PUBLIC SERVICE COMMISSION OF MARYLAND

Recommendations on the Future of EmPOWER Maryland

Pursuant to Section 3 of Chapters 14 and 780 of the Acts of the General Assembly of 2017 and Section 9 of Chapter 38 of the Acts of the General Assembly of 2022

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Table of Contents

I. Introduction

In 2017, the Maryland General Assembly enacted Senate Bill 184/House Bill 514 which updated the electricity savings goals for the EmPOWER Maryland Program and extended the Program through 2023. Specifically, Section 3 of SB 184/HB 514 requires:

> [O]n or before July 1, 2022, the Public Service Commission shall determine the advisability of maintaining the methodology and magnitude of the savings trajectory established in § 7–211(g)(2) of the Public Utilities Article, as enacted by this Act, as the basis for designing cost–effective energy efficiency and conservation programs and services in subsequent program cycles that the Commission shall authorize beginning with the 2024–2026 program cycle.

This report contains the Maryland Public Service Commission's recommendations to the General Assembly on goals and cost-effectiveness for EmPOWER beginning in 2024.

On December 18, 2020, the Commission issued Order No. 89679 which established the Future Programming Work Group to aid the Commission in answering the directives outlined by the General Assembly in SB 184/HB 514.[1] The Work Group filed its final report with the Commission on April 15, 2022.[2] The Commission received additional written comments on the Work Group report through April 25, 2022 and held a legislative-style hearing on May 5, 2022, to review the report and corresponding testimony. The Commission issued Order No. 90261 on June 15, 2022, approving the partial consensus greenhouse gas (GHG) abatement goal structure and adopting the consensus cost-effectiveness test as filed by the Work Group.[3] The information in this report is based on the Work Group report, the written and oral testimony before the Commission, and Commission Order No. 90261. The Commission recommends the

[1] Maillog No. 233021, Order Authorizing Transition to EmPOWER 2021-2023 Program Cycle.
[2] Maillog No. 240203, Future Programming Work Group Report.
[3] Maillog No. 241115, Order 90261.

General Assembly adopt the GHG abatement goals and cost-effectiveness recommendations included in this report.

II. Legal History of EmPOWER

In 2006, the North American Electric Reliability Council issued its Long-Term Reliability Assessment, warning that increasing load would compromise electricity supply and reliability in the absence of usage reduction.[4] In response, the General Assembly passed the Maryland Energy Efficiency Act of 2008 establishing the first iteration of the EmPOWER program. The EmPOWER Act created statewide goals of both a 15 percent reduction in per capita electricity consumption and in-peak demand by the end of 2015. The Utilities[5] responsible for meeting the statewide goals achieved 99 percent of the electricity consumption goal and 100 percent of the peak demand goal by the end of 2015.

Prior to the expiration of the original goals, the Commission received comments and held proceedings to establish updated goals for EmPOWER. On July 16, 2015, the Commission issued Order No. 87082[6] which established the current two percent electricity savings goal as a percentage of total electricity sales. In 2017, SB 184/HB 514 codified the new two percent goal into law. At the end of the 2018-2020 program cycle, the Utilities again met their statutory goals. The EmPOWER programs are currently in their fifth three-year cycle (2021-2023) and the Commission continues to monitor the Utilities' performance semi-annually for the 2021-2023 program cycle.

[4] North American Electric Reliability Council, *2006 Long-Term Reliability Assessment*, October 2006, https://www.nerc.com/files/LTRA2006.pdf.
[5] The Utilities include the Potomac Edison Company, Baltimore Gas and Electric Company, Delmarva Power & Light Company, Potomac Electric Power Company, and Southern Maryland Electric Cooperative. Washington Gas Light Company also participates in the EmPOWER programs but does not currently have a statutory goal.
[6] Maillog No. 171275.

In 2022, the General Assembly passed the Climate Solutions Now Act (SB 528) increasing the electricity savings goal to 2.25 percent in 2025 and 2026 and to 2.5 percent beginning in 2027. Section 9 states that:

> [I]t is the intent of the General Assembly that the Public Service Commission continue with the submission of plans and making the determinations required under Sections 2 and 3 of Chapters 14 and 780 of the Acts of the General Assembly of 2017 [and that] the determination of the advisability of maintaining the methodology and magnitude of the savings trajectory established in § 7–211(g)(2) of the Public Utilities Article shall take into account the changes made in § 7–211(g)(2) of the Public Utilities Article, as enacted by Section 4 of this Act; and require that the core objective of the alteration to percentages for 2025 and later years under § 7–211 of the Public Utilities Article, as enacted by Section 4 of this Act, change from electricity reduction to a portfolio of mutually reinforcing goals, including greenhouse gas emissions reduction, energy savings, net customer benefits, and reaching underserved customers.

