2021 – 2023 EMPOWER MARYLAND PROGRAM	*	BEFORE THE PUBLIC SERVICE COMMISSION OF MARYLAND
	*	
	*	CASE NO. 9648

FUTURE PROGRAMMING WORK GROUP REPORT

April 15, 2022

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I. Executive Summary

Over the past 13 months, the Future Programming Work Group ("Work Group") held 28 meetings and stakeholders submitted numerous written comments on 6 separate topics and numerous sub-topics related to the EmPOWER Maryland program cycle set to begin in 2024. The Work Group reached a consensus on several items that were achieved through discussion and compromise and resulted in partial settlements on three topics, but there remained disagreements on a number of topics. The following is a brief overview of some of the more significant areas of consensus and non-consensus:

Consensus Items

- There was agreement that the new goals should transition to a Greenhouse Gas ("GHG") abatement goal to be measured on a gross-lifecycle basis instead of electrical (or gas) savings goals that the goal can be achieved through various Behind-The-Meter ("BTM") and Front-of-the-Meter ("FTM") programs (but no agreement on the minimum/maximum amounts); and that each utilities' goals be informed by a utility-specific study. However, on April 9, 2022, Senate Bill ("SB") 528 became law and requires, in pertinent part, that in 2025 the core objective of the targeted reductions under PUA § 7-211 shall include the development and implementation of a portfolio of mutually reinforcing goals, including GHG emissions reduction, energy savings, net customer benefits, and reaching underserved customers;
- There was consensus to continue the current evaluation process for future EmPOWER Maryland program cycles and that all programs would be subject to the same evaluation process, regardless of whether they were funded by EmPOWER; and
- There was agreement on a comprehensive package of changes and updates to the primary cost-effectiveness test used to evaluate EmPOWER programs.

Partial Consensus Items

- Fuel Switching remained an item of contention as several stakeholders supported a transition away from fossil fuels and related incentives, whereas the Utilities[1] maintained a fuel-neutral position that would provide customers' options on the types of equipment to purchase/install;
- There was progress on Limited Income ("LI") and Climate Equity issues as the Work Group agreed on a to-be-determined percentage of the Statewide EmPOWER goal be focused on equity-eligible customers and communities, but there was not agreement whether the goal should be based on budget, energy savings, or GHG abatement. However, legislation passed during the recent legislative session requires a target of 0.4% annual energy savings for low-income households in 2023 and

[1] The Utilities include Baltimore Gas and Electric Company ("BGE"), Potomac Electric Power Company ("Pepco"), Delmarva Power & Light ("DPL"), Southern Maryland Electric Cooperative ("SMECO"), The Potomac Edison Company ("PE"), and Washington Gas Light Company ("WGL").

increasing to 1% annual energy savings for low-income households by 2026; and

- There was a general agreement that the core energy efficiency programs would continue to remain part of EmPOWER Maryland, but disagreements remained related to the inclusion of some FTM resources, namely upgrades to core distribution infrastructure.

Non-Consensus Items

- There was no agreement on increasing the involvement of third parties' roles and whether the existing Technical Conference is a sufficient mechanism for the engagement of third parties in EmPOWER;
- There was no agreement on whether a Stakeholder Board/Council should be created; and
- No agreement was reached on the various cost recovery and Performance Incentive Mechanism ("PIM") proposals that were discussed by the Work Group.

II. Background

On December 18, 2020, the Public Service Commission of Maryland ("the Commission") issued Order No. 89679, which authorized the transition to the 2021-2023 EmPOWER Maryland Program. As part of that Order, the Commission created the Work Group and delegated the conduct of the Work Group to the Public Utility Law Judge ("PULJ") Division. The Work Group was directed to "consider the parties' proposals in the 2021-2023 Plans and comments thereon, which include but are not limited to, a new goal structure, general energy reduction, customer bill impacts, greenhouse gas reduction, promoting electrification, and state climate action plan coordination."[2] Additionally, the Commission directed the Work Group to consider whether the inclusion of Conservation Voltage Reduction ("CVR") savings was appropriate in the next program cycle,[3] and to coordinate with the Cost Recovery Work Group to ensure that PIMs align with recommendations on future goals and cost-effectiveness tests.[4] The Commission set an April 15, 2022 deadline for the filing of the Work Group's final recommendations.

After soliciting proposals from the EmPOWER stakeholders on the referenced topics, and in consultation with the Commission's Technical Staff ("Staff"), on March 3, 2021, a Proposed Plan and Timeline was filed setting forth a schedule to address 14 topics.[5] The Work Group's 28 virtual meetings were well attended with between 35 to 75 individuals participating at each meeting.[6] All stakeholders had ample opportunities to express their views, both verbally and in writing, on each topic and to question/respond to all stakeholders' proposals. Additionally,

[2] *The 2021-2023 EmPOWER Maryland Program*, Case No. 9648, Order No. 89679, *slip op.* at 12, para. 20 (December 18, 2020).
[3] *Id.* at 16, para. 28.
[4] *Id.* at 20, para. 35.
[5] The Timeline was amended multiple times in order to rearrange the order of topics, to provide stakeholders additional time to discuss particular issues and provide written responses to various proposals.
[6] All meetings were held virtually via Google Meet. There were also numerous meetings with a smaller number of stakeholders held outside of the Work Group's scheduled meetings in an effort to reach agreement on various issues. Additionally, both the Cost Recovery and the PIM Work Groups were invited to participate in this Work Group's discussions of PIMs. *See* Section VIII – Cost Recovery, Bill Impacts, and Funding.

throughout the process, various presentations were made for the Work Group's benefit, including (1) Chris Hoagland and Mark Stewart from the Maryland Department of Environment ("MDE") presenting on the Maryland Commission on Climate Change ("MCCC") and the 2030 Greenhouse Gas Reduction Act ("GGRA") Plan, and the expectations for EmPOWER; (2) Amanda Best, Senior Commission Advisor and Electric Vehicle ("EV") Work Group Leader, provided an update on the EV Pilot Program and how EVs could potentially fit within EmPOWER; (3) on behalf of the Department of Housing and Community Development ("DHCD"), CADMUS made several presentations and provided a Maryland Statewide Low-Income Top-Down Potential Analysis; (4) on behalf of the Building Performance Association ("BPA"), Ms. Leticia Colon de Mejias, owner of Energy Efficiencies Solutions (Connecticut), President of Green Eco Warriors and Policy Co-Chair of the BPA, presented on the importance of workforce development; (5) Joe Loper, Staff's EmPOWER Consultant, provided an overview of the current methodologies used to determine a program's cost effectiveness; and (6) Steve Nadel from ACEEE presented on PIMs.

While the Work Group did not reach a consensus on all issues, there were significant areas of agreement. Most notably was the agreement to recommend a change from the existing energy efficiency goal to a GHG abatement goal, which would require amendments to Public Utilities Article, *Annotated Code Maryland* ("PUA") § 7-211 as it does not currently reference GHG abatement.[7] The Work Group also submitted three separate partial settlements/joint recommendations on Goal Structure, LI reporting, and Cost Effectiveness. There was also agreement that EmPOWER programs should align with State policies, that EmPOWER programs should be available to all customers, and that all programs should be measured and evaluated for cost effectiveness[8] and to optimize bill impacts on customers. Additionally, the Work Group generally agreed on several overarching concepts, including: the need for flexibility to meet goals; an awareness of increases in the surcharge/rates and the importance on ensuring energy affordability; and the need to improve equity.

This Report details the positions on each topic and sub-topics, notes whether there was consensus, general consensus, or non-consensus, and presents recommendations/options for the Commission's consideration.[9] All Stakeholders were provided two opportunities to review drafts of this Report to ensure their respective positions were accurately reflected and to suggest edits and corrections.

III. New Goal Structure

The initial comments varied in specificity with most proposals consisting of general ideas and concepts. There were several common themes throughout, notably the need to reduce GHG emissions, the need for a specific LI goal,[10] and that EmPOWER programs should equitably serve all ratepayers. The Work Group also generally supported the concept that the new goal structure should align with government climate policies, which will result in EmPOWER contributing to the State's GGRA. Several stakeholders suggested the development of a policy

[7] *See* SB 528. Additionally, PUA § 2-113(a)(2)(vi) requires the Commission, when regulating public service companies, to consider the State's commitments for reducing GHG emissions.

[8] With the noted exception that LI programs are not required to be cost effective, which is the current policy.

[9] Neither Chief PULJ McLean nor PULJ Burke expressed views or opinions on any topic and acted solely as facilitators. Please note that several issues do not contain Consensus, General Consensus, or Non-Consensus labels or recommendations which simply indicates that there was not significant discussion on those particular issues.

[10] HB 108/SB 524 contain a LI usage reduction goal. *See* Section IV.

inventory based on NSPM for refining Maryland's primary cost-effectiveness test using applicable State policies and goals to help guide changes. The Work Group collaborated to develop the inventory which included the stakeholders' positions with respect to the relevance and weight that should be attributed to each identified policy.[11] While there was general agreement on the applicable State policies, there were differing opinions as to the relevance and appropriate weight to be given to each one when developing EmPOWER programs and goals. Furthermore, the Work Group agreed on the potential inclusion of other GHG reduction technologies, in addition to traditional energy efficiency and Demand Response ("DR") programs, to meet EmPOWER's objectives.

On June 10, 2021, MDE provided a presentation of the MCCC's recommendations and the State's 2030 GGRA Plan. The MCCC recommended that the General Assembly amend PUA § 7-211 to permit electrification of existing fossil fuel systems through EmPOWER and to direct the Commission to require electric utilities to proactively encourage customers with either natural gas, propane or oil space heating and water heating to replace those systems with electric heat pump technology, especially for LI households.[12] Furthermore, the MCCC recommended a statutory amendment to change the core objective of EmPOWER from electricity reduction to a portfolio of mutually reinforcing goals, including GHG emissions reduction, energy savings, net customer benefits, and reaching underserved customers. The MCCC specified that beneficial electrification be permitted by PUA § 7-211 with a focus on LI customers and be aligned with other health and safety upgrades to consider a whole-house/whole-building retrofit approach.

The MCCC's recommendations add greater specificity to the building decarbonization measures already included in the State's 2030 GGRA Plan which focuses on increasing efficiency to counteract growth and to converting fossil fuel space heating and water systems to electric heat pumps that run on increasingly clean electricity.[13] The GGRA Plan did not include a specific efficiency goal, but modeled a level of electric efficiency achievement beyond 2023 consistent with that currently being achieved under EmPOWER.

A. Goal Structure and Cycle Framework

1. Flexibility

General Consensus

Parties generally supported the need for flexibility to promote new and emerging clean technologies. Staff's initial comments noted certain areas where the goal structure should permit the consideration of investments to other distributed energy resources ("DER") or non-wires investments, energy efficiency, and the State's goals related to the delivery of energy.

[11] Several months into the Work Group process, some parties requested that the various statutes and policies generally referenced in proposals be specified. Therefore, stakeholders were directed to provide the relevant statute, regulation, Commission Order, *etc.*, that supported their proposal, as well as the relevancy and weight (high, medium, or low) assigned to each item. The Cost-Effectiveness Testing: Policy Inventory – Weight v. Relevancy is attached as Attachment ("Attch.") A.

[12] It is possible an amendment may not be necessary as the Commission already has the authority to require the Utilities to establish a program or service deemed appropriate and cost effective to encourage and promote efficient use and conservation of energy. *See* PUA § 7-211(f)(1). Since systems that use electricity are both more efficient and use less energy than either propane or heating oil, the Commission could approve such a program without an amendment.

[13] The MCCC's Building Study was completed in August 2021.

The American Council for an Energy-Efficient Economy ("ACEEE") also supported providing the Utilities with flexibility to meet the GHG abatement goal while supporting savings to advance those resources that might be disincentivized absent business model reforms. Additionally, ACEEE recommended that targets support emerging technologies. The Maryland Energy Efficiency Advocates ("MEEA")[14] similarly supported allowing the Utilities flexibility to meet the GHG goals and objectives through innovation even though these innovations may be outside of EmPOWER.

The Utilities proposed that Staff continue to hold an annual conference[15] to consider input from all stakeholders, as well as potential external changes in the markets and how those changes impact their ability to meet existing goals. Based on that conference, the Commission could consider modifications to existing programs and goals.

The Commission will need to determine how much flexibility the Utilities should be afforded, the extent to which programs or other initiatives outside traditional energy efficiency programs can/should be counted toward EmPOWER goals, and whether a Staff-led annual conference is appropriate to consider changes in the market and the impact on existing goals.

2. Number of Goals

General Consensus

The Work Group agreed to limit the number of goals, but not to a specific number. The Utilities maintained that there should be a limited number of goals (3-5) to avoid diluting EmPOWER's focus. The Utilities claimed that fewer goals would ensure the State's priorities would be the focus of EmPOWER. In contrast, multiple goals could add unnecessary complexity and undermine contributions to achieving the goals of the State's GGRA Plan. The Utilities recommended relying on the negotiated consensus position as agreed to by the Maryland Energy Administration ("MEA"), the Maryland Office of People's Counsel ("OPC"), MEEA, Staff, and the Utilities that was submitted to this Work Group on June 23, 2021.[16]

OPC initially recommended there be 6 primary goals that align EmPOWER with Maryland's policies and objectives. OPC's proposed goals included the following: electricity and gas savings (annual and lifetime); LI lifetime savings; GHG savings; net benefits; and peak demand savings (passive and active). OPC also proposed to track spending, energy burden, and participation as related to LI customers, and to track DER integration.

The Work Group recommends that the number of goals for the next EmPOWER cycles be limited, but the Commission will need to determine how to best align the outcomes it seeks with the exact number of goals it establishes.

3. Sound Ratemaking Decisions

General Consensus

The Utilities highlighted the continued need for full and timely cost recovery of prudently incurred expenses, consideration of the EmPOWER surcharge's impact on a customer's bill, and

[14] MEEA includes the National Resources Defense Council, Green and Healthy Homes Initiative, Sierra Club, National Housing Trust, and Earthjustice.
[15] *See* Section VII – Legislation & Third-Party Opportunities - .B.3.
[16] The Partial Settlement related to the New Goal Structure is attached hereto as Attch. B.

recognition that certain programs may increase bills for one energy type while reducing bills for another thus still reducing a customer's overall costs.

While ratemaking should not be ignored, OPC claimed it should not be part of establishing a goal structure. Determining the ultimate bill impact on customers requires estimating the costs of savings; therefore, the type, structure, and boundaries should be the focus with examination of rates once costs to achieve specific goals can be estimated. Several stakeholders also encouraged the Utilities to pursue certain types of FTM, non-EmPOWER funded programs/initiatives that could result in reduced energy use through base rate cases.

The Commission will need to determine whether the Utilities should be directed/encouraged to pursue non-EmPOWER-funded programs/initiatives as part of base rate cases. As previously noted, not all utilities file rate cases with the same frequency as the Exelon Utilities, WGL, and Columbia. Additionally, with the advent of multi-year rate plan ("MRP") cases, the pursuit of non-EmPOWER funded programs/initiatives would need to be proposed as part of a utility's initial MRP application. The evaluation and recovery for any such proposal would be determined on a case-by-case basis.

4. Length of Cycle – Three years vs. Four years

Non-Consensus

There was limited discussion on this issue with the Utilities proposing to shift the current 3-year cycle to 4 years. The Utilities argued the continuation of the current 3-year program cycle could be overly burdensome. The Utilities pointed out that a longer cycle could reduce administrative costs of all parties and better facilitate the completion and evaluation of longer-term projects within plans. In support of the longer cycle, the Utilities noted the potential savings in shifting the program cycle, with estimates ranging between $150,000 and $550,000 (contractor and utility administrative costs) per Utility, the additional lead time associated with the ramp up of certain programs, and the continuation of programs beyond the existing 3-year cycle.

MEA, OPC, Staff, and DHCD disagreed and claimed there would be little, if any, cost savings by extending the program cycle. MEEA favored continuing the current 3-year goal as it provides both stability and a periodic opportunity to update programs to reflect market conditions. MEEA found that a longer cycle would result in programs becoming "stale" in the event new technologies become available but cannot be incorporated on a timely basis.

DHCD suggested that if the Commission issued an Order 6 months in advance of the commencement of the 3-year cycle, it would positively impact its programs. It cited the potential uncertainty in the EmPOWER legislation as it does not require DHCD to administer LI programs; therefore, it is possible DHCD would not be granted a program in a new cycle. This results in a "near complete pause in program transition until the program is granted," whereas an earlier issued Order would provide time to prepare for the new cycle.

The Commission will need to determine whether to maintain or extend the EmPOWER program cycle~~,~~ and whether DHCD's request for an earlier issued Order is feasible. If the length of the program cycle is changed, a statutory change would be necessary as PUA § 7-211(h)(1-2) requires plans to be filed every 3 years.

B. Consensus Items in Partial Settlement

After holding six meetings, a partial agreement was submitted by the Utilities, MEA, OPC, MEEA, and Staff (collectively "Settling Parties") that addressed several issues. In the meeting that discussed the Partial Settlement and in subsequent written comments, no party raised any objections or concerns to the Partial Settlement.[17] All parties recognized that the specific percentages in this goal, as well as other percentages referenced in this Report, should be adopted at a later date when more information becomes available.

1. Resource Channels

The Settling Parties first set forth the various "Resource Channels" that can be used to achieve a GHG abatement goal and included the following terms: BTM Resources; FTM Community Resources; FTM Utility Resources; and Non-Energy Resources. The Settling Parties agreed that "BTM resources" include energy efficiency programs (improving the efficiency of the end use or building shell regardless of fuel); beneficial electrification (increasing electricity usage and/or demand by switching from direct fossil end use to electric use[18]); passive DR programs (reductions in demand (kilowatts ("kW") that do not involve active control measures achieved through energy efficiency, dynamic pricing, or other DER), and active DR programs (reductions in demand (kW) that involve active control of measures achieved through DER or other load flexibility measures). "FTM Community Resources" were defined as programs or resources that can directly benefit a set of customers and are separate from utility resources that benefit all customers, which are considered "FTM Utility Resources." Finally, "Non-Energy Resources" were defined as GHG abatement programs related to a utility's programs or business areas, but the benefits are largely non-energy based, such as replacing appliances or modifying equipment to reduce refrigerant-based GHG.[19]

MEEA emphasized its support for BTM resources while recognizing the potential value of FTM resources. However, MEEA cautioned that FTM resources should be limited and the focus of EmPOWER remains on BTM savings opportunities which reduce loads and resulting emissions while also providing bill savings. MEEA and OPC believed the Utilities should continue to pursue additional FTM resources and savings opportunities in base rate cases. Similarly, OPC generally encouraged innovation and that the Utilities pursue innovative approaches during rate cases regardless of whether those approaches count toward EmPOWER goals. MEA added that activities within a utility's rate case could contribute to GHG reduction and possibly reduce the EmPOWER surcharge.

The Partial Settlement included four "Straw" goals for a GHG abatement goal without including percentages. The first goal required that at least **X%** of a utility's total GHG abatement goal be achieved through BTM and FTM community programs funded by EmPOWER based upon a utility-specific study, and that a minimum of **X%** of EmPOWER-funded BTM energy efficiency programs also based upon the referenced study.[20] Additionally,

[17] Attch. B. Please note that the Partial Settlement included an agreement that the GHG abatement goal would be measured on a gross lifecycle basis.

[18] OPC repeatedly stated that this is a definition of "electrification" not "beneficial electrification," and objected to making any decisions or program designs in the name of "beneficial electrification" without a better definition.

[19] There were concerns regarding the definitions of Community Resources (OPC) and BTM Resources (MEEA). *See* Section V Energy Efficiency/Demand Response/Distributed Energy Resources/Fuel Switching - for further discussion.

[20] These percentages will be determined at a later date based on the Commission's directive.

there was agreement that a maximum of **X%** of a utility's total GHG abatement goal would be met with either non-energy resources or FTM Utility Resources, subject to the Commission's approval of the specific program(s) or initiative(s).

There was also agreement that contributions to the GHG abatement goal through other initiatives, such as those that align with Public Conference ("PC") 44, could be included in each utility's specific plan. However, those initiatives must be BTM and FTM Community Resources that are not EmPOWER funded and must be subject to the Commission's approval. Finally, the Settling Parties also included an equity goal that a minimum of **X%** be focused on the Utilities' respective LI customers and communities.[21]

MEEA explained additional discussion and research are required to determine the appropriate percentages and noted it may be beyond the scope of this Work Group. Staff indicated a range of percentages would provide flexibility to meet the GHG goal, while OPC highlighted that both BTM and FTM programs/savings will be reviewed under the same standard.

The Work Group recommends the Commission accept the proposed Resource Channels and that specific percentages be determined at a later date.

2. Measurement of Goals

In relation to the measurement of the GHG abatement goal, the Settling Parties agreed that "a gross-lifecycle basis with a pre-defined GHG abatement trajectory (*i.e.*, tons of GHG per kilowatt-hour [("kWh")] for each year over the lifetime) and measure lifetime" should be utilized to set annual goals or a goal for the cycle. Furthermore, it was agreed that the abatement trajectory and measure lifetimes would be refreshed for each planning cycle, but that programs/measures would be evaluated for purposes of determining goal attainment with the measurements in place at the time the program is approved. All savings that count towards the EmPOWER GHG abatement goal would be evaluated, measured, and verified ("EM&V") in the same manner as EmPOWER-funded programs and such evaluations would be paid for through EmPOWER funding, regardless of whether the program or initiative itself is EmPOWER-funded.

MEEA stressed that this item addressed the importance of evaluating all savings (BTM, FTM, *etc.*) on an equal footing as non-EmPOWER-funded savings that were not previously subjected to EmPOWER's EM&V but were still attributed towards goals. MEA noted its expectation that peak DR would be a part of EmPOWER's future and believed peak DR could provide opportunities to either avoid or delay infrastructure improvements. OPC cited the importance of reducing peak demand and making demand more controllable and flexible to encourage continued development and innovation. Additionally, OPC highlighted the following requirements to properly vet programs: hourly measure characterizations for all EmPOWER measures, preferably an hour-by-hour analysis that characterizes energy load, generation/production, and/or savings; time-differentiated GHG emissions factors to calculate emissions based on when the electricity is delivered to and consumed on the grid; cost-benefit screening for all EmPOWER programs consistently applied; and the use of a valuation of GHG emissions in cost-benefit tests.

[21] Low-income and Low/Moderate-income were used interchangeably during the Work Group's meetings. LI will be used to avoid confusion.

After agreeing that the GHG abatement goal should be measured on a gross lifecycle basis with a pre-defined abatement trajectory, (*i.e.*, tons GHG per kWh for each year over the lifetime) and measure lifetime, the Work Group revisited this issue during the Cost Recovery meetings. Staff and Mr. Loper asserted that the use of a gross savings goal misleads policymakers and stakeholders through the inclusion of "free ridership" savings and other savings not attributable to EmPOWER programs. Furthermore, they claimed gross savings also results in "perverse incentives" that impact portfolio decisions and program design, and can encourage programs that have little impact on either costs or bills, but can significantly raise the surcharge. Mr. Loper stated, and OPC agreed, that programs with low net-to-gross ratios might still have an overall benefit and should not necessarily be ended, but greater transparency about net savings was needed to inform those decisions.

After further discussions and the submission of additional comments by the Utilities citing issues with a net savings goal, Mr. Loper and Staff offered an alternative that in lieu of using a net savings goal, an annual report or a memorandum could be filed with the Commission that would highlight the evaluated net-to-gross ratios for all programs and provide the appropriate context for the ratios and an explanation of net-to-gross. The Utilities, OPC, and MEEA all supported this alternative in lieu of a net savings goal.

The Work Group recommends that the Commission accept the proposed Goal Measurement structure set forth in the Partial Settlement and measure the GHG abatement goal on a gross lifecycle basis with a pre-defined abatement trajectory (*i.e.*, tons GHG per kWh for each year over the lifetime) and measure lifetime. The Work Group also recommends that an annual report be filed in accordance with the agreed upon alternative.

