2024 Testimony - HB 864 - EmPOWER - Favorable - UU

Uploaded by: Ashley Egan

Position: FAV

Unitarian Universalist Legislative Ministry of Maryland

Testimony in Support
HB 864 - Energy Efficiency and Conservation Plans (EmPOWER Reform)

To: Chair Wilson and the Members of the Economic Matters Committee
From: Phil Webster, PhD
Lead Advocate on Climate Change
Unitarian Universalist Legislative Ministry of Maryland.
Date: February 29, 2024

The Unitarian Universalist Legislative Ministry of Maryland (UULM-MD) strongly supports **HB 864 - Energy Efficiency and Conservation Plans (EmPOWER Reform)** and urges a FAVORABLE report by the committee.

The UULM-MD is a statewide faith-based advocacy organization, with over 1,200 members, based on the Principles of Unitarian Universalism. Unitarian Universalists believe in *"justice and equity in human relations"* and "*respect for the interconnected web of all existence of which we are a part."*

This bill addresses Environmental Justice issues faced by low and moderate income families and requires reductions in greenhouse gas emissions as follows:

- Keep what EmPOWER does best by continuing to offer free or discounted energy audits, help weatherize homes, and provide rebates for efficient heating and appliances.

- Align EmPOWER with Maryland climate goals -
    - Shift program goals from electrical savings to greenhouse gas emissions reductions goals, directing the Public Service Commission to set specific goals for each utility with a set of clear parameters.
    - Require that electric utilities provide incentives for switching to clean, efficient electric appliances and home heating, which will open up access for the use of federal incentives. Electric appliances and equipment are tremendously more efficient and less polluting than gas appliances.
    - Ensure that consumers who want to switch to electric appliances have access to state and federal incentives—without mandating they switch to "electric appliances"
    - Make these changes to both the utility run portion of EmPOWER and the Department of Housing run programs directed at low-income households.

- Deliver more savings to customers -
    - Establish a clear benchmark of 85% for what percent of goals are met though in home energy efficiency measures (behind the meter).
    - Direct the Department of Housing to staff multilingual community outreach specialists to promote the programs and help low-income households access federal and state incentives.
    - Bring down costs to utility customers by lowering the rate of return to utilities on existing EmPOWER debt.

We support this bill and urge a FAVORABLE report in committee.

Phil Webster

Phil Webster, PhD
Lead Advocate, Climate Change UULM-MD

2024_HB0864_FAV_Written.docx.pdf
Uploaded by: Brian Crosby
Position: FAV

Brian Crosby
Legislative District 29B
St. Mary's County

Vice Chair
Economic Matters Committee

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THE MARYLAND HOUSE OF DELEGATES
ANNAPOLIS, MARYLAND 21401

HB 864: Energy Efficiency and Conservation Plans

Position: FAV

February 29, 2024

Good afternoon, Mr. Chair, and my esteemed colleagues on the Economic Matters Committee. I am Vice Chair Delegate Crosby, here to present to you HB 864: Energy Efficiency and Conservation Plans.

This bill will make updates to our State's EmPOWER program, which are necessary to help our State meet our climate goals. There are many components to this bill, and there are amendments forthcoming. My office has been engaging with stakeholders for several months, and we continue to do so. Some of the major changes include:

1. Adding Choptank Electric Cooperative to the EmPOWER program.

2. Expanding the applicability of EmPOWER to gas companies.

3. Requiring electric and gas utilities and the Department of Housing and Community Development to adopt energy efficiency, conservation, demand response, and beneficial electrification measures to support greenhouse gas emissions reductions.

4. Setting new annual targets for greenhouse gas emission reductions. Reduction targets will be set for each electricity and gas company in three-year cycles. At least 80% of reductions must come from behind-the-meter programs, which will improve energy efficiency and lower utility bills for ratepayers.

The bill also includes provisions addressing cost recovery; tenant protections; the use of formaldehyde; labor standards for contractors; supporting a whole-home approach; the coordination of funding sources; language accessibility; long-range planning to further our State's greenhouse gas emissions reduction goals through energy efficiency, particularly for low-income households; and the evaluation of the programs' success.

Thank you for your time and consideration of this bill. I respectfully request a favorable report.

HB 864 Testimony from the Center for Progressive R

Uploaded by: Bryan Dunning

Position: FAV

Center for Progressive Reform

February 27, 2024

Testimony of Bryan Dunning
Maryland Policy Analyst
Center for Progressive Reform

Before the Maryland House of Representatives' Economic Matters Committee
Regarding House Bill 0864: Energy Efficiency and Conservation Plans

Dear Chair and Members of the House Economic Matters Committee:

Thank you for the opportunity to testify today on behalf of the Center for Progressive Reform (the Center) in support of HB0864 (HB 864). The Center is a nonprofit research and advocacy organization that is focused on addressing our most pressing societal challenges, including advancing the concerns of historically marginalized communities by centering racial and economic justice in climate policy. For the reasons discussed in the testimony below, the Center requests that this committee issue a **favorable** report on HB 864.

Since its creation in 2008, EmPOWER has been successful in both ensuring access and reduced costs to Maryland residents for energy audits, weatherization, and upgrading to energy efficient appliances. As of 2021, the Maryland Public Services Commission (PSC) determined that EmPOWER has returned approximately $1.61 dollars in benefits for every $1 spent on the program, with expected savings of over $13 billion dollars over the life of installed energy efficiency measures as of 2021.[1] In the same time, energy efficiency improvements from the EmPOWER program have resulted in a reduction of 9.6 million metric tons of carbon dioxide, or their greenhouse gas (GHG) equivalents,[2] representing a meaningful step in achieving Maryland's GHG reduction goals. In addition to cost savings and GHG reductions, EmPOWER also has an important equity element, establishing dedicated funding for EmPOWER upgrades for low-income residents. This provides a means to reduce both the energy costs for, and GHG emissions of those residents, and also to reduce in-home pollution generated by aging, and in-efficient, fossil fuel appliances which negatively impact the health of the residents.

HB 864 will bolster the effectiveness of the established benefits that the EmPOWER program has achieved, by making the following important improvements:

[1] 2021 MD PSC report on EmPOWER Maryland
[2] *Id.*

- Expands sources of funding for the EmPOWER program, notably including funds from the Federal Inflation Reduction Act of 2022 – which includes monies for installation of energy efficient electrical appliances.
- Places a programmatic priority on GHG reduction, including requiring the PSC to achieve an average annual reduction of 1.8% of GHG from direct consumption of electricity and gas from households in 2020, and for the PSC to establish GHG reduction targets for individual utilities.
- Prioritizes GHG reduction occurring "behind the meter", placing the focus of investments under EmPOWER on home energy efficiency, benefiting ratepayers.
- Improves access to the EmPOWER program by establishing a single point of contact for low- and moderate-income households and requiring that services for those households are offered in any language needed by them.
- Requires the Department of Housing and Community Development (DHCD) to adopt regulation to ensure the focus of EmPOWER weatherization upgrades to leased or rented residence accrues primarily for low-income tenants, and that residents do not suffer a rent-hike or eviction resulting from those upgrades.

HB 864 expands upon the EmPOWER program's proven effectiveness to reduce both energy costs for Maryland residents, and meaningfully reduce GHG emissions in the state. HB 864 creates clear metrics and targets for GHG reductions achieved through the EmPOWER program and directs the PSC to establish specific reduction targets for utilities. It also prioritizes these reductions as happening behind the meter (*e.g.* household appliance upgrades), resulting in greater energy savings for ratepayers.

HB 864 has numerous provisions to improve access to EmPOWER programs for low- and middle-income households, and to expand EmPOWER funding for low income households. HB 864 also directs DHCD to provide protections for low-income renters who might be inadvertently harmed by upgrades pricing them out of affordable housing.

Finally, HB 864 includes a requirement that gas and electric companies promote the availability of federal and state rebates, tax credits and incentives for non-fossil fuel energy efficient appliances and upgrades. Coupled with the availability of state and federal funding, particularly the Inflation Reduction Act, this will serve as a meaningful inducement to achieving GHG reductions by promoting the transition from natural gas to electric appliances, particularly energy efficient heat pumps.

