Annual NET kWh)		
	2022 2023		
	817,597	822,538	

Program Element	Home Performance			
Objective	Produce long-term peak demand reduction and annual energy savings in the residential sector by promoting high-efficiency HVAC equipment.			
Target Market	Residential customers seeking to purchase and install new air conditioning units, heat pumps, smart thermostats, room air conditioners, electric water heaters and pumps.  Residential rental property owners and customers living in rental properties are also eligible.			
Program Duration	This program is an ongoing element of the program portfolio.			
Program Description	The Home Performance HVAC program will leverage the nationally recognized ENERGY STAR® brand, when applicable, to promote products that can reduce electric energy use. Energy efficient choices can save families about a third on their energy bill, without sacrificing features, style or comfort. The ENERGY STAR® brand helps consumers make the most energy efficient choice.  The program will focus on contractor-installed heating, cooling, and water-heating equipment. For electric heat customers, walk through audits will be offered and include direct install lighting and water heating measures.  Although federal efficiency standards for central air-conditioning have increased, there are still opportunities to promote units that exceed the current standards in Michigan and thus achieve additional energy savings. The program will provide incentives for ENERGY STAR®			
	central air-conditioners, heat pump water heaters, air-source heat pumps, ground-source heat pumps, and ductless "mini-split" heat pumps. Incentives for the installation of Wi-Fi setback thermostats will also be considered.			
Eligible Measures	Eligible measures initially will include:			
	Central Air Conditioners			
	Air-Source, Ductless Heat Pumps			
	Ground source HP			
	Heat Pump Water Heaters (ENERGY STAR®)			
	Wi-Fi Thermostats			
	Direct Install measures including ENERGY STAR® lighting and water efficiency measures for electric heat customers during an audit			

# **Implementation** Contractor recruitment, education and outreach. The utility's implementation Strategy contractor will utilize a field representative to facilitate the recruitment of local HVAC/plumbing contractors to participate in the program. **Planning coordination** with local natural gas provider. The utility's implementation contractor will work closely with the natural gas utility to coordinate incentive levels, eligibility requirements, marketing materials, and contractor outreach. Application processing: The utility's implementation contractor will coordinate processing of all rebate applications. Provide complete website presence. The program will be comprehensively outlined on the utility website. Customers and market providers will also be able to review qualifying measures, download incentive applications, and complete applications via an online portal. Marketing Strategy The HVAC and water heater components of the program will be primarily marketed through local contractors, the most direct influencers of customer purchase decisions. Contractors will receive training and educational materials to share with their customers. During the twoyear program period, UPPCO will consider adding an upstream element to the program working directly with equipment distributors. All marketing materials will carry a strong consumer education message emphasizing the cost of operating older, inefficient appliances and the benefits of early replacement with ENERGY STAR® qualified models (lifetime dollar savings, energy savings, lower noise, etc.). Marketing materials will leverage the ENERGY STAR® brand, which enjoys a high level of consumer recognition and favorable associations. Key elements of the marketing strategy include: Direct consumer marketing through the UPPCO website and newsletter. Point-of-purchase displays. Cooperative advertising with contractors. Savings values are based on documented values from the Michigan Energy Measures **EM&V Requirements** Database. Evaluation activity will focus on verification of installation and estimates of deemed savings. **Estimated Participation (in Units of Installed Measures) Participation** 2022 2023 2,740 2,756 **Estimated Budget Annual Budgets** 2022 2023 60,319 60,430 Savings Targets **Energy Savings (Annual NET kWh)**

2022	2023	
300,321	302,136	

Program Element	Residential New Construction				
Objective	Produce long-term peak demand reduction and annual energy savings in the residential sector by promoting high-efficiency HVAC equipment, appliances, lighting and high efficiency design into new residential homes.				
Target Market	Builders and Residential customers who are designing and building new homes in the UPPCO territory.				
Program Duration	This program is an ongoing element of the program portfolio.				
Program Description	New residential homes, whether single family, multi-family or manufactured, provide an opportunity to make long term energy efficiency savings based on the choice of equipment and design. By getting efficiency incorporated during construction, savings can be realized for the life of the building. Lost opportunities or more costly retrofits can be avoided.				
	In the 2022-2023 plan period UPPCO will develop and implement a New Construction program with multiple phases. The first phase will be the special promotion of Energy Star and high efficiency products and HVAC measures through bundled rebates and incentives. Working with both builders and homebuyers, UPPCO will bundle and promote those measures available through the MEMD qualification list. The second phase will expand the program to home designers and builders to incorporate high efficiency into the building design using Energy Star Ratings as a method to define qualifying homes and incentive levels. Phase two requirements and incentive levels will be determined based on the results of the first phase of the program.				
Eligible Measures	Eligible measures for electrically heated homes will include for phase one:				
	Air-Source, Ductless Heat Pumps				
	Ground source HP				
	Heat Pump Water Heaters (ENERGY STAR®)				
	Wi-Fi Thermostats				
	Energy Star lighting fixtures				
	Energy Star Appliances				
	Eligible measures may be revised over time as needed to reflect changes in current market conditions, EM&V results, and program experience.				
Implementation Strategy	UPPCO and the implementation contractor will promote this program to both builders and customers. For phase one, incentives will be bundled with				

The program will be marketed through local builders, the most direct influencers of customer purchase decisions. Builders will receive training and educational materials to share with their customers.  All marketing materials will carry a strong consumer education message emphasizing the cost of operating inefficient homes, HVAC equipment and appliances and the benefits of ENERGY STAR® qualified models (lifetime dollar savings, energy savings, lower noise, comfort, etc.). Marketing materials will leverage the ENERGY STAR® brand, which enjoys a high level of consumer recognition and favorable associations.  Key elements of the marketing strategy may include but not be limited to:  • Customer recruitment, education and outreach will occur at home shows, events and through other UPPCO marketing communications.  • Builder recruitment, education and outreach will utilize a field representative to facilitate the recruitment of local builders to participate in the program.  • The program will be comprehensively outlined on the utility website. Customers and market providers should be able to review qualifying measures, download incentive applications, and complete applications via an online portal.  EM&V Requirements  Savings values are based on documented values from the Michigan Energy Measures Database. Evaluation activity will focus on verification of installation and estimates of deemed savings.  Estimated  Participation (in Units of Installed Measures)  2022 2023  27 27  Estimated Budget  Energy Savings (Annual NET kWh)  2022 2023  13,342 31,397  Energy Savings (Annual NET kWh)		bonuses for incorporating multiple items in the new home. Processing of the incentives will be through the normal rebate process. Phase two will take a more performance-based approach to facilitate good design as well as high efficiency measures.					
emphasizing the cost of operating inefficient homes, HVAC equipment and appliances and the benefits of ENERGY STAR® qualified models (lifetime dollar savings, energy savings, lower noise, comfort, etc.). Marketing materials will leverage the ENERGY STAR® brand, which enjoys a high level of consumer recognition and favorable associations.  Key elements of the marketing strategy may include but not be limited to:  • Customer recruitment, education and outreach will occur at home shows, events and through other UPPCO marketing communications.  • Builder recruitment, education and outreach will utilize a field representative to facilitate the recruitment of local builders to participate in the program.  • The program will be comprehensively outlined on the utility website. Customers and market providers should be able to review qualifying measures, download incentive applications, and complete applications via an online portal.  EM&V Requirements  Savings values are based on documented values from the Michigan Energy Measures Database. Evaluation activity will focus on verification of installation and estimates of deemed savings.  Participation  Participation (in Units of Installed Measures)  2022 2023  27 27  Estimated Budget  Annual Budgets  2022 2023  31,342 31,397  Energy Savings (Annual NET kWh)  2022 2023	Marketing Strategy	influencers of custon	influencers of customer purchase decisions. Builders will receive training and				
Customer recruitment, education and outreach will occur at home shows, events and through other UPPCO marketing communications.      Builder recruitment, education and outreach will utilize a field representative to facilitate the recruitment of local builders to participate in the program.      The program will be comprehensively outlined on the utility website. Customers and market providers should be able to review qualifying measures, download incentive applications, and complete applications via an online portal.    EM&V Requirements		emphasizing the cos appliances and the b dollar savings, energ materials will leverage	All marketing materials will carry a strong consumer education message emphasizing the cost of operating inefficient homes, HVAC equipment and appliances and the benefits of ENERGY STAR® qualified models (lifetime dollar savings, energy savings, lower noise, comfort, etc.). Marketing materials will leverage the ENERGY STAR® brand, which enjoys a high				
shows, events and through other UPPCO marketing communications.  Builder recruitment, education and outreach will utilize a field representative to facilitate the recruitment of local builders to participate in the program.  The program will be comprehensively outlined on the utility website. Customers and market providers should be able to review qualifying measures, download incentive applications, and complete applications via an online portal.  Savings values are based on documented values from the Michigan Energy Measures Database. Evaluation activity will focus on verification of installation and estimates of deemed savings.  Faticipation (in Units of Installed Measures)  2022 2023  27 27  Estimated Budget  Annual Budgets  2022 2023  31,342 31,397  Savings Targets  Energy Savings (Annual NET kWh)  2022 2023			3 31	·			
representative to facilitate the recruitment of local builders to participate in the program.  The program will be comprehensively outlined on the utility website. Customers and market providers should be able to review qualifying measures, download incentive applications, and complete applications via an online portal.  EM&V Requirements  Savings values are based on documented values from the Michigan Energy Measures Database. Evaluation activity will focus on verification of installation and estimates of deemed savings.  Participation (in Units of Installed Measures)  2022 2023  27 27  Estimated Budget  Annual Budgets  2022 2023  31,342 31,397  Savings Targets  Energy Savings (Annual NET kWh)  2022 2023							
Customers and market providers should be able to review qualifying measures, download incentive applications, and complete applications via an online portal.  EM&V Requirements  Savings values are based on documented values from the Michigan Energy Measures Database. Evaluation activity will focus on verification of installation and estimates of deemed savings.  Participation (in Units of Installed Measures)  2022 2023 27 27  Estimated Budget  Annual Budgets  2022 2023 31,342 31,397  Savings Targets  Energy Savings (Annual NET kWh) 2022 2023		representative to					
Measures Database. Evaluation activity will focus on verification of installation and estimates of deemed savings.    Participation (in Units of Installed Measures)		Customers and measures, down	market providers shaload incentive appli	ould be able to review	qualifying		
2022   2023	EM&V Requirements	Savings values are based on documented values from the Michigan Energy Measures Database. Evaluation activity will focus on verification of					
27   27		Participation (	in Units of Insta	alled Measures)			
	·	2022	2023				
2022   2023		27	27				
Savings Targets  Energy Savings (Annual NET kWh)  2022 2023	Estimated Budget		Annual Budget	S			
Savings Targets Energy Savings (Annual NET kWh) 2022 2023		2022	2023				
2022 2023		31,342	31,397				
	Savings Targets	Energy Savings (Annual NET kWh)					
13,974 14,058		2022	2023				
		13,974	14,058				

Program Element	Multi-Family Direct Install		
Objective	The objective of the program is to increase the efficiency of Multi-Family homes/buildings to save money for tenants and landlords.		
Target Market	Multi-Family buildings with 4 or more units. The program will include both market rate and subsidized rental units.		
Program Duration	This program is an ongoing element of the program portfolio.		
Program Description	The multi-family market has been a difficult market to get participation in energy efficiency programs. The primary reasons are that the landlords who own the building don't pay the electric bills for the living units within the building. People living in rental properties don't have a financial incentive to improve the buildings they don't own. These tenants can improve some aspects of their energy use through better lighting, behavior changes, water consumption reduction and education on energy efficiency. The Multi-Family program is designed to help improve the efficiency of the living units inside of multi-family buildings and to improve the lighting in the common areas of the building (interior and exterior). Multi-Family buildings often have two distinct areas from a utility perspective, living units that have their own meter and common areas which have a commercial meter. In-unit improvements will be made through a direct install strategy for both lighting and electric water heating. Common area improvements will be through both a direct install and rebated approach depending on the measure. Common area savings will be captured within the Small Business Direct Install and Business Prescriptive programs to assure that costs get allocated properly.  This program will also assist multi-family buildings with subsidized rental units housing lowincome customers. Buildings identified as receiving subsidized rents (ex: Section 8 housing) or in areas where the population is more than 50% low-income, will be tracked through the low-income program and may qualify for additional measures available under that program.		
Eligible Measures	In-unit direct install measures will include:  • LED bulbs		
	Bathroom flow restrictors		
	<ul> <li>Kitchen flow restrictors</li> <li>Low flow showerheads</li> </ul>		
	<ul><li>Low flow showerheads</li><li>Pipe wrap for accessible electric water heaters</li></ul>		
	Common Area		
	LED interior lighting		
	LED exterior lighting		
	LED linear lighting fixtures and tubes		
	LED exit signs		

	Lighting controls and occupancy sensors						
Implementation Strategy	The implementation contractor will work with landlords to gain participation for that building and the tenants. Each living unit will get direct installation of lighting and water heating measures with consent of the tenant. The contractor will work with the landlord to install appropriate lighting measures in the common areas and will be coordinated through the Small Business Direct Install program. All implementation activities will be through the implementation contractor and include administration, marketing, installation and tracking. They will also be responsible for verifying if the building qualifies for the program and if they qualify for additional low-income services.						
Marketing Strategy	Implementation staff	Marketing of the program will primarily be direct contact with landlords by program staff. Implementation staff will also make presentations to landlord associations where there are active associations. Materials and information will be available for distribution and on the website.					
EM&V Requirements	Savings values are based on documented values from the Michigan Energy Measures Database. Evaluation activity will focus on installation verification and application of deemed savings.						
Estimated Participation	Participation (in Units of Installed Measures)						
	2022	2022 2023					
	1,393	1,402					
Estimated Budget		Annual Budget	s				
	2022	2023					
	87,438	87,458					
Savings Targets	Energy Savings (Annual NET kWh)						
	2022	2023					
	212,981	214,268					

Program Element	Business Prescriptive
Objective	<ol> <li>There are three primary objectives for the Business Prescriptive Program:</li> <li>Increase the market share of a targeted group of commercial high-efficiency electric technologies sold through market channels.</li> <li>Increase the installation rate of a targeted group of high-efficiency electric technologies in commercial facilities by businesses that would not have done so in the absence of the program.</li> <li>Help local businesses prosper and grow through increases in their energy efficiency and controlling their energy bill.</li> </ol>
Target Market	All business customers are eligible to participate in the Prescriptive program when they purchase qualifying equipment. The program will utilize a targeted outreach strategy to influence specific markets.  1) Market Providers (wholesalers, distributors, engineering and architectural firms, developers, and builders) that will promote the qualifying technologies. 2) High-impact/high-need customer sectors (such as schools, municipal buildings, hospitals, food service, and hospitality). 3) Underserved small businesses less than 200 kW demand.
Program Duration	This program is an ongoing element of the program portfolio.
Program Description	The Prescriptive program will provide incentives for the purchase and installation of specific high efficiency technologies. The program will affect the purchase and installation of high-efficiency technologies through a combination of market push and pull strategies that stimulate market demand while simultaneously increasing market provider investment in stocking and promoting them.  The program will increase demand of efficient technologies by educating business customers about the energy and money saving benefits associated with efficient products and equipping market providers to communicate those benefits directly to their customers. To address the first-cost barrier for customers, the program will utilize financial incentives (i.e. cash-back mail-in rebates) to lower the cost of purchasing qualifying technologies.  The program will stimulate market provider investment in stocking and promoting efficient products through a targeted outreach effort. The implementation contractor will employ field representatives to proactively train and equip market providers to convey the energy and money saving benefits to customers. Further, the existence of cash-back incentives will elevate efficiency to a competitive issue that will naturally motivate market providers to stock and promote targeted products.
Eligible Measures	Initial eligible measures are listed in Measures section at the end of the document. Note that eligible measures will change over time as the MEMD, markets, standards and technologies change.
Implementation Strategy	Outreach to market providers. The implementation contractor will inform and recruit participating market providers/trade allies. Outreach will include orientation meetings
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and conducting in-person visits aimed at training and equipping market providers to communicate program information to customers. Training will be provided to the market providers on new technologies and the appropriate application of those technologies. The implementation contractor will ensure that market providers have an updated stock of program materials. Key market providers that will be targeted include but are not limited to:

- Lighting distributors, wholesalers,
- HVAC distributors and retail contractors
- Motors/compressed air vendors
- Food service equipment distributors and retailers
- Engineering and Architectural firms
- Developers and Builders in the commercial market
- Outreach to targeted customers. The program staff will personally contact energy
  managers and decision makers within the targeted customer sectors. They can assist
  business customers in determining the energy and cost savings benefits from using the
  prescriptive incentives for new high efficiency equipment in their operations. The
  UPPCO business account representatives will assist with outreach within the course of
  their regular contacts with business customers.
- Energy Assessments. The implementation contractor will provide energy assessments
  to eligible customers. Energy assessments will include a walk-through analysis by the
  implementation contractor's Energy Advisor and a report detailing recommended next
  steps and estimated energy savings. The assessments should drive customers to
  participate in the incentive and other UPPCO programs.

# Marketing Strategy

The Business Prescriptive Program may employ but not be limited to the following marketing strategies:

- **Engage market providers/trade allies.** Outreach and training will be provided to a targeted group of providers that have business motivations for promoting incentives to their customers.
- Outreach to targeted customers. The implementation contractor will work closely with UPPCO to identify and conduct face-to-face meetings with key end-use customers to recruit their participation. The contractor will target decision makers within the customer's organization including energy managers, facility managers, financial and operations managers, chief engineer and facility/property managers, maintenance supervisors, and building operators. Energy assessments will be offered to eligible customers to further encourage participation.
- Outreach to key influencers. The implementation contractor's energy advisors will
  generate awareness of the program through presentations and seminars with
  appropriate trade associations (ASHRAE, BOMA, school administrators, etc.).
- **Provide website presence.** The program will be comprehensively outlined on the utility website. Customers and market providers will be able to review qualifying measures, download incentive applications and apply for incentives via an online portal.