3. Goal Setting

Finally, the Settling Parties agreed that the goal setting for each utility service territory should be informed by a utility-specific study "that includes assessment of energy efficiency and greenhouse gas reduction opportunities, as well as other information deemed relevant by the Commission."[22] The Work Group recommends the Commission set goals for each utility service territory based upon the Potential Study and any other relevant factors.

C. Non-Consensus Items & Concerns with Partial Settlement

1. Specified Percentages for Different Resource Types

The Utilities stated that they should be provided maximum flexibility to best support their ability to meet the aggressive EmPOWER goals. OPC and MEEA agreed to the inclusion of savings/GHG reductions from FTM Community Resources, FTM Utility Resources, and Non-Energy Resources, provided the electricity savings and carbon dioxide equivalent ("$CO2_e$") reduction from those resources do not exceed 15% of the overall program electricity savings and reduction. MEEA feared that without limitations, BTM programs and measures could be de-emphasized by the Utilities.

OPC indicated that a limit greater than 15% could crowd-out BTM programs and create confusion if programs and capital projects are reviewed/approved by different methods and standards, *i.e.*, a rate case, a PC, or the EmPOWER docket. Thus, BTM programs should account for at least 85% of savings towards the EmPOWER GHG abatement goal. OPC pointed

[22] For further discussion, please see Section III.C.3.

out that during the last program cycle, CVR accounted for approximately 20% of the Utilities' claimed savings, and the Utilities exceeded the overall 2% savings goal; therefore, OPC claimed the CVR savings, which were not properly verified and were likely less than claimed, were either completely unnecessary or minimally necessary to goal attainment.

OPC highlighted that the Potential Study should provide an input for setting savings targets and the percentages would provide the boundaries for those targets.[23] Whereas the Utilities preferred to wait for the completion of the Potential Study to establish the percentages based on each utility's characteristics, *i.e.*, service territory.[24]

OPC and MEEA specified that the inclusion of any non-EmPOWER-funded resource to count toward EmPOWER savings goals should not limit the ability of any stakeholder to make proposals, report on, or file comments about those programs in another proceeding (namely the proceeding in which they are funded). OPC indicated it was open to considering programs outside of the EmPOWER docket, such as in a rate case, which could count towards meeting EmPOWER goals, but those programs would still need to be thoroughly scrutinized in the respective proceeding. Additionally, OPC did not want to limit the Utilities from continuing to pursue a particular source of savings even though there was a limit as to what counts towards EmPOWER.

OPC also claimed that "Community Resources" was not sufficiently defined, other than through the idea that Community Resources contrast with savings from utility distribution resources, which include programs such as CVR, transformer upgrades, and savings not associated with any particular customers. OPC recommended that savings from "non-energy GHG reductions," such as reducing leaks in refrigeration systems, be permitted but limited to approximately 5-10% of total savings.

BPA agreed with OPC on limiting the scope of resources that count toward EmPOWER goals to largely EmPOWER-funded programs, which will improve regulatory accountability of costs and benefits. BPA also agreed with the continued prioritization of BTM activities, including an emphasis on energy efficiency, which can positively impact utility bills, energy use, health, safety, and quality of life.

As previously noted, the Commission will need to determine the specific percentages that should be allocated to BTM resources, FTM community resources, FTM utility resources, and Non-Energy resources either based on the results of the Potential Study and other relevant factors, adopting OPC's and MEEA's 85%/15% proposal for BTM/other categories, or other percentages the Commission deems reasonable.

2. Fuel Switching/Beneficial Electrification vs. Fuel-Neutrality

There was no agreement on the continuation of offering gas equipment incentives. MEEA and OPC cited the MCCC's 2020 Annual Report that recommended that Maryland accelerate "the deployment of electric systems for primary space and water heating of new and

[23] The funding of the Potential Study was also briefly discussed with the Utilities proposing the study be funded through the EmPOWER surcharge, while OPC opined that it could be done either funded through EmPOWER or recovery as part of rate case as an expense. It was again noted that not all of the Utilities, notably PE and SMECO, file rate cases with the frequency of the Exelon Utilities and WGL.

[24] However, in the final design of the Potential Study, the Utilities stated that it is not intended to estimate the potential for FTM or non-energy GHG abatement.

existing buildings," and that the State "should set a goal of 50 percent of space heater sales to be electric heat pumps (air source or ground source) by 2025."[25] According to MEEA, these objectives cannot be met with the continuation of incentives for gas-fired heating and hot water equipment. Instead, incentives should be provided for electric heating and hot water equipment, and that EmPOWER contractors should be trained to discuss the benefits of conversion to high-efficiency electric appliances to replace gas systems. MEEA recognized that if its position was adopted, it could have a disproportionate effect on LI customers who may have been eligible for high-efficiency gas equipment through DHCD programs. Therefore, MEEA recommended a "more robust incentive structure" for LI households.

MEEA also noted its continued support for using EmPOWER funds to promote increased efficiency for existing gas-end uses through building shell improvements and operational efficiency. To achieve this, MEEA suggested a $CO2_e$ savings goal which would encourage fuel switching to highly efficient electric-end use technologies, a natural gas therm savings goal met by building shell efficiency and process improvements, and a heat pump deployment goal.

Next, MEEA claimed the BTM definition was not consistent with the MCCC's recommendation to the General Assembly that PUA § 7-211 be amended to allow electrification of existing fossil fuel systems through the EmPOWER Maryland Program. This would require the electric utilities to proactively encourage customers with natural gas, propane or oil heating systems to replace those systems with electric heat pumps, especially for homes with central air conditioning and for LI households.[26] MEEA cited Maryland's 2030 GGRA Plan which seeks to reduce emissions by prioritizing energy efficiency and converting fossil fuel heating systems to efficient electric heat pumps powered by clean and renewable electricity.[27] Accordingly, MEEA recommended the Commission direct the Utilities to pursue fuel switching consistent with the MCCC 2020 Report and the GGRA Plan, to support efficient electric/water heating equipment, and provide inducements to replace inefficient gas equipment. MEEA noted that if EVs were included in fuel switching/beneficial electrification, the goal would change. Montgomery County also supported fuel switching be an eligible measure under EmPOWER.

MEA stressed that the new goal structure should align with State policies and goals. It also supported the expansion of EmPOWER to include fuel switching, recommended that beneficial electrification consider impacts of cost shifting and cost-effectiveness, and supported incentives to encourage cost-effectively achieving energy savings and reductions in emissions. MEA claimed that as renewable resources increase, the energy profile will change and the energy sector's emission intensity will decrease. Therefore, MEA recommended that opportunities be sought to improve EM&V of savings opportunities and that a GHG measurement protocol be implemented across the Utilities' activities to capture and verify savings. MEA also recommended that the new targets set intra- and inter-class contribution levels to distribute savings across planning years and programs to reduce the negative impacts of market shocks and supply chain constraints. MEA explained that the continuation of existing programs should provide incentives to achieve both energy savings and emission reductions. If

[25] *Citing* MCCC 2020 Annual Report at 30-31; *See* https://mde.maryland.gov/programs/Air/ClimateChange/MCCC/Documents/MCCCAnnualReport2020.pdf
[26] *Id.* at 30.
[27] https://mde.maryland.gov/programs/Air/ClimateChange/Documents/2030%20GGRA%20Plan/THE%202030%20GGRA%20PLAN.pdf at 47.

fuel switching and beneficial electrification are expanded, the impacts of cost shifting and cost-effectiveness must be considered to avoid increased costs to ratepayers.

Prior to the partial settlement on goals, OPC initially proposed two fuel-neutral savings metrics for GHG reduction and net benefits. OPC noted that many households use multiple types of fuels and many State environmental and economic policy objectives are based on outcomes, not fuel types. OPC asserted that EmPOWER's focus on reducing electricity consumption and peak demand be adapted to include Maryland's energy goals, such as emissions reduction goals. OPC stressed that both the economic and environmental costs of electricity generation and delivery should be considered, and that a fuel-neutral GHG reduction goal will allow the Commission to consider the tradeoffs and align program investments with State goals. OPC also recommended a net-benefit (net of benefits minus costs), fuel-neutral goal to measure the total impact of the EmPOWER portfolio on society when accounting for all costs and benefits. The establishment of a net-benefit goal would push the Utilities to maximize benefits while reducing costs.

BPA proposed that EmPOWER programs provide fuel-neutral incentives for building shell measures for both electricity and natural gas homes. BPA also supported incentives for building shell measures for gas homes being raised to bring them closer to fuel neutrality.

The Utilities supported fuel neutrality but disagreed with MEEA's proposed limitations on options to meet the goals. They claimed EmPOWER should incentivize both electric and gas customers to choose efficient appliances and technologies. The Utilities expressed concern with the accuracy of the notion that the removal of certain natural gas incentives automatically implies that a customer will switch to electricity and that a just-as-likely scenario will be choosing a cheaper, less-efficient equipment measure of the same fuel source, thus resulting in an *increase* in emissions. The Utilities asserted that reducing incentive offerings for natural gas limits the ability of the Utilities to reduce emissions and as long as natural gas remains as a viable fuel source for Maryland residents and businesses, there should be opportunities to reduce emissions through the promotion and incentivizing of high efficiency equipment and other fuel-saving measures.

Staff expressed concern about limiting EmPOWER energy efficiency and DR programs as it could silo EmPOWER away from other State/Commission initiatives, such as grid modernization. Staff noted there have previously been instances where parties sought to couple EmPOWER programs with other State goals but were unable to do so due to the limitations (energy efficiency) of EmPOWER goals. Therefore, a program goal should permit the consideration of other DERs or wires investments, and energy efficiency should be considered in conjunction with other power sources/wire investments, including distributed solar, storage, micro-grids, distribution upgrades, and grid-size modernization.

The Commission will need to determine whether fuel-neutral incentives should continue or gas equipment incentives be discontinued as proposed by OPC and MEEA, and whether or not to adopt MEEA's proposal, and what targets, if any, should be set. This includes determining whether EmPOWER should more actively promote beneficial electrification, regardless of whether gas equipment incentives remain available. Furthermore, the Commission will need to determine whether EmPOWER should be expanded to consider DERs in accordance with Staff's recommendation.

3. Potential Study

The stakeholders agreed that utility-specific goals should be based in part on studies for the assessment of energy efficiency and GHG reduction opportunities, but there was no agreement on the roles and responsibilities for conducting the Potential Study. OPC and MEEA expressed concerns related to properly setting goals and the level of stakeholder collaboration during the process. MEEA noted that if stakeholders are not permitted to collaborate, stakeholders should be permitted to challenge the studies' findings through litigation, if necessary.

DHCD noted that if the Potential Study only considers EmPOWER programs for the LI community, there are other DHCD programs with other funding sources that can provide services to the same customers/communities, thereby lessening the amount of savings that can be captured by EmPOWER. DHCD noted that funding sources and savings are already reported in the EmPOWER reports; therefore, DHCD sought to include the savings from non-EmPOWER funds which should be counted towards meeting EmPOWER goals, while continuing to report on those funding sources and savings separately.[28] Staff acknowledged that consideration of funding sources varies throughout EmPOWER and did not view DHCD's proposal as a departure from current practices.

After this issue was discussed at several Work Group meetings and off-line meetings with a smaller group of stakeholders (OPC, MEA, MEEA, the Utilities, DHCD and Staff), the Utilities presented an initial draft Request for Proposals ("RFP") for a Potential Study for discussion purposes. The Utilities emphasized that the Potential Study's emphasis would be on BTM resources. MEEA indicated the initial draft was similar to those that MEEA has litigated throughout the country and found some of the language to be extremely limiting. MEEA had great concerns about the timeline and the lack of collaboration on developing the RFP. MEEA found the proposed timeline (9 months) to be both challenging and unworkable, and the draft lacked specificity in terms of what would be accomplished. Further, MEAA expressed concern that the Potential Study would be used to establish the level of the goals and that the Utilities would be in control of the process while in a conflicted position, since they may be biased towards more conservative estimates of what is achievable. MEEA suggested that the current EmPOWER goals could be continued into 2024 to provide additional time to complete the Potential Study. OPC similarly questioned the Potential Study's scope and the limits on stakeholder involvement.

OPC highlighted that the Potential Study should provide a basis for setting savings targets and the percentages would provide the boundaries for those targets.[29] Whereas the Utilities preferred to wait for the completion of the Potential Study to establish the percentages based on each utility's characteristics, *i.e.*, service territory.[30]

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[28] DHCD would continue to provide a chart in its annual report depicting the non-EmPOWER funding it uses in its various programs. MEEA supported the continued reporting of funding sources and the associated savings.

[29] *See* Section III.C.1. The funding of the Potential Study was also briefly discussed with the Utilities proposing the study be funded through the EmPOWER surcharge, while OPC opined that it could be done either funded through EmPOWER or recovery as part of rate case as an expense. It was noted that not all of the Utilities, notably PE and SMECO, file rate cases with the frequency of the Exelon Utilities and WGL.

[30] However, in the final design of the Potential Study, the Utilities stated that it is not intended to estimate the potential for FTM or non-energy GHG abatement.

Ceres noted that the Potential Study results should serve only as a minimum of what can be achieved. Ceres also noted that the RFP should include Technical and Economic Potential as deliverables, and the Economic Potential should evaluate a range of key cost-effectiveness inputs, including carbon costs that are linked to the Social Cost of Carbon ("SCC").

In response to the Utilities' draft RFP, comments and suggested revisions were submitted by several stakeholders. While some recommendations were accepted, the RFP was not a consensus document. One example was the requested inclusion of language that would require the contractor to include all defensible input from stakeholders received during feedback sessions and the contractor's basis for excluding any such feedback. In response, the Utilities modified the RFP to leverage the expertise of the contractor to mitigate concerns that the Utilities would unduly influence its completion and included the opportunity for discussion on stakeholder input. The Utilities' modifications did not allay all stakeholders' concerns that the Utilities may unduly influence the Potential Study's findings. The Work Group acknowledged that the Potential Study is just one factor to be considered along with State policies, historic performance, and balancing the ratepayers' interest in lower rates/bills.[31]

On September 21, 2021, the draft RFP was officially filed with the Commission for its consideration and approval.[32] On October 20, 2021, the draft RFP was considered at the Commission's Administrative Meeting, and the Commission approved the Work Group's request to issue the RFP to assist the development of future EmPOWER Maryland goals.[33] After receiving Commission approval, the Utilities advised the Work Group that the bid date was changed and that Potomac Holdings, Inc. ("PHI") would issue the RFP. Stakeholders were provided an opportunity to raise any objections to the changed bid date and selection of PHI to issue the RFP. After receiving no objections, PHI issued the RFP and an award was subsequently made. It is anticipated that the Potential Study's initial findings will be available in October 2022, and the final report will be completed by November 2022.

4. Further Proceedings

Non-Consensus

Noting the limitations in the Potential Study, both MEEA and OPC supported a goal-setting proceeding, either a litigated evidentiary proceeding or a legislative-style proceeding, which would provide stakeholders the opportunity to propound discovery where needed, and provide testimony and evidence regarding how the Commission should establish the magnitude of GHG goals. MEEA argued that such a proceeding would also provide information, in addition to the Potential Study, to the Commission to determine the best goal structure and appropriate level of effort and investment for LI programs.

OPC suggested a proceeding begin in late summer/fall 2022 and end in December 2022 (with a decision by the end of January 2023) or after the completion of the Potential Study, but *before* the development of program planning occurs. OPC argued that such a proceeding is essential as it would allow all stakeholders to provide input before the Utilities embark on a lengthy, complex, and costly process to develop their plans. MEEA noted its disagreement with portions of the RFP and the RFP process, remaining concerned that the vendor and the Utilities

[31] *See Re Potomac Edison Co. dba Allegheny Power*, 106 Md. P.S.C. 351, 367 (2015).
[32] Maillog ("ML") 237108. While there could have been more time devoted to the development of the RFP, given the time constraints and parties' positions, it was unlikely a consensus would be reached.
[33] ML 237494 - Letter Order, dated October 20, 2021.

would make decisions in the development of the study that would lead to artificially low savings estimates. Therefore, MEEA argued that a scenario in which the Utilities develop their own goals without direction from the Commission based on stakeholder input, should be avoided.

The Utilities noted that the Potential Study includes engagement with the Stakeholders throughout the process with the selected vendor. The Utilities acknowledged the need for transparency, and that the data from the study was necessary before starting the goal-setting process. If a proceeding began in August, to the extent data was available, it would not be final. The Utilities disagreed with MEEA's assertion and explained that the vendor, not the Utilities, would be the ultimate decision-maker for the Potential Study. MEEA countered that in its national experience it is routine for savings potential to be understated even without overt direction from utilities. This is so commonplace that both the American Council for an Energy Efficient Economy[34] and the Regulatory Assistance Project[35] have published research on the inherent conservatism of potential studies.

The Utilities noted that when it submits the Potential Study, other parties would be free to submit whatever information they wish the Commission to consider. The Utilities were open to considering a process where information is presented to the Commission and results in a Commission Order about goal quantities to inform their planning, but wanted to avoid re-opening issues surrounding the Potential Study and RFP. The Utilities' hope is that the completed Potential Study will be submitted by November 2022. Based upon an approximate 7-month planning process, any proceeding to present information to the Commission would likely need to occur no later than December 2022. Several stakeholders hoped that preliminary results from the Potential Study could be provided in advance of its completion so that they could provide comments/information well in advance of a December hearing.

Staff proposed the potential for a Work Group in an effort to reach a consensus on potential goals and to discuss what other factors/evidence should be provided to the Commission.

D. Miscellaneous Comments/Proposals

1. Greenhouse Gas Measurements[36]

MEA recommended the Commission consider the implementation of GHG measurement protocols across utility activities, including those in rate base, to capture and verify savings that contribute to GHG emissions reductions. MEA also recommended evaluating the sources and levels of savings in the goal structure, and to seek to improve EM&V of savings opportunities as the historic EmPOWER programs may become less cost effective and the GHG abatement value may not be directly tied to the source.

2. Peak Demand Reduction

MEA anticipated that peak DR would continue in EmPOWER even though it was not specifically included in the goal structure discussion. MEA claimed that mitigating costs through peak DR creates opportunities to either delay or avoid upgrades to the distribution infrastructure and provides opportunities for individuals to invest in DER.

[34] https://www.aceee.org/research-report/u1407
[35] https://www.raponline.org/wp-content/uploads/2016/05/energyfutures-kramerreed-tenpitfallsesdraft2-2012-oct-24.pdf (use caution, link may be corrupted with phishing).
[36] *See* Section VI – Evaluation Protocols and Cost Effectiveness.

3. Distribution of Savings

MEA recommended targets be set for the distribution of savings and benefits at both the intra- and inter-class contribution levels to reduce cost-shifting.

4. Time-Differentiated Savings Calculations

OPC stated that it would be increasingly important for estimates of GHG abatement to have greater time-differentiated granularity. That is because the time of day and time of year when energy usage changes can greatly affect the GHG outcome, whether a change in usage occurs because of energy efficiency, beneficial electrification, or demand management. To improve accuracy of GHG abatement estimates, and to enable the Utilities to target their measures to maximize GHG outcomes, OPC recommended additional effort be made to identify more granular time-periods for GHG intensity (rather than use a single number for all hours of the year) and to match those against time-periods for which measures result in energy usage change – at least for the most common measures. OPC recommended that effort begin now and occur in phases over the coming couple of years.

IV. Low-Income and Climate Equity

All parties agreed that the number of participating LI households in EmPOWER programs needs to be increased while also acknowledging the historical difficulty of reaching and enrolling LI customers. Additionally, the Work Group recognized the need to utilize all potential funding sources (ratepayer, federal, State agencies, *etc.*), and be mindful of bill impacts on all customers. According to MEA, the goal should seek to increase the number of households by maximizing coordination and benefits resulting in more customers being reached while limiting the impact on rates.

ACEEE indicated that based on a 2020 energy burden report, which examined energy burdens in the Baltimore metropolitan area, the median energy burden for low-income households was 4 times higher than non-LI households, while African American households paid 34% more of their income on energy bills than non-Hispanic white households.[37] ACEEE recommended the following concepts be considered: Procedural Equity – offering inclusive, accessible, authentic engagement and representation in the development/implementation of clean energy programs and policies; Distribution Equity – design clean energy programs and policies to distribute benefits and burdens across all communities and prioritizing by need; Structural Equity – ensure decisions are made by recognizing the historical, cultural, and institutional dynamic structures that have benefitted privileged groups but created disadvantages for subordinate groups; and Transgenerational Equity – avoid unfair burdens being placed on future generations.

MEEA's initial goal framework proposal included a recommendation for both an income-based equity goal and a racial equity goal, stating that "the long history of societal racial bias calls for inclusion of specific goals to ensure prioritization of the equitable provision of clean energy benefits provided by EmPOWER." OPC highlighted the need for further collaboration between the Utilities, State agencies, program administrators, service providers and community organizations, as well as coordination between utility programs, such as bill assistance and demand-side management.

[37] *See* https://www.acee.org/sites/default/files/pdfs/aceee-01_energy_burden_-_baltimore.pdf

The Work Group generally agreed with these overarching concepts.

A. Statewide LI EmPOWER Goals

Consensus[38]

After the submission of written comments and Work Group discussions, several parties, including the Utilities, OPC, MEA, MEEA, and Staff, reached agreement on a basic framework for a LI goal. The agreement is as follows: no less than **X**% of an amount to be determined of the Statewide EmPOWER goal shall be focused on the State's utilities equity-eligible customers and communities. This overarching goal would then be allocated by utility service territory such that no less that **X**% of the Statewide equity goal shall be achieved through program targets to the respective utility's LI-eligible customers and communities.

In terms of accountability for determining whether a goal has been achieved, MEEA and OPC proposed using a utility-specific study that includes energy efficiency and GHG reduction opportunities, in addition to any other information the Commission deems relevant, *i.e.*, energy burden assessment; that the allocation to each utility service territory be determined by the percentage of equity-eligible households; and that the allocation of each utility service territory equity goal between DHCD and the utility be determined by the nature of savings opportunities available through the programs they each administer (DHCD would be accountable for a fraction of the savings through programs it operates, and the Utilities would be similarly responsible for a fraction of the savings through its programs, that have demonstrated participation from LI households, such as Quick Home Energy Checkups ("QHEC")). Since DHCD and the Utilities are each better suited to administer certain programs, MEEA and OPC proposed to have separate goals based upon those programs - one for the Utility and one for DHCD with no joint accountability.[39] DHCD noted the shares of total LI consumption differ across the service territories with approximately 46% of BGE's customers considered LI compared to 4.8% in SMECO's territory. Therefore, DHCD strongly favored separate goals from the Utilities. DHCD and the Utilities agreed that there would need to be coordination to avoid any potential duplication of efforts. Each Utility's goal would be determined based upon the results of the Potential Study, as well as other information deemed relevant by the Commission.

There was also some discussion as to whether DHCD could count non-EmPOWER funded programs towards meeting its goals. Staff agreed with DHCD's proposal noting there was currently flexibility in how EmPOWER programs are counted. After further discussion, the Utilities expressed their "general agreement" with DHCD's proposal to have a goal for DHCD and a goal for the Utilities with the percentages to be determined. The Utilities acknowledged that DHCD's programs generate the most savings for LI customers and that the Utilities programs are only complimentary.

The Work Group recommends that the Commission approve the proposed LI goal's basic framework described in the first paragraph above. However, this recommendation may conflict with the provisions in House Bill ("HB") 108/SB 524. The legislation would require that

[38] Please note that the Work Group's discussions and agreement on this issue occurred prior to the passage of HB 108/SB 524. DHCD stressed that this legislation places the LI goal responsibility solely on DHCD. Therefore, any savings garnered by the Utilities effectively takes away from potential savings for DHCD. That said, there are avenues the Utilities have to reach LI customers that DHCD does not, such as existing programs at food banks.

[39] MEEA noted that this approach was similar to a proposal from 2017 when a LI goal was considered.