Considerations for the Committee and the PSC

Although HB 864 provides meaningful steps to promote the transition from fossil fuel to electric appliances, and requires meaningful GHG reductions, it does not outright preclude the EmPOWER program from continuing to subsidize new energy efficient gas appliances. The Center requests that both the legislature and the PSC consider ending fossil fuel appliance incentives, either through legislation or agency implementation of the EmPOWER program. Doing so meaningfully advances the underlying goals of the EmPOWER program – reducing GHG emissions and ensuring lower costs for ratepayers.

Energy efficient electric appliances are extremely effective at reducing GHG emissions resulting from the building sector and represent a more effective pathway to decarbonization as

compared to new energy efficient fossil fuel appliances.[3] Making this transition to energy efficient electrification is in line with the express language of the Climate Solutions Now Act (CSNA).[4] Further, removing gas subsidies from EmPOWER has been a major recommendation of the Maryland Commission on Climate Change to secure achievement of the CSNA's legislatively mandated GHG reduction goals.[5] Removing gas subsidies from EmPOWER will increase the rate that GHG reduction goals are met, and is inline with agency recommendations and legislative intent.

Continuation of gas subsidies through EmPOWER also places ratepayers who invest in new fossil fuel appliances at risk of spiraling rate costs in future years, as a general transition from gas to electrification is required to meet GHG reduction goals. As ratepayers transition away from gas, the remaining ratepayers reliant on gas systems will have to pay an increasingly greater share of capital expenditures, safety and maintenance, and other charges included in the utility's rate of return, meaning greater utility prices.[6] Given EmPOWER's role in reducing energy cost burdens for ratepayers, the Committee and the PSC should consider ending gas subsidies under the program to protect ratepayers from investing in systems that will face increasing costs over time.

Conclusion

HB 864 creates meaningful improvements to the EmPOWER program, and represents a way to achieve GHG reduction in Maryland, continue to lower energy costs for ratepayers, and improve on the equitable considerations of the program. The Center respectfully requests that the Committee issue a favorable report on HB 864.

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[3] *See, e.g.,* https://www.iea.org/reports/the-future-of-heat-pumps/executive-summary; Office of People's Counsel's Comments on EmPOWER Goals for the 2024-2026 Program Cycle, Case No. 9648, Maillog No. 301064 (January 27, 2023)

[4] Climate Solutions Now Act, 2022 Md Laws Ch. 38 Section 10(a)

[5] 2023 Annual Report of the Maryland Commission on Climate Change, at p. 15

[6] Notably, this is a fact that the utilities are aware of in their modeling – see, e.g. BG&E's Integrated Decarbonization strategy

HB 864 Energy Efficiency and Conservation Plans (F

Uploaded by: Cait Kerr

Position: FAV

The Nature Conservancy
Protecting nature. Preserving life.

The Nature Conservancy
Maryland/DC Chapter
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Bethesda, MD 20814

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Thursday, February 29, 2024

TO: C. T. Wilson, Chair of the House Economic Matters Committee, and Committee Members
FROM: Mariana Rosales, The Nature Conservancy, Director of Climate; Cait Kerr, The Nature Conservancy, State Policy Manager
POSITION: Support HB 864 Energy Efficiency and Conservation Plans

The Nature Conservancy (TNC) supports HB 864 offered by Delegates Crosby and Qi. HB 864 builds on EmPOWER Maryland's successes and aims to align the program with the state's climate goals and maximize the use of federal energy efficiency funds. This bill continues the program's effective focus on weatherization and rebates for efficient electric appliances and home heating and adds essential consumer safeguards. Importantly, the bill includes enabling fuel switching though EmPOWER funds and changing the program accounting to greenhouse gas emissions reductions. Energy efficiency is one of the most cost-effective ways to decrease greenhouse gas emissions to combat climate change, while reducing utility bills.

HB 864 seeks to improve the EmPOWER Maryland program by prioritizing energy efficiency measures that reduce greenhouse gas emissions, aligning program goals with Maryland's climate goals, and maximizing the use of federal energy efficiency funds from the Inflation Reduction Act. Energy is one of the three largest carbon emissions sources in our state. Decreasing the amount of energy needed through investing is energy efficiency creates a path to reducing emissions.

EmPOWER Maryland has been a highly successful energy efficiency program. It establishes free or discounted energy audits, weatherization, and efficiency rebates that help homeowners and businesses save money and advance efficient energy use. However, depending on the energy source used, the amount of greenhouse gas emissions might be drastically different. HB 864 goes beyond a solely efficiency-focused approach on the reducing energy use and aims to diminish greenhouse gas emissions.

In order to reach Maryland's statewide emission reduction goals of 60% from 2006 levels by 2031 and net-zero emissions by 2045, the EmPOWER Maryland program must continue and be improved. The measures included in this bill will contribute to the state's efforts to reduce greenhouse gas emissions and transition to clean, efficient electric power and home heating. HB 864 ensures that ratepayers receive meaningful benefits and clearly establishes obligations to the energy providers.

TNC commends Delegates Crosby and Qi on introducing this bill, which seeks to expand energy efficiency and reduce greenhouse gas emissions though the EmPOWER program.

Therefore, we urge a favorable report on HB 864.

HB0864 - Energy Efficiency and Conservation Plans_
Uploaded by: Cecilia Plante
Position: FAV

MARYLAND LEGISLATIVE COALITION

TESTIMONY FOR HB0864
Energy Efficiency and Conservation Plans

Bill Sponsor: Delegate Crosby
Committee: Economic Matters
Organization Submitting: Maryland Legislative Coalition
Person Submitting: Aileen Alex, co-chair
Position: FAVORABLE

I am submitting this testimony in favor of HB0864 on behalf of the Maryland Legislative Coalition. The Maryland Legislative Coalition is an association of activists - individuals and grassroots groups in every district in the state. We are unpaid citizen lobbyists, and our Coalition supports well over 30,000 members.

Maryland needs a variety of energy solutions to achieve its ambitious statutory requirement to reduce greenhouse gas emissions to 60% of 2006 levels by 2031. HB0864 will strengthen the original EmPOWER Maryland Energy Efficiency Act, passed in 2008 to incentivize energy efficiency and energy conservation.

Two years ago, I took advantage of the EmPOWER program and received a rebate for insulating my attic and implementing other energy conservation steps. I now see a reduction in my energy bills. However, I was disappointed the program did not offer an incentive to shift my gas appliances to electricity to make my home healthier and more efficient.

HB0864 requires electric utilities to provide incentives for switching to clean, efficient electric appliances and home heating. I and other Marylanders can combine incentives in a strengthened EmPOWER program with federal Inflation Reduction Act incentives to further reduce their costs.

For these reasons and more MLC strongly supports HB0864 and urges a **FAVORABLE** report in Committee.

HB0864 Energy Efficciency and Conservation Plans -

Uploaded by: Chris Parts

Position: FAV

AIA Maryland

27 February, 2024

The Honorable C. T. Wilson
Chair of the Economic Matters Committee
Room 231 House Office Building
Annapolis, Maryland 21401

Re: Letter of Support for HB0864
Public Utilities – Energy Efficiency and Conservation Plans

Dear Chairman Wilson and members of the Economic Matters Committee:

I am writing to voice AIA Maryland's support of House Bill 0864, the Energy Savings Act. Our nearly 2,000 architect members work every day to consider the health, safety and welfare of the occupants in buildings we design. While the properties impacted by this legislation will most likely not be touched by an architect, we feel that it is important to advocate for the low to moderate income households who may have the most to lose in making utility and appliance choices for their homes.

This bill provides the opportunity and incentives to enable them to lower their energy burden and move toward healthier appliances in their homes. Weatherization and electrification of low to moderate income households are important step toward allowing all of us to reduce our carbon output, but the economic and health benefits of the targeted recipients are critical.

The energy audits of the EmPOWER program are a critical first step. This legislation supports a whole home approach, aiming to address health and safety upgrades, weatherization, energy efficiency and general maintenance. One of the most efficient ways of reducing energy use is addressing "passive" ways to reduce the need for heating and cooling and the building weatherization focus of this program offers just that. An inefficient building envelope can act the same as an open door, sending heating and cooling energy into the atmosphere if a residence does not have an efficient air barrier to temper the outdoor climate and if the insulation levels are limited, heating and cooling a home is incredibly inefficient. The energy audit helps to identify passive demand reduction strategies to implement in residents' homes and operating money saved from implementing those strategies, is reducing passive energy demand and generating direct savings for the resident every month the resident heats or cools their residence. Adding active demand strategies like programmable thermostats, creates further opportunities to increase "behind the meter" savings for participants in the empower program.