The Commission approved the Work Group recommendation to transition EmPOWER to a GHG reduction goal structure. The new program goals will require statutory amendments. If the law is not amended during the 2023 Session, then the Utilities will move forward with plans for the 2024-2026 program cycle that comply with the current goals, as amended by the Climate Solutions Now Act.

III. Applicable Law

There are several provisions under the Public Utilities Article (PUA) that are relevant to the Commission's oversight of EmPOWER and the issues contemplated in Section 9 of SB 528. First, under the Commission's general authority to regulate utilities, PUA § 2–113(a)(2) requires the Commission to consider:

(i) the public safety;

(ii) the economy of the State;

(iii) the maintenance of fair and stable labor standards for affected workers;

(iv) the conservation of natural resources;

(v) the preservation of environmental quality, including protection of the global climate from continued short–term and long–term warming based on the best available scientific information recognized by the Intergovernmental Panel on Climate Change; and

(vi) the achievement of the State's climate commitments for reducing statewide greenhouse gas emissions, including those specified in Title 2, Subtitle 12 of the Environment Article.

Second, PUA § 7-211 governs how EmPOWER operates. There are several provisions worth highlighting when considering updates to the goals and cost-effectiveness requirements of the program in relation to the Commission's oversight of EmPOWER. PUA § 7-211(f) states the Commission shall:

1) require each gas company and electric company to establish any program or service that the Commission deems appropriate and cost-effective to encourage and promote the efficient use and conservation of energy; and
2) adopt ratemaking policies that provide cost recovery and, in appropriate circumstances, reasonable financial incentives for gas companies and electric companies to establish programs and services that encourage and promote the efficient use and conservation of energy.

PUA § 7-211 (i)(1) states that in determining whether a program or service encourages and promotes the efficient use and conservation of energy, the Commission shall consider the:

(i) cost-effectiveness of the residential sector sub-portfolio and the commercial and industrial sector sub-portfolio by utilizing:

1. the total resource cost test in order to compare the electricity savings and demand reduction targets of the program or

service with the results of similar programs or services implemented in other jurisdictions, including:

A. participant non-energy benefits; and

B. utility non-energy benefits; and

2. the societal cost test in order to determine whether cost–effectiveness requirements will be met prospectively, including:

A. participant non-energy benefits;

B. utility non-energy benefits; and

C. societal non-energy benefits;

(ii) impact on rates of each ratepayer class;

(iii) impact on jobs; and

(iv) impact on the environment.

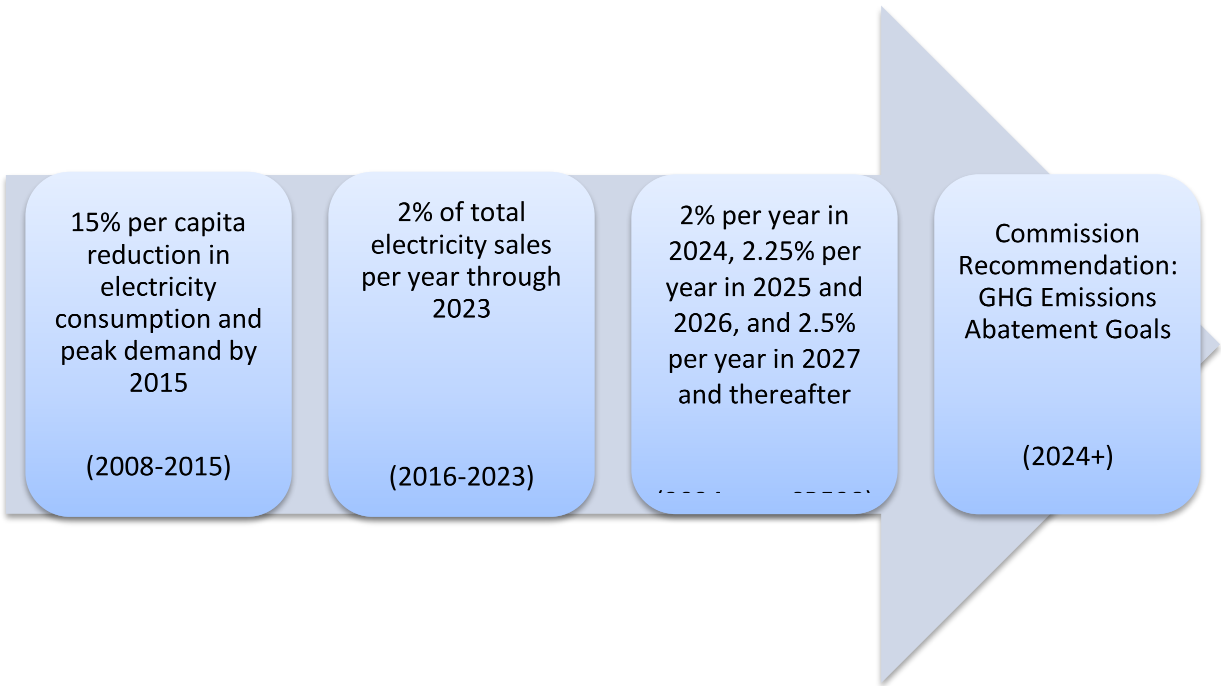
Based on these statutory provisions, the Commission must balance the general concerns regarding economic and environmental impacts of regulating the Utilities with the more specific EmPOWER requirements of promoting energy efficiency through cost-effective programs. The Commission considered these responsibilities in recommending that the General Assembly enact a law endorsing the transition to a GHG reduction goal.