DHCD's programs and services be designed to achieve targeted annual incremental gross energy savings of at least 0.4% of the total electric usage of income-eligible customers per year starting in 2023 and increasing in subsequent years.

B. Federal Poverty Level

Consensus

All parties agreed that any LI-related goal be aligned with DHCD's revised EmPOWER guidelines that classify LI populations at or under 250% of the Federal Poverty Line ("FPL"). This would provide more flexibility which the Utilities claimed was necessary to address some of the historical issues with LI program implementation. For example, income verification for customers can be a barrier to enrollment and can increase administrative costs. Additionally, the Utilities sought to use census tracts, zip codes, and other methods to serve as proxies for income levels. The Utilities noted the need to potentially expand reporting so that additional metrics (other than percentage budget, participation, and MWh savings), can be used to properly assess plans and implement any LI-related program. However, the Utilities cautioned the imposition of metrics can increase administrative costs; therefore, any such metrics should be carefully considered.

MEA noted that in Order No. 89679, the Commission approved the request to raise the income threshold for LI ratepayers to 250% of the FPL.[40] MEA recommended that the 250% threshold form the basis for determining the number of LI households in conjunction with the U.S. Census American Community Service, which was also approved by the Commission in Rulemaking 56. BPA agreed that eligibility be expanded to reach more LI customers and cited Connecticut's Home Energy Solutions-Income Eligible program that uses that state's 60% income median as the eligibility threshold.

DHCD added that its eligibility criteria is 250% of the FPL or 80% of the Area Median Income ("AMI"), whichever is higher. It stressed that AMI-based income-eligibility generally applies for multi-family properties. Simply adopting 250% of the FPL would likely exclude some of DHCD's multi-family clients that qualify at 80% of AMI.

Therefore, the Work Group recommends the Commission maintain 250% of the FPL or 80% of the AMI, whichever is higher, for determining LI eligibility for purposes of EmPOWER.

C. Budget Goal vs. Energy Savings Goal vs. GHG Abatement Goal

Non-Consensus

The Utilities proposed that if there is a Utilities' LI goal, that it be established as a percentage of the total budget directed towards LI programs, separate from the goal structure for DHCD, based on the demographics of each respective service territory supported by analyses and appropriate data sources/references. The Utilities commented that the goal structure for DHCD and the Utilities needs to recognize the roles and responsibilities of each program administrator and that this structure is more appropriate for the Utilities as it recognizes DHCD as the LI program administrator. The Utilities also recommended the budget amount be established for each program administrator to ensure customer bill impacts are considered.

[40] *See The 2021-2023 EmPOWER Maryland Program*, Case No. 9648, Order No. 89679, *slip op.* at 48 (dated December 18, 2020).

The Utilities claimed that this approach provides more control over budgets and the EmPOWER surcharge which all customers pay. The Utilities highlighted the necessity of developing programmatic assumptions to establish LI budgets for each party. The assumptions should be consistent with those used for program approval and implementation and, finally, that cost-effectiveness policies should be reviewed to ensure they are appropriate for the equity targets and programs. The Utilities cited an ACEEE database that indicated over 13 states have a percent of budget spend goal for LI customers.

The Utilities explained that all customers should have the opportunity to participate regardless of their financial means. The percent of budget goal proposal, for the Utilities, separate from DHCD, would allow the Utilities to better coordinate with DHCD and ensure flexibility in the design of portfolios in accordance with the characteristics of each utility's service territory and the ability to change the program in response to policy or market changes. This would also allow for designating the specific LI responsibilities for both the Utilities and DHCD. A percent of spend was not appropriate for several reasons, including because it could fluctuate throughout the cycle.

The Utilities indicated it was in their best interest to coordinate with DHCD because each entity has separate roles and goals, and coordination is necessary to meet those goals. The Utilities explained that DHCD programs generally target the largest and most comprehensive savings opportunities while their programs complement DHCD's efforts by targeting participants through general residential and supplementary program offerings (*e.g.*, Food Bank kits, Home Energy Reports, *etc.*) and continued outreach and education. The Utilities asserted their position would avoid competition and increase collaboration and coordination with DHCD to maximize LI participation in the collective EmPOWER programs, and the agreed upon LI reporting structure would provide Stakeholders and the Commission with meaningful information of EmPOWER's impact on the LI community. It would also focus the Utilities on designing initiatives that support DHCD's programs and on supplemental and complementary utility programs.

The Utilities argued that a percentage of energy savings LI goal on the Utilities would ignore DHCD's role as the LI program administrator and result in the Utilities being in direct competition for customers and savings with DHCD. Additionally, the Utilities highlighted that, since goals will likely be based on GHG reduction in the next program cycle, both the resulting programs and goals are unknown. Thus, it would be inappropriate to set a target for the Utilities based on a percentage of energy savings or a target requiring the Utilities to achieve a savings percentage for unknown programs.

OPC disagreed with the Utilities position, and OPC supported a GHG savings-based goal that aligns the level of savings with the proportion of LI customers in the Utility's service territories. OPC indicated that while the Utilities currently meet or exceed the current 2% energy savings goal, the savings realized by LI customers is well below 1% of the retail sales for that sector. A savings-based goal will ensure LI customers receive their fair share of EmPOWER energy savings benefits.

OPC stated that the LI goal should include savings goal components for both DHCD programs and Utility programs in each service territory. OPC supported a ramp-up period and an assessment of how the Utilities' EmPOWER programming can provide more savings. OPC supported a Utility LI Household goal separate from DHCD, leveraging programs such as QHEC

and Appliance Recycling, and noted that behavioral and DR programs can only be offered by the Utilities.

OPC acknowledged the costs of a GHG savings goal, but its concern was that LI customers would be "left behind," and as more people switch to electrification, LI customers will be left on the gas system and subjected to increased costs. The theory is that if LI customers can be retrofitted sooner, the costs will be less than if the transition is delayed. OPC cited the MCCC's Building Energy Transition Plan that was included in the MCCC's 2021 Annual Report, which recommends that all LI customers' homes should be retrofitted and operating with heat pumps by 2030.[41] OPC remained committed to a GHG savings goal and stressed that customers who can be converted more economically should be targeted first.

OPC later explored different scenarios through which greater equity could be achieved for LI households through EmPOWER. OPC noted that LI households (based on 250% or less of the FPL) comprise 26.5% of Maryland households. Despite this, planned DHCD lifecycle savings represent only 3% of total residential savings, and only 17% of total residential program spending is for LI households. OPC estimated that achieving equity in *savings* (*e.g.*, LI GHG savings in proportion to the share of LI households) would necessitate a roughly $775 million 3-year increase in spending, based on current cost to achieve LI savings. Although recognizing that proportionality in savings would likely be the most equitable outcome, OPC acknowledged that such a large budget increase may not be feasible at this time.

OPC then modeled a scenario for proportionality in *spending*, estimating that a roughly $41 million 3-year increase in spending would be required. OPC considered this a minimum threshold but not really an equitable outcome, given the higher energy burdens faced by LI households.[42]

Finally, OPC estimated the 3-year increase in spending that would be required to reach the savings targets set forth in HB 108. OPC performed recalculations after input from Work Group members and estimated that roughly $340 million over 3 years would be needed to meet the goal in this legislation. OPC noted that a budget increase to attain this savings target need not be tied to the success of the legislation. For comparison, OPC cited the Fiscal and Policy Note from DHCD that accompanied HB 108, which stated that "DHCD's estimate of the cost associated with significantly expanding its programs to meet the bill's enhanced energy savings requirements is approximately $26.9 million in fiscal 2023, increasing to $219.8 million by fiscal 2027."[43] Although there were different baseline assumptions used in these analyses, OPC concluded that all three of the estimates that it outlined regarding the cost to meet the savings target in HB 108/SB 524 would require a ramp-up of DHCD's budget by 2026 or 2027 to a total of $150-$220 million per year.

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[41] Maryland Commission on Climate Change, *Building Energy Transition Plan: A Roadmap for Decarbonizing the Residential and Commercial Building Sectors in Maryland*, 14 (November 2021), https://mde.maryland.gov/programs/Air/ClimateChange/MCCC/Documents/2021%20Annual%20Report%20Appendices%20FINAL.pdf

[42] Proportional spending does not take into consideration the fact that LI households have higher energy use and, therefore, contribute more through the surcharge then their strict share of households suggest.

[43] Fiscal and Policy Note, HB 108, Md. Gen. Assemb. 5, 2022 Sess. (2022), https://mgaleg.maryland.gov/2022RS/fnotes/bil_0008/hb0108.pdf; *see also* Brendon Baatz & Isaac Gabel-Frank, *et al.*, Gabel Associates, Inc., *Maryland Low Income Benefits: Estimating the Benefits of Energy Efficiency Programs for Low-Income Customers in Maryland* v, 16-17 (January 27, 2021), http://gabelassociates.com/wp-content/uploads/2021/02/Maryland-Low-Income-EE-Benefits-Report-1.27.21.pdf

OPC solicited input on these cost scenarios and how these funds could be obtained from a redistribution of the exiting budget, budget increases, or both. OPC also questioned how the Utilities and DHCD might share in the responsibility for achieving these goals. There was little time remaining in the Work Group process when OPC put forth this proposal, and stakeholders did not discuss this in depth. OPC continued to support a GHG abatement goal for DHCD, as well as requiring the Utilities to better track, report, and evaluate the participation and savings of limited-income households in its mass-market residential programs.

MEEA disagreed with the Utilities' position that a budget-based LI spending goal would be more effective at reducing potential for the Utilities' and DHCD's programs to be in competition with each other than a GHG abatement or energy savings goal. MEEA favors a LI savings goal, finding that it is more appropriate to establish targets for what the utilities must accomplish than the amount they must spend, and that a budget goal will not lead to maximized outcomes for income-eligible households.

MEEA agreed that long-term costs should be considered, but was mindful that bills for LI customers should not be increased in the short-term as a side-effect of increasing program investment. It may be beneficial to explore other payment options, such as percent-of-income payment plans or LI rate structures, to address potential increases for individual LI customers resulting from fuel switching. MEEA questioned whether specific programs should be assigned to DHCD and the Utilities, or some other approach, to avoid market confusion and ensure both are operating effectively.

DHCD acknowledged that the Utilities can do things beyond DHCD's offerings, but there is some crossover, such as the QHEC program. DHCD explained that the goals should be clearly delineated and that there should be better communication/coordinated to avoid unintentionally poaching customers and having the Utilities completing a project that would have fallen into DHCD's programs.[44] DHCD added that the cost of the project would be lower or zero if it is done through DHCD's programs.

DHCD also expressed concern with a GHG savings goal as it may not be the correct metric for LI customers. It cited a recent fuel switching study in Colorado in which heat pumps were installed and resulted in an 82% increase in heating costs. DHCD did not believe the goal should be to increase costs to LI customers but recognizes the balance with State policies regarding GHG reduction.

Oracle indicated that many jurisdictions, including Illinois, Minnesota and New York, use a spending goal in pursuit of their efficiency goals. It was noted that Pennsylvania has a savings goal of 5.5% of the portfolio savings goal from LI customers. Oracle also indicated that studies have shown LI customers that are having trouble paying their bill will first reach out to their utility rather than a government agency. Thus, Oracle agreed with the increased outreach/education to the hard-to-reach LI customers but cautioned against making a complex goal structure which could lead to added complexities for customers and the enrollment process.

ACEEE indicated that setting goals or spending floors for LI energy efficiency programs was a best practice to enable access to energy efficiency services for LI customers. Twenty

[44] DHCD acknowledged that the current level of communication with the Utilities has been very good for the past several years.

states and the District of Columbia have minimum levels of state/utility support of such programs.[45]

Staff noted that a spending goal may be appropriate for a LI goal, but if adopted, spending should be focused on incentives and marketing outreach levels, not utility administrative or outside service costs.

BPA believed that combining either a spending or savings goal with a goal for the number of households served by EmPOWER would be beneficial.

MEA proposed the LI goal be a percentage of the GHG abatement savings in the referenced Partial Settlement based upon the total estimated number of households in each utility's service territory. MEA emphasized that metrics will be needed to measure program performance to mitigate rate increases, and coordination will be needed between program administrators and State agencies to address the energy, health, and safety needs to customers.

MEEA similarly supported access to energy bill savings for all customers, especially since LI customers pay a higher share of household income towards energy costs. MEEA expressed support for a goal initially recommended by MEA in the Goal Structure portion of this Report, that gross wholesale electric energy savings for LI customers be pursued to match LI households' percentage of the residential sector load in the baseline year. MEEA recommended making the LI requirement either a standalone energy savings goal or an equivalent GHG abatement goal that equates to an appropriate level of energy bill savings. MEEA suggested the savings target be set at 1% of the LI energy load, a level referenced by the Maryland General Assembly during the last two legislative sessions.

Ceres recommended establishing an ambitious LI savings goal to raise more ratepayers out of poverty and to better ensure all communities are served. Ceres referenced HB 379/SB 462, proposed during the 2021 legislative session, which sought to have any LI savings goal established by the Commission to reflect the goals set forth in that bill. Specifically, for the 2021-2023 program cycle, HB 379/SB 462 sought to require DHCD to provide LI customer energy efficiency and conservation services; target annual incremental gross energy savings of at least 1% per year starting in 2022; and measuring energy savings by calculating as a percentage of the 2019 weather-normalized gross LI residential retail sales.[46] Ceres also proposed new and expanded partnerships, including innovative channels (*i.e.*, healthcare providers, food banks, *etc.*); offering funding through a wider range of measures to address building health, safety, and integrity issues; modernizing program eligibility and outreach and delivery mechanisms to consider energy burden, customer disconnection history, and customer enrollment in deferred payment programs; program coordination with bill assistance programs and other social services offered in the community; and incorporating best practices in program design for LI ratepayers.

Ceres noted that HB 108/SB 524, a substantially similar bill, was passed by the General Assembly between the final Work Group meeting and the drafting of this Report. HB 108/SB 524, effective July 2022, requires DHCD to provide LI customer energy efficiency and conservation services; target annual incremental gross energy savings of at least 0.4% of the total electric usage of income-eligible customers per year starting in 2023, with target annual incremental gross energy savings increasing to 0.53% (2024), 0.72% (2025), and 1% (2026),

[45] *See* https://aceee.org/sector/state-policy/toolkit/supporting-low-income
[46] *See* HB 379 - 2021 General Assembly legislative session.

respectively; and measuring energy savings by calculating as a percentage of the 2016 weather-normalized gross LI residential retail sales.

The Commission will need to determine whether a savings goal, budget or spending goal, GHG abatement goal, or a combination thereof should be utilized. Furthermore, the Commission will need to determine whether to establish a goal for the Utilities and, if so, separate LI goals between the Utilities and DHCD and, if so, how those goals should be separated. Finally, the Commission will need to determine if an accountability mechanism as suggested by MEEA is necessary to ensure there is no competition between the Utilities and DHCD. As previously noted, the Commission must take into account any legislation that imposes goal requirements on DHCD.

D. Fuel Switching

Non-Consensus

MEEA supported prioritizing LI households for switching from fossil-fuel-powered heat and hot water systems, especially those that rely on fuel oil and propane. This would provide customers with economic benefits while also supporting the State's climate goals. Prioritizing LI households for fuel switching also aligns with a recommendation from the MCCC, which says that funding should be made available to provide comprehensive weatherization and electrification retrofits for 100% of LI households by 2030. MEEA advocated for the consideration of Percentage-of-Income Payment Plan policies and cost trajectories for the lifecycle of natural gas and electric alternatives.[47] DCHD noted, and OPC agreed, that if solar was introduced/included in EmPOWER, it could make fuel switching more economical.[48] DHCD argued that fuel switching should be allowed as an option. OPC later noted that it would be interested in the possibility of including solar as part of comprehensive electrification projects for LI households. Staff noted there are some concerns with solar depending on the particular company and the potential for increasing fees.

The Utilities' position on mandated fuel switching has been clearly stated.[49] The Utilities' position is fuel neutral as customers, given the continued availability of efficient equipment in the State, should be permitted to choose the most efficient device to meet their needs whether it is electric or gas.

The Commission will need to determine whether fuel switching should be promoted as an option, and to what extent LI households should be prioritized for fuel switching.

E. Energy Efficiency

Several parties supported energy efficiency investments for LI customers. For example, Ceres supported energy efficiency investments as they benefit all facets of society.[50] Oracle stressed the need to act in response to climate change and encouraged behavioral solutions based

[47] *See* Section III.C.2.
[48] *See for example* Section IV.J.
[49] *See* Section III.C.2.
[50] *See* also Section V.Q.

on their climate value.[51,52] Oracle also recommended that energy efficiency goals align with climate objectives and leverage behavioral energy efficiency. The new goal structure should have programs that are accessible to and benefit all individuals. Oracle also proposed that behavioral solutions be included if Statewide or location-specific peak reduction or load shifting goals are adopted.

BPA similarly supported establishing an energy efficiency goal for LI ratepayers and recommended the establishment of an annual goal for the number of LI households enrolled and served by EmPOWER. MEEA recommended that funding be increased to ensure LI households can access efficiency services despite health and safety barriers.

F. CADMUS Study

General Consensus

CADMUS, a contractor for DHCD, presented a LI Geographic Analysis to determine the energy efficiency potential based upon the number of LI customer population and the average savings per household depending on the goal of the program. The intent of the analysis was to better determine the locations of LI customers in order to increase LI customer participation in EmPOWER programs. CADMUS presented its draft findings on its Maryland LI Top-Down Potential Analysis. It explained its approach, data sources, and assumptions to determine the number of unserved/eligible LI households in Maryland. The analysis determined there were approximately 550,000 such households and that the potential Statewide savings was approximately 850,000 MWh and 19,700,000 therms. However, to serve that many households, the estimated cost would be approximately $2.5-$3 billion. Therefore, it was necessary to narrow the scope of the study. CADMUS reviewed various options and need criteria based upon household energy burden and high-need variables (energy burden, children under 18, adults over 65, disability) to determine the areas with the highest need.

CADMUS indicated that energy burden would be determined based upon publicly available data to summarize average energy burden, which can be viewed as a function of other income/building/demographic factors. The study will identify underserved-LI households within various geographic designations by using data at the Public Use Microdata Area ("PUMA") and at the Census Tract or Block Group level.

The Utilities believed the CADMUS study could be useful in increasing LI customers' participation in EmPOWER's energy efficiency and conservation programs; however, they were concerned the study would duplicate the Utilities' efforts, such as the Potential Study that the Commission authorized the Utilities to proceed with in October 2021. Additionally, the Utilities believed the CADMUS Study should be limited to informing DHCD how it can better serve LI customers and should not create competition with existing LI programs. Furthermore, the Utilities did not consider the study to be of use for program development, but rather to provide a quick approximation of energy efficiency for goal-setting purposes and that further refinement was necessary to develop programs.

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[51] Hibbard, Paul *et al.*, *Utility Energy Efficiency Program Performance from a Climate Change Perspective.* Oracle Utilities. August 2020. https://go.oracle.com/LP=97548?elqCampaignID=262134

[52] Sergici, Sanem *et al.*, *The Customer Action Pathway to National Decarbonization.* Brattle. September 2021. https://www.brattle.com/wp-content/uploads/2021/10/The-Customer-Action-Pathway-to-National-Decarbonization.pdf

CADMUS responded that the final estimate of the potential came from energy savings (derived from billing analyses of DHCD program data) and the number of households (derived from Public Use Microdata Sample). CADMUS indicated that estimating error at the PUMA level would require additional analysis, but it may not prove useful. CADMUS explained its study was the initial phase to determine State-level top-down potential savings for LI customers. More granularity was possible, but it would require additional analysis.

No Commission action on this item is required as the results will be relied upon to further the development of LI goals and certain tracking metrics discussed below.

G. Investment Levels by Utility Territory

MEEA raised an issue about how the Commission would determine the level of investment in LI programs within each utility's territory. MEEA pointed out that the presence of income-eligible households as a percentage of all residential customers is disproportionate by utility, which suggests there should be a greater level of investment, participation, and savings in LI programs for the Utilities with more LI-eligible customers than for those with fewer LI customers. However, this would likely also result in a higher surcharge for those utilities with more income-eligible customers which would disproportionally increase energy burdens in territories that already have more struggling households. Analysis by CADMUS suggests that the surcharge impact on LI household energy burdens is already highly uneven depending on which utility territory the household is located in.

Alternatively, if the Commission requires more modest LI program investments to mitigate surcharge impacts in territories with higher percentages of income-eligible households it would mean providing program services to fewer households, which would also challenge any concept of equity. To address these questions in an informed manner, MEEA suggested the Commission conduct a comprehensive review of energy affordability that would study ways to mitigate potentially higher surcharges on LI customers while still ensuring that access to programs is indeed equitable. Such a study would consider a broad range of policy options, possibly including a Statewide or EmPOWER-wide LI funding or project allocation mechanism, the establishment of income-eligible affordability rate structures, percent-of-income payment rates, or other policy solutions that coupled with energy efficiency could provide greater assurance that energy affordability for income-eligible households is not sacrificed in the clean energy transition.

CADMUS provided an estimate of the distribution of LI customers (less than or equal to 250% of the FPL) across Maryland as a percent of the total population to address equity distribution. CADMUS estimated that LI customers contribute approximately $48.76 million to EmPOWER each year and are estimated to receive approximately $85 million in DHCD program investments over the full 2021-2023 three-year program cycle. This equates to an average of roughly $28 million per year in LI program investments, or $20 million less per year than income-eligible households pay for EmPOWER. CADMUS noted there are approximately 550,000 households in Maryland at or below 250% of the FPL, but only 5,000 to 10,000 of those households receive assistance through DHCD's EmPOWER programs in any given year. That means each year more than 98% of LI customers contribute to EmPOWER without receiving direct EmPOWER program services, which significantly and negatively impacts their energy burden. CADMUS asserted that this demonstrated that some services beyond energy efficiency were badly needed and not currently available. MEEA agreed, stating that in addition to energy

efficiency, consideration of a broad range of other policies that could reduce energy burden for LI households is needed in order to address equity in a meaningful way, and to avoid perverse outcomes.

MEEA also raised concerns about the distribution of LI customers by service territory and whether, under the current utility funding mechanisms those customers receive and pay for EmPOWER services equitably. MEEA recommended that issues related to energy burden and equity at the household and utility level, as well as for LI customers as a whole, be studied by an independent party. MEEA asserted that there are issues related to the surcharge's impact on LI customers and how much they pay in EmPOWER surcharges versus services and benefits they receive.

The study MEEA recommends could be conducted independently on behalf of the Commission, the General Assembly, or OPC. A study could more thoroughly review the issues and provide recommendations, such as a Statewide EmPOWER charge for LI households, percent-of-income payment plan options, income-based rate structures, *etc.* MEEA did not recommend a specific policy action at this time given the limited data and the number of unanswered questions, but recommended the issue requires further study. MEEA stressed the importance of these issues and that the results of the study could produce significant policy changes. Both BPA and CADMUS supported MEEA's recommendation to study the issue further to help address equity.

CADMUS provided further analysis which indicated that the electric energy burden for non-participating LI customers is being raised 2%-4% to lower the electric energy burden of the referenced 10,000 customers by 15%-20%. Given the importance of reducing the negative consequences of unmanageable energy burdens, MEEA stated that it does not appear reasonable for EmPOWER to continue raising the energy burden of so many customers while serving so few each year.

OPC shared the concerns of MEEA and CADMUS and did not oppose a study but took no position on whether the surcharge impact study was necessary and had no opinion on how the study should be conducted or who should conduct it. OPC acknowledged that there are a few issues that could require further study, such as LI budget and geographical equity issues.

DHCD referenced the LI energy savings goal bill that passed the General Assembly and is awaiting action by the Governor. If legislation passes, it will set a LI goal solely for DHCD, will require modifications and new plans, and would require an approximate $45 million increase to achieve the year 1 savings of 0.4% of the total electric usage of income-eligible customers, this will likely result in further surcharge impacts, especially on LI households, unless mitigating policies are enacted. MEEA and Cadmus agreed that the legislation instituting LI energy savings targets will result in more LI households receiving program services each year, but also that the surcharge impacts will become greater for all LI households, especially those that have yet to participate in DHCD's programs.