The energy audits of this program include the evaluation to assess the readiness of a home for electrification and it will promote rebates that can be used to support fuel switching from gas to electric. Making this switch is an important means to shield these residents from the anticipated rapid rise in fossil fuel costs and it will enable them to use building systems and appliances that are more fuel efficient and allow for a healthier household environment. A study by Northeast Energy Efficiency Partnerships found that in the Northeast and Mid-Atlantic areas the installation of an electric air-source heat pump can yield annual energy savings that may range from $300 to nearly $1,000.

AIA Maryland
86 Maryland Avenue
Annapolis, MD 21401

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The technology of the air source heat pumps has advanced to enable them to work effectively down to -10 degrees, and Maryland has never in our recorded weather history had temperatures that have dropped below -7. The coldest winter day on average in central Maryland is approximately 6 degrees, which is very comfortably within the range of air source heat pumps. Additionally, the technology of the electric appliances in the homes, eliminates the chance for carbon monoxide or nitrogen oxide pollution.

AIA Maryland encourages you to support this legislation, both to create healthier and more affordable living conditions for low to moderate income residents and to help us statewide, to reduce greenhouse gas emissions toward our goal of zero carbon emissions by 2045. We ask your committee to vote in favor of HB 0864.

Sincerely,

Chris Parts, AIA
Director, Past President, AIA Maryland

cc: Economic Matters Committee
AIA Maryland Board of Directors

Nature Forward - HB864 - FAVORABLE.pdf
Uploaded by: Denisse Guitarra
Position: FAV

February 27, 2024,

Written testimony for HB864– Energy Efficiency and Conservation Plans[1]

Position: FAVORABLE

Submitted by: Denisse Guitarra, MD Conservation Advocate, Nature Forward

nature forward
Connecting people and nature in the Capital Region
natureforward.org

Dear Members of the House Economic Matters Committee,

Nature Forward is the oldest independent environmental organization in the DC metropolitan region. For 126 years, Nature Forward has inspired residents of the greater Washington, DC, area to appreciate, understand, and protect their natural environment through environmental education, advocacy, and outdoor experiences. We support HB864 because, if enacted, this bill will update the EmPOWER program to promote energy efficiency and conservation and to advance efforts to meet Maryland's ambitious greenhouse gas (GHG) reduction goals. Via the 2022 Climate Solutions Act (CSNA), Maryland set at its target to reduce GHG emissions by 60% by 2023 and 100% by 2035[2] Furthermore, HB864 closely aligns with Nature Forward's conservation advocacy concentrations areas which are: prioritize human health & access to nature, biodiversity & habitats, fighting the climate crisis, and sustainable land use.[3] Nature Forward urges the House Economic Matters Committee to **favorably** support **HB864.**

[1] Available at: https://mgaleg.maryland.gov/mgawebsite/Legislation/Details/HB0864
[2] MD Climate Change Program. 2023. Available at: https://mde.maryland.gov/programs/air/ClimateChange/Pages/index.aspx
[3] Nature Forward (ANS) Conservation Advocacy Priority Campaign Areas: https://natureforward.org/conservation-advocacy-at-ans-dynamic-changing-as-conditions-change-seeking-always-to-become-more-effective/

EmPOWER successes and potential

The EmPOWER Maryland Energy Efficiency Act of 2008[4] created the EmPOWER program to promote energy efficiency and conservation efforts and has been highly successful. Under the EmPOWER program, public utilities offer rebates and efficiency updates, and the Maryland Department of Housing and Community Development (DHCD) offers similar programs targeted at limited income consumers.[5] The United States Department of Energy observed that utilities reduced per-capita electricity consumption by 10% and saved consumers more than $4 billion through the EmPOWER Maryland initiative.[6] The EmPOWER program has had a track record of success in lowering energy consumption and utility bills. Now the EmPOWER program can be improved by ensuring GHG emissions are reduced and make use of the recently available inflation reduction act (IRA) funding available to states.

EmPOWER for healthier people and the environment

People and the environment are at the core of the EmPOWER program updates proposed in this legislation. By ensuring that more funding is available to low to moderate-income individuals, this legislation will ensure that more people can make use of the benefits of this program while helping combat climate change. The new upgrades focus on ensuring people have discounts on electric appliances will encourage them to transition from gas to electric appliances. The more homes we transition to electric, the less GHG emissions we will be putting into the atmosphere. Additionally, we will keep Maryland residents safe from the health dangers of using gas appliances as we have seen multiple gas explosion accidents in Maryland--like the Silver Spring 2020 Flower Avenue apartment explosion.[7] If HB864 passes, then it will

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[4] Available at: https://energy.maryland.gov/pages/facts/empower.aspx
[5] Available at: https://pirg.org/maryland/articles/how-to-supercharge-empower-maryland/

[6] Available at: https://www.energy.gov/eere/better-buildings-residential-network/empower-maryland-saves-consumers-4-billion-and-counting

[7] Available at: https://wjla.com/news/local/flower-branch-apartments-explosion-aftermath

line up with local DC jurisdiction which passed funding in its FY2024 budget to incentivize residents to transition to electric appliances. [8,9]

Emission Reduction Targets, Plans, and Schedules in HB864

The provisions of HB864 add to this successful program by adding clear and specific requirements for GHG emission reduction targets, plans and schedules that will help to ensure additional GHG reductions are achieved to support efforts to meet the CSNA GHG emission reduction targets. For example, HB864, if enacted, would require the Public Service Commission (Commission) to set GHG reduction targets covering a three-year program cycle for each public gas and electric utility and for the DHCD. Utilities are to meet their targets through energy efficiency and conservation programs and the DHCD is to meet its target by providing such programs to low- and moderate- income individuals.

In addition, after the Commission establishes these emission reduction targets, each gas and electric utility and the DHCD would be required to develop and submit to the Commission a plan pursuant to schedules set out in the bill to achieve its GHG emission target and to consult with Commission staff, the Office of the People's Counsel, the Maryland Energy Administration and the Maryland Department of the Environment regarding the adequacy of the plan for achieving the GHG emission reduction targets established by the Commission. The bill also generally requires the Commission to require programs and adopt ratemaking policies to promote and support energy efficiency and conservation in support of the GHG emission goals and reductions in the CSNA.

[8] Healthy Homes DC 2023. Available at: https://trackbill.com/bill/district-of-columbia-bill-119-healthy-homes-and-residential-electrification-amendment-act-of-2023/2356181/
[9] Beyond gas 2020. Available at: https://natureforward.org/advocating-for-a-beyond-gas-dc/

Nature Forward supports the updates to the EmPOWER program in HB864 because we believe that those updates would lead to meaningful GHG emission reductions in Maryland. Achieving these reductions is critical as we must reduce GHG emission to lessen the impacts of climate change in our communities, Maryland, and around the world.[10] The 2023 "Maryland's Climate Pollution Reduction Report" states that the buildings sector is the largest consumer of electricity in the state of Maryland.[11] By enacting HB864, we would be tackling GHG reductions in buildings by making buildings more energy efficient and providing incentives to do energy retrofits to those that need support. On behalf of Nature Forward and our 28,000 members and supporters, we recommend that the Committee **pass and approve HB864.** Thank you for your time and consideration.

Sincerely,

Denisse Guitarra

MD Conservation Advocate at Nature Forward

Sheila Igoe & Debra Street

Nature Forward Conservation Volunteers

[10] Available at: https://mde.maryland.gov/programs/air/ClimateChange/Pages/index.aspx

[11] Maryland's Climate Pollution Reduction Report. December2023. Page 34. Available at: https://mde.maryland.gov/programs/air/ClimateChange/Maryland%20Climate%20Reduction%20Plan/Maryland%27s%20Climate%20Pollution%20Reduction%20Plan%20-%20Final%20-%20Dec%2028%202023.pdf

HB0864_JCRC_Singer_FAV.pdf
Uploaded by: Elizabeth Singer
Position: FAV

JCRC JEWISH COMMUNITY RELATIONS COUNCIL
JEWISH FEDERATION OF HOWARD COUNTY

Committee: **Economic Matters**
Testimony on: **HB0864 – Energy Efficiency and Conservation Plans**
Organization: **The Jewish Community Relations Council, (JCRC) Howard County, MD**
Submitting: **Betsy Singer and Laura Salganik, Co-chairs**
Position: **FAVORABLE**
Hearing Date: **February 29, 2024**

Dear Chair and Committee Members:

The JCRC of Howard County urges action to slow climate change. Repair of the world (*tikkun olam)* is a guiding tenant of our Jewish faith. We are compelled to act to prevent massive changes to Earth's climate as we face rising temperatures due to burning fossil fuels that trap greenhouse gases in the Earth's atmosphere.