# **EM&V Requirements**

The utility's implementation contractor will be responsible for implementing the following types of measurement and verification activities to facilitate the utility's third-party evaluation work:

- Collect and track all participating customers, measure installations, and incentive data.
- In the incentive process, verify that each product on which incentives are paid meets the prescribed efficiency standards for the incentive.
- Conduct on-site inspections of 2% to 5% of equipment for which customers receive
  incentives to verify that products were installed and that the model and serial numbers
  match those provided on the incentive claim. Any inconsistencies will be researched

	and the resolution recorded. Market providers associated with inconsistencies will receive follow up inspections on projects in which they are associated.  The implementation contractor will work with the EM&V contractor to provide necessary data to complete evaluations and assure a high verification rate.							
Estimated Participation	Estimated Pa	rticipation (in U	nits of Installed					
ганистраноп		Measures)						
	2022	2023						
	39,142	39,671						
Estimated Budget		Annual Budgets	3					
	2022	2023						
	906,701	891,440						
Savings Targets	Energy Savings (Annual NET kWh)							
	2022							
	5,262,382 5,071,984							

Program Element	Business Custom				
Objective	There are three primary objectives for the Business Custom Program:				
	Increase the market share high-efficiency electric technologies sold through market channels.				
<ul> <li>2) Affect the installation of site-specific and unique energy efficiency tec process improvements (that do not fit the parameters of the prescription offerings) by business customers that would not have done so in the program.</li> <li>3) Help local businesses prosper and grow through increases in their enand controlling their energy bill.</li> </ul>					
Target Market	All business customers are eligible to participate in the Custom program when they purchase and install cost effective, energy efficiency equipment. The program will develop an outreach strategy to influence specific markets such as.				
	<ol> <li>Market Providers (wholesalers, distributors, engineering and architectural firms, developers, and builders) that promote the qualifying technologies.</li> <li>High-impact/high-need customers such as industrial customers and others that use unique processes or equipment that are not covered by the Prescriptive program.</li> </ol>				
Program Duration	This program is an ongoing element of the program portfolio.				
Program Description	The Business Custom program helps customers and market providers identify more complex energy savings projects, analyze the economics of each project, and complete a customized incentive grant application. Over the long term, the custom solutions approach will allow the utility to develop and enhance the assistance they can provide to businesses				

with unique opportunities – including industrial process improvements, emerging technologies, and new facility design and/or modernization. To address the first-cost barrier for customers, the program will utilize financial incentives based on energy and demand savings from the cost-effective high efficiency technologies. Initial incentives will be \$0.10 per first year kWh saved for most technologies. LED Low Bay lighting will be incented at \$0.08 per first year kWh saved. Experience from previous years has shown this is enough to stimulate that Low Bay market. Incentives will change over time if needed to address market response and goal attainment.

The program will affect the purchase and installation of unique high-efficiency technologies through a combination of market push and pull strategies that stimulate market demand while simultaneously increasing market provider investment in stocking and promoting these unique technologies.

The program will increase market demand by educating business customers about the energy and money saving benefits associated with efficient products and equipping market providers to communicate those benefits directly to their customers.

The implementation contractor will employ field representatives to proactively train and equip market providers to convey the energy and money saving benefits to customers.

The Custom program will include a new construction/renovation component that will assist customers in specifying and installing unique high efficiency measures and establishing effective commissioning on the long-term performance of the building.

# Eligible Measures

Unique measures, innovative technologies and new processes that cost effectively save energy are eligible for the Custom program. Savings will be based on calculated energy savings pre and post installation. Incentives will be paid only after installation and verification of the installation.

# Implementation Strategy

- Outreach to market providers. The implementation contractor will inform and recruit
  participating market providers. Outreach will include orientation meetings and
  conducting in-person visits aimed at training and equipping market providers to
  communicate program information to customers. The Contractor will ensure that
  providers have an updated stock of program materials. Key market providers that will be
  targeted include:
  - Innovative technologies and solutions from:
    - Lighting distributors, wholesalers,
    - HVAC distributors and retail contractors
    - Motors/compressed air vendors
    - o Food service equipment distributors and retailers
  - · Engineering and architectural firms
  - Developers and builders in the commercial market
- Outreach to targeted customers. The program staff will personally contact energy
  managers and decision makers within the targeted customer sectors. They will assist
  business customers in determining opportunities for the Custom program for their
  operations. The UPPCO business account representatives will assist with outreach
  within the course of their regular contacts with business customers.
- **Energy Assessments**. The implementation contractor will provide energy assessments to eligible customers. Energy assessments will include a walk-through analysis by the

	implementation contractor's Energy Advisor and a report detailing recommended next steps for installing innovative technologies or new processes.								
Marketing Strategy	The Custom program	may employ but not	be limited to the follow	ring marketing strategies:					
	<ul> <li>Incentives to Customers. Incentives on a per annual kWh reduced basis determined through engineering estimates reviewed by the program and the evaluator (for larger projects).</li> <li>Engage market providers. Outreach and training will be provided to a targeted group of providers that have business motivations for promoting cost effective high efficiency innovative technologies or processes to their customers.</li> <li>Outreach to targeted customers. The utility's implementation contractor will work closely with UPPCO to identify and conduct face-to-face meetings with key end-use customers to recruit their participation. The contractor will target decision makers within the customer's organization including energy managers, facility managers, financial an operations managers, chief engineer and facility/property managers, maintenance supervisors, and building operators. Energy assessments will be offered to eligible customers to further encourage participation.</li> <li>Outreach to key influencers. The implementation contractor's energy advisors will generate awareness of the program through presentations and seminars with appropriate trade associations (ASHRAE, BOMA, school administrators, etc.).</li> <li>Provide website presence. The program will be comprehensively outlined on the utili website. Customers and market providers will be able to review qualifying measures, download incentive applications and apply for incentives via an online portal.</li> </ul>								
EM&V Requirements	download incentive applications and apply for incentives via an online portal.								
Estimated Participation	Esti	imated Participa	ation						
	2022	2023							

	4	4	
Estimated Budget		Annual Budgets	5
	2022	2023	
	143.454	144,004	
Savings Targets	Energy S	avings (Annual	NET kWh)
	2022	2023	
	942,569	948,265	

Program Element	Small Business Direct Install
Objective	The primary objective of the Small Business Direct Install (SBDI) program is to install cost effective energy efficient measures in business customers' facilities that would not install these measures without the support of the program.
Target Market	Small business customers, who have an energy demand of 25 kW or less, are eligible to participate in the SBDI program. The program will target hard-to-reach customers. This program will also work with the Multi-Family program in common areas of multi-family buildings to install energy efficient measures in those spaces.
Program Duration	This program is an ongoing element of the program portfolio.
Program Description	UPPCO will provide energy efficiency services to its small hard-to-reach business customers to help them implement energy efficiency. This market has significant barriers to implementing energy efficiency in their businesses due to lack of time and expertise as well as the first cost of the measures. The SBDI program will provide the direct installation of energy efficiency measures during a walk-through assessment addressing all those barriers. The program will offer free or subsidized installation of lighting upgrades, setback thermostats, refrigeration lighting and gaskets and ECM motors for coolers and freezers. Additional incentives will be offered for larger measures to encourage installation.
Eligible Measures	Initial measures to be included:
	<ul> <li>Lighting</li> <li>Water measures</li> <li>Lighting Controls</li> <li>Refrigeration controls</li> <li>Exit Signs</li> </ul>
	Additional measures will be offered for larger measures that are included in the Prescriptive program. Measures may change over time. The detailed list of measures is included in the measure list at the end of the document.
Implementation Strategy	In coordination with other EWR programs, the implementation contractor representatives will personally contact business owners and decision makers within the targeted customer sectors. The contractor will coordinate installation of all measures and track measure installation information.
Marketing Strategy	In coordination with other EWR programs, the SBDI program will be marketed directly to targeted small business customers based on size and location. Direct marketing outreach will occur through local meetings, direct mail and direct customer visits.
EM&V Requirements	The utility's implementation contractor(s) will be responsible for tracking the qualifying measure installations and customer data to facilitate the utility's third-party evaluation work:
	Collect and track all customers, measure installations, and incentive data.

	<ul> <li>Field (virtual) verifications will occur on 10% of the installations to verify installation and correct application.</li> <li>The implementation contractor will also work with the EM&amp;V contractor to provide necessary data to complete evaluations and assure a high verification rate.</li> </ul>							
Estimated Participation	Estimated F	Participation (in	Units of Installed	d Measures)				
	2022	2023						
	6,383	8,627						
Estimated Budget		Annual Budget	S					
	2022	2023						
	117,928	129,586						
Savings Targets	Energy S	avings (Annual	NET kWh)					
	2022	2023		_				
	489,024	659,665						

Program Element	Small Business Financing Program (Pilot)
Objective	The objective of the Small Business Financing Program pilot is to provide a subsidized financing option for small business customers to allow them to get past the first cost barrier and get high efficiency implemented in their facility.
Target Market	The program is targeted to small business customers with energy demand less than 200 kW.
Program Duration	This will be a pilot program in 2021-2022 and if successful become a full program in 2023.
Program Description	The Small Business Financing program will team with Michigan Saves to offer zero percent financing for qualifying customers. One of the primary barriers to participation by this group of customers is the upfront cost of implementing energy efficiency in their facility. By providing financing, the customers can participate in the Prescriptive and Custom program to get measures installed. Financing during the pilot program will be at 0% for 36 months for projects up to \$25,000 but may be adjusted for the 2021 program. Participants would still qualify for the standard prescriptive and custom rebates. Energy savings will be captured in those programs to assure no double counting of results.
Eligible Measures	All prescriptive and custom measures qualify for the program if they fall under the financing cost maximum.
Implementation Strategy	All aspects of the program financing will be handled through Michigan Saves. Customer recruitment and project implementation/management will occur through the other business programs. Savings will be captured through the other business programs as well.
Marketing Strategy	Marketing will occur in conjunction with the other program efforts. Special outreach will occur to small customers who qualify for the financing. This will occur through direct marketing to these customers. The pilot efforts will explore the best way to reach potential participants.
EM&V Requirements	Savings will not be attributed to this program. Evaluation activity will focus on the effectiveness of financing in increasing participation and getting deeper measure implementation.
Estimated Participation	This is a pilot program and participation is unknown.
Estimated Budget	Budgets are within the pilot budget. If the program continues a separate budget will be developed at that time.
Savings Targets	Savings are within the pilot savings. If the program continues a separate savings estimate will be developed at that time.

# Pilots and Education Initiatives

UPPCO will continue its education and pilot programs as outlined in the EWR law and guidelines. The education programs will include both public education to customers and school education. The public education will be through multiple communications channels including direct communications at events to bill stuffers and multi-media. Education will also occur in the schools. UPPCO will continue working with the National Energy Foundation to deliver classroom materials and curriculum to the fourth grades throughout the territory. This very popular and successful program is appreciated by the teachers, schools and parents.

Pilot programs will be developed to try new and innovative measures, marketing and delivery approaches with the goal of expanding the UPPCO EWR offerings. These programs will be designed with measurement and verification to learn the impacts of the efforts to determine cost effectiveness and viability as a regular program offering. Pilot program results will be shared with the other utilities in the state through the EWR Collaborative.

# **TABLE 1 – ELIGIBLE MEASURES**

Measure eligibility was determined based on many factors. These included MEMD incremental cost and energy savings data, incentives, implementation costs and several utility supply factors. During the EWR Plan, measures may be added or removed based on market response, technology availability, changes to the MEMD data and changes in efficiency standards. Other measures may become eligible pending engineering review of cost-effectiveness analysis.

Table 1 provides the measures included for each program, the estimated quantities and the incentive or direct install values. Note that partial participation is used because not every measure is expected to get installed each year or a group of similar measures may vary with sizes and we cannot predict which sizes might be installed. The measure mix on average is expected to meet the goals of the program. Quantity estimates were developed based on past program participation.

# **Table 1 - ELIGIBLE MEASAURES**

#### **RESIDENTIAL**

# **Appliance Recycling**

Dehumidifers - Event

Dehumidifers - Pickup

Freezer - Event

Freezer - Pickup

Refrigerator - Event

Refrigerator - Pickup

Room AC - Event

Room AC - Pickup

#### **ENERGY STAR**

Clothes Washer ENERGY STAR, Electric Water heater, Electric Dryer

Energy Savings KIT 2

**Energy Savings KIT 3** 

Energy Star 8.0 TV + 20% (41-50")

Energy Star 8.0 TV + 20% (51-60")

Energy Star 8.0 TV + 20% (gt 60")

**ENERGY STAR Air Purifier CADR 101-150** 

**ENERGY STAR Ceiling Fan** 

**ENERGY STAR Continuous Bathroom Exhaust Fan** 

**ENERGY STAR Electric Clothes Dryer** 

**Energy Star Heat Pump Clothes Dryer** 

**ENERGY STAR Portable Dehumidifier** 

**ENERGY STAR Room AC** 

Freezers ENERGY STChest Freezer

Freezers ENERGY STUpright Freezer

LED FLOOD PAR

LED LIGHTING REPLACE 100W A

LED LIGHTING REPLACE 75W A

PROMO - LED 100W A replacement

PROMO - LED 60W A replacment

PROMO - LED 75W A replacement

PROMO - LED Candelabra

PROMO - LED FLOOD PAR

PROMO - LED GLOBE

Refrigerators Freezers ENERGY STBottom Freezer

Refrigerators Freezers ENERGY STSide by Side

Refrigerators Freezers ENERGY STTop Freezer

Upstream LED A-Line

Upstream LED Candelabra

Upstream LED Globe 8W

Upstream LED Night Light

#### **Table 1 - ELIGIBLE MEASAURES**

#### **Home Performance**

ASHP - SEER 15 +

ECM Heating Water Circulator Pump, 100-500W

ECM Heating Water Circulator Pump, gt 500W

ECM Heating Water Circulator Pump, lt 100W

ENERGY STAR Heat Pump Water Heaters in Conditioned Space, It = 55 gallons UEF gt = 2.0

ENERGY STAR Heat Pump Water Heaters in Conditioned Space, It = 55 gallons UEF gt = 2.5

ENERGY STAR Heat Pump Water Heaters in Conditioned Space, It = 55 gallons UEF gt = 3.0

ENERGY STAR Heat Pump Water Heaters in Conditioned Space, It = 55 gallons UEF gt = 3.5

LED Candelabra It = 5W

LED Globe It = 8W

**LED Night Light** 

LED replacing 100W Incandescent

LED replacing 60W Incandescent

LED replacing 75W Incandescent

Low Flow Bathroom Faucet Aerators - 1.0 gpm electric water heater

Low Flow Kitchen Faucet Aerators - 1.5 gpm electric water heater

Minisplit Heat Pump - 21+ SEER (0.50 - 1.50 tons)

Minisplit Heat Pump - 21+ SEER (1.75 - 2.75 tons)

Outdoor LED PAR-Flood It = 15.5W

Pipe Wrap R3 - electric water heater

Setback thermostat - full setback

Setback thermostat - moderate setback

Thermostatic Shower Head 1.5 gpm electric water heater

# **Income Qualified**

60W LED Lightbulb

Aerators and Showerheads

**Bathroom Aerator** 

**Boiler Pumps** 

ECM Heating Water Circulator Pump, 100-500W

ECM Heating Water Circulator Pump, gt 500W

ECM Heating Water Circulator Pump, lt 100W

**Energy Savings KIT 1** 

**Energy Savings KIT 2** 

ENERGY STAR Heat Pump Water Heaters in Conditioned Space, It = 55 gallons UEF gt = 2.0

ENERGY STAR Heat Pump Water Heaters in Conditioned Space, It = 55 gallons UEF gt = 2.5

ENERGY STAR Heat Pump Water Heaters in Conditioned Space, It = 55 gallons UEF gt = 3.0

ENERGY STAR Heat Pump Water Heaters in Conditioned Space, It = 55 gallons UEF gt = 3.5

ENERGY STAR Refrigerator - Single Door - Full Pay

**ENERGY STAR Room AC** 

Furnaces and boilers

**Heat Pumps** 

HPT8 4ft replace(T12)

Infiltration

Infiltration reduction - 10% and attic insulation

#### **Table 1 - ELIGIBLE MEASAURES**

Infiltration Reduction - 10% Electric Heat

Infiltration reduction - 15% and attic insulation

Insulation

**Kit Support Costs** 

Kitchen Aerator

**LED Lighting** 

**LED Night Light** 

LW HPT8 4ft replace(T12)

Minisplit Heat Pump - 21+ SEER (0.50 - 1.50 tons)

Pipe Insulation

Pipe Wrap (3 ft)

**Power Strips** 

T8 2' -retrofit(T12)

T8 tube 4' - retrofit(T12)

Water heating

Window Kit

#### **Multi-family**

60W LED Lightbulb

Bathroom Aerator (1.5 gpm)

HPT8 4ft replace(T12)

Kitchen Aerator (1.5 gpm)

LED A-Style Exterior

LED Candelabra to 5W

**LED Exit Signs Electronic Fixtures** 

LED Globe It = 8W

**LED Night Light** 

LED replacing 100W Incandescent

LED replacing 75W Incandescent

LW HPT8 4ft replace(T12)

Occupancy Sensors between 150 and 500 sq ft

Outdoor LED PAR-Flood It = 15.5W

Pipe Wrap (3 ft)

Showerhead (1.5 gpm)

T5 2' -retrofit(T12)

T8 2' -retrofit(T12)

T8 tube 4' - retrofit(T12)