CADMUS cautioned that if the legislation passes and requires a 1% reduction of all LI customers (at or below 250% of the FPL), that translates to having 35,000 traditional weatherization participants per year compared to the current 5,000-8,000 annual participants. CADMUS claimed that it was not possible to meet that goal without a radical change to address the energy burden problem.

The Commission will need to determine whether a study, such as the one recommended by MEEA and CADMUS, is necessary to address the energy burdens and investment levels for LI customers, or if there are other approaches to address the policy issues that have been raised. The Commission should also determine whether the items noted by OPC[53] should be made part of a study or future work group.

H. Low-Income Reporting Structures

After several discussions and meetings, the Utilities, OPC, Staff, MEA, MEEA, DHCD, and Ceres submitted a partial agreement with the below reporting metrics.[54] After the entire Work Group had an opportunity to review the partial agreement, only one item - Impact on Arrearages and Disconnects - remained without consensus. The Parties also agreed that for all reported metrics and other information reported, success should be measured based upon the combination of the respective Utility's and DHCD's program results for each service territory.

1. GHG Abatement Attributable to the LI Community

Consensus

This will be reported as part of EmPOWER's overarching goals. Specifically, the Utilities and DHCD will report GHG abatement associated with LI programs and measures based on the conversion factors that will be agreed upon at a later date. A determination of the LI population receiving measures will also need to be established.

2. Renters vs. Homeowners

Consensus

The Utilities agreed to add two questions to a few specific programs where an EmPOWER contractor or utility employee is in the home. Specifically, the question to the customer shall be: "Do you rent or own the premise?" and the question for employee/contractor to complete: "Is the premise a single family or multi-family premise?" DHCD indicated that it has this information for every project it completes. DHCD agreed to report the number of units that meet the LI threshold. This item can leverage the online home energy assessments and outbound communications associated with the behavior programs. Outbound communications and the online assessments can ask customers about their homeownership status.

3. Geographic Distribution and Percent of LI-Eligible Customer Participation

Consensus

The Utilities indicated this information on the geographic distribution and participation of LI-eligible customers was not currently being captured and, to the extent it is captured, it is self-reported and not verified. The Work Group agreed that information, such as census track, zip code data, surveys and statistical samples, could be used to evaluate and report the effectiveness of EmPOWER programs.

There are databases that can be purchased that provide certain information, including income, home type, number of people in the household, race, *etc*., that could be used to evaluate

[53] *See* Section IV.C.
[54] The Partial Settlement related to LI Reporting Structure is attached as Attch. C.

programs. In the event information is needed, the Evaluators (Guidehouse, CADMUS, and Loper Energy) would purchase the information for evaluation purposes and potentially share the information with DHCD and the Utilities. The time and effort necessary to ingest and synchronize the purchased data with existing databases is currently not known.

DHCD can compute Geographic Distribution and Percent of LI-eligible Customer Participation. Additionally, DHCD has demographic information for some single-family jobs, while the Utilities have geographic data for measures that required a customer account number. Income information is only available for customers that receive energy assistance. In order for the Utilities to collect this information, an increased investment would be required for participating customers. The Utilities also noted potential difficulties in collecting demographic data for the entire service territory to determine the extent EmPOWER programs are reaching specific demographics.

It was agreed that currently available information for single-family jobs during and at the beginning of the 2024 program cycle be used to determine EmPOWER's success in reaching under-served communities. During the 2024 cycle, it will be determined whether there is sufficient data available and whether further data gathering and/or analyses are necessary.

This would be an evaluation function using the data available from DHCD and the Utilities, samples, and statistical data or information from purchased databases if necessary.

4. Home Energy Burden

Consensus

This figure represents the percentage of total income spent on home energy. DCHD information is based on the percent spent of total income for single-family comprehensive jobs only (not for all programs or multi-family jobs) and reflects the income percentage spent on energy at the time the EmPOWER measure was installed. This item would look at the estimated impact on the population rather than on an individual customer basis.

5. Arrearages and Disconnects

General Consensus

Currently, the Utilities file a Termination and Arrearage Report, and some utilities separate LI and non-LI based on self-reported income status. The Work Group agreed to utilize the information about arrearages and disconnects and participation in energy efficiency programs to target EmPOWER programming. Additionally, the Work Group agreed to identify geographic areas with high arrearages and disconnects that could benefit from additional outreach efforts.

The Utilities agreed to investigate whether there is a way to overlay data related to the Utilities' Termination and Arrearage reports with the data that will be provided with the CADMUS data reflecting EmPOWER participation to evaluate participation and further use as a tool to market EmPOWER. Additionally, there was agreement that demographic data would be provided during the cycle, but this will not be a reporting metric.

The only point of contention was OPC's and Ceres' concurrent proposals to track the impact of participation in EmPOWER on arrearages and disconnects. The Utilities opposed that proposal because billing systems can only identify LI customers who are on energy assistance, so a metric would not provide a complete picture. Further, the Utilities stated that EmPOWER does

not identify customers who purchase EmPOWER measures through point of service (light bulbs, smart power strips, *etc*.) so the Utilities do not have complete information on each LI customer. The Utilities cited numerous factors impacting a customer's ability to pay their utility bill including non-gas or electric heating source, energy supplier rate, as well as non-utility factors such as job stability, *etc*. EmPOWER savings have an impact but it is not a direct correlation and should not be viewed as such.

Ultimately, the Utilities agreed to use the data from the Termination and Arrearage Reports provided during each cycle to target the next cycle's EmPOWER programming. OPC believes a tracking metric should be implemented regardless.

The Commission will need to determine whether to accept OPC's proposed tracking metric.

I. Low-Income Criteria

MEEA questioned whether the current LI-eligibility criteria (income and household size), should be used for the 2024 cycle or whether alternative/broader criteria should be used instead or in addition to the current criteria. Specifically, MEEA urged consideration of criteria that could lead to greater benefits for communities of color, citing studies showing that low-income households as well as households of color, particularly African Americans, are the most likely to have a high energy burden, live in older housing with structural deficiencies or aging energy infrastructure, and make behavioral or economic tradeoffs that impact energy security. In addition, there is decades of evidence suggesting that low-income communities, particularly African American communities, are more likely to live in neighborhoods with high fossil fuel emissions, which directly leads to poor air quality that impacts resident health and which contributes to climate change, of which low-income communities and communities of color are the most susceptible to the impacts of, including extreme temperatures and weather disasters.

J. Inclusion of Solar for Low-Income Customers

DHCD raised the possibility of including solar in EmPOWER, specifically for LI customers. It explained that regardless of what the Commission or General Assembly does in relation to EmPOWER, costs will increase for LI customers, primarily for those that are using gas. DHCD again cited a study from Colorado that indicated that moving LI customers from natural gas to heat pumps increased utility bills by 82%. Additionally, when more people Statewide move off of natural gas, the costs of gas will increase for those that remain on that service. DHCD viewed the introduction of solar as the only way to offset those increases. Solar could be classified as an energy efficiency measure since, once the installation is complete, the utility will not have to provide as much electricity to that home.

DHCD indicated that the U.S. Department of Energy allows for solar, but at a very small cost; therefore, solar projects do not get completed. DHCD did not advocate for EmPOWER to cover all of the costs of solar, but ideally it would like the ability to use EmPOWER funds, in combination with other funding mechanisms, for solar projects. Solar is a long-term solution that will keep utility bills down and reduce energy burdens.

OPC agreed that the results of electrification alone could increase energy burden unless something is done. Additionally, it noted that the MCCC's Building Energy Transition Plan stated that all LI customers should be transitioning from gas and be retrofitted by 2030 due to the

concern raised by DHCD. MEEA agreed and stated that if nothing is done through DHCD's proposal, rate design, or policy change, LI customer costs will go up either way. The costs will either increase because LI customers are left to bear an increasing share of the costs of maintaining the gas infrastructure as more affluent customers fuel switch to electricity, or because their total energy costs will increase if electrification ends up being more costly for them than gas.

OPC was interested in the possibility of including solar in EmPOWER programs for LI customers as part of comprehensive electrification projects. However, it noted that legislation would need to add solar as an eligible measure within the EmPOWER programs for LI households.

Mr. Loper raised the issue of whether roofing and other repairs associated with rooftop solar would be included, thus adversely affecting cost effectiveness. DHCD commented that cost effectiveness is not a requirement for LI programs and that there should be consideration for some level of repair costs. The LI programs already have a level of authorization to provide repair work.

The Commission will need to determine whether the inclusion of solar in EmPOWER programs for LI customers should be pursued through legislation.

V. Energy Efficiency/Demand Response/Distributed Energy Resources/Fuel Switching

While many stakeholders submitted proposals and programs, this topic generated limited discussion, and many stakeholders did not voice an opinion on the various proposals and programs. There was some agreement that the "core" energy efficiency programs should be continued as well as some of the same themes previously noted (*i.e.*, the Utilities should have flexibility to meet the goals, EmPOWER programs should be available to all, LI customer participation should be increased, and all programs (both BTM and FTM) should be subject to the same EM&V.

One area of general disagreement involved the potential imposition of program requirements or restrictions. The Utilities adamantly opposed any proposals that sought to impose program requirements or restrictions that could potentially limit flexibility in program development and offerings.

A. BTM and FTM Community Programs

1. Utilities' Proposal

General Consensus[55]

In concert with the agreed upon GHG abatement goal, the Utilities proposed a goal whereby no less than **X%** of a Utility's GHG abatement goal be achieved through EmPOWER-funded BTM resources and FTM community resources, with EmPOWER-funded BTM energy efficiency programs based on a utility-specific study accounting for not less than **X%** of the respective utility's GHG abatement goal. The Utilities proposed that BTM resources could include the following: energy efficiency programs to improve efficiency of the end use or

[55] There was more support of the various types of programs referenced by the Utilities rather than the specific goal structure proposed by the Utilities, which did not generate much discussion.

building shell regardless of fuel source; beneficial electrification that would increase electric usage and/or demand by switching from direct fossil fuel end use to electric use (oil, propane, and gas to electric, EV road transportation, electrification of heavy equipment); passive DR programs to reduce demand (kW) that do not involve active measures, such as behavioral DR (gamification challenge, customer notifications, university challenges, ties with Automated Residential Technology Program), load shifting via various rate offerings; energy efficiency that results in reduced demand; and active DR programs (connected devices (thermostats, EV chargers, appliances, *etc.*), vehicle to grid, virtual power plant, and DERs). The Utilities noted FTM Community Resources can also provide direct benefits to a set of customers, such as community renewable resources, community lighting, virtual power plant, DERs, and EV charging.

OPC generally agreed with the types of BTM resources noted by the Utilities, and specifically noted a diverse range of BTM DERs, such as energy efficiency, passive and active DR, EV charging, BTM energy storage, and distributed generation (*i.e.*, solar) that could be utilized. In response to the Utilities' proposed goal, OPC reiterated its support that at least 85% of the GHG abatement goal be achieved through BTM resources with the remaining 15% coming from FTM Community Resources, FTM Utility Resources, and Non-Energy Resources. OPC noted the absence of a clear savings measurement regime for FTM in the Utilities' submission.

Oracle supported the adoption of EVs to meet GHG reduction goals, and recommended that the Utilities invest in customer education, engagement, and behavioral change strategies to achieve the State's transportation electrification goals. In addition to EV adoption, Oracle recommended that behavioral strategies could be key to reducing vehicle miles traveled. Northeast Energy Efficiency Partnerships ("NEEP") recommended the program design be updated to reflect energy efficiency and climate and equity policy by segmenting the energy efficiency portfolio.

MEEA focused on BTM programs and supported the continuation of "core" programs that have been part of EmPOWER for years as they achieve usage reductions, lower bills, and can remain cost effective under an updated benefit-cost assessment test. In relation to FTM resources, MEEA suggested FTM initiatives, such as DER (renewable energy and storage) be targeted to Environmental and Social Justice communities.[56] Similarly, Ceres supported DR and DER implementation that is complementary and additive to core energy efficiency programming, with a focus on energy efficiency and passive and active DR measures which provide the best opportunity for bill savings.

Staff supported the continued inclusion of energy efficiency and DR programs as part of the future of EmPOWER. Staff added that DERs, such as solar and storage, have not been previously incentivized due to government incentives and net metering. Therefore, the potential market inefficiency and other existing incentives must be considered in determining whether to include DERs in EmPOWER. Ceres similarly supported the continued focus on energy efficiency of EmPOWER programs. Finally, MEA sought to increase customer participation and increase understanding of DR/DER program impacts.

[56] MEEA noted that studies have found that minorities are more likely to live in a county with heavy pollution and have old heating systems, such as boilers and unventilated gas stoves that release harmful particulate matter and gases, all of which can severely impact health. *Citing Leading with Equity and Justice in the Clean Energy Transition: Getting to the Starting Line for Residential Building Electrification*, by Ruth Ann Norton as part of The Green and Healthy Homes Initiative, 2021, p. 7.

The Work Group recommends the Commission adopt the Utilities proposal for a broad list of resources that could be included, subject to OPC's objection to having core distribution infrastructure improvements count toward the GHG savings goal.[57] Additionally, the Commission will need to ultimately determine the specific percentages and what should be included in BTM and FTM resources. In relation to OPC's position, the Commission will also need to determine whether upgrades to core distribution infrastructure, such as transformers or gas pipes, should be included as part of any FTM resources/programs, and whether proposals for rate design be considered separately or within EmPOWER (*i.e.*, counting toward EmPOWER goals and using new EmPOWER EM&V protocols).

2. FTM Utility Resources & Non-Energy Resources

Non-Consensus

The Utilities proposed that **X%** of a utility's GHG abatement goal be achieved through a combination of non-energy resources or FTM Utility Resources. FTM Utility Resources could include CVR, high-efficiency transformers, methane gas detection, line loss reduction programs, street and area lighting, electric transportation/EV charging, DER, and renewables. There are also non-energy resources that provide benefits, including expanding recycling programs (refrigerants, batteries, appliances, *etc.*), encouraging low-global warming potential refrigerants, encouraging battery replacements to reduce switch backs to fossil fuel, and selling or donating utility equipment (computers and screens).

OPC objected to the inclusion of upgrades to core distribution infrastructure, such as transformers or gas pipes, as part of any FTM resources/programs. OPC also noted that savings and benefits from non-EmPOWER programs, such as pre-paid billing and Time-of-Use ("TOU") rates, are difficult to measure, in a way that is consistent with and non-duplicative to current EmPOWER savings measurement, which should preclude their inclusion in EmPOWER. Conversely, the Utilities noted the importance of contributions from the other programs, including initiatives that are funded outside of the EmPOWER surcharge, such as T&D upgrades, street lighting and energy efficient transformers as currently included, to helping the State meet its GHG goals.

OPC proposed that no more than 15% of each utility's GHG goal be achieved through FTM Community Resources, FTM Utility Resources, and non-energy resources. OPC added that better EM&V was necessary for these types of resources, which could be complicated to develop.

MEEA, while not directly opposed, sought to have measures that have already been installed be ineligible for post-2024 lifecycle savings. MEEA also sought to limit new equipment, such as CVR or high-efficiency transformers, to only a one-year measure life which is consistent with the Utilities long-standing assertions that these measures have a one-year measure life.

Similar to the previous item, the Commission will need to determine whether upgrades to core distribution infrastructure, such as transformers or gas pipes, should be included as part of any FTM resources/programs and whether to accept MEEA's recommendation to limit FTM equipment to a one-year measure life.

[57] *See* Attch. B which permits several types of resources; *see* Section V.A.2.

3. Other Potential Programs

Non-Consensus

The Utilities noted several other potential programs could also contribute to the GHG abatement goal that are composed of both BTM and FTM community resources (non-EmPOWER funded) including: pre-paid billing; TOU and other innovative rates; expanding electric road transportation/charging for existing programs; DERs (*e.g.*, battery storage); and fuel switching (*e.g.*, diesel to gas generators, propane to gas grills hookups). Oracle endorsed behavioral offerings as part of EmPOWER's traditional offerings (Utilities) and the "core" programs referenced by MEEA which should be continued. OPC supported the use of rate design in support of conservation and DR, but it was hesitant to quantify those effects through EmPOWER.

MEEA opposed pre-paid billing for LI customers, given the current lack of evaluation data assessing whether savings for such programs derive from information provided to participants or deprivation of use. In the event such a program is considered, MEEA recommended that savings not occur as a result of deprivation of use or threat to a customer's well-being. It also noted that pre-paid programs could result in shut-off threats to influence energy reductions. Instead, MEEA supported that standard credit and collection protocols/protections be preserved.

NEEP recommended enrolling large appliances (refrigerators, washers, dryers, and dishwashers) in a DR program whereby customers would be alerted or pre-enrolled in an appliance TOU rate.

MEA noted the recent Notice of Proposed Rulemaking issued by the federal government related to implementing changes to light bulb efficiency requirements. As lighting is a large contributor to energy savings for several programs that have been found to be cost effective, future program designs should incorporate sensitivities around lighting contribution.

The Commission will need to determine which, if any, types of these other programs should be implemented.

B. Low-Income Customers and Communities

General Consensus

The Utilities proposed an Equity Goal that no less than **X%** be focused on LI customers and communities through various programs, including: energy efficiency and DR programs; donation of utility equipment (computers and screens); community renewable resources; beneficial electrification; enhancing marketing and outreach efforts; fuel switching; load shifting through rate offerings; and energy efficiency that reduces demand. There was no express objection to or support of this proposal.

OPC generally supported LI-offerings funded by EmPOWER or that count towards achieving EmPOWER goals to achieve cost-effective GHG reductions at the community level and increasing the equity impact of EmPOWER. NEEP supported providing LI programs to include improving access to energy efficiency, increasing programs that provide comfort and safety, improved indoor air quality, and more affordable utility bills.

MEEA proposed to coordinate EmPOWER with other housing-related offers to target LI customers and maximize benefits, and suggested the proposal be extended to other financial and

utility-bill assistance programs. By enrolling customers in financial assistance programs or addressing health and safety issues, Oracle claimed a pipeline would be created for energy efficiency programs and supported this proposal.

The Utilities highlighted that DHCD's study to quantify energy efficiency savings estimates for LI customers is ongoing; therefore, the Utilities found it to be premature to offer a position on specific goal structure target amounts without information from DHCD's study, as well as the Potential Study's outcomes. DHCD disagreed and contended that the information provided by CADMUS was sufficient to inform a LI savings goal.

While the Work Group generally supported this overall concept, the Commission will need to develop an Equity Goal and determine what types of programs should be utilized that are either funded by EmPOWER or count towards EmPOWER goals.

1. Specific Low-Income Proposals[58]

NEEP asserted that energy efficiency programs have the potential to reduce poverty and the home energy affordability gap if designed correctly. Potential participants should be targeted through energy use and arrearage data while financing could be provided by the State that is tied to energy savings, an approach used in other states called Tariffed On-Bill Model or Inclusive Utility Financing,[59] and can result in 20% savings for customers. NEEP similarly supported the creation of a program to provide technical assistance to support small businesses as a way to navigate identifying contractors, rebates, *etc.*

Ceres agreed that equity must be a priority and recommended that the Commission require the Utilities to propose percent-of-income payment plans or other financing mechanisms that account for the income and/or energy burden of participating customers. Additionally, Ceres supported the inclusion of multi-family housing to ensure renters, many of whom are LI and all of whom pay the surcharge, benefit from EmPOWER programs.

Oracle supported equity in EmPOWER while recognizing the challenges of reaching LI customers/communities. Therefore, Oracle stressed the need to invest in enhanced marketing and outreach and design programs that a) encourage collaboration among the Utilities, State agencies, program administrators, service providers, and community-based organizations, and b) encourage coordination between utility bill assistance and demand-side management programs. Oracle presented their capabilities for using predictive analytics to the following metrics: household energy burden; census tract ability-to-pay index; County unemployment; and a household energy vulnerability score (a weighted composite score using the three aforementioned metrics). These attributes can be layered on top of other factors, such as demographics, usage, and billing, resulting in a powerful tool that can identify and improve the Utilities' understanding of those in need.

Ceres agreed that there is a need to invest in enhanced marketing and reiterated that percent-of-income payment plans or other financing mechanisms to account for income or energy burden may be appropriate.

[58] These proposals did not generate a significant amount of discussion.
[59] *See* https://www.seealliance.org/initiatives/low-income-financing/4

Sunrun supported an adder/multiplier for LI customers and highlighted a Connecticut program which provides an upfront incentive worth two times the value of the general market residential incentive.

C. Rigorous Evaluation, Measurement, and Verification[60]

General Consensus

The Work Group generally agreed that all programs should be subjected to the same EM&V methods, but there was disagreement as to what level cost effectiveness should be conducted, *i.e.*, program level versus portfolio or sub-portfolio level. Additionally, there was no agreement as to how the savings are evaluated and measured for certain FTM programs, notably CVR and high-efficiency transformers, and certain issues, such as fuel switching, remained unresolved.

OPC supported enhancements to measure and evaluate savings, especially in areas outside of traditional energy efficiency measures. OPC emphasized the need to include measures on when they save energy or reduce demand in order to determine impacts more accurately on the system and GHG emissions for all measures, including behavioral strategies, demand reduction, and load management which are more complex and newer. Oracle agreed with OPC's proposal on the value of the timing of emissions reductions.

In terms of what should count, MEEA reiterated that the proposed post-2024 lifecycle savings framework from CVR and high-efficiency transformers that were already installed would not count towards achieving EmPOWER goals. Rather, only newly installed CVR and high-efficiency transformers would be potentially eligible for meeting the Utilities' goals.

Ceres supported the expansion of the cost-benefit analyses on electrification to include public health, climate, and other inputs. NEEP encouraged the Work Group to segment the energy efficiency portfolio to be most cost effective and provide more flexibility to design programs that increase benefits. The segmentation would be as follows: 1) Resource Acquisition – programs will deliver, on a short-term basis, cost-effective avoided cost benefits which will be based upon the Total Systems Benefit Metric; 2) Market Support – programs designed to deliver long-term success by educating and training customers, building partnerships, and making technology more cost effective; and 3) provide programs to LI customers that will increase comfort and safety, improve air quality, and lower bills.

MEA cautioned about the expansion of programs that are not cost effective and supported implementing an objective and quantifiable evaluation criterion for all programs. Staff noted that new programs must still be cost effective with consideration of the impact on customers' bills, the environment, jobs, and effective October 1, 2021, climate change and efforts to achieve the State's environmental goals must also be considered. Without naming specific programs or proposals, the Utilities expressed support for comprehensive solutions where they are cost effective.

The Work Group recommends that all programs be subject to EM&V. However, the Commission will need to determine at what level a cost-effectiveness analysis should be

[60] *See* Section VI – Evaluation Protocols and Cost Effectiveness – for a more in-depth discussion on cost effectiveness.

conducted, and how savings from certain FTM programs, notably CVR and high-efficiency transformers, should be measured.

D. Comprehensive and Integrated Approaches

MEEA supported a coordinated and integrated customer-focused approach to maximize savings by encouraging customers to participate in complementary programs, such as energy efficiency, DR, and TOU rates at the same time. Based on a recent Pepco-DC analysis related to electric load growth,[61] MEEA believes that mitigating load growth through load flexibility tools and programs should be a priority.

BPA similarly supported the coordination and integration of BTM programs to maximize benefits. It noted that smart home offerings can bridge energy efficiency, DR, and DERs into integrated home energy management solutions to maximize grid and ratepayer benefits. BPA also recommended that the Utilities share lessons learned to ensure there is consistency in how to best determine the move from pilots into full-scale offerings.

NEEP proposed the creation of a Total Energy Pathways ("TEP") program for customers that are interested in comprehensive upgrades and renewable energy. TEP bundles beneficial electrification upgrades by combining weatherization, electrification, and renewable energy in a single package.

OPC and ACEEE supported all three ideas as these approaches increase the opportunities for customers to participate in EmPOWER and could produce comprehensive energy savings.