The fastest and most affordable way to lower our energy usage is to make our homes, businesses, and communities more energy efficient. Maryland has a program in place, EmPOWER, that helps Marylanders increase the efficiency of buildings and decrease the amount of energy used. Since its implementation in 2008, it has saved Marylanders $12.7 billion on energy bills and reduced Maryland's greenhouse gas emissions by 9.6 million metric tons of carbon dioxide, which is equivalent to taking 2 million cars off the road per year.

But we need to update the EmPOWER program to meet today's priorities as outlined in Maryland's Climate Pollution Reduction Plan. As part of that plan, Maryland needs to expand EmPOWER's successful discounts and rebates for energy audits, weatherization, and efficient appliances by adding new incentives to switch to efficient, electric appliances and heating of homes and water. Fuel-switching incentives can be combined with federal Inflation Reduction Act incentives to further reduce their costs.

An updated EmPOWER should also have a distinct environmental justice focus that helps more Marylanders, especially those who are underserved and underrepresented, to take advantage of these programs. The bill can also help low-income households by directing the Department of Housing and Community Development to dedicate multilingual community outreach specialists to promoting the EmPOWER Program.

For these reasons, we strongly support HB0864 and urge a FAVORABLE report in committee.

HB864_FAV_EmPOWER_PIRG Et al. (1).pdf
Uploaded by: Emily Scarr
Position: FAV

HB864: Energy Efficiency and Conservation Plans
Economic Matters Committee
Thursday, February 29, 2024
Emily Scarr, Maryland PIRG
FAVORABLE

Maryland PIRG is a state based, small donor funded public interest advocacy organization with grassroots members across the state. We work to find common ground around common sense solutions that will help ensure a healthier, safer, more secure future.

Maryland PIRG, and our partners, enthusiastically support HB864. In addition we know the Public Service Commission, the Office of the People's Counsel, the Moore Administration and Agencies have worked on a set of technical amendments to the bill. Based on what we worked on with these stakeholders over the summer, we expect to support these amendments when they are final, but have not yet seen them. We support, for example, directing the PSC to establish greenhouse gas reduction goals for the utilities with a clear set of parameters. We would not support amendments to shift the EmPOWER program funding being moved into the rate base.

We thank Vice-Chair Crosby, Del, Qi and this entire committee for advancing similar legislation in 2023. We are also deeply appreciative of the work done by the PSC, the OPC, the Moore Administration and Agencies, and legislative leadership in both chambers to find consensus around technical amendments to the bill.

The bill would build on EmPOWER Maryland, the state's successful energy efficiency program by helping homeowners and businesses save money through energy efficiency

Emily Scarr, Maryland PIRG Director emily@marylandpirg.org
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rebates, aligning the program with the state's climate goals, and maximizing the use of federal energy efficiency funds available from the Inflation Reduction Act.

While the legislature has made clear it intends to shift away from fossil fuels to power our homes and buildings, EmPOWER is not currently in line with the state's plan. Because its goals are currently measured in electrical savings, EmPOWER does not adequately prioritize some of the most efficient electric equipment, like electric heat pumps, which are two to three times more efficient than gas furnaces even amid the depths of winter weather.

Our goal is simple – adjust the program to prioritize reducing pollution while maintaining the program's focus on efficiency – because the cleanest energy of all is the energy we don't use. As the electric and gas utilities update their rebates and incentives to help reduce energy use and greenhouse gas pollution, it remains critical that the program maintain its primary goals: to provide benefits to Marylanders.

HB864 includes guardrails to ensure that the utilities deliver savings directly to ratepayers, and are held accountable to their goals. For example, we're pushing the utilities to prioritize long lasting savings like insulation and good windows over quick fixes.

Now is the time to do this work. There are billions of dollars in new federal funding to help people improve the efficiency of their homes and transition to clean, efficient electric power and home heating.

Bill components:

- **Keeps what EmPOWER does best** by continuing to offer free or discounted energy audits, help weatherize homes, and provide rebates for efficient heating and appliances.

- **Aligns EmPOWER with Maryland climate goals -**
  - Shifts program goals from electrical savings to greenhouse gas emissions reductions goals, directing the Public Service Commission to set specific goals for each utility with a set of clear parameters. We support agency amendments to direct PSC to set the utilities' goals with a set of clear parameters.
  - Enables electric utilities to provide incentives for switching to clean, efficient electric appliances and home heating, which will open up access for the use of federal incentives. Electric appliances and equipment are tremendously more efficient and less polluting than gas appliances. We support agency amendments to make these incentives a requirement.
  - Does not mandate the use of electric appliances, but it ensures consumers who want to make the switch have access to state and federal incentives.
  - Makes these changes to both the utility run portion of EmPOWER and the Department of Housing run programs directed at low-income households.

Emily Scarr, Maryland PIRG Director emily@marylandpirg.org
Twitter: @emilyscarr @marylandpirg

- **Delivers more savings to customers** -
  - Establishes a clear benchmark of 85% for what percent of goals are met though in home energy efficiency measures (behind the meter).
  - Directs the Department of Housing to staff multilingual community outreach specialists to promote the programs and help low-income households access federal and state incentives.
  - Brings down costs to utility customers by lowering the rate of return to utilities on existing EmPOWER debt.

We respectfully request a favorable report.

350 Montgomery County + Advance Maryland + AIA Maryland + Audubon Mid-Atlantic + Baltimore Jewish Council + Blue Water Baltimore + CASA + Center for Progressive Reform + Ceres + Chesapeake Climate Action Network + Chesapeake Climate Action Network Action Fund + Citizens' Climate Lobby (Maryland) + Climate Reality Greater Maryland + Climate XChange Maryland + DoTheMostGood + EarthJustice + Earth Ministry of the River Road Unitarian Universalist Congregation + Economic Action Maryland + Elders Climate Action Maryland Chapter + Environmental Justice Ministry Cedar Lane Unitarian Universalist Church + Green & Healthy Homes Initiative, Inc + Indivisible Howard County MD + Institute for Market Transformation + Interfaith Partners for the Chesapeake + Interfaith Power & Light (DC.MD.NoVa) + Justice & Witness Action Network - Maryland (Central Atlantic Conference, United Church of Christ) + League of Women Voters of Maryland + Maryland Energy Advocates Coalition + Maryland Catholics for Our Common Home + Maryland Legislative Coalition + Maryland Legislative Coalition Climate Justice Wing + Maryland PIRG + National Aquarium + National Consumer Law Center, on behalf of its low-income clients + One Montgomery Green + Potomac Conservancy + Potomac Riverkeeper Network + Progressive Maryland + Rebuild Maryland Coalition + ShoreRivers + The Nature Conservancy Maryland/DC Chapter + Third Act Maryland + Unitarian Universalist Legislative Ministry of Maryland + United Nations Association of the National Capital Area + Waterkeepers Chesapeake

BACKGROUND

The EmPOWER Maryland Energy Efficiency Act of 2008 created the EmPOWER program to incentivize energy efficiency and conservation efforts. EmPOWER includes a utility run program of rebates, weatherizations and other efficiency updates, as well as similar programs targeted at limited income consumers, which are run by the state's Department of Housing and Community Development (DHCD). In 2023 Gov. Moore signed a new law to improve the DHCD run program.

As outlined in Maryland PIRG Foundation's 2023 report, energy efficiency is one of the smartest investments the state can make.

BENEFITS OF ENERGY EFFICIENCY

- **Reducing costs for consumers and ratepayers.** By reducing the amount of energy people consume and reducing the amount of infrastructure needed to provide that energy, efficiency improvements help ratepayers pay less on their utility bills. That's because energy efficiency improvements are often a cheaper way for utilities to meet electricity demand than generating and distributing electricity.
- **Protecting public health by reducing pollution from burning fossil fuels.** Burning fossil fuels, both indoors and out, produces air pollution that can cause a range of health

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problems, from damage to the lungs and heart to cancer to mental health and cognitive issues.