Thermostatic Shower Head 1.5 gpm electric water heater

## **New Construction**

ASHP - SEER 21 - SEER 14 Base

ENERGY STAR Heat Pump Water Heaters in Conditioned Space, It = 55 gallons UEF gt = 2.0

ENERGY STAR Heat Pump Water Heaters in Conditioned Space, It = 55 gallons UEF gt = 2.5

ENERGY STAR Heat Pump Water Heaters in Conditioned Space, It = 55 gallons UEF gt = 3.0

ENERGY STAR Heat Pump Water Heaters in Conditioned Space, It = 55 gallons UEF gt = 3.5

GSHP - 2 stage EER 20 ASHP Base

Minisplit Heat Pump - 21+ SEER (0.50 - 1.50 tons)

Minisplit Heat Pump - 21+ SEER (1.75 - 2.75 tons)

Setback thermostat - full setback

#### **Table 1 - ELIGIBLE MEASAURES**

### **COMMERCIAL & INDUSTRIAL**

#### Custom

Lighting Non Lighting

#### **Prescriptive**

Automatic Door Closers for Refrigerated Walk-in Coolers-Freezers

**Central Lighting Control** 

Chiller Tuneup

**Combination Ovens** 

Commercial LED Grow Lights for Interior AG - Flowering Rooms

Commercial LED Grow Lights for Interior AG - Seedling Rooms

Commercial LED Grow Lights for Interior AG - Vegetative Rooms

Compressed Air Audits & Leak Repair

Compressed Air Storage Tank (It 3 gal-cfm baseline)

Compressed Air Storage Tank (It 5 gal-cfm baseline)

Computer Room Air Conditioner Economizer 65 and 240 MBH

Computer Room Air Conditioner Economizer greater than 240 MBH

Computer Room Air Conditioner Economizer less than 65 MBH

**Convection Ovens** 

DCV

DCV & HVAC Occ Sensor

**ECM Case Motors** 

ECM Cooler and Freezer Motors - ECM replacing PSC

ECM Cooler and Freezer Motors - ECM replacing SP

ECM DHW Circulator Pump, 100-500W

ECM DHW Circulator Pump, lt 100W

ECM Heating Water Circulator Pump, 100-500W

ECM Heating Water Circulator Pump, lt 100W

**ECM on Exterior Condenser Fans** 

ENERGY STAR Commercial Solid Door Freezers 15 to 30 ft3

ENERGY STAR Commercial Solid Door Freezers 30 to 50ft3

ENERGY STAR Commercial Solid Door Freezers less than 15ft3

ENERGY STAR Commercial Solid Door Refrigerators 15 to 30 ft3

ENERGY STAR Commercial Solid Door Refrigerators 30 to 50ft3

ENERGY STAR Commercial Solid Door Refrigerators less than 15ft3

**ENERGY STAR Electric Tankless Water Heater** 

**ENERGY STAR Fryers** 

ENERGY STAR Heat Pump Storage Water Heater, to 55 gallons

ENERGY STAR High Draw Heat Pump Storage Water Heater, 55+ gallons

ENERGY STAR Ice Machines 500 to 1000 lbs

ENERGY STAR Ice Machines less than 500 lbs

ENERGY STAR Ice Machines more than 1000 lbs

ENERGY STAR Medium Draw Heat Pump Storage Water Heater, 55+ gallons

**ENERGY STAR Steam Cookers 3 Pan** 

**ENERGY STAR Steam Cookers 4 Pan** 

**ENERGY STAR Steam Cookers 5 Pan** 

**ENERGY STAR Steam Cookers 6 Pan** 

Engineered Nozzles Compressed Air, 1,000 hrs, .125 Dia.

Engineered Nozzles Compressed Air, 2,000 hrs, .125 Dia.

#### **Table 1 - ELIGIBLE MEASAURES**

Engineered Nozzles Compressed Air, 3,000 hrs, .125 Dia.

Engineered Nozzles Compressed Air, 4,000+ hrs, .125 Dia.

Exterior HID replacement LED-Induction

Garage HID replacement LED-Induction

Griddles

High Efficiency CRAC unit between 65 and 240 MBH

High Efficiency CRAC unit greater than 240 MBH

High Efficiency CRAC unit less than 65 MBH

INTERIOR NON-HIGHBAY-LOWBAY FIXTURE

INTERIOR NON-HIGHBAY-LOWBAY FIXTURE (24-7)

LED A-SERIES REPLACING INCANDESCENT A-SERIES (50-80W)

**LED Exit Signs Electronic Fixtures** 

**LED High Bay** 

LED HIGHBAY (24-7)

LED LIGHTING FOR REFRIGERATION CASES

LED Low Bay (per kW saved)

LED MR-16 REPLACING HALOGEN MR-16

LED REFRIGERATOR CASE LIGHTING PER LINEAR FOOT

LED REPLACING A-LINE 60W

Lighting Power Density - Exterior

Lighting Power Density - Interior

Lighting Power Density - Parking Garage

Occupancy and Daylight Sensor

Occupancy Sensors between 150 and 500 sq ft

Occupancy Sensors for LED Refrigerator Lighting

Occupancy Sensors over 500 sq ft

**Pre Rinse Sprayers** 

Reach-in Refrigerated display case door retrofit for Low Temp

Reach-in Refrigerated display case door retrofit for Medium Temp

Switching Controls for Multilevel Lighting

Vending Equipment Controller

VFD Condenser Fan

VFD Fan

VFD for Process Fans under 50 Hp

VFD HP 50 Process Pumping

VFD HW Pump

VFD Medium Temp Condenser Fan

VFD Return Fan

VFD Supply Fan

VSD Air Compressor Replacement (It 50-HP) 6000 and above hours

**VSD Air Compressors** 

VSD Air Compressors-Low operation hours

Web enabled EMS

Web enabled EMS with Electric Heat

# **Table 1 - ELIGIBLE MEASAURES**

# **Small Business**

60W LED Lightbulb

Anti Sweat Heater Control

Bathroom Aerator (1.5 gpm)

**Commercial Smart Thermostat** 

Door Gaskets - Cooler and Freezer

ECM Cooler and Freezer Motors - ECM replacing PSC

ECM Cooler and Freezer Motors - ECM replacing SP

Kitchen Aerator (1.5 gpm)

LED A-Line 60W

LED Candelabra to 5W

**LED Exit Signs Electronic Fixtures** 

LED Globe It = 8W

**LED Night Light** 

LED REFRIGERATOR CASE LIGHTING PER LINEAR FOOT

LED replacing 100W Incandescent

LED replacing 75W Incandescent

Low Flow Faucet Aerator - Public Restroom - 1.0 gpm

**Night Covers** 

Occupancy Sensors for LED Refrigerator Lighting

Occupancy Sensors over 500 W

Occupancy Sensors under 500 W

Outdoor LED PAR-Flood It = 15.5W

Pipe Wrap (3 ft)

**Pre Rinse Sprayers** 

Showerhead (1.5 gpm)

Strip Curtains - Cooler

Strip Curtains - Freezer

	UPPCO Energy Waste Reduction Savings and Budget Summary								
	(a)	(b)	(c)		(d)	(e)	(f)	(g)	
	Energy Waste Reduction Plan	rgy Waste Reduction Plan 2022			2023				
		Savings (	kWh)	Po	rtfolio	Savings	(kWh)	Portfolio	
Line		1st Year	Lifetime		\$	1st Year	Lifetime	\$	
1	Residential								
2	Income Qualified/Low Income	3,072,806	29,736,153	\$	535,231	3,091,375	29,915,844	\$ 536,965	
3	ENERGY STAR® Lighting and Appliance	1,282,825	9,258,983	\$	469,831	1,290,577	9,162,429	\$ 471,151	
4	Home Performance	300,321	3,010,306	\$	60,319	302,136	3,013,524	\$ 60,430	
5	Appliance Recycling	817,597	6,540,777	\$	86,993	822,538	6,580,302	\$ 87,222	
6	Multi-Family Direct Install	212,981	1,043,130	\$	87,438	214,268	1,049,434	\$ 87,458	
7	Residential New Construction	13,974	178,935	\$	31,342	14,058	180,016	\$ 31,397	
8	Evaluation			\$	140,000			\$ 142,800	
9	Administration			\$	210,000			\$ 214,200	
10	Subtotal - Residential	5,700,504	49,768,284	\$	1,621,154	5,734,952	49,901,549	\$ 1,631,623	
11									
12	Commercial & Industrial								
13	Prescriptive	5,262,382	76,548,072	\$	906,701	5,071,984	73,719,247	\$ 891,440	
14	Custom	942,569	18,038,816	\$	143,454	948,265	18,147,822	\$ 144,004	
15	Small Business Direct Install	489,024	3,298,849	\$	117,928	659,665	4,500,540	\$ 129,586	
16	Evaluation			\$	140,000			\$ 142,800	
17	Administration			\$	210,000			\$ 214,200	
18	Subtotal - Commercial & Industrial	6,693,975	97,885,737	\$	1,518,083	6,679,914	96,367,609	\$ 1,522,030	
19									
20	Portfolio								
21	Pilot Programs	673,613	8,024,675	\$	156,962	674,721	8,037,874	\$ 157,683	
22	Educational Services	404,168	404,168	\$	94,177	404,833	404,833	\$ 94,610	
23	Performance Incentive			\$	678,075			\$ 681,189	
24	Subtotal - Portfolio	1,077,781	8,428,843		929,214	1,079,554	8,442,707	933,482	
25									
26	Total EWR Plan	13,472,260	156,082,864		4,068,451	13,494,420	154,711,865	4,087,135	

	(a)	(b)	(c)	(d)	(e)	(f)
	Energy Waste Reduction Plan					Participant
Line		UCT Score	TRC Score	RIM Score	Societal Score	Score
1	Residential					
2	Income Qualified/Low Income	3.25	3.22	0.28	3.93	
3	ENERGY STAR® Lighting and Appliance	1.43	1.78	0.29	2.12	62.43
4	Home Performance	3.09	2.04	0.30	2.55	11.71
5	Appliance Recycling	5.20	3.99	0.33	4.74	19.16
6	Multi-Family Direct Install	0.75	0.75	0.22	0.84	
7	Residential New Construction	0.31	0.21	0.15	0.30	1.64
8	Administration and Evaluation	0.00	0.00	0.00	0.00	
9	Program - Residential (including low income)	1.92	1.94	0.28	2.35	
10	Program - Residential (excluding low income)	1.27	1.30	0.28	1.54	25.13
11						
12	Commercial & Industrial					
13	Prescriptive Program	4.25	1.40	0.35	2.01	3.80
14	Custom Program	6.24	1.66	0.38	2.49	3.92
15	Small Business Direct Install	2.19	1.98	0.37	2.33	20.76
16	Administration and Evaluation	0.00	0.00	0.00	0.00	
17	Program - Commercial & Industrial	3.28	1.33	0.35	1.90	3.97
18						
19	Portfolio					
20	Pilot Programs	2.79	2.79	0.35	3.45	
21	Educational Services	0.32	0.32	0.18	0.32	
22	Performance Incentive	0.00	0.00	0.00	0.00	
23	Program - Portfolio	0.50	0.50	0.22	0.61	
24						
25	Plan (including low income and PIM)	2.11	1.36	0.31	1.82	5.43
26						
27	Plan (including low income and excluding PIM)	2.53	1.53	0.32	2.05	5.43
28						
29	Plan (excluding low income and PIM)	2.39	1.35	0.33	1.84	5.43

 $<sup>\</sup>hbox{ (1) Residential Program cost-effectiveness test scores include low income. } \\$ 

Case No.: U-20879 Exhibit A-4 (AHM-4) Witness: Andrew McNeally Page 1 of 2

	(a) (b) (c) (d) COMPONENT #1			(e)	(f)		(g)	(h)	(i)	
		COMF	ONENI #1			СОМРОІ	VEIVI	#2		
					Lifetime Savi	ngs Goal	An	inual Low	Income	
	Annu	ial Energy S	avings Goal (N	/Wh) <sup>1,5</sup>	(MWh) (W	eighed	Sp	end (\$) (V	Veighed	
Lina					60%)	2		50%)	3	
Line 1		Goal	7,839		94,066	12	\$	474,653	14%	Budget \$4
2		Target	13,457		34,000		,	474,033	1470	Buuget 3
3		2022 Plan	13,472		156,083		\$	622,669		3,390,376
4		Goal	7,839		94,066	12	\$	476,832	14%	Budget \$4
5		Target	13,457							-
6		2023 Plan	13,494		154,712		\$	624,423		3,405,946
7		Incentive <sup>6</sup>	175%	20.00%	166%	12.00%		18%	10.00%	678,075
8		Incentive <sup>5</sup>	175%	20.00%	164%	12.00%		18%	10.00%	681,189
9 10	Tier 1	1.00% 1.01%	100% 101%	15.00% 15.10%	100% 101%	9.00% 9.06%		14.00% 14.08%	7.50% 7.55%	
11		1.01%	101%	15.10%	101%	9.12%		14.06%	7.55%	
12		1.03%	103%	15.30%	103%	9.18%		14.24%	7.65%	
13		1.04%	104%	15.40%	104%	9.24%		14.32%	7.70%	
14		1.05%	105%	15.50%	105%	9.30%		14.40%	7.75%	
15		1.06%	106%	15.60%	106%	9.36%		14.48%	7.80%	
16		1.07%	107%	15.70%	107%	9.42%		14.56%	7.85%	
17		1.08%	108%	15.80%	108%	9.48%		14.64%	7.90%	
18		1.09%	109%	15.90%	109%	9.54%		14.72%	7.95%	
19 20		1.10% 1.11%	110% 111%	16.00% 16.10%	110% 111%	9.60% 9.66%		14.80% 14.88%	8.00% 8.05%	
21		1.11%	111%	16.20%	111%	9.72%		14.86%	8.10%	
22		1.13%	113%	16.30%	113%	9.78%		15.04%	8.15%	
23		1.14%	114%	16.40%	114%	9.84%		15.12%	8.20%	
24		1.15%	115%	16.50%	115%	9.90%		15.20%	8.25%	
25		1.16%	116%	16.60%	116%	9.96%		15.28%	8.30%	
26		1.17%	117%	16.70%	117%	10.02%		15.36%	8.35%	
27		1.18%	118%	16.80%	118%	10.08%		15.44%	8.40%	
28 29		1.19% 1.20%	119% 120%	16.90% 17.00%	119% 120%	10.14% 10.20%		15.52% 15.60%	8.45% 8.50%	
30		1.20%	120%	17.10%	120%	10.26%		15.68%	8.55%	
31		1.22%	122%	17.20%	122%	10.32%		15.76%	8.60%	
32		1.23%	123%	17.30%	123%	10.38%		15.84%	8.65%	
33		1.24%	124%	17.40%	124%	10.44%		15.92%	8.70%	
34	Tier 2	1.25%	125%	17.50%	125%	10.50%		16.00%	8.75%	
35		1.26%	126%	17.60%	126%	10.56%		16.08%	8.80%	
36		1.27%	127%	17.70%	127%	10.62%		16.16%	8.85%	
37		1.28%	128%	17.80%	128%	10.68%		16.24%	8.90%	
38 39		1.29% 1.30%	129% 130%	17.90% 18.00%	129% 130%	10.74% 10.80%		16.32% 16.40%	8.95% 9.00%	
40		1.31%	131%	18.10%	131%	10.86%		16.48%	9.05%	
41		1.32%	132%	18.20%	132%	10.92%		16.56%	9.10%	
42		1.33%	133%	18.30%	133%	10.98%		16.64%	9.15%	
43		1.34%	134%	18.40%	134%	11.04%		16.72%	9.20%	
44		1.35%	135%	18.50%	135%	11.10%		16.80%	9.25%	
45		1.36%	136%	18.60%	136%	11.16%		16.88%	9.30%	
46		1.37%	137%	18.70%	137%	11.22%		16.96%	9.35%	
47 48		1.38% 1.39%	138% 139%	18.80% 18.90%	138% 139%	11.28% 11.34%		17.04% 17.12%	9.40% 9.45%	
49		1.40%	140%	19.00%	140%	11.40%		17.12%	9.50%	
50		1.41%	141%	19.10%	141%	11.46%		17.28%	9.55%	
51		1.42%	142%	19.20%	142%	11.52%		17.36%	9.60%	
52		1.43%	143%	19.30%	143%	11.58%		17.44%	9.65%	
53		1.44%	144%	19.40%	144%	11.64%		17.52%	9.70%	
54		1.45%	145%	19.50%	145%	11.70%		17.60%	9.75%	
55		1.46%	146%	19.60%	146%	11.76%		17.68%	9.80%	
56 57		1.47%	147%	19.70%	147%	11.82%		17.76%	9.85%	
57 58		1.48% 1.49%	148% 149%	19.80% 19.90%	148% 149%	11.88% 11.94%		17.84% 17.92%	9.90% 9.95%	
	Tier 3	1.49%	150%	20.00%	150%	12.00%		18.00%	10.00%	
55		1.5576	13370	_5.0070	13370				_5.0070	1

- (1) 1st Year Savings Goal calculated using prior 3-year retail sales average.
- $\hbox{(2) Lifetime Savings Goal is 1st Year Savings Goal multiplied by Average Measure Life}. \\$
- (3) Low Income Spend Goal is 14% of Budget and 150% target equal to 18% of Budget
- (4) UPPCO's EWR Plan Costs
- (5) 2022 and 2023 Goals are anticipated results of the EWR Plan.
- (6) 2022 and 2023 Incentives are for illustrative purposes based on anticipated energy savings and spend.

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# 2022 - 2022 Energy Waste Reduction Plan Performance Incentive Mechanism

The performance incentive would be calculated at the individual achievement of lifetime savings achieved incentive percentage plus low income dollar spend incentive percentage. Lifetime savings account for 60% of the weighting and the Low Income Spend accounts for 50% of the weighting. The performance incentive award percentage will not exceed the percentage earned for first year savings achieved.