E. Beneficial Electrification/Fuel Switching/Natural Gas Incentives/Natural Gas Upgrades

Non-Consensus

Both MEEA and OPC supported an increased focus on beneficial electrification within EmPOWER and also the phase out of natural gas equipment incentives by the end of 2023.[62] MEEA, ACEEE, and OPC agreed that all-electric new construction should be prioritized and that electric resistance and propane/oil heating should be targeted for replacement by heat pumps. Beginning in 2024, MEEA advocated that all new residential construction (post-2023) have no fossil-fuel end uses. In relation to transportation, neither MEEA nor OPC supported the conversion of diesel end-uses to natural gas or converting propane uses to natural gas. MEEA argued the Utilities should be precluded from using EmPOWER funds as a marketing or load-building tool.

Ceres also supported electrification offerings (over gas appliances and gas-powered end uses) which will decrease GHG emissions and improve health and safety. Thus, Ceres maintained that transitioning from gas-dependent end uses, while keeping equity in mind, should be implemented and be in addition to existing energy efficiency programs. Furthermore, Ceres supported cost-effective beneficial electrification programs dedicated to commercial and industrial customers.

MEEA also supported the end use electrification of fossil gas appliances and systems which were identified by MDE as critical to meet the State's climate goals. MEEA cited the

[61] https://edocket.dcpsc.org/apis/api/Filing/download?attachId=139363&guidFileName=cd2d3333-2c51-463b-aea0-23f987ddca27.pdf

[62] OPC noted the phase out/end should not apply to hybrid-heat pumps.

2030 GGRA which "reduces emissions from energy use in residential and commercial buildings by … converting fossil fuel heating systems to efficient electric heat pumps that are powered by increasingly clean and renewable Maryland electricity."[63] MEEA supported the aggressive promotion of high-efficiency electric heat pumps and heat pump water heaters. Additionally, MEEA supported the rapid phase out of natural gas equipment efficiency programs in accordance with the State's climate goals and the elimination of incentives for new construction with fossil fuel end-uses beyond 2023. MEEA noted that Washington, D.C.'s Sustainable Energy Utility eliminated residential gas incentive programs and both Massachusetts and New York identified the elimination of such incentives as a way to help meet climate commitments.

MEEA advocated for the participation of LI ratepayers that have high energy burdens, especially those that use fuel oil and propane. Those ratepayers should be prioritized for electrification and the Utilities' tariffs could create payment plans, such as a percent-of-income payment plan that would allow LI households to participate in beneficial electrification without unduly increasing their monthly utility bills. Furthermore, MEEA asserted that EmPOWER should coordinate with other housing programs that target LI customers to maximize the potential benefits, especially health and safety retrofit resources, with electrification and efficiency.

OPC noted support for beneficial electrification based on the definition of the Regulatory Assistance Project ("RAP") framework.[64] Any such beneficial electrification measures should be designed to support the State's zero-direct building emissions goal by 2045 and such programs should be informed by the Maryland Building Decarbonization Study. OPC did not agree with the Utilities definition of "beneficial electrification" because it just defines "electrification" and could include *any* electrification. OPC also noted that conversion of diesel or propane to natural gas could not be considered to be "beneficial electrification" under any definition.

In the near-time, OPC claimed the electric utilities should target markets and customers with the most compelling value proposition and customer economics for heat pump installation. Such markets could include all-electric new construction; customers with electric resistance heating and hot water systems; customers installing new/replacing existing air conditioning systems; and customers with solar generation.

The Utilities included fuel switching from direct fossil end use to electric use (oil, propane, and gas to electric, EV road transportation, electrification of heavy equipment) as part of the BTM programs. Oracle asserted natural gas will continue to be a source of power generation and recent weather events demonstrated the need for a gas DR program. Therefore, Oracle recommended that EmPOWER provide for investment in innovative gas DR and energy efficiency programs.

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[63] 2030 GGRA Plan at 47; *see* https://mde.maryland.gov/programs/Air/ClimateChange/Documents/2030%20GGRA%20Plan/THE%202030%20GGRA%20PLAN.pdf

[64] RAP, Beneficial Electrification: Ensuring Electrification to the Public Interest, June 19, 2018; *see* https://www.raponline.org/knowledge-center/beneficial-electrification-ensuring-electrification-public-interest/ RAP defines beneficial electrification as meeting one of the following criteria without negatively impacting others: reduces net lifecycle costs for customers; improves grid management; or reduces harmful impacts on the environment, such as GHG emissions.

The Utilities opposed OPC's and MEEA's recommendation to eliminate incentives for gas appliances. They argued the discontinuation of such incentives would limit the Utilities' ability to achieve GHG goals and may promote the continued use of older equipment or the purchase of less efficient (and cheaper) gas equipment, thus leading to an *increase* in GHG emissions. The Utilities explained there is a need for there to be incentives to choose high-efficiency appliances/technologies rather than buying appliances/technologies that meet federal standards and foregoing potential savings/GHG contributions.

In relation to natural gas efficiency programs, there was some support for the elimination of incentives for natural gas furnaces, boilers, and water heaters by 2024. However, OPC supported a pilot program to investigate the potential for electric-natural gas dual-fuel/hybrid heat pumps, which add a ducted electric heat pump to existing natural gas heating systems. Additionally, non-equipment strategies, such as building shell improvements and behavioral and operational measures, should be a focus of natural gas efficiency programs. OPC supported an increase in the performance-based incentives for natural gas savings in the Home Performance with ENERGY STAR program but noted additional resources may be necessary to support LI customers that need to replace a natural gas boiler/furnace in the event a heat pump is not affordable. OPC recommended that measure characterization should be reviewed to ensure fuel savings are counted towards GHG abatement goals, and cost-benefit tests should value the benefits of beneficial electrification, including the avoided GHG emissions and health impacts from improved indoor air quality.

The impact on LI customers must also be carefully considered when implementing these programs. OPC anticipated that in the short-term, electrification could push monthly bills higher for customers with natural gas heat, and the long-term impacts could include rate increases driven by declining throughput. While Staff supported fuel switching, it noted that this would be a major change to EmPOWER as the Commission does not regulate propane and oil companies.

The Commission will need to determine whether EmPOWER's fossil fuel-related incentives should be continued or discontinued/phased out and if EmPOWER incentives can be offered for fuel-switching customers who space and/or water heat with propane and oil based on the GHG savings.

F. Building Shell Improvements/Incentives

General Consensus

BPA supported parity of fuel-neutral incentives for home performance and building shell measures. It claimed that currently there is a disparity between incentives for home performance measures for gas versus all-electric homes. BPA also claimed that weatherization and building shell upgrades for oil and propane-heated homes, which make up over 10% of Maryland households, are cost effective, provide energy savings and emission reduction opportunities, and will also be critical for any future electrification efforts.

MEEA, ACEEE, and OPC supported BPA's position to focus on improving the building shell of gas-heated homes, with MEEA supporting building electrification. Additionally, the Utilities supported the continuation and expansion of such improvements through a fuel-neutral approach. Ceres noted such improvements should include smart thermostats and pipe insulation. Ceres supported increasing efficiency incentives to enable building shell improvements for gas customers, and also encouraged smart thermostats and pipe wrap/insulation as ways to add value,

decrease fuel consumption, and reduce GHG emissions. OPC also expressed support for behavioral measures.

The Commission will need to determine whether fuel-neutral incentives for building shell improvements/incentives should be improved/increased and, if so, how.

G. Whole-Building Strategy for Heat Pumps

NEEP recommended a program to combine weatherization with heat pump installation which would be cost-effective and lead to the adoption of clean energy technology. NEEP indicated the definition of "weatherization" should be agreed upon or that measures be standardized so the same measures are performed on every home. As previously noted by other stakeholders, NEEP explained that weatherization is sometimes not appropriate due to the condition of the home; therefore, NEEP recommended EmPOWER be used to make home repairs easier and be geared towards LI customers and/or general offers to help improve the condition of homes. Such a program could provide contractors and program managers to help customers with the process, similar to a program offered in Delaware.[65]

NEEP also recommended customer education to increase awareness and an understanding of the available heat pump technology. The heat pumps to be installed should meet high-performance expectations and the Utilities should partner with manufacturers and construction businesses to ensure compliance with best practices for installation.

In terms of renewable energy, NEEP suggested a contractor-based approach that would offer beneficial electrification upgrades by combining weatherization, electrification, and renewable energy in one package that allows customers to finance improvements with the resulting energy savings. NEEP stressed that both training and education will be necessary for the construction industry. ACEEE noted its support of NEEP's recommendation.

H. Workforce Development

1. Supporting Investments

Non-Consensus

BPA asserted workforce development was essential to EmPOWER's continued success and implementation of energy efficiency and DR programs and DERs, as there is a shortage of skilled workers trained in energy efficiency and building science principles which has been exacerbated by the COVID-19 pandemic. BPA indicated workforce development provides opportunities and access to career pathways in disadvantaged and traditionally underrepresented communities, as well as for unemployed and transitioning workers. BPA recommended that EmPOWER focus on minorities, women, and disadvantaged communities for any workforce development program.

BPA proposed that funds be provided to training organizations to expand training and reformulate programs, as well as to small businesses to train new employees. In preparation for another COVID-19-related shutdown, BPA encouraged the EmPOWER programs to develop a strategy, such as online training, to ensure training continues. BPA also recommended that EmPOWER programs support training for industry certifications. In support of BPA's proposal,

[65] *See* https://www.energizedelaware.org/wp-content/uploads/2021/03/DESEU-32810-FY21-Annual-Report_Full-Report_v4.pdf

Ms. Leticia Colon de Mejias, owner of Energy Efficiencies Solutions (Connecticut), President of Green Eco Warriors, and Policy Co-Chair of the Building Performance Association, provided a presentation about the success of the Efficiency for All Connecticut Workforce Development Program and the need for workforce development in Maryland.

NEEP, Ceres, HVAC contractors, and OPC all expressed support for BPA's workforce development proposal, with OPC specifically supporting the portion of the proposal that discussed an Energy Efficiency Workforce Needs Assessment (referenced in H.2, below). NEEP explained these types of programs educate customers, train contractors, build partnerships, and move beneficial technologies towards greater cost-effectiveness. Ceres specifically recommended that a Workforce Development Roadmap be created to outline a program for the development of skills to meet current and future demand.

OPC viewed workforce development and training as a way to increase savings opportunities and lower bills for customers. It acknowledged the importance of workforce development, quality assurance, and customer education as way to increase EmPOWER's impacts and benefits, but the cost effectiveness of such measures is difficult to measure. While these programs do not generate direct savings, OPC stressed the importance of the programs to support EmPOWER savings.

The Utilities agreed on the importance of the EmPOWER workforce but expressed concern that BPA's proposal is much broader than EmPOWER and could take away from the purpose of EmPOWER. The Utilities noted that elements of workforce development are already incorporated in their EmPOWER programs through their implementation contractors. The Utilities were open to continued discussions about EmPOWER workforce development but stressed that workforce development currently exists as needed for meeting EmPOWER goals. The Utilities did not support BPA's proposal or utilizing a separate program as it is outside the scope of EmPOWER programming, that any funding outcomes may not be attributable to, or benefit EmPOWER, and would take funding away from program design, implementation, and delivery.

The Commission will need to determine whether to accept BPA's proposal or a version thereof, if and how workforce development could be expanded as part of existing programs, or reject BPA's proposal.

2. BPA/NEEP/MEEA Workforce Development Proposal

Non-Consensus

BPA, NEEP, and MEEA proposed the creation of a Workforce Development Coordinating Committee which would provide a forum/venue to coordinate different needs/opportunities related to the EmPOWER workforce. The Committee would be responsible for developing recommendations on improving workforce development initiatives and supporting job training pathways/pipelines with a focus on under-represented and disadvantaged workers. The Committee would be composed of representatives from the Utilities, DHCD, Staff, the Maryland Department of Labor ("DOL"), MEA, and other relevant State agencies, contractors, training providers, apprenticeship programs, community colleges and technical schools, equity stakeholders, community representatives, and other workforce development entities. They proposed to launch the Committee in 2022 to help inform programming for the

2024-2026 cycle and potentially launch initiatives prior to 2024. The Committee would meet on a monthly basis and be led by DOL and MEA.

BPA, NEEP, and MEEA also supported tracking workforce development efforts to determine the status of workforce diversity and progress to equitable access to training/opportunities. They proposed to have the Utilities file an annual report and that the following metrics be established: the estimated numbers of workers required to meet EmPOWER goals; number of contractors participating in EmPOWER broken down by demographics; and training investments. BPA, NEEP, and MEEA added that there is a need to conduct an Energy Efficiency Workforce Needs Assessment conducted by an independent research team to identify needs and gaps in training and workforce development to meet EmPOWER goals.

Sean Mallonee of SM Mechanical, LLC, a local HVAC company, spoke on behalf of the Heating and Air Conditioning Contractors of Maryland ("HACC") in support of BPA's workforce development proposal. He explained that there are currently programs across the State, but there is a lack of central coordination which the coordinating committee could provide. Mr. Mallonee also felt it would be a forum for the small businesses performing EmPOWER-related work to have their concerns heard. He cited several trends that he and his members are noticing with respect to EmPOWER. First, due to inflation, the cost of equipment has risen, and customers are opting for the cheaper, standard-efficiency option rather than choosing the most energy-efficient options. The industry has also been negatively impacted by the labor shortage and high employee turnover. Labor rates are very high for the better skilled and trained workers (those that do high-efficiency installations). This group has the highest turnover because they can demand the highest rates of pay. HACC believes reporting these trends to a coordinating committee would be beneficial to more successful and effective implementation of the EmPOWER programs.

Stephanie Anderson, the Executive Director for HACC, submitted written comments in support of the establishment of a Workforce Development Coordinating Committee. She explained there was a critical need to proactively build and advance the energy efficiency workforce, especially in light of the new EmPOWER goal structure being considered. Such a committee could create job training pathways and pipelines throughout the State. The proposed committee would help address equity and build a more diverse workforce. Ms. Anderson concluded that without a trained workforce, the EmPOWER goals will not be met.

Ceres stressed that the workforce for future EmPOWER cycles can implement the next generation of heat pumps, batteries, load managers, and other decarbonization measures. Ceres claimed addressing workforce development and retention in the near term will lower EmPOWER costs over the long term by addressing and stemming the costs of high employee turnover. This program should include an investigation into the potential gaps in training, education, and retention impacting the Utilities' ability to meet the EmPOWER goals and improve program delivery to LI communities. Ceres cited the recent Massachusetts Public Utility Commission approval of a $4 billion plan that included a workforce development attraction and retention plan.[66]

[66] https://www.mass.gov/doc/2022-2024-three-year-energy-efficiency-plans-order/download

OPC also supported the Energy Efficiency Workforce Needs Assessment. OPC cited Mr. Mallonee's and HACC's comments regarding small businesses' unwillingness to invest resources to train employees to install higher efficiency equipment due to high turnover rates and competition for higher-skilled employees.

The Utilities disagreed with the BPA, NEEP, and MEEA proposal for several reasons. First, the Utilities believe the proposal does not fully reflect the State's numerous existing workforce development programs. Workforce development issues are much broader than EmPOWER and EmPOWER-ratepayer dollars should not be spent on funding initiatives that may not be attributable to or benefit EmPOWER. The proposal is beyond the responsibility of the Utilities to provide ratepayer-funded, cost-effective energy efficiency programs designed to meet EmPOWER's objectives. The Utilities argued that the resources they currently provide to licensed professionals, contractors, service providers and program staff are an effective means to achieve EmPOWER objectives and have contributed to career growth for numerous individuals. Further, the Utilities do not support any workforce development metric or criteria that would be tied to Utility performance of meeting energy efficiency goals as it would be outside the scope of EmPOWER. The Utilities also oppose the proposed metrics and reporting requirements as they would be complex and a significant undertaking to both design and implement. Finally, the Utilities do not support the creation of a coordinating committee due to the potential of undermining or duplicating the current offerings in the State and imposing additional costs on ratepayers which may be unnecessary and not directly attributable to or benefit EmPOWER. The Utilities further commented that there are already direct relationships with and lines of communication between EmPOWER contractors and the Utilities making a coordinating committee unnecessary and potentially duplicative.

In response to the Utilities' concerns, Staff noted that leveraging funding from other resources, such as federal sources, outside of EmPOWER could cover unforeseen costs. MEEA argued the proposal was a cost mitigation strategy in that a small investment for tracking and coordination would make the programs more effective and cost less in the long run.

The Commission will need to determine whether a Workforce Development Committee should be established and the extent to which workforce development efforts should be tracked and reported to the Commission.

I. Grid Interactive Buildings and Smart Technology

General Consensus

BPA supported strategies to increase coordination and integration of BTM programs to maximize benefits of energy efficiency, DR, and DERs, and stressed the values of including smart and grid-interactive technologies that can support demand flexibility to reduce emissions and lower customer bills in home performance retrofit programs. BPA recommended increasing coordination across all utilities to share lessons learned and best practices to develop smart home and grid-interactive efficient building programs.

OPC supported BPA's proposal as it would expand upon an existing part of EmPOWER. ACEEE also supported BPA's proposal as it would expand the benefits of energy efficiency, demand response, and other DERs.

The Utilities supported the consideration of new technology that would provide GHG abatement and energy efficiency opportunities, and specifically noted DR combined with clean

energy or storage as possibilities. However, the Utilities requested clear guidance, from an evaluation perspective, as to how GHG abatement will be counted in order to consider new technologies and noted each respective utility's portfolio will differ due to each service territory's characteristics.

The Commission will need to determine whether to accept BPA's proposal and, if so, direct the Utilities how to share lessons learned and best practices with the stakeholders and begin the process to develop the programs proposed by BPA.

J. Vendor-/Technology-Neutral Programs and Third-Party Standards[67]

Non-Consensus

OPC stressed the importance of vendor and technology neutrality, especially for smart devices and load/demand management, which will allow customers to access the services in a competitive marketplace. This could be implemented by establishing third-party standards, rather than having the Utilities set the standards.

The Utilities generally supported such neutrality in certain programs, such as the Bring Your Own Device ("BYOD"); however, the Utilities claimed flexibility was required when developing programs and opposed any requirements or restrictions on the inclusion of specific vendor or technology offerings.

The Commission should determine whether and to what extent third-party standards should be established.

K. Building Codes/New Construction

General Consensus

OPC and ACEEE supported NEEP's comments that the Utilities should support the adoption of new building codes and increased code compliance. OPC indicated there are significant savings that can be achieved through increased compliance in the construction industry, and that new residential construction programs and incentives should be exclusive to energy efficient, all-electric homes.

The Utilities supported exploring programs in conjunction with other State agencies to increase adoption of new codes and standards; however, the Utilities note that the new codes and standards are law and oppose any proposal that would make the Utilities act in an enforcement role for building code compliance.

NEEP indicated such a program would improve building codes and that appliance standards to account for energy efficiency would remove tensions between policy goals and the utilities' financial constraints. Similar programs have been established in Massachusetts, Rhode Island, and New Hampshire.

Staff noted that Maryland automatically adopts the IECC building codes and that EmPOWER has traditionally applied incentives for efficiency measures that were above code and not to meet an efficiency standard.

The Commission should determine whether and to what extent new building codes and supporting code compliance should be considered.

[67] *See* Section VII.B.

L. Alignment with Other Proceedings/Maximize Net Benefits/Mitigate Cost Increases

General Consensus

There was some level of agreement on this issue with all in support of aligning EmPOWER with proceedings such as PC 44 and exploring available funding, including leveraged funds and ratepayer contributions, prior to increasing costs and rates. Oracle referenced the Exelon TOU pilot that produced both load shifting and net energy (kWh) savings during the first year of the pilot. Oracle also supports aligning future EmPOWER programs with PC 53, *Impacts of COVID-19 Pandemic on Maryland's Gas and Electric Utility Operations and Customer Experiences,* to further support EmPOWER's equity goals and meeting LI customers' needs. MEA also sought to fully utilize current and future rate base to achieve EmPOWER goals and to mitigate costs.

The Utilities cautioned about misinterpreting the use of rate base. The Utilities instead supported including savings from non-EmPOWER programs, *i.e.*, those approved outside of EmPOWER or already in rate base, in order to help the State meet its climate goals.

The Commission will need to determine if EmPOWER can/should be better aligned with other proceedings and whether to include savings achieved from initiatives funded in other proceedings to meet EmPOWER goals and reduce costs.

M. Evaluation of Customer Behaviors, Systems Benefits, and Costs

MEA claimed peak DR presents opportunities to delay upgrades to the electricity infrastructure if load shifting occurs. While the Commission noted in 2015 that issues in the PJM market complicated establishing a peak demand goal,[68] MEA claimed circumstances have changed and that DR programs can increase benefits by managing peak consumption and costs to ratepayers, as well as offer investment by individual ratepayers.

N. Bring Your Own Device

The Clean Energy Group ("CEG") provided a presentation on an energy efficiency model to reduce peak electricity demand while bringing cost savings and energy resilience benefits. CEG described "ConnectedSolutions," a funding mechanism for the deployment of BTM battery storage, with the resulting storage being used to address peak demand. CEG explained customers can either purchase or lease batteries for homes or commercial properties and could qualify for a performance payment and financing depending on the jurisdiction. Rebates can be offered to offset the cost of the battery.

Customers can contract (multi-year, typically 5 to 10 years) with their utility to allow the battery to be dispatched in aggregate during peak demand hours for which utilities pay for the peak load reduction that customers provide. By offsetting peak loads, utilities' capacity and transmission-related costs are lowered for all customers. Customers are compensated with performance payments (average load reduction over a season or per-kW dispatched basis) or other opportunities (non-peak demand) provided by the utility. During non-peak hours and a grid outage, customers may use the battery. It would also be possible to have a net-metering scenario for a solar+battery customer, which could allow a customer to export power from the battery to the grid.

[68] *See* 106 Md. P.S.C. at 370.

CEG advocated for the inclusion of an LI provision in a battery storage program. It cited examples, including up-front rebates, low- or no-interest loans, and a LI carve-out for a residential program being used in other states. CEG also indicated the program was accessible to third-party installers and aggregators, and concluded the program creates a "virtual power plant" that utilities may call upon when necessary.

CEG claimed BTM batteries have been proven to be cost effective in several states. Its program, similar to a utility DR program, is run through state energy-efficiency plans. The benefits of this approach include a much larger budget ($275.6 million for Maryland); availability to all rate classes; and incentives for residential and small commercial customers. Inclusion of the program in a State energy efficiency program also allows for greater input from stakeholders.

Sunrun believed in DERs being complementary to existing energy efficiency and DR programs and expressed support for CEG's battery incentive program. Sunrun's program provides an upfront incentive for onsite battery storage with pay-for-performance compensation through net metering and other future grid services which may be developed as part of PC 44's distribution system planning process. Such incentives will help defray the upfront costs and provide a steady revenue stream. A portion of the battery's capacity could also be dispatched in response to a grid event. Sunrun noted an approved battery storage program in Connecticut that targets 580 MW of energy storage capacity by 2030 that provides a $/kWh rebate for the purchase and installation of battery storage and a pay-for-performance payment when discharging to the grid at peak times.

OPC expressed support for BYOD programs generally, while MEA supported individual ratepayer investments in DERs.

O. Residential/Community-Based Programs

1. Affordable Multi-Family Housing Solar Resilience Hubs

Sunrun sought to extend virtual net metering and provide an upfront incentive that encourages onsite solar+storage facilities to provide resilience hubs. To develop such facilities for LI multi-family housing solar+storage solutions, Sunrun recommended that consideration be given to legislation to create financial tools, such as tax credits/incentives that will ensure tenants benefit through bill credits. Sunrun explained that California utilities have specific virtual net metering tariffs for these hubs, which target installing 300 MW on multi-family properties by 2030 and includes specific training and hiring requirements. The program would allow an islanding capability and serve critical common area loads during prolonged outages and allow residents to opt in for a nominal fee and receive virtual net metering credits to offset their utility bills, with at least 60% of bill credits flowing to participating residents. Such a program would require that tariffs specify that common areas are billed on a residential rate with no demand charges and virtual net-metering for LI, multi-family housing resilience projects.