In addition to the requirements in the PUA, the General Assembly passed the Greenhouse Gas Reduction Act (GGRA) in 2009. The GGRA was reauthorized in 2016 and amended in 2022 within the Climate Solutions Now Act. The state GHG reduction targets are 60 percent reduction from 2006 levels by 2031 and net-zero GHG emissions by 2045. The Work Group considered the State's GHG emissions targets in its recommendations on goals and cost-effectiveness tests to the Commission. The Commission also considered these statutes and goals in its determinations in Order No. 90261.

IV. EmPOWER Utility Goals

The goals for EmPOWER have changed over time in parallel with changing state policies. Initially, the Program was designed to reduce consumption and peak demand to mitigate and prevent potential negative impacts to the grid from increasing usage. In updating and continuing the program in 2017, the General Assembly recognized EmPOWER as one of the least expensive ways to meet and manage increasing consumer electricity demand. In the near future, EmPOWER can be used as a tool to help meet the State's GHG emissions targets. The figure below illustrates this history and the potential path forward.

Figure 1 Evolution of EmPOWER Goals



The Commission recommends the General Assembly adopt the GHG abatement goal structure described below into law beginning with the 2024-2026 program cycle. A goal based on reducing overall electricity sales no longer aligns with the needs of the State. Switching to a GHG abatement goal will allow the Utilities to better tailor their programs to meet the State's energy and climate policies while delivering benefits to ratepayers. The recommended goal structure is as follows:

1. No less than X percent of a utility's total GHG abatement goal shall be achieved through behind-the-meter resources[7] and front-of-meter community resources[8] funded through EmPOWER.
    a. No less than X percent of a utility's total GHG abatement goal shall be achieved through EmPOWER-funded behind-the-meter energy efficiency programs. These programs will count towards (1) above.
2. No more than X percent of a utility's total GHG abatement goal shall be achieved through non-energy resources[9] or front-of-meter utility resources[10] programs; inclusions of these programs will be subject to Commission approval.
3. Contributions of the GHG abatement goal for initiatives other than those in 1, 1a, and 2, such as additional initiatives that are in alignment with Public Conference 44 (PC44), may be included in a utility's program plans. These initiatives shall be composed of behind-the-meter and front-of-meter community resources that are not EmPOWER-funded; inclusion of these programs will be subject to Commission approval.[11]

The GHG abatement goal should be measured on a gross lifecycle basis.[12] The trajectory of the GHG abatement goal and corresponding measure lifetime should be refreshed for each plan cycle.

The Commission recognizes there are no numbers specified in the recommended goal structure above. On October 21, 2021, the Commission approved the Work Group to issue a

[7] Behind-the-meter resources include energy efficiency programs, beneficial electrification, and demand response programs.
[8] Front-of-meter community resources include programs or resources that can be shown to directly benefit a set of customers that are separate from utility resources that broadly benefit all customers such as an opt-in program for a set of customers.
[9] Non-energy resources include programs or resources related to a utility whose benefits are largely non-energy based such as replacing appliances with different refrigerants.
[10] Front-of-meter utility resources include programs or resources that broadly benefit customers.
[11] Effectuating these changes will require modifications to PUA § 7–211(g)(2).
[12] The total savings of an individual measure or group of measures for their expected lifetime measured at a gross savings level.

request for proposal for a study to determine the potential for GHG reductions to assist with the development of the EmPOWER goals. The study is due to be filed with the Commission in November 2022 and will provide data in support of finalizing the details of the recommended goal structure. The Commission will hold a goal-setting proceeding in 2023 after party comments and final recommendations from the Work Group are filed.