### **Example Calculations**

	First Year	Lifetime	Low-Income	Incentive Earned
Scenario 1:	1.00%	100.0%	10.00%	
Incentive -	15.00%	9.00%	7.50%	15.00%
Formula -	Incentive = the lesser	of 15% or (9.00°	% + 7.50%)	
Scenario 2:	1.51%	132.0%	11.25%	
Incentive -	20.00%	10.88%	8.28%	19.16%
Formula -	Incentive = the less	er of 20.00% or (	10.88% + 8.28%)	
Scenario 3:	1.51%	151.0%	14.00%	
Incentive -	20.00%	12.00%	10.00%	20.00%
Formula -	Incentive = the less	er of 20% or (12.	00% + 10.00%)	

The Company cannot earn an incentive without at least reaching Tier 1 of the Annual 1st Year Savings Goal. If lifetime falls short, low income must achieve even higher to maximize the incentive, or vice versa.

	UPPCO Energy Waste Reduction Net Benefit Summary							
	(a)		(b)		(c)		(d)	(e)
	Energy Waste Reduction Plan				2022	2-20	23	
			Avoided	N	let Program		Net	UCT
Line		Co	ost Benefits		Costs		Benefits	Score
1	Residential							
2	Income Qualified/Low Income	\$	3,373,296	\$	1,037,490	\$	2,335,806	3.25
3	ENERGY STAR® Lighting and Appliance	\$	1,300,996	\$	910,530	\$	390,466	1.43
4	Home Performance	\$	360,477	\$	116,844	\$	243,633	3.09
5	Appliance Recycling	\$	876,816	\$	168,577	\$	708,239	5.20
6	Multi-Family Direct Install	\$	127,515	\$	169,244	\$	(41,729)	0.75
7	Residential New Construction	\$	18,960	\$	60,709	\$	(41,749)	0.31
8	Evaluation	\$	-	\$	273,570	\$	(273,570)	
9	Administration	\$	-	\$	410,356	\$	(410,356)	
10	Subtotal - Residential	\$	6,058,060	\$	3,147,320	\$	2,910,740	1.92
11								
12	Commercial & Industrial							
13	Prescriptive	\$	7,390,546	\$	1,740,523	\$	5,650,023	4.25
14	Custom	\$	1,735,577	\$	278,150	\$	1,457,427	6.24
15	Small Business Direct Install	\$	522,712	\$	239,138	\$	283,574	2.19
16	Evaluation	\$	-	\$	273,570	\$	(273,570)	
17	Administration	\$	-	\$	410,356	\$	(410,356)	
18	Subtotal - Commercial & Industrial	\$	9,648,835	\$	2,941,737	\$	6,707,098	3.28
19								
20	Portfolio							
21	Pilot Programs	\$	849,347	\$	304,453	\$	544,894	2.79
22	Educational Services	\$	57,962	\$	182,672	\$	(124,710)	0.32
23	Performance Incentive	\$	-	\$	1,315,236	\$	(1,315,236)	
24	Subtotal - Portfolio		907,309		1,802,361		(895,052)	0.50
25								
26	Total EWR Plan		16,614,204		7,891,418		8,722,786	2.11

# UPPCO Energy Waste Reduction Request for Proposal Scope of Work

RFP#:

Issued: December 15, 2020

Bid Due: February 1, 2021

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# Introduction

Upper Peninsula Power Company (UPPCO) is an electric investor owned utility operating in the Upper Peninsula of Michigan. It serves over 47,000 Residential customers and over 5,800 Commercial & Industrial customers. To better serve its customers and save them money, UPPCO is implementing an Energy Waste Reduction (EWR) program in accordance with the Michigan Public Service Commission (MPSC) ruling in response to the Clean, Renewable, and Energy Waste Reduction legislation, Public Acts 295 of 2008 and 341/342 of 2016.

UPPCO is issuing this Request for Proposal (RFP) for the selection of an experienced EWR program implementation contractor team(s) for turnkey delivery of the programs outlined in this proposal. The time period for this proposal is Jan 2022 through Dec 2023 but may be extended pending performance and future regulatory outcomes. As such, Bidders should be aware that targets or approaches specified in their RFP response may need to be renegotiated.

# **Background & Program Descriptions**

#### **UPPCO Overview**

UPPCO's roots can be traced back to 1884, with the establishment of the Peninsula Electric Light and Power Company. In 1902, the company was purchased by Houghton County Electric Light Company, which merged with Iron Range Light and Power Company and the Copper District Power Company in 1947 to form UPPCO. UPPCO produces power at three hydroelectric facilities, has 58 power substations and over 4,354 miles of power lines. The rugged and rural landscape of the Upper Peninsula has an average of 12 UPPCO customers per square mile. In all, UPPCO reliably delivers power to 52,000 customers spread out over 4,500 square miles with a dedicated team of 180 employees that have years of experience serving customers. UPPCO is committed to educating the community about energy safety and conservation.

Table 1: UPPCO by the Numbers

Customer Class	Customer	Average Usage
	Count	(kWh/customer/mo.)
Residential	43,460	424
Residential - Electric Heat	3270	669
Commercial - Small	5,220	1131
Commercial - Medium	515	12,800
Commercial – Large/ Industrial	45	437,443

The energy waste reduction market potential for UPPCO's service territory is estimated by GDS Associates, Inc. ("GDS") as detailed in the August 9, 2017 memorandum "Upper Peninsula Energy Efficiency Potential Study Final Report". The report summarizes the technical, economic and achievable potential for the Upper Peninsula of Michigan. It is important to note that UPPCO is 1 of 19 electric utilities that service the Upper Peninsula, thus the potential needs to be adjusted appropriately. In addition, Energy Efficiency For All (EEFA) with Optimal Energy delivered a final report in May 2015 "Potential for Energy Savings in Affordable Multifamily Housing" which identified the maximum achievable potential by utility service territory in Michigan. UPPCO and 4 other electric utilities are grouped into the "Other Investor Owned Utilities" category, and, through personal communication with the National Housing Trust, UPPCO has narrowed the saving potential.

Table 2: UPPCO Market Potential

Potential Study	Achievable Potential -	Multi-family	Multi-family
	Electric (MWh)	Market-rate	Affordable
GDS – U.P. – Residential	175,444		
GDS – U.P. – Commercial	154,283		
GDS – U.P Commercial	76,224		
EEFA – Michigan IOUs	5,000		
EEFA - UPPCO	2,900	1,368	2,299

To improve and update these potential numbers with UPPCO specific information, UPPCO is beginning a new research effort to improve and update the utility specific market potential information. This study will focus on residential and small business customers. The study is scheduled to be completed at the end of the first quarter of 2021 so that it can be used to refine a final plan for UPPCO's EWR program which will be filed on July 1, 2021 in MPSC Case No. U-20879. The chosen implementation partner will also be able to use this information to help develop final operational plans for the programs and focus its marketing and outreach efforts.

# History of UPPCO EWR

UPPCO began its EWR efforts in 2009 as part of a statewide initiative called Efficiency United (EU) and administered through the MPSC. To help focus the efforts on UPPCO's unique customer base, reduce costs and to customize the program for their needs, UPPCO began administering the program directly in 2018, however, the implementation was carried out by the same organizations and contractors as EU. This RFP is seeking potential contracted partners to make sure that UPPCO is getting the best delivery of its programs at the best price.

#### **UPPCO EWR Goals and Budgets**

UPPCO's EWR program should be designed to meet the energy savings goals in relation to its annual kWh energy sales each year for the period 2022-2023. It must be designed to deliver cost effective energy savings and great customer service for UPPCO customers. The current 2020 plan and budgets can be found in UPPCO filing U-20376. See the Resources section at the end of the RFP for additional links and information.

NOTE: The goals included in this RFP are for bid purposes only. Actual final savings will be determined based on the current ongoing market potential study and future regulatory guidance.

#### **Programs Being Offered**

For 2022-2023, UPPCO desires to continue to offer similar programs to its successful current offerings, however the utility is seeking new ideas and approaches to expand those programs and serve more customers. In particular UPPCO would like to expand its success in the small business customer category (customers up to 200 kW demand) and its income qualified customers. UPPCO also expects to be flexible and understands that the current measure mix and incentive levels might change to respond to market, technology and customer changes. The current programs consist of the following.

## **Residential Programs:**

- Income Qualified Services
- ENERGY STAR® Lighting and Appliances
- Home Performance
- Appliance Recycling
- Multi-Family Direct Install

#### **Business Programs:**

- Business Prescriptive
- Business Custom
- Small Business Direct Install
- Small Business Financing (pilot in 2020-2021 EWR Plan)

UPPCO will also offer two additional initiatives as outlined in the EWR law and guidelines; education and pilot programs. Education programs will include general customer, trade ally and marked education as well as school programs. The pilot programs are unique programs that will be developed and tested over the two-year period as outline by the MPSC. Creative and effective pilot program ideas are encouraged within the proposal.

The majority of UPPCO customers do not heat with electricity. Where possible, UPPCO will focus on the electric heat market to help those customers improve their structures and reduce costs. For customers with natural gas heating, UPPCO will work with their gas distribution company to seek joint programs where applicable. UPPCO will also seek ways to assist delivered fuel customers use of efficient technology.

One of the goals of UPPCO is to grow local skills and jobs as part of the EWR efforts. To accomplish this, UPPCO desires to build upon the relationships established with local market providers and trade allies. Emphasis should be placed not only on program participation, but on educating these allies on new technologies and appropriate application of known efficient technologies.

# Scope of Work

The following section details the major tasks categories for each program planned within this RFP. The Contractor must discuss the strategy by task to deliver each program. If the task or strategy is the same between programs, to reduce duplication of content, the proposer need not repeat that description but can reference the earlier discussions. Contractors are required to provide their strategy to achieve each program's goals including the design, implementation and marketing of each program.

#### **UPPCO** Roles and Responsibilities

UPPCO will provide high-level administrative, contract management, program design, delivery and marketing oversight of the selected Contractor(s). However, given the limited availability of UPPCO staff resources, the Contractor is expected to provide services in a "turnkey" manner.

The following are the anticipated roles and responsibilities of UPPCO:

- Contract program oversight, management, financial planning and budgeting.
- · Provide guidance and direction on proactive proposed new initiatives or strategies
- Communicate other UPPCO initiatives that may provide opportunity for cross-program promotion.

- Review and approve marketing plans and collateral.
- Review and approve Contractor invoices and ensure budget expectations are met.
- Review of Contractor maintained program tracking database.
- Management and coordination of the Evaluation, Measurement, and Verifications (EM&V) consultant with the Contractor.

#### Contractor Roles and Responsibilities

The Contractor is expected to provide all the services in a "turnkey" manner to deliver the programs, reaching the goals cost effectively. The following list is not a listing of all tasks necessary to meet that objective but a list of initial requirements and expectations. The Contractor's roles and responsibilities shall include, but not be limited to the following:

- Provide the management and staff who are qualified in their respective fields with specialty expertise in energy efficiency program delivery. Staff located within or close to the UPPCO territory is preferred.
- Maintain frequent and ongoing communications with UPPCO about the program, customer issues, goal attainment, pilot program results/status and potential program adjustments.
- Consider local sub-contractors in the UPPCO territory or at the least within Michigan when possible.
- Implement and deliver programs to achieve 100% of the net savings to meet or exceed the kWh energy savings goals.
- Make ongoing program adjustments over the year to ensure goal achievement.
- Train staff and provide systems to ensure high customer satisfaction. Monitor customer satisfaction and maintain a high level and implement a tracking system for complaints and their satisfactory resolution.
- Provide management systems to optimize operations including but not limited to operating manuals, delivery plans, timelines and milestones and QA/QC systems.
- Develop financial planning and budgeting systems to manage within the proposed budget and provide a communication mechanism for UPPCO to keep abreast of the current and future status financially.
- Develop and maintain a program tracking system that includes management dashboards for UPPCO.
- Develop and maintain an incentive processing, payment and tracking system.
- Develop marketing communications, materials and collateral to support the programs to achieve goals. Include cross-program promotion of all programs under EWR even if there may be related services deliver by another organization.

- Develop relationships and a Trade Ally network including recruitment, enrollment, training, reporting and maintaining relations. UPPCO believes these relationships are critical to program success.
- Coordinate with the EM&V contractor to provide appropriate data, increase effectiveness of the program, and drive attribution of the program.
- Assist UPPCO with MPSC requests including participation with stakeholder meetings, technical subcommittee and development of new measures for the MEMD.

### Start-Up Strategy and Transition Plan

It is critical to maintain the UPPCO program without any disruptions of services to customers and trade allies between the 2021 and the 2022 plan years. The Contractor will need to provide the key steps to ensure a smooth transition and continuation of each program. The Contractor will need to describe the systems that are in place and ready for implementation. If not currently available or there is a need to customize the systems, a plan with milestones will need to be provided. Limited information may be accepted from the incumbent contractor in this section but transition plans for new requirements, enhancements and program changes are required. In addition, the transition plan should discuss the following:

- A summary of the data tracking system transition.
- The method of transition for incentive processing and payments to assure no lags in participant payments.
- A discussion of your strategy for engaging trade allies, community organizations, and other market actors and your approach for managing these established relationships.
- Discuss your approach to staffing the programs in the first three to six months including the level of corporate involvement. Detail how you will work to recruit and train staff.
- Provide a master schedule with the tasks and milestones during the transition.

#### General Administration and Management

Contractors should describe their proposed approach for general management, budgeting, financial management, and reporting. This section should also include the approach for overseeing the performance of subcontractors and field implementers of programs.

Address, although you are not limited to, the following areas in your proposal:

1. Overall experience and systems used for administration and management of energy efficiency and program implementation and marketing. Outline your approach to

- monitor overall portfolio success and adjust programs and initiatives as needed over time.
- Detail how you propose to fairly and proportionately allocate program administrative, promotion and marketing costs across programs whose activities overlap or are performed jointly.
- 3. Describe your ability to prepare monthly, quarterly, and annual reports detailing program results to date, anticipated activities, accomplishments, issues, and opportunities. Include in your appendix examples of past reports for programs delivered elsewhere.
- 4. Review your capability to develop, implement, and maintain the necessary financial accounting systems. This shall include the capability to review, approve, and track budgets, invoices, payments to subcontractors, program implementers, and customers. Confirm that your financial accounting system is consistent with general accounting standards. Also confirm that you shall be able to provide information and documentation required for independent annual financial audits.
- 5. Describe your company's requirements, systems and approach to diversity both within your firm and with recruiting and utilizing diverse partners, trade allies and suppliers.
- 6. Describe your staff development, training and support systems and how you deal with key staff turnover on ongoing projects.

## Program Design

Contractors should respond with their detailed program design based on the general program outlines contained within. These turnkey programs should embrace flexible and innovative approaches while still insuring goal accomplishment and high customer satisfaction. All programs will also be required to be cost effective utilizing the Utility Cost Test as outlined by the MPSC and should minimize rate impacts.

The proposal response should address the following areas for each program.

- Discuss your approach and strategy for final program design and implementation to ensure continuity in program offerings throughout the 2022-2023 period.
- Introduce any new and innovative program ideas as well as your proven best practice approaches from around the country that you propose for UPPCO.
- Provide the detailed measures you propose to promote, including anticipated quantities, efficiency levels, savings and incentives in the workbook, Savings Table.
   Measure savings should be based on the 2021 MEMD. If not within the MEMD, please provide your calculations and sources for assumed savings values.

- Describe your program design strategies to minimize freeridership and if possible, maximize quantifiable program spillover.
- Describe your approach to annually revising the implementation plan, reporting on key program metrics and operational milestones, establishing new performance metrics, and milestones as needed, and overall ability to track progress and manage budgets.
- Contractors must clearly specify any anticipated subcontractors who will be utilized, their roles and responsibilities, etc. Describe your subcontractor management, and oversight plan.
- Where applicable, provide your approach to recruiting and training new trade allies, retail partners, Community Action Agencies, non-profits and other market actors to assist with program delivery. Indicate how you will specifically recruit veteran-owned, women-owned or minority-owned businesses as part of this effort.
- Describe your approach to managing established relationships with trade allies and other market actors (where applicable). Summarize the profiles of the most critical trade allies/partners by program who you consider the most important partners for program success. Summarize how you ensure high levels of customer satisfaction with participating trade allies/partners, including your protocols for addressing customer complaints related to trade ally/partner performance.
- Where applicable, describe your proposal for developing and maintaining a trade ally website portal. The portal could include trade ally resources; status of projects, applications or incentive payments; as well as online submission tools for trade allies.
- With the uncertain future of residential lighting and the increase in market share of LED bulbs, please provide detailed information related to how you would propose, from a strategic and tactical perspective, ways to help offset the pending loss in electric savings.
- Provide examples of how you could adjust program goals and tactics to accommodate changes to savings targets, both for "ramping up" and "scaling down." Consider in your response a full range of activities, measures, incentive adjustments, marketing tactics, personnel assistance, etc.
- Given the current uncertainty due to health related limitations to access face to face services within programs, please describe strategies you are using or propose to use if limitations continue into 2022 so that UPPCO can be confident that goals will be met.

# Program Descriptions:

The following general program descriptions are of current programs being delivered by UPPCO. These are the successful foundational programs for UPPCO but are not meant to be seen as a requirement that cannot be modified or enhanced. They are provided for your information.

You are encouraged to add to, modify and enhance these programs to increase participation, broaden the customer groups served, increase customer satisfaction and to capture missed opportunities. Information on past programs, participation, budgets and savings are available in the documents referenced in the "Resource" section at the end of this RFP. UPPCO expects that a final plan will be developed with the chosen implementer as additional information from the market study becomes available. The updated plans would be filed on July 1, 2021.