OPC indicated it could potentially support this proposal.

2. Residential Clean Energy + Demand Response

Sunrun proposed to have customers commit to a 10-year participation TOU rate and DR technology that would deliver at least 1 kW demand reduction with an upfront incentive of a $X/watt. Sunrun claimed that combining programs where customers increase load through either fuel switching or EV charging, onsite clean energy and DR can mitigate potential GHG increases

with 100% renewable energy. This program would support the RPS's solar carve out, reduce GHG emissions, increase resiliency, and support demand reduction. Residential TOU rates would be required without any restriction.

3. Reducing Obstacles to Expanded DER and DR Programs

Sunrun indicated that beneficial electrification and increased DERs require significant electrical upgrades for residential customers and, therefore, the cost barrier should be addressed. An example of a way to potentially overcome such barriers are programs that offer make-ready credits to cover costs of electrical work installing EV charging service equipment.

4. Lighting

MEA highlighted a federal Notice of Proposed Rulemaking to implement changes to light bulb efficiency which was significant as lighting remains a large contributor to energy savings for several of the existing cost-effective programs. Therefore, MEA suggested that plans be developed to incorporate sensitivities into programs that are not currently cost effective.

P. Residential Virtual Energy Profile Program

NEEP supported offering residential customers virtual energy profiles so that EmPOWER programs can be better tailored to meet customer needs and connect customers with appropriate contractors. NEEP differentiated this program from QHEC, because this program would have a database that would be accessible to customers, administrators, and other parties. NEEP pointed to a program in Vermont whereby databases can generate a preliminary breakdown of annual energy cost estimates to form a home energy report that can be further refined by including the home's attributes (billing data, lighting, *etc.*). Contractors can then provide recommended improvements (with any appropriate rebates/available government funding), and any improvements would be stored in the database for future reference. This approach would allow energy efficiency contractors a way to engage with customers and identify potential candidates for weatherization, retrofits, and appliance upgrades.

Q. Statewide Schools Energy Efficiency Program

NEEP highlighted its work with the Northeast Collaborative for High Performance Schools which encouraged the construction of schools that provide premium educational environments and benefits to the public. NEEP recommended a similar program to serve schools throughout the State as schools are often community centers and can positively impact children's health and well-being. First, the program would focus on new construction and major renovations to ensure the building meets energy, health, and educational goals. Because such construction must also consider climate, NEEP encouraged mandating building design practices that assess climate change vulnerability. Additionally, schools should be designed to address the needs of the community and to plan for long-term maintenance of the facilities.

Ceres supported this recommendation as the pandemic demonstrated that schools are an asset to livable communities. Ceres stated that building schools which meet specific climate and energy requirements and provide public health benefits, would improve community resiliency and public health outcomes overall. ACEEE also supported this recommendation given the important role that schools play in communities.

VI. Evaluation Protocols and Cost Effectiveness

A. Evaluation Process

Consensus

The Work Group agreed that the current evaluation process is thorough, rigorous, and transparent with regard to behind-the-meter programs,[69] and should be continued into the 2024 EmPOWER cycle. There was consensus that currently the overall process is comprehensive and inclusive to interested stakeholders. The Evaluation Advisory Group ("EAG") continually reviews the process to ensure best practices and protocols are used in each evaluation.

Therefore, the Work Group recommends the Commission adopt EmPOWER's current evaluation process for the 2024 EmPOWER cycle, with a new agreement that any programs or savings claimed from the FTM should also have the same rigorous approach to measurement, verification and evaluation as EmPOWER-funded programs and savings, as described below.

B. Cost Effectiveness

The initial written comments varied somewhat with several parties advocating to maintain or improve upon the current cost-effectiveness tests, while others supported potentially using different cost-effectiveness tests and changes to the discount rate. Parties also recommended following the National Standard Practice Manuals ("NSPM") guidance – including foundational principles – to update the cost-effectiveness test used to assess the EmPOWER Maryland programs.[70]

At the conclusion of the initial meeting on this subject, it was determined that significantly more time and discussion was required. Therefore, Joe Loper, the Commission's Independent Evaluator, agreed to present a strawman position for the Work Group's consideration and to develop consensus and non-consensus items. Mr. Loper's strawman initially included 14 items, many of which were not controversial and were quickly agreed upon, whereas other items required lengthy discussions, such as emissions benefits and calculations, which produced consensus, partial agreements and non-consensus. Several of the items were addressed in a partial settlement/joint recommendation negotiated between OPC and the Utilities.[71]

1. Evaluation Process and Cost-Effectiveness Analysis Should be Applied to All Programs that Count Towards EmPOWER

Consensus

The Work Group agreed that all programs should be subject to the same EM&V process. OPC favored the strawman position, which would be a change from the current approach and would require all programs that count towards the EmPOWER goal being subject to the same evaluation and cost-effectiveness process. OPC had concerns with claims of non-EmPOWER-

[69] OPC noted that there is disagreement on the current measurement and evaluation practices with regard to FTM savings claimed within EmPOWER.
[70] https://www.nationalenergyscreeningproject.org/national-standard-practice-manual/; https://www.nationalenergyscreeningproject.org/resources/quantifying-impacts/
[71] *See* Attch. D.

funded program savings counting towards EmPOWER that are decided in an outside proceeding without being subject to the same cost effectiveness and evaluation process.

The Utilities supported the current process whereby only programs that are specifically EmPOWER funded are subject to cost-effectiveness testing. Whereas programs not funded by but claim savings as part of EmPOWER, could be subject to the same evaluation processes test as it is critical all savings be accounted for.

The Work Group recommends the Commission determine that all programs/measures that count toward EmPOWER goal savings be subject to the same EM&V processes.

2. No Cost-Effectiveness Requirement for Limited-Income Programs & Savings Should Count Towards EmPOWER Goals

Consensus

The Strawman position represents the current approach to LI programs and savings. Staff, OPC, and the Utilities agreed that cost-effectiveness testing of LI programs should continue for tracking purposes, however, there should continue to be no requirement that LI programs pass the cost-effectiveness test.

The Work Group recommends there not be a requirement for LI programs to be cost-effective, but that they continue to be subject to cost-effectiveness testing for tracking purposes.[72]

3. Cost-Effectiveness Methods and Assumptions Should be Used in Pending Potential Study and the 2024-2026 Program Plans

Consensus

Both the Utilities and OPC supported the Strawman position and no other parties raised objections or concerns. Therefore, the Work Group recommends the Commission adopt the Strawman position to use the same cost-effectiveness methods and the assumptions in the Potential Study and 2024-2026 program plans.

4. EmPOWER *Ex Post* Cost-Effectiveness Analyses Should Continue to Utilize Most Current Available Data and Thinking

i. The Methods and Assumptions prescribed here should be used in *ex post* cost-effectiveness analyses starting with the 2021 program evaluations (scheduled for completion in October 2022)

Consensus

The methods and assumptions prescribed in Order No. 87082 were discussed by the WG. The Utilities did not consider this to be a change to current policy. The Utilities agreed that any material changes to available data or methodologies should be incorporated into the analysis and could provide the impact of the change, but the Utilities should be held harmless from any changes to what had already been approved.

The partial settlement reached by the Utilities and OPC directed the EAG to deliberate about whether the Work Group's cost-effectiveness assumptions should apply during this

[72] *See also* Section IV.

program cycle. The Work Group recommends the Commission defer this determination to the EAG.

ii. The Evaluation Advisory Group should continue to review all assumptions annually and update assumptions if indicated by new data, errors, changes in state or national policy, *etc*.

Consensus

This is current practice. The Utilities agreed that any material changes to available data or methods versus what was approved should be identified and that scenario analysis could provide impact of the change. Similar to the above comments, the Utilities maintained that they should be held harmless for changes and any impacts should be applied to 2024 and beyond, not the existing cycle. Mr. Loper stated that cost effectiveness would likely improve and he could not imagine the Utilities being accountable for any such changes in assumptions. Many assumptions are discussed in the EAG, such as incremental costs and estimated useful life, which change frequently.

The Work Group recommends the Commission adopt the Strawman proposal and maintain the current practice.

5. A Maryland-Specific Societal Cost Test ("SCT") Should Be Applied at the Sector Level and will be the Primary Test for Portfolio Screening & Other Cost-Effectiveness Tests Should Continue to be Reported

General Consensus

The Work Group agreed that the SCT should be the primary test for cost-effectiveness, and it should be identified as the Primary Maryland Jurisdiction-Specific Test ("MJST"). There were several meetings to discuss changes to the inputs in the MJST including, but not limited to, discount rate, geographic boundary, and emissions benefit. Mr. Loper developed a spreadsheet to illustrate the impacts of numerous potential scenarios.[73] There was also agreement that cost effectiveness using the Total Resource Cost Test ("TRC"), Participant Cost Test, the Program Administrator Cost Test, and Rate Impact Measure would continue to be reported.

There was extensive discussion of each of the individual elements of the MJST. Ultimately, after several off-line discussions, there were joint recommendations negotiated and developed by the Utilities and OPC as a "package." Staff, MEEA, BPA, and Ceres supported the recommendations and there were no objections expressed by other stakeholders.[74] The elements of the agreement are listed below.

i. Emissions Benefit

General Consensus

With respect to an air emissions benefit, the Work Group recommends using a benefit that corresponds to Mr. Loper's "option 17" (row 20) framework,[75] including a 2% discount rate for the SCC, which results in a Year 1 emissions benefit of 9.17 cents/kwh and a levelized

[73] Attch. D.

[74] The Joint Recommendations incorporated other strawman items, namely emissions benefits, discount rate, a geographic boundary, and the inclusion of federal tax credits and other incentives.

[75] *See* Attch. E - Benefits EUL comparisons worksheet developed by Joe Loper.

emissions benefit of 9.06 cents for measure life of 6.4 years. Further, the Work Group agreed that the EAG should produce a table with specific total emission benefits for each year, based on the agreed upon option. It should be noted that while there is agreement with the results of this scenario, there was not agreement on all of the methodological elements or discrete individual inputs. There was consensus on using the 2% discount rate, the federal SCC, and the EPA's COBRA model to estimate benefits of criteria emissions, however there was no consensus regarding marginal vs. average emissions rates, the boundary definition of costs, and the source of emission's forecast (whether it be current policy vs. GGRA policy).

The Work Group also agreed that the emission benefit values in "option 17" would remain in place for planning and through the next (2024) program cycle, however an increase or decrease in the GHG value could be considered if there was a relevant change in State or federal policy. The EAG should deliberate about whether these assumptions should be used for alternative scenario analysis in the current cycle (*e.g.*, 2022). For the pending potential study, this 9-cent value should be one of the values used, but at least one other value will likely be needed as a sensitivity. Additionally, an equivalent SCC value, as identified in the EAG's table, would be used to calculate avoided emission values for end-use combustion of propane, oil and natural gas.

OPC and the Utilities clarified that it was not necessary to establish a formal State and federal policy monitoring process. In the event there is a change to the federal SCC/discount rate or the MDE emission numbers, it would not trigger an automatic change but would result in further re-evaluation/discussion by the EAG. In the event such a change was to occur prior to the point that planning begins in earnest for the 2024 cycle, the change should be seriously considered. In the event a change occurs and there is no consensus among the EAG, it should be reported to the Commission for a final decision.

Additionally, MEEA supported future review by the EAG of energy, capacity, and emissions values. Viewing the values on a time-differentiated basis could provide a better understanding of which types of programs and measures are most effectively providing economic value and GHG abatement.

The Work Group recommends the Commission adopt the results of "option 17," including a 2% discount rate for the SCC; direct the EAG to produce a table with specific total emission benefits for each year, based on the results of the agreed upon option; adopt the SCC value identified by the EAG to calculate avoided emission values for end-use combustion of propane, oil and natural gas; and direct the EAG to discuss whether the assumptions should be used for alternative scenario analysis in the current cycle.

ii. Appropriate Discount Rate - A discount rate of 2% plus inflation and that the 10-year Consumer Price Index ("CPI") or similar method be used for the MJST

Consensus

There was extensive discussion and comparison of the appropriate real discount rate to be applied in the MJST with ranges from 1% to 3%. Initial Staff comments stated current protocols call for a 3% rate plus inflation and noted that too low of a rate could over value the benefits of a program, leading to higher program costs and ratepayer bill impacts. It was noted during the discussion that 2% is consistent with the federal discount rate and aligns with the methodology

proposed by the EV Work Group.[76] Ultimately, the Work Group recommended using a 2% real discount rate (plus inflation) for the MJST. There was also agreement to using a 10-year moving average of the CPI or similar method to determine inflation and continuing to apply it as it is now.[77] This value should be fixed through the next program cycle and be reviewed in advance of each future cycle.

The Work Group recommends the Commission adopt a 2% real discount rate (plus inflation) for the MJST, the use of a 10-year CPI or similar method to determine inflation and continue to apply it as is currently applied, and the value be fixed for the next program cycle and be reviewed in advance of future cycles.

iii. Adders

a. Health and Safety Benefit

Consensus

Initially, BPA, MEEA and Ceres proposed a health and safety adder of 15% to be applied in addition to the existing Non-Energy Benefits ("NEBs") in Maryland cost-effectiveness testing, specifically to avoided energy costs for certain residential programs. Those residential programs are home performance, new construction, and HVAC fuel savings (*i.e.*, excluding electric-to-electric replacements). Ceres also recommended considering the adder for other programs, such as behavioral programs. The adder would serve as a proxy to account for improved health outcomes and avoided respiratory risks that are not currently captured in EmPOWER cost-effectiveness testing and are difficult to quantify. They asserted that 15% falls within the mid-range of similar health and safety adders in a dozen other jurisdictions. After further investigation into the dozen jurisdictions with a mid-range of 15%, it was not always apparent that the 15% adder was for health and safety alone. It was sometimes found to be an adder covering other NEBs as well. As a result, Mr. Loper recommended considering a lower adder to cover health and safety.

However, as part of OPC's and Utilities' joint recommendations, it was agreed that a health and safety benefit of 10% of avoided energy should be limited to home retrofit programs and non-electric-to-electric HVAC measures (in addition to the existing comfort benefit) should be applied.[78] MEEA proposed the health and safety benefit be applied to the measures associated with current utility reporting under the "completed Projects" category, but not with the measures that are direct-installed during audits. This was also endorsed by BPA and OPC.

MEEA further proposed the health and safety benefit also be applied in all-electric residential new construction based on the premise that the absence of fossil-fuels and associated leaks as well as combustion byproducts will improve occupant health and safety. The Work Group agreed that this particular issue could be deferred to the EAG for further discussion on what programs this benefit should be applied to.

The Work Group recommends the Commission include a 10% health and safety adder be applied to the MJST as referenced above.

[76] ML 238013.
[77] The EAG currently utilizes a 10-year CPI.
[78] Oracle favored extending this adder to behavioral programs and noted general support. Oracle alternatively proposed to allow the EAG to discuss potentially applying this adder to other programs not referenced in this Report.

6. Limited Income

Consensus

The joint recommendations also included a LI benefit of 20% of avoided energy for LI programs to account for non-comfort health and safety benefits as well as a general basket of non-specific economic benefits. Please note that the health and safety benefit (described above) does not apply to LI programs as this 20% benefit applies to all LI programs and is inclusive of health and safety benefits for those programs. However, the LI benefit would be applied in addition to the 10% of avoided energy adder (described below).

The Work Group recommends the Commission adopt a 20% avoided energy benefit for LI programs.

7. Avoided Energy Benefit

Consensus

OPC proposed a benefit of 15% of avoided energy to account for avoided wholesale price risk. OPC presented multiple pieces of evidence that such a benefit exists in the PJM ISO and that this factor is used in other jurisdictions. This triggered a lengthy discussion about the economic and financial risks of supply versus those for energy efficiency, many of which are difficult to quantify.

At the conclusion of these discussions, the Work Group reached an agreement and recommends the Commission include an adder of 10% of avoided energy to account for a range of costs and risks not otherwise included in the MJST. It may be necessary to work toward further characterization of what this adder represents.

C. Other Recommendations

Other recommendations that were part of the agreement: to include federal tax credits as benefits in the primary MJST; to include utility earnings on EmPOWER as a cost in the primary MJST; and to include an upstream methane emissions factor on avoided gas and avoided electric generation. A list of specific tax credits would be developed through the EAG. In the partial settlement, there was agreement that tax credits should be treated like energy savings benefits, in that there would be an adjustment to the benefit to account for estimated free ridership.

There was agreement to include an upstream methane emissions factor on avoided gas and avoided electric generation in the MJST. OPC proposed a formula (approximately 2% of gross utilization) in the partial settlement. Mr. Loper's Team developed a worksheet to illustrate the formula and net emissions benefits calculations that was discussed by the Work Group.[79]

1. Reporting of Total Resource Cost ("TRC") Test Results

Consensus on Revised Strawman

The Utilities disagreed with the Strawman Position to discontinue reporting TRC Test results. The Utilities supported the continuation of TRC Test results as it provides a good baseline and comparison benchmark, while not incurring any additional cost. The information is useful to observe trends, provides baselines and comparison to the primary SCT, and it contributes to the overall Cost Benefit Analysis. OPC agreed the TRC is good for tracking

[79] Attch. E. The final calculations will be developed in the EAG.

purposes and provides a basis for historical comparisons and to other jurisdictions. Mr. Loper clarified that the TRC provides meaningful comparison with other jurisdictions and to EmPOWER over time if the assumptions are the same, however, that is often not the case.

The Work Group recommends the Commission continue reporting TRC Test results.

VII. Legislation & Third-Party Opportunities

A. Legislation/Policy

There were numerous suggestions on amendments to the EmPOWER statute, ranging from slight to more expansive changes, and several requests for policy guidance from the Commission.[80] Many of the proposals reflected themes that have been discussed throughout this process and some issues/proposals could potentially be addressed by the Commission rather than through legislation.

1. GHG Abatement

General Consensus

The Work Group agreed that the goals of EmPOWER should be changed to and focused on a GHG abatement framework/goals rather than MWh reductions and that any legislation should continue to provide flexibility to alter/determine program design and management of future cycles as necessary without being overly prescriptive.

The Utilities specified that any legislation should provide educational opportunities to enable customer acceptance; require implementation of programs aimed at GHG reduction while ensuring energy affordability with reasonable customer bill impacts; and provide full and timely cost recovery of program costs. The Utilities also stated that goals for each utility be set based upon a utility-specific, territory-specific study that assessed energy efficiency, GHG reduction opportunities, and any other relevant factors, and should include the State agencies that contribute to meeting those goals. The GHG goal should remain consistent throughout the program cycle to support administrative efficiencies and market conditions which will reduce costs to customers.

OPC explained that achieving Maryland's GHG targets must be the top consideration when setting EmPOWER's GHG targets. It sought the authorization of a new goal structure with a GHG focus, guidance on advancing GGRA targets and strategies and a GHG reduction goal, policy guidance on a target-setting process and considerations, measurement of GHG impacts on a lifecycle basis, and establishing a clear, ambitious and effective-/outcome-based LI program. OPC also sought policy guidance on the target-setting process and considerations, and how to balance GHG reductions with near-term costs and equity. OPC advocated for a rigorous approach to measure GHG impacts on a lifecycle basis and that an effective-/outcome-based target for LI programs is established. OPC also agreed with MEEA that the cost of non-EmPOWER GHG abatement must be a consideration.

MEEA specified that the General Assembly should direct the Commission to require the Utilities to maximize achieving GHG abatement savings through programs/initiatives that are

[80] Please note that legislation that was pending during the Work Group's meeting, such as HB 108/SB 524 and SB 528, were not considered. SB 528 and HB 108/524, if passed, may impact the Work Group's recommendations and actions that the Commission must take to comply with the legislation.

cost-effective at the portfolio/sub-portfolio level. Additionally, MEEA supported legislation that directed the Commission to consider alternative costs of GHG abatement through non-EmPOWER initiatives when determining utility GHG abatement targets – specifically, EmPOWER goals should be increased when doing so would cost less than complying with the State's GHG targets through other means.

Ceres supported establishing ambitious GHG reduction targets for EmPOWER and for similar targets specifically for LI customers, which has been addressed in legislation and discussed above. Energy efficiency is the least-cost resource delivering numerous benefits and should be recognized in statute. Ceres also supported the inclusion of beneficial electrification offerings under EmPOWER emphasizing equity and inclusion, and measures to minimize the long-term use of gas and the need for gas infrastructure. These programs should be in addition to – rather than in place of – current energy efficiency programs. Finally, Ceres supported legislation that encourages research and development of electrification of hard-to-reach segments and the creation of a stakeholder council to advise on the electrification of both commercial and industrial sectors.

Staff anticipated that PUA § 7-211 would need to be amended after the Commission determines the appropriate goal structure following the submission of the WG's Report. Staff recommended caution be exercised when considering potential amendments as they could preclude flexibility that may be necessary to respond to market changes or legislative-mandated environmental goals.

The Commission will need to determine whether the goals of EmPOWER should be shifted to GHG abatement and, if so, determine what amendments are necessary to implement the new focus of EmPOWER.[81] Additionally, the Commission will need to determine whether the Work Group's GHG abatement methodology is appropriate or if a different methodology should be utilized.

2. Equity

Non-Consensus

MEEA supported legislation that creates a framework for the magnitude of equity goals within EmPOWER which could provide support for the Commission in directing the Utilities and DHCD to implement equity-targeted GHG abatement programs. Additionally, the General Assembly should pass legislation with broad language describing equity to ensure ample opportunities for economically-disadvantaged communities and customers and those that have historically been or are currently being harmed by discriminatory practices. As part of this amendment, MEEA also recommended the establishment of a "uniform Statewide funding methodology and resultant equity program surcharge for equity-focused EmPOWER programs to ensure that disadvantaged households have fair access to such programs."

OPC supported further discussion on a new approach to Statewide-funding/-surcharge that focuses on equity. OPC also sought more specific terminology and noted that equity-related goals should identify a specific population with specific measures.

[81] *See* Attch. B.

The Utilities countered MEEA's position that disadvantaged customers should receive significant program support to electrify with little or no out-of-pocket costs as such a transition would significantly increase program costs and the EmPOWER surcharge.

The Commission should determine whether equity-related EmPOWER legislation should be pursued.

3. Natural Gas Phase Out/Fuel Switching

Non-Consensus

As previously noted, this was an issue of contention and the Stakeholders' positions on this item are consistent with positions taken during Work Group process on this issue.

MEEA supported legislation consistent with the MCCC, which would phase out the promotion of and incentives for new natural gas heating and hot water systems, replace-on-burnout, and new construction applications. MEEA sought specific language that made fuel switching (fossil fuels to electricity) a primary focus of EmPOWER under a GHG abatement goal framework. Statutory language to provide electrification incentives for disadvantaged households should be adopted that will result in little to no out-of-pocket costs and participation that is representative of this groups' Statewide presence.

Similarly, OPC sought guidance on how to transition away from natural gas in buildings within EmPOWER with an overall gas transition strategy that will protect customers, especially LI, as well as guidance on using EmPOWER for fuel switching. Montgomery County also expressed support for fuel-switching to be an eligible measure under the EmPOWER Maryland program.

The Utilities opposed any amendments that would result in restricting the encouragement of natural gas efficiency. They argued that as long as natural gas was a viable fuel option to ratepayers, customers who have a preference should continue to be encouraged through EmPOWER programs to purchase the most efficient gas equipment possible rather than lower cost, less efficient equipment. The Utilities further argued that restricting natural gas energy efficiency thus restricts the Utilities' ability to reduce GHG emissions across multiple fuel types and asserted that it should not be assumed that fuel switching will supplant the GHG emission reduction benefits derived from high-efficiency gas equipment and appliances. In addition, maintaining the potential for the emergence of clean fuel technology could further reduce overall societal transition costs.

A Commission decision on the larger issue of continuing versus ceasing natural gas incentives and natural gas generally will assist the Commission's determination as to whether such legislation/policy should be pursued.