V. EmPOWER Limited-Income Goal

In addition to a GHG abatement goal for the Utilities, the Commission recommends the General Assembly adopt into law, beginning with the 2024-2026 program cycle, a GHG abatement goal for limited-income customers to be implemented by the Department of Housing and Community Development (DHCD). DHCD has implemented the limited-income energy efficiency programs for EmPOWER since 2012. A goal for DHCD that is complementary to the Utilities' goal will better target EmPOWER towards reaching underserved customers in line with directives of the Climate Solutions Now Act.[13]

The Commission directed the Work Group to provide recommendations on a GHG abatement goal for DHCD by January 15, 2023. The Commission also required an Energy Affordability Study to be completed to better understand the potential geographical equity issues of EmPOWER and the impact of the EmPOWER surcharge on limited-income customers. The results of the study are due to the Commission by December 30, 2022. The Commission will review the limited-income goal at the goal-setting proceeding in 2023.

VI. Cost-Effectiveness

Cost-effectiveness is an important consideration of the EmPOWER program. The EmPOWER cost-effectiveness requirements were last updated in statute in 2017. The Commission is required to consider the results of the Total Resource Cost (TRC) test and Societal Cost Test

[13] Effectuating these changes will require modifications to PUA § 7–211(g) or an entirely new subsection such as a PUA § 7–211.1.

(SCT) of the residential sub-portfolio and commercial and industrial sub-portfolio. The tests are applied at the sub-portfolio level which means that while some individual offerings may not be cost-effective, overall, the program is delivering benefits to the specific rate class.[14] Both tests include participant and utility non-energy benefits. The SCT also includes societal non-energy benefits.

The EmPOWER evaluation, measurement, and verification (EM&V) process involves a statewide contractor for the Utilities and an independent evaluator for the Commission. This allows for an independent verification of the accuracy of the energy savings and cost-effectiveness results reported by the Utilities and that the evaluation conducted by the Utilities' contractor is completed in accordance with industry best practices and in compliance with Commission orders.

The Commission recommends the EM&V process for EmPOWER continue into the 2024-2026 program cycle with a few modifications. First, the primary test for cost-effectiveness should be changed to the Primary Maryland Jurisdiction-Specific Test. The Work Group created this consensus test based on the SCT and the Commission approved this test in Order No. 90261. The TRC test and other tests[15] will be reported for continuity, but will not be used to inform program design decisions. Second, all programs used or savings claimed to meet the GHG abatement goal will be subject to the EM&V process.[16] These modifications will allow the Commission and General Assembly to verify that the Utilities and DHCD are meeting the GHG abatement goals.[17]

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[14] This approach allows the Utilities to offer a wider variety of energy efficiency measures that serve different needs for customers including deeper building retrofits and measures with longer useful lives and payback periods.

[15] Other tests include the Participant Cost Test, the Program Administrator Cost Test, and the Rate Impact Measure.

[16] Effectuating these changes will require modifications to PUA § 7-211(i)(1) and (2).

[17] The Commission notes that it has not required EmPOWER limited-income programs to be cost-effective historically and recommends that continue in the 2024-2026 program cycle. DHCD is subject to the same EM&V process as the Utilities; however, their programs are not required to be cost-effective in order to be approved by the Commission.

VII. Legislative Considerations

The General Assembly will need to amend or add new language to PUA § 7–211 to enact the recommendations in this report. The current EmPOWER goals are specified in PUA § 7–211(g)(2). This was updated by the Climate Solutions Now Act. Should the General Assembly decide to adopt the GHG abatement goal for the Utilities recommended by the Commission, then PUA § 7–211(g)(2) will need to be amended or replaced.

There is currently no language in PUA § 7–211 that corresponds to a limited-income goal. Should the General Assembly decide to adopt the GHG abatement goal for DHCD recommended by the Commission, then a new (3) may need to be added to PUA § 7–211(g) or, in the alternative, an entirely new subsection could be created such as in PUA § 7–211.1.

The cost-effectiveness requirements for EmPOWER are specified in PUA § 7–211(i)(1) and (2). Should the General Assembly decide to adopt the Primary Maryland Jurisdiction-Specific Test as recommended by the Commission, then PUA § 7–211(i)(1) and (2) will need to be amended or replaced.

VIII. Conclusion

The Commission appreciates the opportunity to provide the General Assembly with recommendations on the future of EmPOWER. The Utilities and DHCD will continue to report their progress on a semi-annual basis, and the Commission will continue to monitor EmPOWER to ensure compliance with the law and to study lessons learned. The Commission thanks the Future Programming Work Group for all of its efforts in support of the State's policy goals and recommends the General Assembly adopt the goals and cost-effectiveness recommendations included in this report. The Commission remains available to the General Assembly to provide additional information and recommendations.