# Residential Programs

Program Element	Residential Income Qualified Services
Objective	Provide recommendations, energy efficient measures, financial assistance and education to customers with limited income to assist them in reducing their electric energy use and managing their utility costs.  Coordinate income qualified services with local weatherization providers and other agencies in order to provide comprehensive assistance at lower administrative costs.  UPPCO targets spending at a minimum 15% of its total budget focused on this market.
Target Market	Residential customers whose income is estimated to be below 200% of poverty level. Services will be targeted to diverse segments of the population including those living in single family, manufactured and multi-family buildings, homeowners and renters.
	Residential electric heat customers that are in arrears or at risk of falling behind on bill payments should be a key target market for the home energy assessments. These include income-eligible customers who have or may receive shut off notices and those that are eligible for the Winter Protection Plan.
	It is expected that additional refinement of the target market will occur using the new market research data available early 2021.
Program Duration	Services for customers with limited income will be an ongoing element of the program portfolio.
Program Description	UPPCO will help income qualified customers get access to existing programs that can assist them and if appropriate, provide a home energy assessment that includes education and the direct installation of efficiency measures to assist customers in reducing their energy use. UPPCO will partner with other agencies and utilities to provide customers with coordinated closely related programs when applicable.
Eligible Measures	Cost effective electric measures that will be permissible for this program include replacement of inefficient lighting/equipment with ENERGY STAR® labeled products including LED's, replacement of inefficient refrigerators over 10 years, heat pump water heaters, attic insulation and infiltration reduction for electric heat customers and ECM heating water circulator pumps. In addition to energy efficiency measures, the program will allow up

	to \$500 investment per home for health and safety improvements that are related to the energy efficiency improvements and construction.
Implementation Strategy	The utility will work with one or more implementation contractors to conduct the home energy assessments and install measures in homes and multifamily properties. This program will be coordinated with local agencies to subsidize the delivery of the program when possible.
Marketing Strategy	Marketing will be closely coordinated with the local weatherization agencies and UPPCO's implementation contractors. Key elements of the marketing strategy might include:  Targeted outreach through local agencies Presentations in the community UPPCO website and newsletter Press releases Targeting of multi-family rental property owners
EM&V Requirements	Evaluation activities for the residential low-income program will focus on verification and assessment of electric energy impacts for the installed measures.

Program Duration  Program Duration  The Residential ENERGY STAR® program should leverage the nationally recognized ENERGY STAR® brand, when applicable, to promote can save families about a third on their energy efficient choice.  The lighting efforts in the program should provide opportunities for customers to use efficient ENERGY STAR® lighting products by receiving the products directly and/or by providing upstream market incentives and market support through riestory and lighting products. The program targets the purchase of lighting products through in-store promotion as well as special sales events. As technology and lighting staring the retail lighting market, UPPCO would like to provide provide. In addition to utilizing the retail lighting market, UPPCO would like to provide provide.		Desidential ENERGY CTAR® Draducts
Target Market  Residential customers seeking to purchase and install new lighting products, dehumidifiers, clothes washers and dryers, TVs, and air purifiers. Residential rental property owners and customers living in rental properties are also eligible.  Program Duration  This should be an ongoing element of the program portfolio during this period.  The Residential ENERGY STAR® program should leverage the nationally recognized ENERGY STAR® pragram should leverage the nationally recognized ENERGY STAR® brand, when applicable, to promote products that can reduce electric energy use. Energy efficient choices can save families about a third on their energy bill, without sacrificing features, style or comfort. The ENERGY STAR® brand helps consumers make the most energy efficient choice.  The lighting efforts in the program should provide opportunities for customers to use efficient ENERGY STAR® lighting products by receiving the products directly and/or by providing upstream market incentives and market support through retailers to build market share and usage of ENERGY STAR® lighting products. The program targets the purchase of lighting products through in-store promotion as well as special sales events. As technology and lighting standards change, the measure mix should move more towards specialty lighting options over the plan period.  In addition to utilizing the retail lighting market, UPPCO would like to provide the additional option of receiving high efficiency lighting through lighting "kits' that can be distributed by mail or though events. These free kits should be available one per household on a limited basis. This can help increase penetration of lighting in rural areas where there are fewer retail options.  Appliance efforts should focus on retail sales of clothes washers and dryers, TVs, air purifiers and dehumidifiers. The program should work through local	Program Element	Residential ENERGY STAR® Products
dehumidifiers, clothes washers and dryers, TVs, and air purifiers. Residential rental property owners and customers living in rental properties are also eligible.  Program Duration  This should be an ongoing element of the program portfolio during this period.  The Residential ENERGY STAR® program should leverage the nationally recognized ENERGY STAR® brand, when applicable, to promote products that can reduce electric energy use. Energy efficient choices can save families about a third on their energy bill, without sacrificing features, style or comfort. The ENERGY STAR® brand helps consumers make the most energy efficient choice.  The lighting efforts in the program should provide opportunities for customers to use efficient ENERGY STAR® lighting products by receiving the products directly and/or by providing upstream market incentives and market support through retailers to build market share and usage of ENERGY STAR® lighting products. The program targets the purchase of lighting products through in-store promotion as well as special sales events. As technology and lighting standards change, the measure mix should move more towards specialty lighting options over the plan period.  In addition to utilizing the retail lighting market, UPPCO would like to provide the additional option of receiving high efficiency lighting through lighting "kits' that can be distributed by mail or though events. These free kits should be available one per household on a limited basis. This can help increase penetration of lighting in rural areas where there are fewer retail options.  Appliance efforts should focus on retail sales of clothes washers and dryers, TVs, air purifiers and dehumidifiers. The program should work through local	Objective	,
Program Description  The Residential ENERGY STAR® program should leverage the nationally recognized ENERGY STAR® brand, when applicable, to promote products that can reduce electric energy use. Energy efficient choices can save families about a third on their energy bill, without sacrificing features, style or comfort. The ENERGY STAR® brand helps consumers make the most energy efficient choice.  The lighting efforts in the program should provide opportunities for customers to use efficient ENERGY STAR® lighting products by receiving the products directly and/or by providing upstream market incentives and market support through retailers to build market share and usage of ENERGY STAR® lighting products. The program targets the purchase of lighting products through in-store promotion as well as special sales events. As technology and lighting standards change, the measure mix should move more towards specialty lighting options over the plan period.  In addition to utilizing the retail lighting market, UPPCO would like to provide the additional option of receiving high efficiency lighting through lighting "kits' that can be distributed by mail or though events. These free kits should be available one per household on a limited basis. This can help increase penetration of lighting in rural areas where there are fewer retail options.  Appliance efforts should focus on retail sales of clothes washers and dryers, TVs, air purifiers and dehumidifiers. The program should work through local	Target Market	Residential rental property owners and customers living in rental properties
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customers to use efficient ENERGY STAR® lighting products by receiving the products directly and/or by providing upstream market incentives and market support through retailers to build market share and usage of ENERGY STAR® lighting products. The program targets the purchase of lighting products through in-store promotion as well as special sales events. As technology and lighting standards change, the measure mix should move more towards specialty lighting options over the plan period.  In addition to utilizing the retail lighting market, UPPCO would like to provide the additional option of receiving high efficiency lighting through lighting "kits' that can be distributed by mail or though events. These free kits should be available one per household on a limited basis. This can help increase penetration of lighting in rural areas where there are fewer retail options.  Appliance efforts should focus on retail sales of clothes washers and dryers, TVs, air purifiers and dehumidifiers. The program should work through local		recognized ENERGY STAR® brand, when applicable, to promote products that can reduce electric energy use. Energy efficient choices can save families about a third on their energy bill, without sacrificing features, style or comfort. The ENERGY STAR® brand helps consumers make the most
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TVs, air purifiers and dehumidifiers. The program should work through local		available one per household on a limited basis. This can help increase
them to replace their older, inefficient equipment with high-efficiency units.		TVs, air purifiers and dehumidifiers. The program should work through local appliance retail stores and provide incentives to customers to encourage
Eligible Measures Existing eligible measures include:	Eligible Measures	Existing eligible measures include:
ENERGY STAR® lighting products (LEDs and LED Fixtures, and Ceiling Fans).		
ENERGY STAR® TVs		ENERGY STAR® TVs
ENERGY STAR® Dehumidifiers		ENERGY STAR® Dehumidifiers

	<ul> <li>ENERGY STAR® Clothes Washers and Dryers (with moisture sensor)</li> <li>ENERGY STAR® Air Purifier</li> <li>ENERGY STAR® Room Air Conditioners</li> <li>Measures should change over time as technology, markets and standards change.</li> </ul>
Implementation Strategy	<ul> <li>Lighting strategies. The Lighting program should employ multiple delivery strategies, including upstream, midstream, and downstream offers.</li> <li>Retailer recruitment, education and outreach. The utility's implementation contractor should utilize a field representative to facilitate the recruitment of local appliance retailers to participate in the program.</li> <li>Application processing: The utility's implementation contractor should coordinate processing of all incentives and rebate applications.</li> <li>Lighting kits. Kits can be provided through the mail by an energy fulfillment house and through direct community events.</li> </ul>
Marketing Strategy	High efficiency lighting and appliances should be marketed through local retailers. All marketing materials shall carry a strong consumer education message emphasizing the cost of operating older, inefficient equipment and the benefits of early replacement with ENERGY STAR® qualified models (lifetime dollar savings, energy savings, lower noise, etc.). Marketing materials shall leverage the ENERGY STAR® brand, which enjoys a high level of consumer recognition and favorable associations. Kits can be marketed through direct mail, community events and the website.  Key elements of the marketing strategy should include:  Direct consumer marketing through the UPPCO website and newsletter  Point-of-purchase displays  Cooperative advertising with retailers
EM&V Requirements	Savings values are based on documented values from the Michigan Energy Measures Database. Evaluation activity will focus on verification of installation and estimates of deemed savings.

Program Element	Appliance Recycling Program
Objective	The objective of the Residential Appliance Recycling Program is to produce cost-effective, long-term annual energy savings and demand reduction by removing from the utility grid secondary operable, inefficient appliances in an environmentally safe manner and to prevent those appliances from being resold in the secondary used appliance market.
Target Market	All residential customers are eligible for the program. The primary target market will be those with working second and third refrigerators and freezers, inefficient room air conditioners and inefficient dehumidifiers.
Program Duration	This should be an ongoing element of the program portfolio.
Program Description	The Appliance Recycling Program will produce cost-effective long-term annual energy savings in the residential market by removing operable, inefficient refrigerators, freezers, room air conditioners (room ACs) and dehumidifiers from the utility grid in an environmentally safe manner. Older room ACs, refrigerators, freezers and dehumidifiers can be some of the least efficient electrical appliances in the home. Often these older inefficient appliances are used when they are not functioning properly and as a result, they use electricity very inefficiently.
	A certified recycling agency shall be responsible for the recycling process of dismantling the refrigerators, freezers, room ACs and dehumidifiers and removing oils and refrigerants and other recyclable components.
	Barriers exist to the replacement of old existing appliances with energy-efficient products, including difficulty in finding places to recycle old appliances, inability to deliver appliances to the drop-off location, lack of financial resources, competition for funds with other household budget items, and lack of awareness/knowledge about the benefits and costs of new energy efficiency measures. The Appliance Recycling Program should be designed to minimize these market barriers and encourage customers to dispose of old inefficient appliances and to increase the market share of ENERGY STAR® appliances by offering incentives, convenient scheduling of appointments, cost-free pick-up of qualifying equipment or convenient drop-off locations at special events.
Eligible Measures	Technologies included in the program should be:
	Refrigerators
	Freezers
	Dehumidifiers
	Room Air Conditioners
	Eligible measures may be revised over time as needed to reflect changes in current market conditions, EM&V results, and program experience.

# Implementation Strategy

UPPCO will provide program oversight. An appliance recycling (sub)contractor shall provide turnkey implementation services, including the pick-up services, drop-off events, and proper disposal of the appliances in an environmentally safe manner, application and incentive processing, incentive payments, education and training, community outreach, tracking, verification, and marketing.

Customers should receive an incentive to have their old appliance recycled. Appliances can be collected in two ways, special drop-off events and free pick-up. Special Recycling Drop-Off events should be held in target communities. These have been found to be a cost-effective way to get appliances recycled due to special marketing around the events. The pick-up service should also be available for people who cannot drop off their appliance. Room air conditioners and dehumidifiers should only be picked up with a refrigerator or freezer. All qualifying appliances can be dropped off at the special events.

Incentives can vary based on market and program responses.

# Marketing Strategy

Consumer education and marketing will be key components that emphasize the benefits of savings associated with retiring old, inefficient appliances and the importance of ensuring proper disposal and recycling.

The marketing and communications strategy should be designed to inform customers of the availability and benefits of the program and how they can participate. To control the implementation of this program and scheduling of the appliance pick-up and special events, direct marketing should be a key source of communication.

Key elements of the marketing strategy should include:

- Direct consumer marketing through the UPPCO website and newsletter.
- Brochures that describe the benefits and features of the program including program contact information. The brochures should be available for various public awareness events (presentations, seminars, etc.).
- Bill inserts, bill messages and email messages to targeted customers.
- Special event community promotions.

# EM&V Requirements

Savings values are based on documented values from the Michigan Energy Measures Database. Evaluation activity will focus on verification of appliances recycled

Program Element	Home Performance
Objective	Produce long-term peak demand reduction and annual energy savings in the residential sector by promoting high-efficiency HVAC equipment.
Target Market	Residential customers seeking to purchase and install new air conditioning units, heat pumps, smart thermostats, room air conditioners, electric water heaters and pumps. Residential rental property owners and customers living in rental properties are also eligible.
Program Duration	This should be an ongoing element of the program portfolio.
Program Description	The Home Performance HVAC program shall leverage the nationally recognized ENERGY STAR® brand, when applicable, to promote products that can reduce electric energy use. Energy efficient choices can save families about a third on their energy bill, without sacrificing features, style or comfort. The ENERGY STAR® brand helps consumers make the most energy efficient choice.
	The program should focus on contractor-installed heating, cooling, and water-heating equipment and pump installers. For electric heat customers, walk through audits should be considered and include direct install lighting and water heating measures.
	Although federal efficiency standards for central air-conditioning have increased, there are still opportunities to promote units that exceed the current standards in Michigan and thus achieve additional energy savings. The program should provide incentives for ENERGY STAR® central air-conditioners, heat pump water heaters, air-source heat pumps, ground-source heat pumps, and ductless "mini-split" heat pumps. Incentives for the installation of Wi-Fi setback thermostats should also be considered.
Eligible Measures	Eligible measures should include:
	Central Air Conditioners
	Air-Source, Ductless Heat Pumps
	Ground source HP
	Heat Pump Water Heaters (ENERGY STAR®)
	Wi-Fi Thermostats

	ECM Heating Water Circulator Pump	
	Direct Install measures including ENERGY STAR® lighting and water efficiency measures for electric heat customers	
Implementation Strategy	<ul> <li>Contractor recruitment, education and outreach. The utility's implementation contractor will utilize a field representative to facilitate the recruitment of local HVAC/plumbing contractors to participate in the program.</li> <li>Planning coordination with local natural gas provider. The utility's implementation contractor will work closely with the natural gas utility to coordinate incentive levels, eligibility requirements, marketing materials, and contractor outreach.</li> <li>Application processing: The utility's implementation contractor shall coordinate processing of all rebate applications.</li> <li>Provide complete website presence. The program will be</li> </ul>	
	Provide complete website presence. The program will be comprehensively outlined on the utility website. Customers and market providers should be able to review qualifying measures, download incentive applications, and complete applications via an online portal.	
Marketing Strategy	The HVAC and water heater components of the program should be marketed through local contractors, the most direct influencers of customer purchase decisions. Contractors should receive training and educational materials to share with their customers.  All marketing materials will carry a strong consumer education message emphasizing the cost of operating older, inefficient appliances and the benefits of early replacement with ENERGY STAR® qualified models (lifetime dollar savings, energy savings, lower noise, etc.). Marketing materials will leverage the ENERGY STAR® brand, which enjoys a high level of consumer recognition and favorable associations.	
	Key elements of the marketing strategy should include:	
	<ul> <li>Direct consumer marketing through the UPPCO website and newsletter.</li> <li>Point-of-purchase displays.</li> </ul>	
	Cooperative advertising with contractors.	
EM&V Requirements	Savings values are based on documented values from the Michigan Energy Measures Database. Evaluation activity will focus on verification of installation and estimates of deemed savings.	

	Multi Family Dive at Install	
Program Element	Multi-Family Direct Install	
Objective	The objective of the program is to increase the efficiency of Multi-Family homes/buildings to save money for tenants and landlords.	
Target Market	Multi-Family buildings with 4 or more units. The program will include both market rate and subsidized rental units.	
Program Duration	This should be an ongoing element of the program portfolio.	
Program Description	The multi-family market has been a difficult market to get participation in energy efficiency programs. The primary reasons are that the landlords who own the building don't pay the electric bills for the living units within the building. People living in rental properties don't have a financial incentive to improve the buildings they don't own. These tenants can improve some aspects of their energy use through better lighting, behavior changes, water consumption reduction and education on energy efficiency. The Multi-Family program should be designed to help improve the efficiency of the living units inside of multi-family buildings and to improve the lighting in the common areas of the building (interior and exterior). Multi-Family buildings often have two distinct areas from a utility perspective, living units that have their own meter and common areas which have a commercial meter. In-unit improvements can be made through a direct install strategy for both lighting and electric water heating. Common area improvements can be through both a direct install and rebated approach depending on the measure. Common area savings will be captured within the Small Business Direct Install and Business Prescriptive programs to assure that costs get allocated properly. In-unit measures will be captured within this Residential offering.  This program should also assist multi-family buildings with subsidized rental units housing low-income customers. Buildings identified as receiving subsidized rents (ex: Section 8 housing) or in areas where the population is more than 50% low-income, shall be tracked through the low-income program and may qualify for additional measures available under that program.	
Eligible Measures	In-unit direct install measures could include:      LED bulbs     Bathroom flow restrictors     Kitchen flow restrictors     Low flow showerheads     Pipe wrap for accessible electric water heaters  Common Area	
	<ul> <li>LED interior lighting</li> <li>LED exterior lighting</li> </ul>	

	<ul> <li>LED linear lighting fixtures and tubes</li> <li>LED exit signs</li> <li>Lighting controls</li> </ul>
Implementation Strategy	The implementation contractor will need to work with landlords to gain participation for that building and the tenants. It is expected that each living unit will get direct installation of lighting and water heating measures with consent of the tenant. The contractor should work with the landlord to install appropriate lighting measures in the common areas which will be coordinated through the Small Business Direct Install program. The implementer will be responsible for verifying if the building qualifies for the program and if they qualify for additional low-income services.
Marketing Strategy	Marketing of the program should primarily be direct contact with landlords by program staff. Implementation staff should also make presentations to landlord associations where there are active associations. Materials and information shall be available for distribution and on the website.
EM&V Requirements	Savings values are based on documented values from the Michigan Energy Measures Database. Evaluation activity will focus on installation verification and application of deemed savings.