4. Providing the Commission Authority to Consider Third-Party Proposals

Non-Consensus

OPC proposed legislation that would specifically permit the Commission to consider, evaluate, and implement third-party administration of the EmPOWER program if it found that other entities would be able to deliver more affordable and effective programs. MEEA agreed and failed to see the risk in such legislation.

Staff indicated, and DHCD and the Utilities agreed, that the Commission already can consider third parties in EmPOWER, therefore, legislation was not necessary. The Utilities added that unnecessary language in statutes should be avoided. DHCD noted that it submitted a proposal to the Commission to become a LI provider in 2011 for the 2012 to 2015 cycle and Baltimore City submitted a proposal, which was ultimately rejected, stemming from Case No. 9271 and the resulting Customer Investment Fund. Thus, Staff concluded that a mechanism/avenue already exists for third parties to make proposals to the Commission.

The Utilities indicated that such legislation could also open the door to counties and municipalities to be considered a third-party which could present subsidization issues. For example, a program being administered by Baltimore County, but is being funded by customers in Baltimore City through the EmPOWER surcharge may not be permitted to participate in/benefit from that program.

The Commission will need to determine whether OPC's legislative proposal should be pursued or if the existing process that allowed DHCD to become a provider is sufficient.

B. Third-Party Opportunities

1. Third-Party Definition

General Consensus

There was agreement that "third party" should be defined, but no specified agreement on the appropriate definition. MEEA recommended the following definition of a "third-party program": a program that is designed and implemented on a turn-key basis by an entity other than a utility or utility-paid program implementation vendor." MEEA noted that the definition could include municipalities, research organizations, trade associations, and companies that developed proprietary energy savings initiatives. MEEA's definition would not include programs run, in whole or part, by a utility or companies whose business lines include the contracted delivery of energy efficiency programs. OPC supported MEEA's third-party definition.

In response to initial comments by other stakeholders, the Utilities offered definitions of different entities that could be considered a third-party:

a. **Third-Party Utility Program Implementer/Administrator** – an entity that implements energy efficiency program(s) under the EmPOWER framework on behalf of a specific utility and operates within a specific utility's service territory.

The Utilities viewed this as the most prevalent Third-Party operation in Maryland.

b. **Third-Party Statewide Program Implementer/Administrator** – an entity that implements energy efficiency program(s) under the EmPOWER framework and operates beyond specific utility service territories/across the entire State.

The Utilities indicated that DHCD currently filled this role and met this definition.

c. **Third-Party Independent Program Implementer/Administrator** – an entity that implements energy efficiency programs under the EmPOWER

framework but operates independently from current utility funding and management structure.

This type of third-party is not present in Maryland and the Utilities questioned whether such a construct could effectively deploy programs.

MEA supported defining "third-party opportunities" as there were several variations noted in Stakeholders' initial written comments. Similarly, Oracle supported establishing a definition for "third parties" and "third-party administrators" as there are many variations across the country. Both OPC and Oracle cited a Brattle study[82] which found no particular administrative model was more effective than others and that utilities were the key stakeholder, along with State policies, to successful energy efficiency programs. Oracle also noted that the national trend was to move away from statewide third-party administrators as the sole provider of energy efficiency programs. OPC disputed that any such trend exists. The current Maryland approach – combined State agency (*e.g.*, DHCD) and utility administration – has been proven to be successful.

Oracle believed the definitions of third parties should differentiate between entities contracted by a utility and those working outside the bounds of a utility contract. There should also be strong data privacy protections in situations where vendors have access to customer data. Oracle noted that altering the current approach by adding a non-State agency or utility administrator could result in unnecessary and more costly administration.

The Work Group recommends the Commission adopt one or more of the referenced definitions, which will provide clarity in the event the Commission seeks to alter/expand how third parties operate under EmPOWER.

2. Third-Party Administration

Non-Consensus

OPC found this to be an opportunity to adopt foundational structures and regulations. OPC anticipated third parties' roles should "be viewed through the lens of whether excellence can be achieved within utility-centered administration or whether a greater role for third parties is needed to achieve it." OPC also supported using and developing competitive markets for energy efficiency and GHG goods and services.

OPC set forth the strengths and weaknesses of utility administrators versus third parties, which varied across multiple jurisdictions and included: singular focus on energy efficiency targets; integration of energy efficiency into resource planning; deployment of DER resources; leveraging customer relationships; leveraging and working with supply chain markets; access to customer data; motivation to use customer data to target savings; consolidation of administrative functions into a single entity; delivering Statewide consistency; and meeting the needs of a specific geographic area. OPC stressed the focus should be on determining the characteristics/prerequisites for energy efficiency excellence that are missing in Maryland and how to correct those issues, either at the utility or with increasing roles for third parties. It

[82] *See* Sanem Sergici and Nicole Irwin, *Energy Efficiency Administrator Models: Relative Strengths and Impact on Energy Efficiency Program Success*, November 18, 2019 – https://www.brattle.com/insights-events/publications/report-by-brattle-economists-evaluates-effectiveness-of-energy-efficiency-administrator-models/

explained the key foundations of a program's success, some of which are present in Maryland, as follows:

> **a clear, strong energy efficiency standard** – there must be ambitious targets, and it is unclear whether a new goal structure could achieve this; the lack of a LI target or standard is concerning;
>
> **no disincentives for energy efficiency and GHG savings** – OPC pointed out that natural disincentives for utilities towards energy efficiency must be mitigated through measures such as decoupling or lost revenue adjustments, but further investigation of the cost and efficacy of these are required;
>
> **performance metrics** – non-existent in Maryland; high cost to ratepayers of current cost-recovery limits space for performance metrics; third-party administrators require performance metrics; the Utilities support status quo;
>
> **Statewide integration/collaboration and strong program/brand consistency** – successful in Maryland, but there are still limits and weaknesses; inconsistencies across the Utilities (*e.g.*, midstream); and
>
> **effective and inclusive stakeholder oversight and engagement** – Maryland lacks a standing stakeholder board/council that other high-performing states with a utility-centered delivery model have.

OPC agreed that third-party programs should focus on providing savings where utility-implemented programs have not achieved. Such programs should have portfolio-level strategic plans to complement, not compete with, current programs. Furthermore, OPC noted that such programs should only be selected over utility-implemented programs if it can be demonstrated that it could achieve greater savings, a comparable level of savings more effectively/efficiently to utility-implemented programs, or increase access to EmPOWER from under-served programs.

OPC explained third-party opportunities could include program administrators and implementers, private-sector installers/vendors that receive incentives through programs, and independent vendors/service providers that work directly with customers but do not operate under the program administrator, and could be either private sector entities or State/local government entities. OPC explained that the Commission's focus should be on characteristics/pre-requisites for energy efficiency excellence that are missing in Maryland, and if those issues can be corrected with utility-centered delivery, or if third parties can play a larger role. OPC recommended a clear, strong energy-efficiency standard. It argued that the new goal structure is unclear, but actual targets must be ambitious and not based solely on past performance.

OPC highlighted that third-party programs in other jurisdictions focus on market transformation initiatives which complement existing utility programs. Such third-party programs include codes and standards, workforce development, and/or emerging technology programs. OPC asserted there is potential value in having third-party programs that are not currently addressed in the current EmPOWER structure. OPC also dismissed concerns about oversight as any third-party programs would still be held to the same management and oversight standards as the Utilities' programs.

MEEA supported consideration of third-party programs that focus on the delivery of savings that utility-implemented programs have failed to reach. Such programs should be

included in portfolio-level strategic plans to ensure they complement, not compete with, existing utility programs. MEEA explained such programs should only be favored over utility-implemented programs to the extent the programs can be demonstrated to either 1) achieve greater levels of savings, 2) achieve a comparable level of savings more effectively or efficiently in comparison with utility-implemented programs, or 3) increase access to EmPOWER benefits for under-served populations. Third-party programs should specify objectives and targeted populations in addition to being performance based. MEEA clarified that it was not advocating for an open market.

OPC expressed support of MEEA's criteria but suggested clarifying that the second criteria should be understood to include the full cost to ratepayers from utility-implemented programs.

Montgomery County supported OPC's and MEEA's positions that State and local governments be permitted to serve as third-party administrator/implementers to generate energy savings and GHG abatement efforts. Montgomery County explained it has established programs, such as the Montgomery Energy Connection program, and it has the ability to reach customers in a different manner than utilities. It asserted that counties and local governments could serve as a testing ground for innovative programs, possibly a carve-out for local governments, and could provide useful savings data to justify expanding local programs into utility-operated programs.

Montgomery County noted its ambitious locally adopted climate goals, which support Maryland's GHG reduction goals, but seek to achieve greater reductions on a local level. It expressed hope that local governments could be granted access to a small carve-out of EmPOWER funds for new program development and testing that could improve the EmPOWER program Statewide. It also explained that counties undertake activities at a local level that are not replicated by the Utilities' programs. Counties and municipalities are not attempting to compete with the Utilities, but existing programs or programs that can be enhanced with EmPOWER funding would result in a deeper reach with populations that have been more difficult to reach. Montgomery County also noted that local jurisdictions have a different type of trust with their residents and businesses such that customers may reach out to the County before the respective utility.

In response to questions from the Utilities, Montgomery County indicated that in addition to the Exelon-Pepco merger reporting requirement applicable to MEA, Montgomery County tracks energy engagement with residents, such as the number of CFL light bulbs recycled, the number of incandescent light bulbs swapped with LED bulbs, the number of QHEC referrals made to the resident's utility, and the number of engagements (digital and in person). Furthermore, Montgomery County indicated that these locally offered programs have sparked an interest in EmPOWER which otherwise may not have occurred.

Montgomery County viewed its position as a potential way to lessen or share the Utilities' burden of having to meet 100% of the EmPOWER goals. If local governments received EmPOWER funding directly, they could share a portion of the responsibility and be required to appear before the Commission just like a utility.

Prince George's County explained its situation was a bit more complex because it is made up of more than 20 municipalities with 3 different utilities. It questioned whether a third-party program could be simply within a municipality or whether it should be county-wide. Prince George's County noted that it provides annual reports to PHI on its progress in

implementing the merger conditions, such as the amount spent, number of kWhs saved, and the number of kWhs generated from solar projects.

The Utilities expressed concerns with using ratepayer-EmPOWER funds for third parties' programs as the Utilities are responsible for a majority of the goals. Rather than delegating the Utilities' responsibilities under EmPOWER or making the third parties equivalent to and function like DHCD and be responsible for a portion of EmPOWER goals, the Utilities preferred to collaborate with counties, municipalities, and third parties to find a better way to meet those goals.

MEA stated there were opportunities for non-utilities to offer energy efficiency and DR programs within EmPOWER. MEA stressed the importance of understanding how costs and savings from third-party opportunities and programs are paid for and evaluated, and how funding is allocated. MEA concluded that both the effects and value of such opportunities remain unknown but noted that programs could be designed to serve a distinct target market or cover an area where utility-run programs have struggled.

The Utilities urged the Commission to consider, prior to approving a framework that includes third parties with independent programs goals, the potential of duplication of utility programs, administrative efficiency, funding, goal impacts, and jurisdiction. In the event those issues are addressed, there would be additional burdens on the Commission to oversee third parties' compliance, review offerings, RFPs, contract development and approval, contract management, EmPOWER brand usage, customer satisfaction, goals, timely, accurate and standardized reporting, invoicing, tracking, EM&V, cost-benefit analysis, and cost recovery. As noted above, the Utilities cautioned that allowing counties and municipalities to run EmPOWER programs could have surcharge-related impacts resulting in customers funding a particular program through the EmPOWER surcharge, but not benefitting from it.

The Utilities opposed the "solutions" to current third-party opportunities. They explained that EmPOWER has already achieved national recognition without third-party entities administering programs. The expansion of EmPOWER to include third-party administration could result in regulatory and practical complexities at additional cost.

The Utilities, however, supported the expansion of programs to abate GHG within the EmPOWER framework and will continue to work with private-sector providers to support market growth and participation in EmPOWER.

Franklin Energy ("Franklin"), which provides energy efficiency and energy management services, urged the Commission to continue the current framework of the Utilities and DHCD as the sole, overall portfolio administrators. Franklin argued any change to the current framework could cause confusion in the marketplace of both customers and contractors. In support of its position, it cited customer trust and familiarity with their utility, customer data protection, and streamlining channels for third-party innovation.

Staff agreed with the Utilities that in the event a third party took over an area or program from a utility, it may be necessary to revise that particular utility's EmPOWER goals and funding. The Utilities agreed and indicated that it would be difficult to be held responsible for a third-party's performance.

The Commission will need to determine whether the current framework related to third parties within EmPOWER should be maintained or expanded as proposed by several of the

stakeholders. In the event the Commission elects to alter the framework, it should also consider the surcharge impact, how the third party will be compensated, *i.e.*, surcharge or another mechanism, and whether a utility's goals and funding levels should be altered.

3. Technical Conference vs. Stakeholder Board/Council

Non-Consensus

The Utilities continued to express support for the current process of evaluating and selecting third-party program proposals through the Staff-led Technical Conference. However, they acknowledged that the process could be improved, *i.e.*, establishing selection criteria for programs and developing a process to provide feedback regarding why programs were/were not selected to provide additional transparency. The Utilities recommended that such discussions continue as part of another work group/sub-work group process as this would likely be an extensive undertaking. The Utilities envisioned this process as more of an overhaul than a simple tweak, even with MEEA's proposed criteria.[83]

OPC disagreed with the Utilities and views the current Technical Conference approach as inadequate as it fails to identify and evaluate third-party programs. The current process is laborious for third parties and provides no transparency in the decision-making process, all of which disincentives third-party participation. OPC claimed that the process has not resulted in the use of third-party programs, they argued, because the Utilities get to decide if and when to employ them based on criteria they set internally.

Both OPC and Montgomery County supported the creation of a stakeholder board/council. OPC indicated that Stakeholder Boards/Councils have been established in many other states and provide input on utility-run programs, innovation, goals, *etc.*, and a Stakeholder Board/Council could be used in Maryland to provide ongoing input and oversight on EmPOWER programs (to compliment ultimate Commission oversight). Among other functions, the stakeholder board could be charged with implementing a more inclusive third-party process.

MEEA supported additional transparency in the selection process and suggested the issue could be moved out of this Work Group for further discussions. MEEA disagreed with the Utilities that this issue is a massive undertaking and highlighted the criteria set forth in its written comments to guide the discussions.[84]

Staff indicated there is already an established process for third parties to participate in EmPOWER programs, as parties are invited to offer proposals prior to beginning a new program cycle. The Utilities agreed and expressed support for the current process whereby Staff convenes a Technical Conference prior to a new cycle and third parties are invited to present program ideas. This process allows third parties to contribute to the Utilities and DHCD programs and goals, rather than having independent programs and goals.

The Commission will need to determine whether the current Technical Conference approach is sufficient or to adopt OPC's and MEEA's proposal to create a Stakeholder Board/Council. In the event the Commission elects to maintain the current approach, the Commission will need to determine whether there should be changes, such as those cited by the

[83] *See* Section VII.B.2.
[84] *Id.*

Utilities and MEEA, and if so, the process by which those changes should be made, *i.e.*, work group, public conference, *etc.*

4. Fuel Suppliers

Staff indicated there is not a process for competitive suppliers (electricity and natural gas) to offer efficient devices. To establish a process, Staff indicated questions, such as how savings would be counted, how the EM&V process would apply, and who "pays" for the savings, would need to be answered. OPC agreed that there remained questions about having fuel suppliers offer EmPOWER-related programs. However, such questions are the same as with other third-party programs and, therefore, could be addressed in the same manner.

The Commission will need to determine whether fuel suppliers should be included in EmPOWER and how to address the issues raised by Staff.

5. Third-Party Metrics

OPC noted performance metrics that reward savings/penalize failures are absent in Maryland. OPC argued the high cost to ratepayers of current cost-recovery is preventing performance metrics. Such performance metrics could also be imposed on third-party administrators.

6. Miscellaneous

OPC sought further investigation on the cost and efficacy measures to mitigate disincentives, such as decoupling, which removes the disincentive for energy efficiency savings.

VIII. Cost Recovery (Performance Incentive Mechanisms ("PIMs")), Bill Impacts, and Funding

A. The Utilities' Cost Recovery Proposal

Non-Consensus

The Utilities explained that the current cost recovery methodology has been designed to recover costs over the average term during which customers are realizing the associated energy and capacity savings benefits from the EmPOWER programs. This approach is similar to how cost recovery works for other distribution investments where customers pay for the benefits received over those assets' useful lives. In addition, the Utilities must raise capital to fund the EmPOWER programs the same as their other distribution investments. Thus, the Utilities continue to support the status quo of using a Commission-approved five-year amortization cost recovery approach and the Weighted Average Cost of Capital ("WACC") applied to the unamortized balances for the Utilities' EmPOWER investments.

The Utilities provided excerpts from the 2019 EmPOWER Maryland Cost Recovery Work Group Report in Case No. 9494, citing an ACEEE article that listed factors that contribute to a comprehensive policy to achieve high utility-sector energy efficiency savings. These factors included the establishment of energy efficiency savings targets and the alignment of utility ratemaking and energy efficiency with full program cost recovery, revenue decoupling, and

performance incentives.[85] The Utilities also cited a 2015 ACEEE study that set forth the four general types of incentives: shared net-benefit incentives (most common); energy savings-based incentives; multifactor incentives; and rate-of-return ("ROR") incentives.[86] The ACEEE study stressed that the main advantages of incentives is to place energy efficiency and supply-side resources on relatively equal financial footing, which allows shareholders to earn a return on either one, and that most incentives are performance-based rather than spending-based. In terms of disadvantages, there are costs to implementing an evaluation mechanism to verify performance-based savings and arguments as to why customers should pay the utilities for complying with regulatory and statutory mandates.

Several stakeholders expressed concerns with maintaining the status quo, namely OPC, MEEA, the Apartment & Office Building Association of Metropolitan Washington ("AOBA"), and Staff. First, some stakeholders claimed that the Utilities were already earning a significant amount from the EmPOWER programs. OPC's initial analysis, although subsequently modified, suggested that the Utilities earn significantly more than other states' utilities (or third-party program administrators) as a percentage of program costs, sometimes more than four times more. In support, OPC provided an initial comparison of BGE's, Pepco's, and PE's recent program administrator earnings which OPC argued were significantly higher than other states (the top 18 on ACEEE's most recent Energy Efficiency State Scorecard), earning approximately 16% to 21% compared to the next highest utility (Consumers Energy in Michigan) at approximately 13%. Of the 12 states depicted by OPC, Maryland and Washington, D.C. are the only jurisdictions with a non-governmental program administrator and no performance-based earnings. OPC's analysis was a combination of the ROR and the return associated with the outstanding unamortized balance which equal approximately 20% of the total spending in a program year. OPC acknowledged that the Utilities did not calculate their return percentages in the same manner.

After BGE subsequently provided OPC with updated data (OPC had based its earnings figures on 2020 data provided in an MEA report), OPC pointed out that BGE's earnings for its electric portfolio were estimated to be 14.4% in 2023 and 15.6% in 2025. OPC stated that this did not change its position on cost recovery as earnings were still significantly more than other leading states, and other Maryland utilities were earning between 16.3% and 20.3% in 2020. OPC also noted that the Utilities did not provide any calculations to support its position.

The Utilities strongly disagree with OPC's calculation that Utilities are earning 16% to 21% percent on EmPOWER programs. The Utilities argued that OPC's comparison of annual earnings to one year of annual program costs is irrelevant and not an appropriate nor "apples to apples" comparison. The Utilities' earnings and related return percentages have historically been calculated (and should continue to be calculated) based upon the Utilities' unamortized (and unreimbursed) balances that are being recovered over a 5-year period. The Utilities stated that OPC's comparison of annual earnings to one-year program costs (for example in Year 2023) incorrectly ignores the previous 4 years (Years 2019 to 2022) of programs costs that have not been fully recovered by the Utility. The Utilities' stated that, the unrecovered program costs for Years 2019 to 2022 appropriately earn a return on their unamortized balances and should be

[85] *See* ML 224774 - *In the Matter of the EmPOWER Maryland 2018 – 2022 Energy Efficiency, Conservation and Demand Response Program Plans Pursuant to the EmPOWER Maryland Energy Act of 2008*, Case No. 9494, EmPOWER Cost Recovery Work Group Report (April 15, 2019).
[86] https://www.aceee.org/sites/default/files/publications/researchreports/u1504.pdf

included in any earnings percent calculations. The Utilities further noted that the revenue requirement is calculated on the unamortized balance net of deferred taxes (not gross programs costs) which lowers the return earned by the Utilities.

Next, the aforementioned stakeholders opposed the status quo because there is no plan to reduce the unamortized balance. This was one of the Commission's specific concerns when it authorized the 2021-2023 Program Cycle.[87]

AOBA also claimed that cost recovery, as well as PIMs, were not addressed at a granular level to ensure equitable ratemaking determinations and fair treatment by rate classes for each utility. AOBA argued that cost recovery determinations should be made on a utility-by-utility basis in a STRIDE-like case, and should consider differences in program structures, participation, and cost by utility and rate class. It cited the Building Energy Performance Standards being pursued at State and County levels resulting in commercial buildings being more energy efficient and that GHG reductions are likely to follow.

After the Work Group's initial Cost Recovery meeting, the Utilities submitted comments which highlighted the success of EmPOWER as it has remained cost effective by a 1.3:1 ratio according to the latest Guidehouse study. Additionally, the Utilities noted that EmPOWER has resulted in reducing average energy use per customer over the 13 years of EmPOWER.

The Utilities explained that the purpose of amortization is to avoid front-loading costs and that it helps align the payment of costs and the receipt of benefits of a program to customers. They pointed out that the average measure life of the Utilities' investments in EmPOWER programs has been more than 7 years, but the amortization schedule was only 5 years.

The Utilities also claimed that maintaining the status quo provides the best balance of costs versus benefits to customers, minimizing annual fluctuations, in relation to the total surcharge costs over a 10-year period and, given the current economic conditions, unnecessary annual increases and drastic year-over-year changes to the surcharge should be avoided. Finally, the Utilities noted that the upcoming cycle has significant uncertainties related to new programs, costs, and goal structures as EmPOWER moves toward reducing GHG emissions, thus, the Utilities argued that the status quo will allow the Utilities the opportunity to adjust to the new structure and the new programs that will be needed to meet the new goals.

In response to criticisms that the Utilities' proposal does not reduce the unamortized balance, the Utilities proposed the following to address the unamortized balance: any over-collection from the prior year's balance would be netted against the revenue requirement for the subsequent period in order to mitigate any increase in the surcharge; and if the over-collection is large enough to offset the surcharge increase, the remainder of the imbalance would be applied to the unamortized balance in the following year.

In advance of the Work Group's final meeting, the Utilities provided a 10-year comparison of 1) the status quo methodology (the Utilities' recommendation), 2) the pay-down

[87] In Order No. 89679, which authorized the transition to the 2021-2023 Program Cycle, the Commission found the analysis provided in MEA's EmPOWER Program Cost Analysis to be a useful tool in continuing the discussion on PIMs and future cost recovery for the EmPOWER programs. Order No. 89679, *slip op.* at 19, para. 35. The Order stated, "The Commission directed the Cost Recovery Work Group to discuss the PIM proposals included in MEA's Cost Analysis, and any others the Work Group finds appropriate, for the Commission's consideration. Specifically, the Commission directs the Work Group to focus on solutions to address the growing unamortized balance." *Id.* At 19-20, para. 35.

of the unamortized balance over 10-years at the WACC and expensing all new program costs beginning 2024 (MEA/OPC recommendation), and 3) the pay down of the unamortized balance over 10-years at the WACC and expensing the behavioral program, utility administration, EM&V and marketing costs in 2024 and retaining the 5-year amortization of remaining program costs over 5 years beginning in 2024 (Utility comparison scenario).[88]

The Utilities recommendation provides a relatively level surcharge amount over the initial 10-year period whereas the OPC/MEA recommendation results in a large step increase in 2024 and a larger surcharge amount for the 10-year period than the status quo scenario. The Utilities' comparison scenario (number 3 above) results in a ramping up of the surcharge from current levels over the initial 5 years, then a higher surcharge amount over the following 5 years while lowering the unamortized balances.