- **Reducing greenhouse gas emissions**. By reducing fossil fuel combustion in buildings and from power plants, as well as the leaks of pollutants like methane associated with fossil fuel extraction and infrastructure, energy efficiency reduces greenhouse gas emissions and thus helps fight global warming and climate damage.
- **Making it easier to transition to renewable energy.** By reducing the amount of energy required to meet the needs of the public, energy efficiency reduces the total amount of dirty fossil fuel generation that must be replaced by clean renewable sources in order to protect public health and prevent the worst impacts of climate change. Energy efficiency also reduces the number of costly upgrades to electricity transmission and distribution systems that are needed, significantly easing the transition to renewable energy and reducing the time, costs and other resources required to make it.

A HISTORY OF SUCCESS

According to the Maryland Public Service Commission, since 2008, EmPOWER Maryland has:

- Created lifetime savings of over $12.7 billion from an investment of $3.5 billion in efficiency.
- Reduced greenhouse gas emissions by the equivalent of at least 9.6 million metric tons of carbon dioxide, equal to taking 2 million cars off the road for a year.
- Provided Marylanders with free or discounted energy audits, weatherization, and efficient appliances and provided businesses with discounts and incentives for energy efficient upgrades.

TIME FOR AN UPDATE

Space heating and cooling accounts for more than half of home energy use, yet most Marylanders are using old, inefficient technology to heat and cool their homes. Almost half of Marylanders still use fossil fuels for heating and 25% are using electric furnaces and highly inefficient baseboard heat.

Maryland has made clear its intention to shift away from fossil fuels to power our homes and buildings to help reach ambitious goals to reduce greenhouse gas emissions 60% from 2006 levels by 2031. Yet, EmPOWER Maryland doesn't sufficiently provide incentives to support households switching from gas to highly efficient electric heat pumps and still subsidies inefficient gas-burning furnaces.

A heat pump is an all-in-one electric HVAC system that can both heat and cool a building. This equipment is highly efficient. The latest models use an average of 18% less electricity for cooling than central AC units in the Mid-Atlantic and are two to three times more efficient than gas furnaces even amid the depths of winter weather. They are now suitable for all Maryand climates and they can last 15 years or more.

According to a recent report from RMI, GHHI, CCAN and CASA, in Maryland, fossil fuel equipment in residential and commercial buildings emits more than three times as much health-harming NOx as all the state's power plants put together.

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RIGHTSIZING UTILITY PROFITS

The financing model for EmPOWER in place through 2023 has raised the costs for ratepayers over time without maximizing energy savings. Maryland utilities have profited significantly more than utilities in other top states for efficiency, driving up costs to ratepayers.

- In recent years Pepco has earned a return equivalent to about 16% of its budget while BGE and Potomac Edison earned returns equivalent to over 20% of their annual budgets.
- For reference, efficiency administrators in Massachusetts, Vermont and Rhode Island, all earn returns equivalent to 5% or less of their program budgets.
- Maryland utilities also earn a much higher return on EmPOWER spending than on their normal expenses: for example, the PSC set a 9.5% return on BGE's costs of providing electricity service for the 2021-2023 cycle.

The PSC has rightfully moved away from this funding mechanism for the program, but it will take a number of years for ratepayers to pay off existing debt. Fortunately, the legislature can reduce the rate of the return on that remaining debt, saving ratepayers in a big way. In the future we want to ensure that profits, if any, are in-line with other top performing states and any financial incentives should be tied to performance. If ratepayers are funding incentives, utilities should also be penalized for substandard performance.

Home Heating Fuel Source by County

		Primary Home Heating Fuel -%		
County	Electric Utility	Gas	Electric	Oil/Propane
Baltimore	BG&E	51%	37%	11%
Baltimore City	BG&E	63%	31%	5%
Anne Arundel	BG&E	37%	48%	12%
Howard	BG&E	42%	49%	7%
Harford	BG&E	41%	42%	14%
Carroll	BG&E	18%	50%	27%
Montgomery	Pepco	52%	43%	4%
Prince Georges	Pepco	52%	42%	5%
Alleghany	P. Edison	54%	26%	13%
Washington	P. Edison	24%	51%	21%
Frederick	P. Edison	34%	49%	14%
Calvert	SMECO	6%	74%	16%
Charles	SMECO	24%	56%	16%
St. Mary's	SMECO	12%	60%	15%
Cecil	Delmarva	20%	33%	40%
Wicomico	Delmarva	17%	59%	22%

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HB864_FAV_EmPOWER_PIRG Et al..pdf
Uploaded by: Emily Scarr
Position: FAV

HB864: Energy Efficiency and Conservation Plans
Economic Matters Committee
Thursday, February 29, 2024
Emily Scarr, Maryland PIRG
FAVORABLE

Maryland PIRG is a state based, small donor funded public interest advocacy organization with grassroots members across the state. We work to find common ground around common sense solutions that will help ensure a healthier, safer, more secure future.

Maryland PIRG, and our partners, enthusiastically support HB864. In addition we know the Public Service Commission, the Office of the People's Counsel, the Moore Administration and Agencies have worked on a set of technical amendments to the bill. Based on what we worked on with these stakeholders over the summer, we expect to support these amendments when they are final, but have not yet seen them. We support, for example, directing the PSC to establish greenhouse gas reduction goals for the utilities with a clear set of parameters. We would not support amendments to shift the EmPOWER program funding being moved into the rate base.

We thank Vice-Chair Crosby, Del, Qi and this entire committee for advancing similar legislation in 2023. We are also deeply appreciative of the work done by the PSC, the OPC, the Moore Administration and Agencies, and legislative leadership in both chambers to find consensus around technical amendments to the bill.

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The bill would build on EmPOWER Maryland, the state's successful energy efficiency program by helping homeowners and businesses save money through energy efficiency rebates, aligning the program with the state's climate goals, and maximizing the use of federal energy efficiency funds available from the Inflation Reduction Act.

While the legislature has made clear it intends to shift away from fossil fuels to power our homes and buildings, EmPOWER is not currently in line with the state's plan. Because its goals are currently measured in electrical savings, EmPOWER does not adequately prioritize some of the most efficient electric equipment, like electric heat pumps, which are two to three times more efficient than gas furnaces even amid the depths of winter weather.

Our goal is simple – adjust the program to prioritize reducing pollution while maintaining the program's focus on efficiency – because the cleanest energy of all is the energy we don't use. As the electric and gas utilities update their rebates and incentives to help reduce energy use and greenhouse gas pollution, it remains critical that the program maintain its primary goals: to provide benefits to Marylanders**.**

HB864 includes guardrails to ensure that the utilities deliver savings directly to ratepayers, and are held accountable to their goals. For example, we're pushing the utilities to prioritize long lasting savings like insulation and good windows over quick fixes.

Now is the time to do this work. There are billions of dollars in new federal funding to help people improve the efficiency of their homes and transition to clean, efficient electric power and home heating.

Bill components:

- **Keeps what EmPOWER does best** by continuing to offer free or discounted energy audits, help weatherize homes, and provide rebates for efficient heating and appliances.

- **Aligns EmPOWER with Maryland climate goals -**
  - Shifts program goals from electrical savings to greenhouse gas emissions reductions goals, directing the Public Service Commission to set specific goals for each utility with a set of clear parameters. We support agency amendments to direct PSC to set the utilities' goals with a set of clear parameters.
  - Enables electric utilities to provide incentives for switching to clean, efficient electric appliances and home heating, which will open up access for the use of federal incentives. Electric appliances and equipment are tremendously more efficient and less polluting than gas appliances. We support agency amendments to make these incentives a requirement.
  - Does not mandate the use of electric appliances, but it ensures consumers who want to make the switch have access to state and federal incentives.

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- Makes these changes to both the utility run portion of EmPOWER and the Department of Housing run programs directed at low-income households.

- **Delivers more savings to customers** -
  - Establishes a clear benchmark of 85% for what percent of goals are met though in home energy efficiency measures (behind the meter).
  - Directs the Department of Housing to staff multilingual community outreach specialists to promote the programs and help low-income households access federal and state incentives.
  - Brings down costs to utility customers by lowering the rate of return to utilities on existing EmPOWER debt.

We respectfully request a favorable report.