# **Business Programs**

Program Element	Business Prescriptive	
Objective	There are three primary objectives for the Business Prescriptive Program:  1) Increase the market share of a targeted group of commercial highefficiency electric technologies sold through market channels.  2) Increase the installation rate of a targeted group of high-efficiency electric technologies in commercial facilities by businesses that would not have done so in the absence of the program.  3) Help local businesses prosper and grow through increases in their energy efficiency and controlling their energy bill.	
Target Market	All business customers are eligible to participate in the Prescriptive program when they purchase qualifying equipment. The program should utilize a targeted outreach strategy to influence specific markets.  1) Market Providers (wholesalers, distributors, engineering and architectural firms, developers, and builders) that will promote the qualifying technologies  2) High-impact/high-need customer sectors (such as schools, municipal buildings, hospitals, food service, and hospitality)  3) Underserved small businesses less than 200 kW demand.	
Program Duration	This program should be an ongoing element of the program portfolio.	
Program Description	The Prescriptive program shall provide incentives for the purchase and installation of specific high efficiency technologies through a combination of market push and pull strategies that stimulate market demand while simultaneously increasing market provider investment in stocking and promoting.	
	The program will increase demand of efficient technologies by educating business customers about the energy and money saving benefits associated with efficient products and equipping market providers to communicate those benefits directly to their customers. To address the first-cost barrier for customers, the program should utilize financial incentives (i.e. cash-back mailin rebates, upstream retailer incentives) to lower the cost of purchasing qualifying technologies.	
	The program should stimulate market provider investment in stocking and promoting efficient products through a targeted outreach effort. The implementation contractor will employ field representatives to proactively train and equip market providers to convey the energy and money saving benefits to customers. Further, the existence of cash-back incentives should elevate efficiency to a competitive issue that will naturally motivate market providers to stock and promote targeted products.	
Eligible Measures	Current eligible measures are available from the sources listed in Resources section at the end of the RFP. Note that eligible measures should change over time as the MEMD, markets, standards and technologies change.	

# Implementation Strategy

- outreach to market providers. The implementation contractor will inform and recruit participating market providers/trade allies. Outreach should include orientation meetings and conducting in-person visits aimed at training and equipping market providers to communicate program information to customers. Training should be provided to the market providers on new technologies and the appropriate application of those technologies. The implementation contractor should ensure that market providers have an updated stock of program materials. Key market providers that should be targeted include but are not limited to:
  - · Lighting distributors, wholesalers,
  - HVAC distributors and retail contractors
  - Motors/compressed air vendors
  - Food service equipment distributors and retailers
  - Engineering and Architectural firms
  - Developers and Builders in the commercial market
- Outreach to targeted customers. The program staff should personally contact energy managers and decision makers within the targeted customer sectors. They can assist business customers in determining the energy and cost savings benefits from using the prescriptive incentives for new high efficiency equipment in their operations. The UPPCO business account representatives will assist with outreach within the course of their regular contacts with business customers.
- Energy Assessments. The implementation contractor will provide energy
  assessments to eligible customers. Energy assessments will include a
  walk-through analysis by the implementation contractor's Energy Advisor
  and a report detailing recommended next steps and estimated energy
  savings. The assessments should drive customers to participate in the
  incentive and other UPPCO programs.

# Marketing Strategy

The Business Prescriptive Program could employ the following marketing strategies:

- **Engage market providers/trade allies.** Outreach and training to be provided to a targeted group of providers that have business motivations for promoting incentives to their customers.
- Outreach to targeted customers. The implementation contractor will work closely with UPPCO to identify and conduct face-to-face meetings with key end-use customers to recruit their participation. The contractor will target decision makers within the customer's organization including energy managers, facility managers, financial and operations managers, chief engineer and facility/property managers, maintenance supervisors, and building operators. Energy assessments will be offered to eligible customers to further encourage participation.
- Outreach to key influencers. The implementation contractor's energy advisors should work to generate awareness of the program through presentations and seminars with appropriate trade associations (ASHRAE, BOMA, school administrators, etc.).
- Provide website presence. The program will be comprehensively
  outlined on the utility website. Customers and market providers should be
  able to review qualifying measures, download incentive applications and
  apply for incentives via an online portal.

# EM&V Requirements

The utility's implementation contractor will be responsible for implementing the following types of measurement and verification activities to facilitate the utility's third-party evaluation work:

- Collect and track all participating customers, measure installations, and incentive data.
- 2. In the incentive process, verify that each product on which incentives are paid meets the prescribed efficiency standards for the incentive.
- 3. Conduct on-site (or virtual) inspections of 5% of equipment for which customers receive incentives to verify that products were installed and that the model and serial numbers match those provided on the incentive claim. Any inconsistencies will be researched and the resolution recorded. Market providers associated with inconsistencies will receive follow up inspections on projects in which they are associated.

The implementation contractor will also need to work with the EM&V contractor to provide necessary data to complete evaluations and assure a high verification rate.

Program Element	Business Custom	
Objective	There are three primary objectives for the Business Custom Program:	
	<ol> <li>Increase the market share high-efficiency electric technologies sold through market channels.</li> <li>Affect the installation of site-specific and unique energy efficiency technologies and process improvements (that do not fit the parameters of the prescriptive incentive offerings) by business customers that would not have done so in the absence of the program.</li> <li>Help local businesses prosper and grow through increases in their energy efficiency and controlling their energy bill.</li> </ol>	
Target Market	All business customers are eligible to participate in the Custom program when they purchase and install cost effective, energy efficiency equipment. The program should utilize a targeted outreach strategy to influence specific markets such as.	
	<ol> <li>Market Providers (wholesalers, distributors, engineering and architectural firms, developers, and builders) that promote the qualifying technologies.</li> <li>High-impact/high-need customers such as industrial customers and others that use unique processes or equipment that are not covered by the Prescriptive program.</li> </ol>	
Program Duration	This program is an ongoing element of the program portfolio.	
Program Description	The Business Custom program helps customers and market providers identify more complex energy savings projects, analyze the economics of each project, and complete a customized incentive grant application. Over the long term, the custom solutions approach should allow the utility to develop and enhance the assistance they can provide to businesses with unique opportunities – including industrial process improvements, emerging technologies, and new facility design and/or modernization. To address the first-cost barrier for customers, the program will utilize financial incentives based on energy and demand savings from the cost-effective high efficiency technologies. Responders should provide their proposed incentive levels and their rational. Incentives should change over time if needed to address market response and goal attainment.  The program will affect the purchase and installation of unique highefficiency technologies through a combination of market push and pull strategies that stimulate market demand while simultaneously increasing market provider investment in stocking and promoting these unique technologies.	
	The program should increase market demand by educating business customers about the energy and money saving benefits associated with efficient products and equipping market providers to communicate those benefits directly to their customers.	

	The implementation contractor should employ field representatives to proactively train and equip market providers to convey the energy and money saving benefits to customers.  The Custom program should include a new construction/renovation component that can assist customers in specifying and installing unique high efficiency measures and establishing effective commissioning on the long-term performance of the building.	
Eligible Measures	Unique measures, innovative technologies and new processes that cost effectively save energy are eligible for the Custom program. Savings will be based on calculated energy savings pre and post installation. Incentives will be paid only after installation and on-site (or virtual) verification of the installation.	
Implementation Strategy	Outreach to market providers. The implementation contractor shall inform and recruit participating market providers. Outreach can include orientation meetings and conducting in-person visits aimed at training and equipping market providers to communicate program information to customers. The Contractor should ensure that providers have an updated stock of program materials. Key market providers that could be targeted include:  Innovative technologies and solutions from:  Lighting distributors, wholesalers,  HVAC distributors and retail contractors  Motors/compressed air vendors  Food service equipment distributors and retailers  Engineering and architectural firms  Developers and builders in the commercial market  Outreach to targeted customers. The program staff should personally contact energy managers and decision makers within the targeted customer sectors. They should assist business customers in determining opportunities for the Custom program for their operations. The UPPCO business account representatives will assist with outreach within the course of their regular contacts with business customers.  Energy Assessments. The implementation contractor will provide energy assessments to eligible customers. Energy assessments will include a walk-through analysis by the implementation contractor's Energy Advisor and a report detailing recommended next steps for installing innovative technologies or new processes.	
Marketing Strategy	<ul> <li>Incentives to Customers. Incentives on a per annual kWh reduced basis determined through engineering estimates reviewed by the program and the evaluator (for larger projects).</li> <li>Engage market providers. Outreach and training should be provided to a targeted group of providers that have business motivations for promoting cost effective high efficiency innovative technologies or processes to their customers.</li> <li>Outreach to targeted customers. The utility's implementation contractor will work closely with UPPCO to identify and conduct face-to-</li> </ul>	

face meetings with key end-use customers to recruit their participation. The contractor will target decision makers within the customer's organization including energy managers, facility managers, financial and operations managers, chief engineer and facility/property managers, maintenance supervisors, and building operators. Energy assessments will be offered to eligible customers to further encourage participation.

- Outreach to key influencers. The implementation contractor's energy advisors should work to generate awareness of the program through presentations and seminars with appropriate trade associations (ASHRAE, BOMA, school administrators, etc.).
- Provide website presence. The program will be comprehensively outlined on the utility website. Customers and market providers should be able to review qualifying measures, download incentive applications and apply for incentives via an online portal.

# EM&V Requirements

The utility's implementation contractor will be responsible for implementing the following types of measurement and verification activities to facilitate the utility's third-party evaluation work:

- Collect and track all customers, measure installations, and incentive data
- Custom projects shall be considered on a case-by-case basis; product performance information will be requested from the contractor or manufacturer and efficiency will be verified by a qualified engineer.
- Provide engineering support to identify and analyze the costeffectiveness and energy saving of each project. The energy advisor will work with the customer and/or market provider to complete custom engineering calculations that assess the energy savings potential, payback horizon, project eligibility, and incentive amount. If the project is deemed eligible, the advisor will assist the customer or market provider in completing a custom incentive grant application.
- For projects with incentives over \$5,000 the evaluation contractor will review the engineering calculations for accuracy to assure that the efficiency savings are real prior to project approval.
- Conduct on-site (virtual) inspections of all installations to verify that the specified equipment has been installed and is operating as outlined in the grant application. Any inconsistencies will be researched and the resolution recorded.

The implementation contractor will also need to work with the EM&V contractor to provide necessary data to complete evaluations and assure a high verification rate.

Program Element	Small Business Program	
Objective	The primary objective of the Small Business program is to install cost effective energy efficient measures in business customers' facilities that would not install these measures without the support of the program.	
Target Market	Small business customers, who have an energy demand of 200 kW or less, are eligible to participate in the program. The program will target hard-to-reach customers. This program will also work with the Multi-Family program in common areas of multi-family buildings to install energy efficient measures in those spaces.	
Program Duration	This program is an ongoing element of the program portfolio.	
Program Description	The utility is interested in providing broader energy efficiency services to its small hard-to-reach business customers. UPPCO is looking for new and effective ways of reaching this target market that has been underrepresented in the current program. The Small Business program has and could continue to provide direct installation of energy efficiency measures during a walk-through assessment, but additional proven strategies and approaches will be needed.	
Eligible Measures	Measures have not been identified.	
Implementation Strategy	The implementation contractor shall provide its strategy for delivery of increased savings for this important market segment.	
Marketing Strategy	In coordination with other EWR programs, the Small Business program should be marketed directly to targeted small business customers. A current research effort identifying small business market potential will be available in 2021 which should help identify specific segments within this market that have the best potential for savings and participation. Marketing approaches will need to be developed at that time.	
EM&V Requirements	The utility's implementation contractor(s) will be responsible for tracking the qualifying measure installations and customer data to facilitate the utility's third-party evaluation work:	
	<ul> <li>Collect and track all customers, measure installations, and incentive data.</li> <li>Field (virtual) verifications will occur on 10% of the installations to verify installation and correct application.</li> </ul>	
	The implementation contractor will also need to work with the EM&V contractor to provide necessary data to complete evaluations and assure a high verification rate.	

Program Element	Small Business Financing Program	
Objective	The objective of the Small Business Financing Program is to provide a subsidized financing option for small business customers to allow them to get past the first cost barrier and get high efficiency implemented in their facility. This is a new initiative in 2021 and will be expanded if successful.	
Target Market	The program is targeted to small business customers with energy demand less than 35 kW.	
Program Duration	This will be a pilot program in 2021 and if successful become a full program in January 2022.	
Program Description	The Small Business Financing program will team with Michigan Saves to offer zero percent financing for qualifying customers. One of the primary barriers to participation by this group of customers is the upfront cost of implementing energy efficiency in their facility. By providing financing, the customers can participate in the Prescriptive and Custom program to get measures installed. Financing during the pilot program will be at 0% for 36 months for projects up to \$25,000 but may be adjusted for the 2022 program. Participants would still qualify for the standard prescriptive and custom rebates. Energy savings will be captured in those standard programs and not by this initiative to assure no double counting of results.	
Eligible Measures	All prescriptive and custom measures qualify for the program if they fall under the financing cost maximum.	
Implementation Strategy	All aspects of the program financing will be handled through Michigan Saves. Customer recruitment and project implementation/management will occur through the other business programs. Savings will be captured through the other business programs as well.	
Marketing Strategy	Marketing will occur in conjunction with the other program efforts. Special outreach will occur to small customers who qualify for the financing. This will occur through direct marketing to these customers. The pilot efforts will explore the best way to reach potential participants.	
EM&V Requirements	Savings will not be attributed to this program. Evaluation activity will focus on the effectiveness of financing in increasing participation and getting deeper measure implementation.	

# Program Delivery

Proposals should address, but not be limited to, the following program delivery services/tasks:

#### Implementation Plan

- 1. Present your program delivery plan for 2022-2023. This shall include a Gantt chart with initial contract signing, program launch, and on-going delivery. Indicate the most important milestones and operational goals by program.
- 2. Describe your approach to overseeing the performance of subcontractors and implementers, and how you manage to achieve results, within budget, and ensure excellent customer satisfaction.
- 3. Define your approach and philosophy toward early identification of problems and implementation of adaptive program design if required. Detail your approach to handling conflict resolution on your team, and with UPPCO.
- 4. Provide a staffing plan and the attached table, which includes position description, staff assigned to those positions if filled and available, hourly rates and full-time equivalents.

#### Call Center

- 1. Describe your call center capabilities and experience as well as the phone management system used. This description shall include number and location of facilities and number of calls capable of handling; both inbound and outbound.
- 2. Describe your strategy for handling backup or overflow calls, including locations.
- 3. It is expected that all locations will have the same quality system, scripts, standardized management procedures, and adhere to the same change management program. Please describe this system, and plan for adherence. This shall include call center representative performance and improvement.
- 4. A customer escalation system shall be included at the agent level and provide a mechanism for program team notification. UPPCO has the right to listen to call recordings.

#### Quality Control and Verification

1. Contractors shall provide in their proposals, a detailed explanation of the quality assurance procedures that will be put in place for its programs, including, without limitation thereto,

quality controls, tracking and forecasting, leading indicators, monitoring, measurement to goals set, regulatory compliance measures and audit procedures. Quality assurance procedures will address executing the program with minimal mistakes and customer service problems; protection of UPPCO customer data and the data files for the program to eliminate to the greatest extent possible tampering and misapplication or misappropriation of such data, and ensuring that work claimed and charged for has been performed as described.

2. Implementation contractor must have the capacity to conduct field verifications/inspections on a quarterly basis per program to validate equipment, material installed, or service provided matches what was applied for. Please describe how you plan to achieve a high level of quality assurance within the programs. Describe your approach to ensure accuracy, integrity and quality throughout the program. Field verifications conducted per program should be in the range from 5 to 10 percent depending on complexity and financial risk.

#### Marketing

Marketing and communications are key elements to driving participation in EWR programs. They are also key elements in UPPCO's branding. As such this task will require coordination with UPPCO staff to develop a final program marketing and communications plan. All materials will need to be approved by UPPCO prior to implementation.

Please address at a minimum these following areas of marketing and communication in your response.

- 1. Given your understanding of UPPCO's market, outline your initial proposed marketing strategy, by program, including key milestones, use of existing resources, and timeline. Include the specific marketing approach or approaches proposed and how it will be tailored to the key target audiences for each. If your program design includes a trade ally component, please detail marketing approaches proposed to enroll relevant trade allies and generate program participation. Describe how you will track effectiveness and monitor results to help manage participation levels.
- 2. Describe your approach to cross promoting other programs within the portfolio, when applicable. Also, describe your experience with teaming with other implementers in support of these activities.
- Describe your creative design, graphic arts, and messaging skills. Include examples of
  previous creative marketing and technical support pieces as an appendix to your
  proposal. Indicate the Advertising Agency that was utilized to develop marketing
  materials.