From another perspective in comparing these scenarios, the Utilities provided a table comparing the revenue requirements of the status quo 5-year amortization forecast with the revenue requirement of the 10-year amortization and expensing of future program costs. The Utilities provided the table out to 2047.[89] This comparison revealed that customers would see a cumulative higher payment of their surcharge peaking in 2033 of nearly $600 million without resulting in cumulative savings until 2043.

B. SMECO's Cost Recovery Proposal

SMECO proposed to pay down the unamortized balance over 10 years beginning in 2024. It explained it had expensed all DR costs and in 2024 SMECO will seek to expand the expensing of energy efficiency costs. This approach would raise the surcharge which would not begin to lessen until 2033, when the unamortized balance is paid off. Based on the MEA/OPC model, SMECO estimated it would cost its members approximately $33.77 million more between 2024 and 2035 by paying down the unamortized balance.

SMECO expressed concern about expensing given the potentially large dollar figures when paying down the unamortized balance and expensing programs going forward. However, SMECO believed something in the middle could be appropriate. OPC was generally supportive of SMECO's position and raised the potential of "smoothing" the transition to ease the surcharge impact, but there was not significant discussion on this proposal.

C. The Utilities' PIMs Proposal[90]

Non-Consensus

The Utilities cited the EmPOWER Cost Recovery Work Group Report filed in Case No. 9494 wherein the Utilities expressed concerns about the bill impacts resulting from EmPOWER and supported controlling bill impacts to achieve the energy savings goals at costs lower than forecasted.[91] In that report, the Utilities supported a Shared Savings PIM that would reward a utility for achieving performance in excess of goals and reducing the cost of achieving

[88] Since the Utilities provided this information in advance of the Work Group's final meeting, stakeholders were not provided the underlying assumptions, calculations, and supporting workpapers, and did not have sufficient time to verify and/or challenge the accuracy of the Utilities' findings.
[89] *See* Attch. E.
[90] In this section only, the Utilities do not include SMECO, whose Cost Recovery Proposal is included in Section B.
[91] *See* ML 231480 in Case No. 9494, EmPOWER Cost Recovery Work Group Report at 14-15 (August 14, 2020).

targeted energy savings that result from its programs, as well as having no penalty for failing to meet the respective goal. The Utilities continued to support that proposal recognizing that this is the only PIM that promotes reducing bill impacts to customers.

Several stakeholders expressed concerns with the Utilities' proposal. First, MEEA found that the proposal could incentivize inflating budgets, which may be already occurring so that the Utilities can come in under budget and earn more money. MEEA summed up the Utilities' proposal as, "The best way to reduce rate impacts is to pay the Utilities more." MEEA also averred that the Utilities are already delivering/have a responsibility to deliver programs in a cost-efficient manner and questioned why an incentive is needed to perform more efficiently. MEEA asserted the Utilities should not be rewarded for delivering approved programs in a more cost-effective manner while meeting the Commission's policy objectives and directives as this is already the obligation of the Utilities to their customers. MEEA found the Utilities' proposal disrespectful to LI customers as the Utilities claimed to be concerned with the surcharge impact on one hand but sought more money for shareholders on the other. Additionally, MEEA also claimed that LI programs would likely be impacted because those programs are more costly to implement.

OPC stated that the Utilities already have a clear track record of spending less than their budgeted amounts. OPC gave the example that in the previous cycle's (2018-2020) spending on EmPOWER was approximately 83% of the budget, resulting in approximately $84 million in savings for ratepayers compared with what the Commission had approved. If the PIM proposed by the Utilities had been in place at that time, all of the Utilities would have achieved the maximum value of the proposed PIM, approximately $30 million.[92] Because of this history and the concerns raised by MEEA, OPC adamantly opposed earnings being tied to the under-utilization of budgets. Furthermore, neither MEEA nor OPC could justify the amount the Utilities are already earning and then adding a PIM on top of those earnings. Similarly, Staff questioned why a PIM on top of the Utilities' earnings should even be considered if the status quo is going to be maintained. Staff pointed out that the discussion of the five-year amortization structure in the previous work group was in the context of new programs, which is different from the Utilities' current proposal to apply a five-year amortization period to mature programs.

AOBA shared MEEA's concern about the potential for inflated budgets. Additionally, AOBA expressed concerns as to how a PIM would be implemented in terms of impacting various rate classes and believed such impacts would vary by utility. AOBA concluded with its opposition to ROE-related incentive structures and that any incentives should be linked to the value of benefits achieved through the utility's programs.

The Utilities indicated they would continue to consider alternatives and agreed that the only way for the unamortized balance to be paid down would be to increase the surcharge.

In subsequent comments, the Utilities responded that all filings, especially budgets, are fully transparent and are subject to scrutiny from all stakeholders and approval by the Commission. The Utilities also issue regular RFPs to ensure programs are being delivered in a beneficial way to customers while keeping the surcharge as low as possible. Furthermore, the Commission and stakeholders review the Utilities' progress in terms of meeting goals and the

[92] The Utilities questioned OPC's support for its calculations that could not be verified as they were produced late in the Work Group process.

amounts spent through the well-established semi-annual reporting and hearing process. With an incentive, the Utilities are encouraged to achieve their goals with even more efficiencies and deliver programs with lower costs. In response to OPC, the Utilities cautioned against "back casting" and, emphasized the significant uncertainties with the future EmPOWER goals and the transition of EmPOWER to a GHG focus, and continued to note that they would be transparent throughout the process. Recognizing all the parties' comments as well as these uncertainties, the Utilities proposed delaying the PIM to year 3 of the first program cycle to provide all parties and the Commission with additional time to better understand all aspects of EmPOWER and the PIM going forward. The Utilities' alternative proposal received the same opposition as maintaining the status quo.

In response to AOBA, the Utilities confirmed that they model the cost-benefit analysis at the time programs are filed with the Commission and that the programs are evaluated with annual cost-effectiveness analyses that are reported to the Commission.

In relation to linking the overall earnings from EmPOWER to performance, the Utilities stated the current methodology treats EmPOWER investments in the same manner as physical distribution plant investments, as investments are amortized over the estimated life of the benefits such that customers do not pay for savings/benefits before receiving them. This methodology, which reimburses the Utilities for actual financing costs at the WACC, puts EmPOWER investments and distribution investments on a level playing field while providing full cost-recovery to the Utilities. If a full-expensing model is adopted, benefits and costs are not aligned to customers.

The Utilities advocate that providing full cost recovery and performance incentives are two separate components of a comprehensive strategy to achieve high utility targets, rather than OPC's suggestion of a performance-based earnings based upon a GHG goal. In subsequent comments, the Exelon Utilities indicated that they would consider a structure under which once goals are agreed upon, a PIM could be tied to the ROR on future program expenditures with a +50 basis point award for achieving 110% or greater and a -50 basis point reduction for achieving less than 90% of the agreed upon future goal. Recognizing that there are multiple PIM designs the remaining utilities would use the shared savings PIM that was originally proposed to test and provide insights on different PIM approaches to the parties. The Utilities clarified that the PIM (bonus/penalty) would be within the construct of EmPOWER and the surcharge, rather than a rate case.

Recognizing the concerns on its PIM proposal, the Utilities again cited the significant uncertainty of transitioning EmPOWER to focus on a GHG Abatement goal along with the cost to achieve this goal and recommended their PIM proposals be implemented no sooner than the last year of the next cycle to give all parties additional time to better understand all associated aspects. Based upon the above concerns and uncertainty, the Utilities also responded with the recommendation that the specific PIM parameters (*e.g.*, thresholds, % share of net benefits, *etc.*) be created in tandem with the EmPOWER goal. Recognizing other parties requested additional discussion around the goal after the GHG Abatement Potential Study is complete, the Utilities suggest finalizing the PIM parameters at the same time to better support modeling of the potential impacts.

In response to a request from OPC, the Utilities provided their own estimates of the revenue requirements and surcharge impacts from a pay down of the balance over 10 years. In

order to provide an apples-to-apples comparison between the status quo and the pay down, OPC asked the Utilities to model a 15-year time period with EmPOWER ending after 10 years and the balance being down at that point.[93] According to the Utilities' analysis, ratepayers would pay higher amounts initially as contributions were made toward the balance. However, the cumulative effect would be a net savings to ratepayers of approximately $500 million – discounted to present value, the savings from the pay down would be approximately $300 million.

The Utilities proposed that any PIM be triggered based solely on the achievement of a specific EmPOWER goal to avoid the complexity of a weighted goal or achievement of multiple goal elements and introducing additional uncertainty into the transition of EmPOWER to being focused on GHG reductions.

D. MEA's Proposal

MEA highlighted that the EmPOWER program has accumulated over $800 million in unamortized costs and agreed with OPC that PIMs could, in conjunction with a pay down plan, reduce program costs and potentially eliminate the unamortized costs over the long run by incentivizing efficiency. In 2020, a MEA contractor, Oculus CAS, LLC ("Oculus"), analyzed the unamortized costs and potential of PIMs to finance the uncollected balance. Oculus designed two PIMs for consideration based upon the current EmPOWER structure by maintaining most of the critical elements of the program and providing incentives that benefit both the Utilities and ratepayers. While Oculus found that the PIMs would result in an initial spike in monthly rates, the rates would gradually fall below the current bill impact. MEA argued that strict adherence to the approved budget was required for an incentive mechanism and that the Utilities should accomplish the energy-savings goal within that budget.

MEA opined that the TRC test, which estimates the net-present value of benefits and costs, could be used evaluate a program's cost-effectiveness. MEA sought to have the Utilities meet the TRC threshold of 1.0 for the Residential, Commercial, and Industrial sub-portfolios to ensure benefits exceed costs. In addition to improving program performance, PIMs can improve the planning process to ensure expected benefits are realized.

MEA proposed a true-up process to balance revenue, costs, and incentive payments. A potential approach would be to use targeted energy savings to build the potential costs into rates and have a reserve amount annually for potential incentive payments. In the event goals are not met, the reserve could be applied to the existing unamortized balance. If the reserve was one-third of the annual incentive amount, it could help reduce the likelihood of a revenue shortfall and limit future rate shocks.

The Utilities found MEA's cost recovery and PIM proposal to be an inaccurate picture of potential impacts to customers. The Utilities noted the following issues: the model did not include all EmPOWER program costs and unamortized balances; it did not show the potential for increasing energy use resulting from EVs and electrification; and the resulting bill impacts were inaccurate. Additionally, the Utilities believed the SCT was the more appropriate test. MEA clarified that for whatever test is used, the cost effectiveness must still be greater than 1.0.

[93] Under the OPC proposal, EmPOWER would be treated as an annual expense by 10 years and therefore, if the program ended, all costs would end at the same time.

MEEA disagreed with MEA's proposal to adopt an incentive component that promotes efficiency in spending.

E. OPC's Proposal

OPC proposed that the current unamortized balance be paid down over 10 years in combination with a two-part system to make the Utilities' earnings performance-based: 1) year 1 would include a small performance award that gradually increases as earnings from the unamortized balance decrease; and 2) have a performance-based adjustment to the ROR on the unamortized balance so that all Utility earnings can be performance-based. OPC would treat EmPOWER as an expense since raising capital would no longer be necessary, and the performance metric would include GHG reductions, energy efficiency (kWh/gas savings), and LI savings. Once the unamortized balance is paid, the Utilities would earn based on the success of their programs and would no longer earn a return on the past balance.

OPC asserted performance-based earnings produce better program outcomes and identified several principles and measures of success: earnings should be based on performance towards desired outcomes; there should be a limited number of clear metrics associated with EmPOWER earnings; consistency with Utility-wide PIMs if PIMs are adopted; there should be ambitious but achievable performance targets with both positive and negative changes in earnings based on performance; total EmPOWER earnings should be in line with the earnings of peer programs in other states; the unamortized balance should be paid off over time; and the evaluation and verification structure should be established so calculations are transparent.

OPC's proposal included four components. First, the current $800 million unamortized balance should be paid down over an approximate 10-year period (or over a period that corresponds with planning cycles, *i.e.*, 6 or 9 years, or beginning in the last year of the current cycle resulting in a 7- to 10-year amortization period). This will benefit customers over the long term, but OPC acknowledged that the EmPOWER surcharge would increase in the short term as a result. OPC's proposal would shift EmPOWER to be an expense-based recovery for future cost, which they claimed was the predominant approach nationwide, thereby having the surcharge covering the full cost of EmPOWER programs on an annual basis.

In relation to performance metrics, OPC proposed the total lifetime GHG savings – 40%-50% weighting; total lifetime electricity and gas savings – 40%-50% weighting; and lifetime energy savings for LI households in excess of a target set for DHCD – 10% weighting. While DHCD has primary responsibility for meeting the LI target, OPC averred that the Utilities have a role in supporting LI savings. OPC subsequently commented that a simpler performance metric based only on GHG reductions would be an acceptable starting point.

Next, OPC proposed a target annual performance award of 3% of program budgets for achieving 100% of the savings targets and the award would be gradually phased in over 10 years when the unamortized balance is fully paid and the full 3% award would be available. OPC proposed that 75% of the award be available starting at 75% of achievement of each target and increase up to 125% of the award for achievement of 125% of targets on a straight-line basis. For year 1, OPC proposed a phased-in approach wherein the award at 100% of the target be half of the ultimate award amount at the end of the amortization period.

Finally, OPC proposed a performance adjustment to returns of the unamortized balance as that amount is paid down. Specifically, OPC proposed a 7% ROR during the phase-in period

which could be adjusted up or down by 100 basis points for goal achievement of 75% and 125%, respectively, on a straight-line basis.

OPC found that the cumulative earnings (both return on the balance plus the performance award) for the Utilities achieving 100% of goals would be almost identical to returns whereby the unamortized balance was simply paid down using the WACC. OPC highlighted that once the balance is paid, its proposal would allow the Utilities to continue to earn from EmPOWER, an opportunity that would not be available in a pay-down/expensing scenario.

In relation to the surcharge impact, the pay down would be the primary factor in any increase, and the addition of a performance-based incentive would not result in a materially different surcharge than a simply pay-down approach. OPC highlighted that its PIM proposal was not intended to save ratepayers money (the increase would only be slight) but to incentivize high performance by the Utilities. The pay down itself would result in long-term savings, however, OPC estimated that achieving the pay down would require the average surcharge to increase by 94 cents per month, but at the end of the pay down period, ratepayers would pay 80 cents less per month.

Under OPC's proposal, in 2024, the Utilities estimated in a "pay down" approach that BGE's residential electric customers' annual surcharge impact would see approximately a 17% increase (or $1.13 per month for an average electric customer in the first year). The table below sets forth for Utilities' estimates of monthly surcharge impacts during the pay down period.

Similarly, Pepco and DPL noted there would be an approximate 32% increase (approximately $2.13 per month) for an average electric customer in 2024. OPC's proposal included an estimated monthly surcharge versus the status quo and was an "all in rate," not broken down by individual rate classes. OPC clarified that its calculations were rough estimates to demonstrate what could occur and accepted that the Utilities' calculations might be closer; in either case, OPC believed the impacts were reasonable.

	Estimates from Joint Utilities		
	Monthly EmPOWER Surcharge (all ratepayers)		
	Paydown	Status quo	Change in surcharge
2023			
2024	$7.69	$6.56	**$1.13**
2025	$7.63	$6.72	**$0.91**
2026	$7.57	$6.93	**$0.64**
2027	$7.51	$6.93	**$0.57**
2028	$7.45	$6.74	**$0.70**
2029	$7.38	$6.74	**$0.64**
2030	$7.32	$6.74	**$0.58**
2031	$7.26	$6.74	**$0.52**
2032	$7.20	$6.74	**$0.46**
2033	$7.14	$6.74	**$0.40**
2034/thereafter	**$6.14**	**$6.74**	**($0.60)**

The Utilities viewed OPC's proposal as potentially being a "penalty PIM" because the proposal has a potential for the Utilities not to recover WACC and therefore full cost recovery on previous program expenditures. At the same time, the Utilities will be beginning a new cycle, likely with a new set of programs, which could be more complex and expensive in order to address the new goal structure. Therefore, the Utilities argued that OPC's proposal introduces significant risk related to recovery of the WACC and full cost recovery because the Utilities would rely on PIMs to earn the WACC for new programs that they have not previously executed, for new unknown goals focused on GHG reductions, and spending on previous programs.[94]

OPC questioned what the Utilities believed to be an appropriate surcharge increase if they considered $1.00/month to be too much. The Utilities did not provide any level of surcharge impact they thought would be reasonable. However, the Utilities did note that customers would see a cumulative higher payment of their surcharge peaking in 2033 of nearly $600 million, which the Utilities believe to be unacceptable. OPC argued that unless the surcharge is increased, the unamortized balance issue will not be addressed and urged the Commission to dismiss any proposal that did not include a plan to pay down that balance. OPC stated that the Utilities' objection to any change in the surcharge to pay down the balance does not result in net long-term savings to ratepayers and postpones final reconciliation of the balance in a way that results in higher returns to the Utilities.

OPC argued it is not appropriate to add incentives on top of existing returns without making counteracting adjustments to the Utilities' earnings. OPC favored a PIM that focused on maximizing savings and benefits rather than cutting costs.

OPC also agreed that the verification of savings for the purpose of calculating a PIM award should not be fundamentally different from the current process. OPC expressed confidence in the existing robust and transparent evaluation processes but acknowledged that new methods and assumptions are needed to estimate lifetime GHG savings versus annual energy savings. OPC envisioned an additional process/proceeding to design and assess the financial and logistical details of changes in cost recovery and utility earnings. In the event a consensus is not reached, the status quo could be maintained; however, that would be detrimental to ratepayers who will continue to incur costs of the unamortized balance.

MEEA supported OPC's proposal to address the amortization balance noting it was the only proposal on the table. MEEA agreed that a PIM that would be additive to the Utilities' already excessive earnings should not be considered. Rather, MEEA argued that PIMs must be part of a plan for reducing the amortization costs to ratepayers. MEEA stressed that the Commission wanted the unamortized balance addressed; therefore, there should not be a PIM unless/until the balance is addressed.

The Utilities noted concerns with OPC's cost recovery proposal and PIM. Since it is based on MEA's model, they claimed the results are not accurate for the reasons mentioned above, and OPC's proposal introduces a new goal-weighting approach with additional factors, such as lifetime measuring savings, which produces competing goals and undermines the focus of the State's energy goals. The Utilities argued that the current process keeps the surcharge stable and avoids significant annual increases, whereas OPC's proposal would result in a large increase to the surcharge, which would remain higher over the next 10 years (2024 through

[94] OPC did not consider the inability to recover the WACC to be a penalty.

2033), and it would not be until 2034 that the surcharge would decrease to the point where customers are paying less than they are today. Additionally, the Utilities calculated that customers would not "break even" (in terms of extra surcharge costs vs. benefits) in OPC's pay-down scenario until 2043.[95] The Utilities noted additional concern with this concept because with the goal structure changing, it is most likely that the cost of programs will increase, further increasing the cost to customers if OPC's "expense everything" proposal were accepted.

At the last meeting, OPC indicated it could support a single GHG abatement target linking earnings to performance and a phased-in PIM over the next cycle as it was a simpler approach. MEA supported OPC's simplified proposal. The Utilities also preferred a more simplistic goal tied to a PIM based on its proposals but did not support OPC's initial multi-tiered goal.

F. MEEA's Position

MEEA favored a broader discussion rather than solely focusing on the near-term impact of increasing the surcharge without consideration of the long-term savings to customers. It pointed out that when it reviewed these costs several years ago, the Utilities' distribution investments dwarfed the EmPOWER surcharge and related investments. MEEA acknowledged the Utilities were entitled to earn something, but the issue was how much as the current level of return was excessive.

MEEA noted the importance of an equity metric but was concerned that a net-benefit PIM or a budget-limited PIM (spend less, earn more) would work against under-served populations as those programs have not been cost effective in the past. In response to a question from Staff as to what type of equity-related program the Utilities could offer that are not being addressed by DHCD, MEEA stated a LI goal was not necessarily intended to be met entirely by DHCD and noted the Utilities have done LED bulb distribution at food banks for several years. The Utilities have existing relationships with the manufacturers and distributors of the LED bulbs and it would be easier for the Utilities to continue those activities rather than having DHCD start from scratch. MEEA also noted the potential for Utility-related appliance promotions and other similar program models.

G. Ceres' Position

Ceres supported PIMs generally and recommended that any approved PIMs include the following best practices: (1) encourage the delivery of cost-effective energy efficiency; (2) be based on clearly-defined goals and activities that are monitored, quantified, and verified; (3) be available for activities for which the customer plays a distinct and clear role in bringing about the desired outcome; (4) avoid perverse incentives; and (5) be set at an amount that is effective and reasonable, and balancing/meeting all of the principles. Ceres proposed general PIM concepts for consideration, including a PIM to reduce GHG emissions; an equity-focused PIM aimed at serving historically disadvantaged communities, *e.g.*, GHG abatement, participation by renter versus homeowner and housing type, geographic distribution, percent of LI-eligible participation, demographic data, and impact on energy burden; and a Demand Flexibility PIM to

[95] The Utilities' analysis is attached as Attch. F.

encourage shifting, shaping, and shedding of load.[96] Ceres concluded that caution should be used when employing PIMs.

MEEA generally supported Ceres' PIM principles provided the unamortized balance is addressed. Specifically, MEEA cited Ceres' statement that a PIM should not provide "perverse incentives," *e.g.*, encouraging the inflation of budgets. MEEA also agreed with OPC and Ceres that an equity-related PIM was appropriate, provided the Utilities are held accountable for associated, measurable outcomes. Such a PIM would be tied to achieving measurable benefits that are complementary to, not competitive with, DHCD's programs. However, MEEA did not support incentivizing/rewarding the Utilities for doing a good job of marketing/promoting LI programs as the Utilities already have an obligation to do so and should not be paid more for that obligation.

H. AOBA's Position

AOBA reiterated that the proposals and discussion were generic and advised that consideration must be given to specific rate classes. It noted that commercial customers are already doing a great deal to operate more efficiently and have reduced GHG outside of existing utility programs. Activities that are independent of those programs must be considered in terms of their impact on the Utilities' achieving their goals and the appropriate distribution of cost recovery responsibilities among the various rate classes. AOBA highlighted the importance of this consideration by citing the Montgomery County's Building Energy Performance Standards.

I. Staff's Position

Staff did not have a specific proposal for a PIM structure. Staff is concerned with the potential increase in costs associated with the evaluation of EmPOWER with an incentive in play for reaching certain metrics. The evaluation process is not an exact science and there are many reasonable assumptions made by experts for both the Statewide Evaluator and the Commission's Independent Evaluator. Meetings are held with a wide range of stakeholders that have the opportunity to provide input on the process. Generally, the current structure is collegial and agreement on evaluation processes, assumptions and results is achieved. There are disagreements and the Commission's Independent Evaluator will discuss these issues in the Verification Report and occasionally the Commission will make a final decision on an issue. Staff is concerned that with an incentive on the line, there may be a higher level of disagreement between the parties, which could lead to non-consensus evaluations and ultimately higher costs for the EM&V process. Staff is not against PIMs and believes OPC's and MEA's proposals should be considered by the Commission and if needed, further explored, but Staff wanted to raise its concerns with potential costs and evaluation challenges.

The Commission will need to decide whether to accept the Utilities' request to maintain the current EmPOWER cost recovery mechanism (the status quo) in light of changing goal structures, accept one of the combined pay down/PIM proposals, select either a pay-down proposal or a PIM, or whether PIMs are appropriate for EmPOWER programs.

[96] Please note that when the Ceres proposal was made, it was not aware of the large unamortized balance and its PIM should be considered outside of the unamortized balance. Ceres clarified that it did not support the Utilities earning additional amounts on top of a LI program given the large unamortized balance.