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Carroll	BG&E	18%	50%	27%
Montgomery	Pepco	52%	43%	4%
Prince Georges	Pepco	52%	42%	5%
Alleghany	P. Edison	54%	26%	13%
Washington	P. Edison	24%	51%	21%
Frederick	P. Edison	34%	49%	14%
Calvert	SMECO	6%	74%	16%
Charles	SMECO	24%	56%	16%
St. Mary's	SMECO	12%	60%	15%
Cecil	Delmarva	20%	33%	40%
Wicomico	Delmarva	17%	59%	22%

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EmPOWER testimony CR 2-27-2024.pdf
Uploaded by: Frances Stewart
Position: FAV

Committees: **Economic Matters**
Testimony on **HB864, Energy Efficiency, and Conservation Plans**
Organization: **Climate Reality Greater Maryland**
Submitting: **Frances Stewart, MD, Chapter Chair**
Position: **Favorable**
Hearing Date: **February 29, 2024**

Dear Chair and Committee Members:

. Climate Reality Greater Maryland is the Maryland chapter of the Climate Reality Project, a global network of 3.5 million people working to build a net zero future where all of us can thrive. We urge you to vote favorably on HB864.

We thank Vice-Chair Crosby, Del, Qi, and this committee for advancing similar legislation in 2023. We also deeply appreciate the work done by the PSC, the OPC, the Moore Administration and Agencies, and legislative leadership in both chambers to find consensus around technical amendments to the bill.

The bill would build on EmPOWER Maryland, the state's successful energy efficiency program, by helping homeowners and businesses save money through energy efficiency rebates, aligning the program with the state's climate goals, and maximizing the use of federal energy efficiency funds available from the Inflation Reduction Act.

In 2022, the Climate Solutions Now Act set ambitious and vital goals for greenhouse gas reduction in Maryland. In 2023, Maryland's Climate Pollution Reduction Plan gave us a pathway to meet those goals.

EmPOWER is not currently in line with the plan. Because its goals are measured in electrical savings, EmPOWER does not adequately prioritize some of the most efficient electric equipment, like electric heat pumps, which are two to three times more efficient than gas furnaces even amid the depths of winter weather.

Our goal is simple – adjust the program to prioritize reducing pollution while maintaining the program's focus on efficiency – because the cleanest energy of all is the energy we don't use. As the electric and gas utilities update their rebates and incentives to help reduce energy use and greenhouse gas pollution, it remains critical that the program maintain its primary goal: to provide benefits to Marylanders.

HB864 includes guardrails to ensure that the utilities deliver savings directly to ratepayers and are held accountable to their goals. For example, we're pushing the utilities to prioritize long-lasting savings like insulation and good windows over quick fixes.

Now is the time to do this work. There are billions of dollars in new federal funding to help people improve the efficiency of their homes and transition to clean, efficient electric power and home heating.

This bill keeps what EmPOWER does best by continuing to offer free or discounted energy audits, help weatherize homes, and provide rebates for efficient heating and appliances. It also aligns EmPOWER with Maryland's climate goals by shifting program goals from electrical savings to greenhouse gas emissions reduction goals. It directs the Public Service Commission to set specific goals for each utility with clear parameters. It also enables electric utilities to provide incentives for switching to clean, efficient electric appliances and home heating, which will open up access to federal incentives. Those electric appliances and equipment are much more efficient and less polluting than gas appliances. We support agency amendments to make these incentives a requirement.

It does not mandate the use of electric appliances, but it ensures consumers who want to make the switch have access to state and federal incentives.

These changes would be to the utility-run portion of EmPOWER and the Department of Housing run programs directed at low-income households.

The bill also delivers more savings to customers. It establishes a clear benchmark of 85% for what percent of goals are met through in-home energy efficiency measures (behind the meter). It reduces costs to utility customers by lowering the rate of return to utilities on existing EmPOWER debt.

Historically, low-income customers have paid more into EmPOWER than they have received in benefits. This bill would help to correct that problem by directing the Department of Housing to staff multilingual community outreach specialists to promote the programs and help low-income households access federal and state incentives.

We thank the Public Service Commission, the Office of the People's Counsel, the Moore Administration, and Agencies for their work on technical amendments to the bill. Based on what our coalition partners worked on with these stakeholders over the summer, we expect to support these amendments when they are final, but we have not yet seen them. We support, for example, directing the PSC to establish greenhouse gas reduction goals for the utilities with a clear set of

parameters. We would not support amendments to shift the EmPOWER program funding being moved into the rate base.

Thank you for allowing us to testify in support of this very important bill. We strongly urge a FAVORABLE report in committee for HB864 and passage in the House.

HB 864 - MoCo - Fitzgerald_FAV (GA 24).pdf
Uploaded by: Garrett Fitzgerald
Position: FAV

Montgomery County
Office of Intergovernmental Relations

ROCKVILLE: 240-777-6550 **ANNAPOLIS: 240-777-8270**

HB 864 **DATE: February 27, 2024**

SPONSOR: Delegate Crosby

ASSIGNED TO: Economic Matters Committee

CONTACT PERSON: Garrett Fitzgerald (garrett.fitzgerald@montgomerycountymd.gov)

POSITION: Favorable

Energy Efficiency and Conservation Plans

The EmPOWER Maryland program has driven statewide building energy efficiency improvement for more than a decade, delivered by the State's regulated utilities and the Department of Housing and Community Development (DHCD). This program is now poised to play a more prominent role in helping to achieve the State's climate goals.

This legislation provides important policy direction to guide the Maryland Public Service Commission (PSC) in its oversight of EmPOWER Maryland. The resulting program will better align with the State's climate priorities and will benefit Montgomery County residents and property owners.

This bill will reform EmPOWER Maryland to achieve deeper reductions in greenhouse (GHG) emissions, accelerate the transition to high efficiency electric technologies, and better support participation by low-to-moderate income families. Most importantly, the bill establishes new minimum GHG reduction targets for the program and requires the inclusion of incentives for high efficiency electric appliances such as heat pumps. The bill also requires that program funding is primarily used to improve building energy performance in ways that will directly benefit ratepayers, and it directs DHCD to streamline and improve program access with multilingual services. Finally, the bill seeks to lower long-term costs to ratepayers by requiring utilities to end the practice of accruing costly program debt and to pay down existing unamortized debt.

These are important and reasonable reforms that will improve the EmPOWER Maryland program and benefit participants and ratepayers. Montgomery County suggests that the program could be further strengthened by discontinuing the provision of incentives for fossil fuel combustion equipment, while maintaining incentives for other energy efficiency improvements in buildings that continue to rely on fossil fuel combustion for heating.

Montgomery County respectfully requests that the Economic Matters Committee issue a favorable report on House Bill 864.

Ceres Letter re EmPOWER.pdf
Uploaded by: Jeff Mauk
Position: FAV

RE: Business Community Support for the Investing in and Updating the EmPOWER program

Dear Members of the Maryland General Assembly:

As a group of diverse businesses, including manufacturers, trade associations, and service providers with a significant Maryland presence and business interest, **we write to voice our support for legislation to further invest in energy efficiency and align the EmPOWER program with Maryland's climate goals**.

Climate change poses a significant risk to the long-term economic success of our businesses and the state. It threatens the health and livelihoods of the communities in which we operate and disrupts the value chains on which we rely. In response, Maryland companies like ours are making significant investments to reduce emissions across our operations.

As employers and energy consumers, we understand firsthand how energy policies affect the cost of doing business and the state's economic competitiveness. We support further investments in energy efficiency because all Maryland consumers and businesses benefit when we eliminate energy waste. EmPOWER Maryland programs are the lowest-cost energy resources available, generating ~$1.29 in benefits for every $1 invested.[1] By continuing to invest in energy efficiency through EmPOWER programs, Maryland can reduce total energy costs for all customers, mitigate the impact of fuel and electricity price increases, create local jobs that are not easily outsourced, and build a more affordable, reliable electricity system for the businesses and people in the state.

In addition to providing economic benefits, the legislation should fulfill the Climate Solutions Now Act's direction for the state to shift the EmPOWER program's metrics to emissions reductions. The program currently sets goals for and measures energy demand savings, which leaves some uncertainty about the net impact the program will have on reducing emissions.

[1] The EmPOWER Maryland Energy Efficiency Act Report of 2022. Public Service Commission of Maryland. https://www.psc.state.md.us/wp-content/uploads/2022-EmPOWER-Maryland-Energy-Efficiency-Act-Standard-Report.pdf

We're supporting updates to the EmPOWER program to align it with the state's climate goals by directing the PSC to set annual *emissions* reduction goals for electric and gas utilities to achieve a cumulative statewide reduction in emissions of at least 14% by 2031. This would more fully align the program with state law which requires a 60% emissions reduction by 2030 and provide policymakers with a clear understanding of the role efficiency investments will make in achieving that target. Finally, it should promote beneficial electrification through fuel switching in cases where it results in lower site energy use intensity.