#### Evaluation, Measurement and Verification

Evaluation, Measurement and Verification research is essential to assess and improve program and portfolio effectiveness and to meet regulatory requirements. Please describe your capabilities in the areas below in providing data required for EM&V and working with third-party EM&V contractors.

Please briefly describe how your firm has partnered well with EM&V functions and evaluators at other clients in the areas below, and how you will ensure strong performance with UPPCO.

- Please describe your capabilities in providing frequent data extracts to the EM&V
  contractors of recent program participants and for customer satisfaction research
  samples. Please also describe your capabilities in providing data extracts for other
  evaluation studies that would include program participation, and incentive payment
  data.
- Please describe your capabilities in providing timely, and accurate annual data extracts
  of your program data as required for annual evaluator certification during the
  Reconciliation process. Please indicate what your typical timelines are for generating
  this extract, and how you propose to generate such an extract when required by the end
  of January each year
- 3. Describe how you ensure that details submitted in the rebate incentive applications are valid applications as these will be subject to EM&V audits to ensure accuracy.
- 4. Please describe your ability to ensure that deemed measure savings from the MEMD are correctly being applied in all data tracking systems. Please also describe your firm's capabilities and experience in creating technical work papers that document proposed savings for new measures to be considered by program managers, evaluators and state regulators. If you have submitted a technical workpaper describing a new measure and documenting evidence for its energy savings, please include an example in your proposal in the appendix and note it in your EM&V section.

### **Incentive Processing**

The Contractor should describe and must demonstrate the experience, skills and systems to accurately and quickly process rebate applications and track program activity.

1. Explain your previous experience and ability to process incentive applications, track participant and program savings data.

- 2. Describe your experience with and plan to verify valid applications, process incentive applications, track participant and program savings data, and issue reports. Detail how you propose to accomplish these tasks and submit your proposed process map for incentive processing and data tracking.
- 3. Confirm your capability and describe your experience with providing a web-based dashboard, password protected program tracking and real-time reporting capabilities so UPPCO can monitor. The real time dashboard should report key performance metrics including, but not limited to application pipeline, cycle time, field inspections, savings, and spending. Include illustrative screen shots of reporting dashboards as an appendix.
- 4. UPPCO would like to offer participants application submission through online platforms. Describe your capability, experience, and suggestions with respect to the use of online incentive applications utilized by both customers and trade allies. Describe any experience with smart apps or other technologies for customer data collection and/or application submission and provide samples if possible.
- 5. Outline your approach to minimizing the "cycle time" of a customer's rebate application, starting with the date of service by the contractor, and ending with the date of rebate payment.
- 6. Describe your experience with and your process for monitoring rebates that are given to the market actors and not directly to customers. Include details on how you ensure customers are aware that UPPCO provided the rebate and are receiving the full rebate value in this scenario.
- 7. Describe your incentive application record-keeping process, and ability to scan all hard-copy applications so content and data is available in real-time for project manager and EM&V review.
- 8. Specify how costs for addressing customer service phone calls and rebate processing/incentive check processing will be priced, and if based on a per unit or per event basis, specify cost. For example: a) Fees per individual customer service phone call; b) Cost per incentive check issued. Clearly identify any costs that will be passed through to UPPCO for rebate processing, and payment on a per application basis in the Budget Table.
- 9. Describe your ability to fund and issue rebate checks to customers on behalf of UPPCO prior to reimbursement from the utility.
- 10. Provide other forms of customer incentive payments your company has used, aside from paper checks. Include historical customer preference and best practices data for each method.

#### Systems and Data Processing

The Contractor must maintain an "Operations Tracking System" that tracks all aspects of the program. The system should be an existing system, and capable of providing essential

information to UPPCO in real time with sufficient security controls to prevent data loss, leakage, or unauthorized access (internal and external) of customer, and program participation information. The Contractor shall identify any development costs and ongoing maintenance costs for application of this system to UPPCO.

# Contractor Performance

UPPCO wants to emphasize the importance of reaching energy savings goals while improving customer satisfaction/relationships. UPPCO will place 20% of the Contractor's labor charges in hold status pending achievement of agreed upon savings and customer satisfaction goals.

#### **Energy Savings Goals**

Contractors are expected to achieve or exceed the first year and lifetime net savings values in the goals table below. Contractors must prepare savings information for applicable programs in the Savings Table attached. This table must detail specific participation goals and annual net kWh and kW savings, by year, and program.

Net kWh Savings Goals	Annual Savings	Lifetime Savings
2022	12,800 MWh	160,000 MWh
2023	12,800 MWh	160,000 MWh

Contractors must use the 2021 MEMD deemed savings values. In instances where a Contractor believes a viable measure is not included in the current MEMD, include the measure's proposed savings and source of your savings estimate in the Savings Table.

NOTE: These savings goals are for bid purposes only. Final goals may change based on the current market potential study and future regulatory guidance.

#### **Budget Targets**

The goal of UPPCO is to achieve and exceed its energy savings goals in the most cost-effective manner possible. This will not only save the participants money but help control costs for all ratepayers while helping UPPCO reach its IRP operations targets. Budgets should be submitted

on the enclosed table provided. Total cost per kWh saved should not exceed 0.16 per kWh based on annual net kWh savings of the measures.

#### Other Performance Indicators

In addition to the savings goals, there are other key indicators of success that UPPCO will track and monitor for the contractor's performance. UPPCO expects the Contractor and meet or exceed these minimum levels of performance. Include these levels of achievement in the pricing proposal. Provide examples and describe your company's ability in meeting these expectations. Your examples should be proven and draw from actual experiences with other utilities.

#### Rebate Cycle Time

- Rebate Cycle Time (non-flawed applications): Process and issue rebates upon receipt of a completed application received in a ready to process status, or upon completion of an appliance pick-up within the 21 calendar days. By program, identify your average cycle time for processing these non-flawed applications and describe how you plan to achieve/exceed this metric. Please note that a shorter period will be viewed as favorable.
- Rebate Cycle Time (flawed applications): Provide your experience with processing
  applications that are submitted with errors (flawed). Describe the average percentage of
  applications received flawed (per program) and the tactics you have implemented to
  reduce this percentage. By program, detail your average cycle time for processing these
  flawed applications.
- 3. Completed Appointments Cycle Time: Complete 100% of the appointments within an average of 21 calendar days, from the date scheduled. Describe how you plan to achieve/exceed this metric and minimize cancellations.

#### **Customer Satisfaction**

Achieve and maintain a high customer satisfaction program rating of 9.0 on a 10.0-point scale as determined by program evaluators or a third party. Describe past results (and your program scores) with other clients with similar programs where you were able to increase or maintain a high customer satisfaction rating.

### Personnel and Experience

Contractors are requested to describe their firm and/or team's experience and capabilities in managing, delivering, and implementing the programs requested in this RFP. Contractors must provide detailed information on their overall core team qualifications and experience, including the following:

#### Management and Staffing

In this section, Contractors are requested to:

- 1. Identify the senior executive that will be designated to ensure that the account receives appropriate support from the contractor's entire organization and all organizations on the contractor's team. This executive is required to participate in quarterly quality reviews by phone and annual reviews by phone or onsite, as requested.
- 2. Include a management and organizational chart that depicts the relationships and proposed agreements among all team members (including subcontractors) to accomplish the tasks in this RFP.
- 3. In the Budget Table please describe the number of field staff, by applicable program, such as account managers and technicians you plan on deploying and overseeing. This shall include any subcontractors and identified as such. Detail how you will achieve and maintain a high level of contractor participation and satisfaction.
- 4. Describe your strategy for handling key personnel changes during the contract period when someone leaves or changes responsibilities.

#### **Experience and Qualifications**

- Describe your previous experience as a lead contractor responsible for the programs
  requested in this RFP. Describe any experience serving as a "turnkey" program delivery
  contractor in coordination with utility staff. Summarize your previous experience with
  implementation strategy for each of the programs you propose in this RFP.
- 2. Describe previous experience you have working directly in Michigan or the Midwest as it relates to similar programs to this RFP.

Explain your current understanding of the Michigan market for the programs proposed in this RFP. Describe any opportunities and challenges you anticipate, and how will you address them.

#### Resumes and Bios

Contractors are requested to identify key personnel to be assigned to this project. Describe their primary responsibilities in a brief biography (one paragraph) and attach a maximum two (2) page resume that describes the individual's experience and qualifications. This should include information for the staff which will be doing the actual work and key senior staff from other corporate offices including start-up/transition staff if different than program staff.

Resumes and bios should describe relevant responsibilities from other projects that will help UPPCO evaluate the qualifications and experience of key personnel. Resumes and bios submitted during the RFP process should be for staff committed to working on the programs, with specific reference to which staff will be involved in a temporary start-up and transition role, versus long-term staffing.

The proposals must include agreements by individual subcontractors listed in bids to provide the outlined services. This agreement must be signed by a person with the authority to make such a commitment. There is no prohibition for firms to be included in more than one proposal.

#### Selection Process and Schedule

The key dates for the proposal are as follow:

RFP Released	Dec. 15, 2020
Questions Submitted on RFP	Jan 6, 2021
UPPCO Response	Jan 13, 2021
Bids Due	Feb 1, 2021
Review Process and Decision	Mar 1, 2021
Begin Planning Process	Mar 15, 2021
Updated Plans for filing completed	May 15, 2021
UPPCO Filing	July 1, 2021
Begin Transition Process	July – Dec 2021
Begin Implementation	Jan 1, 2022

The criteria that will be used to consider the proposals will include but not be limited to the following items.

•	Complete and Actionable Plan	25%
•	Goal achievement	25%
•	Costs	20%
•	Experience	10%
•	Systems – Tracking, Management	10%
•	Staffing	5%
•	Innovation	5%

#### Client References

Contractors are requested to provide five (5) references from current (preferred) or previous clients for whom they have performed projects that are relevant to the Scope of Work. References should include a brief synopsis of specific services provided, project size, results, company name and location, contact name, contact title, telephone number, and email address.

#### Resources

The following resources are available to provide insights into the historic UPPCO programs, filings and evaluations.

- UPPCO 2020-2021 Program Filing MPSC Case No. U-20376 (<a href="https://mi-psc.force.com/s/global-search/U-20376">https://mi-psc.force.com/s/global-search/U-20376</a>)
- UPPCO 2019 Program Reconciliation Filing MPSC Case No. U-20706 (<a href="https://mi-psc.force.com/s/global-search/U-20706">https://mi-psc.force.com/s/global-search/U-20706</a>)
- UPPCO 2018 Program Reconciliation Filing MPSC Case No. U-20368 (<a href="https://mi-psc.force.com/s/global-search/U-20368">https://mi-psc.force.com/s/global-search/U-20368</a>)
- UPPCO 2020 Process Evaluation Report attached
- UPPCO 2020 Gross Savings Adjustment Report attached
- UPPCO 2020 Program Incentive Application Forms UPPCO website Link (https://www.uppco.com/residential/energy-efficiency-rebates/)
- Michigan Energy Measures Database <a href="https://www.michigan.gov/mpsc/0,9535,7-395-93309">https://www.michigan.gov/mpsc/0,9535,7-395-93309</a> 94801 94808 94811---,00.html

### Submittal Tables



### **Evaluations**





# UPPCO Energy Waste Reduction Request for Proposal Scope of Work

RFP#:

Issued: December 15, 2020

Bid Due: February 1, 2021

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Issued: December 15, 2020	
Bid Due: February 1, 2021	
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Questions & Answers	
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#### Introduction

Upper Peninsula Power Company (UPPCO) is an electric investor-owned utility operating in the Upper Peninsula of Michigan. It serves over 47,000 Residential customers and over 5,800 Commercial & Industrial customers. To better serve its customers and save them money, UPPCO is implementing an Energy Waste Reduction (EWR) program in accordance with the Michigan Public Service Commission (MPSC) ruling in response to the Clean, Renewable, and Energy Waste Reduction legislation, Public Acts 295 of 2008 and 341/342 of 2016.

UPPCO issued a Request for Proposal (RFP) for the selection of an experienced EWR program implementation contractor team(s) for turnkey delivery of the programs on Dec 15, 2020. The time period for submission of questions on this proposal was Jan 6, 2021 as outlined in the key dates table below. UPPCO's final responses are being distributed today, Jan 13, 2021.

The key dates for the proposal are as follow:

RFP Released	Dec. 15, 2020
Questions Submitted on RFP	Jan 6, 2021
UPPCO Response	Jan 13, 2021
Bids Due	Feb 1, 2021
Review Process and Decision	Mar 1, 2021
Begin Planning Process	Mar 15, 2021
Updated Plans for filing completed	May 15, 2021
UPPCO Filing	July 1, 2021
Begin Transition Process	July – Dec 2021
Begin Implementation	Jan 1, 2022

#### **Questions & Answers**

#### Response #1 December 29, 2020

- Q: What has been the average annual participation per program since its inception?
   A: Please review the plan and reconciliation filings referenced in the Resources section of the RFP.
- Q: For this RFP, can the bidder bid on programs individually or only as a portfolio?A: To clarify the RFP introduction statement "UPPCO is issuing this Request for Proposal (RFP) for the selection of an experienced EWR program implementation contractor

team(s) for turnkey delivery of the programs outlined in this proposal." UPPCO's

preference is for bidders at the portfolio level. Having said that, UPPCO is open to multiple implementors teaming as subcontractors to strengthen the bid if there is a primary implementor responsible for delivery of the portfolio.

 Q: Based upon the budget submission template, is the bidder supposed to submit individual budgets sheets per program in the same file or have individual budget documents per program? See Response #10 Below.

A: The budget submission template is designed to ease analysis and comparison between bidders. If the bidder chooses to create individual sheets per program, UPPCO requests that the budget submission template be a summation by program of the individual sheets which would be included as support documents for budget and savings.

4. Q: If the bidder is offering new program components, should they be incorporated into the program budget or the pilot budget funds?

A: New program components should be included in the program budget if the bidder is expecting energy savings associated with the component to be counted toward the portfolio goals and targets. If the new program components align with the Michigan Public Service Commission (MPSC) MI Power Grid initiative recommended definition of pilot ("A pilot is a limited duration experiment to determine the impact of a measure on one or more outcomes of interest.";

https://www.michigan.gov/documents/mpsc\_old/MPG\_Pilots\_Report093020\_703895\_7.pdf) then include in the pilot budget funds.

5. Q: If the bidder introduces new measures can they offer the new measures to customers who have already participated in the program offering?

A: Yes.

6. Q: How many commercial customers have electric heat?

A: Of the 5,220 small commercial customers listed in Table 1 of the RFP document, UPPCO classifies 200 as electric heating.

7. Q: Can the programs be used as a lever in the portfolio to reach portfolio goals or will each program be expected to reach individual goals?

A: At a high level, UPPCO's EWR Plan must accomplish the first-year energy savings, lifetime energy savings and low-income spend goals as ordered in a future MPSC Case for UPPCO's 2022-23 EWR Plan. In addition, the surcharge collection and incentive spend needs to be equitably distributed across UPPCO's customer rate classes. Thus, programs can be used as levers to reach portfolio goals by sector within the abovementioned limits.

8. Q: Is there a page limit or format requirements for the proposal response?

A: At this time, the only page limit specified in the RFP is the two (2) page resume under the Resume and Bios Section. UPPCO encourages and appreciates that bidders provide the necessary information to fully evaluate responses while remaining focused.

#### Response #2 January 13, 2021

- 9. Q: In regards to the February 1 submission date, are there guidelines as to how to submit the proposal? Is there a certain format you would prefer, whether electronic or physical copies? To whom should we submit our proposal?
  - A: UPPCO prefers proposal submissions be in electronic file format. Microsoft Excel and Word, as well as Adobe PDF file formats are acceptable. All submissions should be submitted directly to myself, Andrew McNeally (amcneally@uppco.com) and copy Gradon Haehnel (GHaehnel@uppco.com) by 5:00 pm EST on February 1, 2021.
- 10. Q: To clarify, the budget submission excel document should be a total portfolio summation for 2022 and one for 2023. Resulting in 2 excel sheets for the budget submitted that include all programs?
  - A: After further consideration of question #3 above and this question, UPPCO is requesting that submissions be by program by year with a roll up to sector and portfolio that will enable UPPCO to perform "what if" analysis, such as elimination of a program, as well as clearly identify the low-income/income qualified program.
- 11. Q: Is UPPCO looking for individual program budget sheets per program? Should the bidder include a separate budget for the income qualified program in the submission document?
  - A: See response to #10 above.
- 12. Q: UPPCO places a high value on customer satisfaction, indicating that satisfaction will be measured by program evaluators on a 10 point scale. Can UPPCO share any details about current customer satisfaction metrics? How is satisfaction measured, frequency, etc?
  - A: The formal measure of customer satisfaction with our EWR Program is measured by our independent third-party evaluator. Satisfaction is measured annually via customer and participant surveys. Within these surveys, satisfaction is measured at multiple levels at the rebated measure level, at the program level (including satisfaction with 5 or 6 different program aspects), and satisfaction with UPPCO as their electric utility.

13. Q: A summary of the data tracking transition is required in the response; can UPPCO provide insight into the current data tracking system?

A: UPPCO requests that the bidder provides their preferred data format and data elements based on their experience delivering data to third-party evaluators for utility programs implemented in Michigan. If the bidder does not provide implementation services in Michigan, please identify the State jurisdiction that the tracking data is applicable to. A spreadsheet of minimum tracking data elements is embedded here



- 14. Q: The first paragraph of the Program Design section on page 10 of the RFP states: "All programs will also be required to be cost effective utilizing the Utility Cost Test as outlined by the MPSC and should minimize rate impacts." Please expand on this statement. In specific, how is a "program" defined? Does it mean just that the overall portfolio needs to be cost effective, or do individual parts of the portfolio, such as Income Qualified Services, need to be cost effective on their own. What does "...and should minimize rate impacts" mean?
  - A: The portfolio as a whole and each sector (residential and business) must pass cost effectiveness, and all programs should also pass with the exception of Low-Income programs. If possible, a cost-effective Low-Income program is desirable while still achieving goals. The use of "program" in this instance refers to the collection or grouping of measures as illustrated by the listing on page 6 of the RFP.
- 15. Q: Are Utility Cost Effectiveness Tests required to be run by the implementation contactor on an annual basis or will a third party run those tests? Is there an expectation that the proposal respondent run the UCT as a component of the response?
  - A: A third party will complete an annual cost-effective analysis based on certified evaluation results. It is not expected that the Proposer provide their cost-effective analysis as part of the proposal. UPPCO will complete that analysis internally.
- 16. Q: Please provide the residential lighting mix in 2020 between standard and specialty bulbs.
  - A: UPPCO's 2020 EWR Program lighting mix was 80% standard bulbs and 20% specialty bulbs.
- 17. Q: Regarding Program Design on page 11, Does UPPCO have a veteran-owned, womenowned or minority-owned business spend goal? If so, what is the target?

- A: At this time, UPPCO has not identified specific spend goals beyond the portfolio, sector and program levels but use of veteran-owned, women-owned, and/or minority owned businesses is encouraged.
- 18. Q: Regarding Program Element Business Custom on page 25, UPPCO references "a customized incentive grant application". Can you please clarify if this is referencing an UPPCO application for a custom incentive or outside entities' (other than UPPCO) grants?
  - A: The "customized incentive grant application" is in reference to the UPPCO incentive application not an outside entity. This reference is to highlight that the bidder should be prepared to assist customers and market providers complete the incentive application referred to in the Business Custom Marketing Strategy section on page 27.
- 19. Q: Regarding Contractor Performance on page 34, Can the 20% hold on contractor labor charges only be earned if both customer satisfaction score and savings goals achieved or is there a tiered scale?
  - A: As stated in the RFP, the 20% hold is to emphasize the importance of achieving both energy savings and customer satisfaction, and not intended to be punitive to the vendor. Thus, UPPCO asks the bidders to propose a metric for the scenarios of achievement, under achievement and over achievement based on energy savings and customer satisfaction goals.

Upper Peninsula Power Company (UPPCO) 2022-2023 Energy Waste Reduction Plan Revenue Requirement Case No.: U-20879 Exhibit A-8 (AHM-8) Witness: Andrew McNeally

	(a)		(b)	(c)	(e)	(f)
Line	Energy Waste Reduction Revenue Requirement	R	esidential	Commercial	Societal	Total
1	2022 EWR Plan Costs	\$	1,309,952	\$ 1,982,690	\$ 775,810	\$ 4,068,451
2	2023 EWR Plan Costs	\$	1,317,306	\$ 1,988,771	\$ 781,059	\$ 4,087,135
3						
4	2022-2023 Proposed Revenue Requirement	\$	2,627,257	\$ 3,971,461	\$ 1,556,868	\$ 8,155,586

Case No. U-20879 Exhibit A-9 (EWS-1) Witness: Eric Stocking

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		2018 P-521	2019 P-521	2020 P-521	3-Year	Statutory	EWR Plan
		Rate Class	Rate Class	Rate Class	Average	1.0% Savings	1.75% Savings
Line	Rate Class	Sales 1	Sales 1	Sales 1	Sales	Goal	Target
1	Residential						
2	A-1	223,098	220,320	233,383	225,600	2,256	3,948
3	AH-1	27,581	27,123	24,112	26,272	263	460
4	Residential Total	250,679	247,443	257,495	251,872	2,519	4,408
5							
6	<u>Commercial</u>						
7	<u>Small</u>						
8	C-1	64,172	64,677	63,528	64,126	641	1,122
9	H-1	7,928	7,788	6,699	7,472	75	131
10							
11	<u>Medium</u>						
12	P-1	77,106	72,685	64,918	71,570	716	1,252
13							
14	<u>Large</u>						
15	CP-U	114,068	139,176	108,513	120,586	1,206	2,110
16	CP-I	403	378	-	260	3	5
17							
18	<u>Industrial</u>						
19	RTMP	172,137	169,038	203,950	181,708	1,817	3,180
20	RTMP-D			-			
21							
22	Special Contract 2 3	30,595	34,950	38,795	34,780	348	348
23							
24	WP-3	28,754	49,234	67,954	48,647	486	851
25							
26	<b>Lighting</b>						
27	SL-3	4,529	2,193	1,866	2,863	29	50
28							
29	Commercial Total	499,692	540,119	556,223	532,011	5,320	9,049
30							
31	Total	750,371	787,562	813,718	783,883	7,839	13,457

<sup>(1) -</sup> UPPCO P-521 Report for year ending December 31st, page 304, column (b)

<sup>(2) -</sup> Special Contrct Sales from non-utility monthly invoices

<sup>(3) -</sup> Current EWR Self-Direct Customer

Case No. U-20879 Exhibit A-10 (EWS-2) Witness: Eric Stocking

	(a)	(b)	(c)	
		3-year Average	Program	Societal
		P-521 Rate	Allocation	Allocation
Line	Rate Class	Class Sales 1	Factor	Factor
1	<u>Residential</u>			
2	A-1	225,600	0.8957	0.2879
3	AH-1	26,272	0.1043	0.0335
4	<b>Residential Total</b>	251,872		
5				
6	<u>Commercial</u>			
7	<u>Small</u>			
8	C-1	64,126	0.1290	0.0818
9	H-1	7,472	0.0150	0.0095
10				
11	<u>Medium</u>			
12	P-1	71,570	0.1440	0.0913
13				
14	<u>Large</u>			
15	CP-U	120,586	0.2426	0.1539
16	CP-I	-	-	-
17				
18	<u>Industrial</u>			
19	RTMP	181,708	0.3656	0.2319
20	RTMP-D	-	-	-
21				
22	Special Contract <sup>2</sup>	34,780	-	0.0444
23				
24	WP-3	48,647	0.0979	0.0621
25				
26	<b>Lighting</b>			
27	SL-3	2,863	0.0058	0.0037
28				
29	Commercial Total	531,751		
30				
31	Total	783,623		

<sup>(1) -</sup> U-20879 Exhibit A-9 (EWS-1), Column (e)

<sup>(2) -</sup> Current EWR Self-Direct Customer

Case No. U-20879 Exhibit A-11 (EWS-3) Witness: Eric Stocking

	(a)	(b)	(c)	(d)		
		Program	Societal		EWR Plan	
		Revenue	Revenue		Revenue	
Line	Rate Class	Allocation	Allocation		Requirement	
1	<u>Residential</u>					
2	A-1	2,353,216	448,213	\$	2,801,429	
3 _	AH-1	274,041	52,196	\$	326,237	
4	Residential Subtotal	2,627,257				
5						
6	<u>Commercial</u>					
7	<u>Small</u>					
8	C-1	512,450	127,402	\$	639,852	
9	H-1	59,709	14,844	\$	74,553	
10						
11	<u>Medium</u>					
12	P-1	571,937	142,192	\$	714,129	
13						
14	<u>Large</u>					
15	CP-U	963,640	239,574	\$	1,203,215	
16	CP-I	-	-		-	
17						
18	<u>Industrial</u>					
19	RTMP	1,452,092	361,010	\$	1,813,102	
20	RTMP-D	-	-	\$	-	
21						
22	Special Contract <sup>1</sup>	259,757	69,099	\$	328,855	
23						
24	WP-3	388,757	96,650	\$	485,407	
25						
26	<u>Lighting</u>					
27	SL-3	22,877	5,687	\$	28,564	
28						
29	Commercial Subtotal	3,971,461				
30		_				
31	Societal Subtotal		\$ 1,556,868			
32 _						
33 =	Total	6,858,475	1,556,868		8,415,343	

<sup>(1) -</sup> Current EWR Self-Direct Customer

Case No.: U-20879 Exhibit A-12 (EWS-4) Witness: Eric Stocking

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
		EWR Plan	Forecasted	Forecasted	Forecasted	U-20869	20879		
		Revenue	Volumes In MWh	Volumes In MWh	Volumes In MWh	2020 Recon	2022-23 Plan	Proposed	
Line	Rate Class	Requirement	2022 <sup>1</sup>	2023 <sup>1</sup>	Total	Surcharge	Surcharge	Surcharge	Units
1	Residential								
2	A-1	2,801,429	219,939	221,234	441,174				
3	AH-1	326,237	25,613	25,764	51,376				<u>-</u>
4	Subtotal	3,127,666	245,552	246,998	492,550	0.0007	0.0063	0.0070	per kWh
5									-
6	<u>Commercial</u>		Number of	Number of	Number of				
7	<u>Small</u>		Customers/Meters	Customers/Meters	Customers/Meters				
8	C-1	639,852	5,072	5,072	10,144				
9	H-1	74,553	228	228	456				_
10	Subtotal	714,405	5,300	5,300	10,600	1.15	5.62	6.77	per month / meter
11									-
12	<u>Medium</u>								
13	P-1	714,129	480	480	960				_
14	Subtotal	714,129	480	480	960	11.72	61.99	73.71	per month / meter
15									<b>-</b> '
16	<u>Large</u>								
17	CP-U	1,203,215	50	50	100				
18	CP-I	-	0	0	0				
19	Subtotal	1,203,215	50	50	100	95.39	1,002.68	1,098.07	per month / meter
20									•
21	<u>Industrial</u>								
22	RTMP	1,813,102	1	1	2				
23	RTMP-D	-	0	0	0				
24	Subtotal	1,813,102	1	1	2	2663.78	75,545.92	78,209.70	per month / meter
25									•
26	Special Contract <sup>2</sup>	328,855	1	1	2				
27	Subtotal	328,855	1	1	2	2663.78	13,702.30	16,366.08	per month / meter
28		<u> </u>							• '
29	WP-3	485,407	3	3	6				
30	Subtotal	485,407	3	3	6	237.33	6,741.77	6,979.10	per month / meter
31									,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
32	Lighting								
33	SL-3	28,564	73	73	146				
34	Subtotal	28,564	73	73	146	0.61	16.30	16.91	per month / meter
35					+				,
36									
37	Total <sup>3</sup>	\$ 8,415,343							

<sup>(1) -</sup> Forecast Annual Sales from U-20535, Exhibit A-2(EWS-2), Page 1

<sup>(2) -</sup> Current EWR Self-Direct Customer

<sup>(3) -</sup> Total in this exhibit does not included assumed Self-Direct revenues.

Case No.: U-20879 Exhibit A-13 (EWS-5) Witness: Eric Stocking

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Self-Direct	Forecasted	Forecasted	Forecasted	2020-21	
		Revenue	Volumes In MWh	Volumes In MWh	Volumes In MWh	Self-Direct	
Line	Rate Class	Requirement	2022 1	2023 <sup>1</sup>	Total	Surcharge	Units
1	Residential						
2	A-1	448,213	219,939	221,234	441,174		
3	AH-1	52,196	25,613	25,764	51,376		_
4	Subtotal	500,409	245,552	246,998	492,550	N/A	per kWh
5							=
6	<b>Commercial</b>		Number of	Number of	Number of		
7	<u>Small</u>		Customers/Meters	Customers/Meters	Customers/Meters		
8	C-1	127,402	5,072	5,072	10,144		
9	H-1	14,844	228	228	456		_
10	Subtotal	142,246	5,300	5,300	10,600	N/A	per meter / month
11							=
12	<u>Medium</u>						
13	P-1	142,192	480	480	960		
14	Subtotal	142,192	480	480	960	N/A	per meter / month
15							=
16	Large						
17	CP-U	239,574	50	50	100		
18	CP-RR	-	0	0	0		
19	Subtotal	239,574	50	50	100	199.65	per meter / month
20							=
21	<u>Industrial</u>						
22	RTMP	361,010	1	1	2		
23	RTMP-D	-	0	0	0		
24	Subtotal	361,010	1	1	2	15,042.09	per meter / month
25							=
26	Special Contract	69,099	1	1	2		
27	Subtotal	69,099	1	1	2	2,879.11	per meter / month
28							=
29	WP-3	96,650	3	3	6		
30	Subtotal	96,650	3	3	6	1,342.37	per meter / month
31							= '
32	Lighting						
33	SL-3	5,687	73	73	146		
34	Subtotal	5,687	73	73	146	N/A	per meter / month
35				-			=
36							
37	Total	\$ 1,556,868					

<sup>(1)</sup> Forecast Annual Sales from U-20535, Exhibit A-2(EWS-2), Page 1

165th Rev. Sheet No. D-

UPPER PENINSULA POWER COMPANY

MPSC Vol No 8-ELECTRIC 73.00

Replaces 154th Rev. Sheet No. D-

73.00

Tariff

#### D2. Energy Waste Reduction (EWR)

**EWR** 

Case No.: U-20879

#### Energy Waste Reduction Surcharge

This surcharge permits, pursuant to Section 91(4) of 2008 Pa 295, and as amended in 2016 PA 342, the adjustment of distribution rates, via the application of an Energy Waste Reduction Surcharge, to allow recovery of the energy waste reduction alternative compliance payment made by the Company in compliance with Section 91(1) of 2008 Pa 295 as amended in 2016 PA 342.

All customer bills subject to the provisions of this tariff, including any bills rendered under special contract, shall be adjusted by the Energy Waste Reduction Surcharge per kWh or Customer as follows:

Energy Charges

R R D	A-1 AH-1	\$0.00 <u>70</u> 77 /kWh \$0.00 <u>70</u> 77 /kWh	
	<u>Tariff</u>	Per Month/Meter	Per Day/Meter
R R	C-1 H-1	\$ <u>6.77<del>7.18</del></u> \$ <u>6.77</u> <del>7.18</del>	\$0. <u>2225<del>2361</del></u> \$0. <u>2225<del>2361</del></u>
R	P-1	\$ <u>73.71</u> <del>73.01</del>	\$ <u>2.4234<del>2.4003</del></u>
R	Cp-U	\$ <u>1,098.07</u> <del>694.12</del>	-\$\frac{36.1009}{22.8203}
R	WP-3	\$ <u>6,979.10</u> <del>2,775.92</del>	\$ <u>229.4499<del>91.2631</del></u>
R R R	RTMP RTMP-D Special Contract	\$78,209.70 <del>7,996.57</del> \$78,209.70 <del>7,996.57</del> \$16,366.08 <del>7,996.57</del>	-\$2,571.2779 <del>262.9009</del> -\$2,571.2779 <del>262.9009</del> -\$538.0628 <del>262.9009</del>
R	SL-3	\$ <u>16.91</u> <del>3.73</del>	\$ <u>0.5561</u> <del>0.1227</del>
<u>R</u> <del>I</del>	Tariff - Self-direct	Per Month/Meter	Per Day/Meter
<u>R</u> <del>I</del>	Cp-U	\$ <u>199.65<del>226.56</del></u>	\$ <u>6.5637</u> <del>7.4185</del>
<u>R</u> <del>I</del>	WP-3	\$ <u>1,342.37</u> <del>923.31</del>	-\$\frac{44.1326}{30.3554}
R <del>I</del> R <del>I</del> R <del>I</del>	RTMP RTMP-D Special Contract	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	-\$494.5346 <del>82.2740</del> -\$494.5346 <u>82.2740</u> -\$44.1326 <del>82.2740</del>

Issued:  $\frac{12}{2}xx - \frac{10}{2}xx - \frac{20}{2}xx$ By G R Haehnel

Director of Regulatory Affairs

Marquette, Michigan

Effective for Service On and After: 01-01-20221 Issued Under Auth. of Mich Public Serv Comm Dated:  $\frac{11}{2}xx - \frac{19}{20}xx - \frac{2020}{20}xxxx$ In Case No: U-20879<del>706</del>

# MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS PUBLIC SERVICE COMMISSION

#### ENTRY OF APPEARANCE IN AN ADMINISTRATIVE HEARING

This form is issued as provided for by 1939 PA 3, as amended, and by 1933 PA 254, as amended. The filing of this form, or an acceptable alternative, is necessary to ensure subsequent service of any hearing notices, Commission orders, and related hearing documents.

#### **General Instructions:**

Type or print legibly in ink. For assistance or clarification, please contact the Public Service Commission at 517-284-8090.

*Please Note:* The Commission will provide *electronic* service of documents to all parties in this proceeding.

THIS APPEARANCE TO BE ENTERED IN ASSOCIATION WITH THE ADMINISTRATIVE HEARING:
Case / Company Name: Upper Peninsula Power Company Docket No. U- 20879
Please enter my appearance in the above-entitled matter on behalf of:
1. (Name) Upper Peninsula Power Company
2. (Name)
3. (Name)
4. (Name)
5. (Name)
6. (Name)
7. (Name)

Name Sherri A. Wellman	
Address Miller Canfield	OI am not an attorney OI am an attorney whose:
One Michigan Avenue, Suite 900	
City Lansing State MI	Michigan Bar # is P-38989
Zip 48933 Phone 517-483-4954	Bar # is:
wellmans@millercanfield.com	( state )
Date 06/29/2021	

# MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS PUBLIC SERVICE COMMISSION

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1. (Name) Upper Peninsula Power Company 2. (Name)		
3. (Name)		
4. (Name)		
5. (Name)		
6. (Name)		
7. (Name)		
Name Paul M. Collins		
Address Miller Canfield	OI am not an attorney	
1 E. Michigan Ave., Ste. 900	OI am an attorney whose:	
City Lansing State MI	Michigan Bar # is P-69719	
Zip 48933 Phone 517-483-4908	Bar # is:	
Email collinsp@millercanfield.com	( state )	
Date 06/29/2021		