We applaud Maryland for the state’s leadership on climate action and commitment to reaching net zero greenhouse gas emissions by 2045. As the lowest-cost resource available for reducing emissions, we strongly support the continuing investments in energy efficiency by passing legislation to invest in and strengthen the successful EmPOWER program.

Sincerely,

A.O. Smith Corporation

DSM North America

EILEEN FISHER, Inc.

Energy Management Solutions, Inc.

Sealed

Faith Testimony Favorable HB 864.pdf
Uploaded by: Joelle Novey
Position: FAV

Testimony Supporting HB 864
House Economic Matters Committee
February 29th, 2024

Position: Favorable

Chair Wilson and Members of the Committee,

Interfaith Power & Light (DC.MD.NoVa) — along with five regional multi-faith networks and over a dozen Maryland faith organizations — request a favorable report on HB 864, the EmPOWER Maryland Energy Efficiency Act.

Our breath connects us to each other and to all life. We believe our breath is for singing praise — not for breathing soot and pollution.

But in Maryland, burning methane gas is harming all that has breath:
• *Below ground,* the pipes that bring gas to our homes leak methane, sometimes enough to risk an explosion — and trap more than 80 times as much heat as carbon dioxide, further damaging our climate.
• *Above ground,* in our homes, burning gas indoors hurts the lungs and health of our loved ones, particularly the young and old.

Today, we are using our breath to speak out: for a safer, cleaner, and more efficient future where everything is powered by clean energy. We call on our elected leaders to issue a favorable report on HB 864, the EmPOWER Maryland Energy Efficiency Act, to help Marylanders get off gas-burning appliances at home.

For the health of our common home, we can strengthen the EmPOWER Maryland program and align it with our climate goals. For all that has breath, we can provide subsidies to help Marylanders choose cleaner, efficient appliances that protect the lungs of our children and most vulnerable neighbors. And for Marylanders already struggling with high utility bills, we can ensure that they have access to all the federal and state funding available to help them lower their utility bills and choose more efficient appliances.

Across Maryland, our faith communities are choosing healthy and efficient electric appliances over gas, oil, and propane. We call on you to join us by strengthening the EmPOWER Maryland program and passing HB 864 – *for all that has breath*.

Submitted on behalf of **Interfaith Power & Light (DC.MD.NoVA)**, and these Maryland faith groups:

Action In Montgomery (AIM)
Anne Arundel Connecting Together (ACT)
Central Maryland Ecumenical Council (CMEC)

Multi-Faith Alliance of Climate Stewards of Frederick County (submitting additional testimony)

The EmPOWER Act will help Marylanders reduce their carbon dioxide and methane output through cost-saving incentives resulting in cleaner air for breathing and less heat trapping carbon gasses in the atmosphere. And it gives the most incentives to lower income households, which is important to faith groups who support creation justice.

People Acting Together in Howard (PATH)

Baltimore Jewish Council
Beloved DMV Environmental Justice Collective (Green leaders in Black churches)

Baltimore Washington Conference of the United Methodist Church Creation Care

BWCUMC Creation Care supports HB 864 for its energy efficiency and electrification provisions to help eliminate health and environmental harms, especially for underserved and overburdened communities.

Chesapeake Earth Holders Community of Engaged Buddhism

Our community cares deeply for the wellbeing of the Earth and all living beings. We support the Energy Efficiency Act because it will provide a means by which the citizens of Maryland can, through their combined efforts to shift to cleaner forms of energy, help create a cleaner and healthier environment for all.

Creation Care Ministry of the Delaware-Maryland Synod of the Evangelical Lutheran Church in America
Episcopal Diocese of Washington Creation Care Committee
Green Dharma DMV (Green leaders in Hindu and Jain communities)
Green Muslims
Jewish Climate Action Network DMV (JCAN-DMV)
Jewish Community Relations Council of Howard County (submitting additional testimony)
Justice & Witness Action Network – Maryland
(Central Atlantic Conference, United Church of Christ)
Maryland Catholics for Our Common Home (submitting additional testimony)
Please note additional testimony submitted by **Unitarian Universalist Legislative Ministry of Maryland**

Over five hundred caring Marylanders have spoken out in our congregations to strengthen EmPOWER over the last two years.

A dozen of us are pictured here.

View the full album.

HB864_MDSierraClub_fav 29February2024.pdf
Uploaded by: Josh Tulkin
Position: FAV

P.O. Box 278
Riverdale, MD 20738

Committee: Economic Matters
Testimony on: HB 864, "Energy Efficiency and Conservation Plans" (EmPOWER)
Position: Support
Hearing Date: February 29, 2024

The Maryland Chapter of the Sierra Club urges a favorable report for HB 864, one of the Chapter's three priority bills for this session.

This bill updates and reforms Maryland's EmPOWER energy efficiency program to more directly mitigate climate change by reducing carbon emissions from Maryland buildings. To do this, the bill provides incentives for households and businesses to electrify their buildings and facilitates the coordination of both federal and state programs to deliver energy efficiency and electrification for low- and moderate-income households. It also sets out a plan by which the Maryland Public Service Commission (PSC) can reduce the cost of and manage down the costs of utilities fees for investing in EmPOWER.

The Sierra Club would support an additional amendment to end existing incentives for gas heating and water heating appliances. The carbon dioxide emissions associated with gas combustion and the essentially inevitable system leaks of methane prior to combustion release damaging greenhouse gasses that would slow Maryland's progress toward its 2031 and 2045 goals.

Opponents of this legislation have propagated a number of myths about it. Neither this legislation nor the amendment that we recommend would ban new gas appliances. They likewise will not require anyone to install an efficient electric appliance, nor require all new buildings to be all electric. With our recommended amendment, however, utilities would limit current subsidies for gas equipment to reduce installation incentives and encourage users to purchase appliances that will be more sustainable both economically and environmentally.

Historical and Legislative Background

The EmPOWER program has significantly improved the energy efficiency of Maryland homes and commercial buildings over the last 15 years. It has resulted in about $12.7 billion in energy savings for utility customers at a cost of $3.5 billion.[1]

To address the climate crisis and meet Maryland's climate goals, it is essential that EmPOWER and its annual budget (now close to $379 million) work to reduce Maryland's greenhouse gas (GHG) emissions.[2] The Climate Solutions Now Act, passed in 2022, set a goal of reducing carbon emissions by 60% from 2006 levels by 2031[3] and called for EmPOWER to take on

[1] The EmPOWER Maryland Energy Efficiency Act REPORT OF 2022, page 2, Maryland Public Service Commission
[2] The EmPOWER Maryland Energy Efficiency Act REPORT OF 2022, pages 18-19
[3] Climate Solutions Now Act, Page 29

"mutually reinforcing goals," including "greenhouse gas emissions reduction, energy savings, net customer benefits and reaching underserved customers."[4] In a July 2022 report to the legislature, the PSC asked the legislature to adopt greenhouse gas emissions goals for the EmPOWER program, measured on a gross lifecycle basis for the 2024 to 2026 cycle.[5] HB 864 needs to be passed in the 2024 legislative session to be effective for the remainder of this EmPOWER cycle.

Using Gas in Buildings Contributes to Climate Change and Adverse Health Impacts

Fuels burned in buildings in Maryland generate 13% of GHG emissions in Maryland. Including electricity consumed, the building sector accounts for 40% of the state's GHG emissions.[6] To meet our climate goals and keep energy affordable for all Maryland residents, we need to reduce greenhouse gas emissions from burning fossil fuels in our buildings.

Efficient electric cold climate heat pumps can be up to three times as efficient as gas fired or electric resistance heat,[7] lowering operating costs for Maryland residents and lowering greenhouse gas emissions. As we install more solar and wind energy, emissions for heat pumps will fall even further.

Gas and other fossil fuels deliver almost half of Maryland's home heating as of 2020.[8] Gas, made mostly of methane, leaks both in our streets and in our homes and businesses. It is a powerful greenhouse gas, 84-87 times as powerful as carbon dioxide over a 20-year period.[9] Inside our homes it also increases the likelihood that children will develop asthma. One study showed that 12.7% of childhood asthma is attributed to gas in our homes.[10]

Reforming EmPOWER to Support Building Electrification

The EmPOWER rebates provided by this bill – along with rebates, credits and deductions available through the federal Inflation Reduction Act and the federal Infrastructure Investment and Jobs Act – will make the transition to clean, all-electric heating, electric cooking, hot water heating, and clothes drying affordable for a large number of Maryland residents. This financial support is particularly important for heat pumps, which typically have a higher upfront cost than gas furnaces or electric resistance heat, but lower operating costs.

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[4] Ibid, Page 72

[5] PUBLIC SERVICE COMMISSION OF MARYLAND
Recommendations on the Future of EmPOWER Maryland, July 1, 2022

[6] Maryland BuildingDecarbonization Study, E3, October 2021, page 5. As Maryland's electricity production becomes increasingly renewable based, the GHG contributions of electricity generation will be greatly reduced. A significant portion of the current electric load comes from inefficient electric resistance heat.

[7] Renewable Energy Consumption Survey, 2020, Energy Information Administration, Residential Energy Consumption Survey (RECS)

[8] RECS Survey, US Energy Information Administration, 2020

[9]International Energy Agency, Methane and climate change – Methane Tracker 2021 – Analysis - IEA over a period of 20 years.

[10]Population Attributable Fraction of Gas Stoves and Childhood Asthma in the United States
https://www.mdpi.com/1660-4601/20/1/75

Replacing electric resistance heat with efficient electric heat pumps will also be important to managing the load on the electric grid and lowering bills for Maryland households, especially low-income households. By replacing electric resistance heat with heat pumps, these homes will have much smaller electric bills. Heat pumps will also lower electric load at peak times. As with those replacing a gas furnace with a heat pump, the incentives from EmPOWER and the Inflation Reduction Act will support this transition.

To support utilities in this transition from GHG-intensive appliances and furnaces to efficient electric ones, the bill proposes to have the EmPOWER program offer utilities incentives for achieving the greenhouse gas and other EmPOWER goals. It also includes penalties for failure to achieve those goals. The proposed changes to EmPOWER in this bill continue to require investments made by EmPOWER to be cost effective for EmPOWER programs delivered by the utilities.

HB 864 would also make needed reforms to help ensure that low-income customers are able to take advantage of the EmPOWER program. As customers electrify their homes and migrate off of the gas system, low-income customers are likely to bear the cost of paying for gas infrastructure. The Office of the People's Counsel (OPC) estimated that gas bills could rise by more than 100% by 2035 as gas utilities continue to invest in gas infrastructure and fewer customers pay the bills for it.[11] To avoid disproportionately burdening low-income families, we need to offer the ability to electrify their homes. Funding from the federal Inflation Reduction Act (2022) along with EmPOWER incentives for fuel switching and other incentives will enable a significant portion of low-income families to have efficient, safe homes heated by heat pumps.

In recent years, some 30% of EmPOWER low income customers were deferred because they needed other work on their homes.[12] There are incentives available to pay for some of this work; however, braiding together these incentives can be a confusing and challenging process. This bill would provide community outreach specialists to help with this daunting job. Along with the modifications to Chapter 572 that resulted from the passage of HB 169 in the last legislative session, which set increased energy efficiency goals for low-income families under the EmPOWER program, HB 864 will help assure that low-income families benefit from electrification and get a fair shake from EmPOWER.

The bill also calls for 80% of savings to take place in the buildings, behind the meter. This is important because EmPOWER, from its inception, has been financed by a small surcharge on ratepayers' bills, and thus ratepayers should be the beneficiaries of the savings paid for by these charges. Other climate friendly actions from the utility can be included in regular rate filings by the utilities.

During the debates on the Climate Solutions Now Act in 2022, a number of utility representatives questioned whether electrification would stress our electric grid. The recently completed Electrification Study commissioned by the PSC and performed by the Brattle Group

[11] Comate Policy for Maryland's Gas Utilities, Financial Implications, Page 19, Office of the People's Counsel.
[12] Maryland Department of Housing and Community Development, 2021-2023 DCHD Limited Income Program Plan filing to the Public Service Commission

concluded that winter peak load would grow only slightly through 2031, with annual growth of 2% or less, much less than peak load has grown in some decades in the past.

Lastly, HB 864 will bring down costs to utility customers by lowering the rate of return to utilities on existing EmPOWER debt. The electric utilities have invested approximately $900 million in the EmPOWER program and earn over $55 million annually on this investment. HB 864 proposes that ratepayers pay off this debt and achieve significant savings. In addition, the return on this safe investment would be reduced to the utilities' cost of debt, roughly half of what they are currently earning.

Additional Opportunities to Strengthen EmPOWER

As noted above, the Maryland Chapter of the Sierra Club encourages the inclusion of an amendment to end incentives for fossil fuel heating and other appliances. EmPOWER currently offers rebates for high-efficiency gas appliances.[13] Continuing to invest in gas-fired building heating, hot water heating, and dryers commits us to higher greenhouse gas emissions for the life of these appliances, typically 15-18 years. It also impairs the health of our children and runs counter to the federal incentives available.

We propose ending incentives for fossil fuel heating and other appliances, which would encourage homeowners and small businesses owners to make this transition as their current fossil fuel appliances reach the end of their life. This amendment will help us transition to clean, efficient heat, hot water heating and clothes drying, while saving on our utility bills. It will contribute to meeting our climate goals, help more low-income families electrify their homes, and not further perpetuate the health harms of fossil fuel appliances. And, it will reduce the numbers of low-income households that face increasing gas bills as the gas user-base contracts over time.

Conclusion

The Maryland Chapter of the Sierra Club strongly supports HB 864. We urge a favorable report and support amendments to eliminate incentives for purchasing gas appliances.

Christopher T. Stix
Clean Energy Legislative Committee
StixChris@gmail.com

Josh Tulkin
Chapter Director
Josh.Tulkin@MDSierra.org

[13] Washington Gas website, Washington Gas Rebates

HB0864_Energy Efficiency & Conservation Plans_Clim
Uploaded by: Karl Held
Position: FAV

CLIMATE COALITION
Montgomery County, MD

Committee:	**Economic Matters**
Testimony on:	**HB0864 - Energy Efficiency and Conservation Plans**
Organization:	**Climate Coalition Montgomery County**
Submitting:	**Karl Held**
Position:	**Favorable**
Hearing Date:	**February 29, 2024**

Dear Mr. Chair and Committee Members:

Thank you for allowing our testimony today in support of HB0864. The undersigned members of the Climate Coalition Montgomery County, a coalition of 20 organizations focused on climate and the environment, urges you to vote favorably on HB0864.

Montgomery County has rigorous greenhouse gas (GHG) emission reduction goals of 80% by 2027 and 100% by 2035. The County has demonstrated its commitment to achieving these goals by passing building energy performance standards and a building decarbonization bill. HB0864 will help Montgomery County meet its ambitious GHG reduction and building decarbonization goals by strengthening the original EmPOWER Maryland Energy Efficiency Act, passed in 2008.

Not only will HB0864 require the EmPOWER Program to continue to offer free or discounted energy audits, provide rebates for efficient heating and appliances, and help offset the cost of weatherization for homeowners, but it will shift the goals from energy savings to GHG emission reductions. Furthermore, the bill requires electric utilities to provide incentives for switching to clean, efficient electric appliances and home heating. These EmPOWER incentives can be combined with both federal Inflation Reduction Act incentives and additional incentives offered by Montgomery County through its Electrify MC pilot program. HB0864 also provides greater benefits to ratepayers by setting a benchmark of 85% of GHG reductions from efficiency measures inside the home (i.e., "behind the meter"). Finally, we strongly support the bill's provisions to help low-income households access EmPOWER benefits by directing the Department of Housing and Community Development to dedicate multilingual community outreach specialists to promoting the program.

In summary, HB0864 will lower energy costs for homeowners and businesses, leverage state incentives with federal and county funds for energy efficient appliances, reduce GHG emissions, and make homes healthier with reduced indoor air pollution.

For these reasons, we strongly support HB0864 and urge a **FAVORABLE** report in Committee.

350 Montgomery County
ACQ (Ask the Climate Question)
Elders Climate Action Maryland
Environmental Justice Ministry Cedar Lane Unitarian Universalist Church
Friends of Sligo Creek
Green Sanctuary Committee of the Unitarian-Universalist Church of Silver Spring
Montgomery County Faith Alliance for Climate Solutions
Takoma Park Mobilization Environment Committee Zero
The Climate Mobilization Montgomery County
Zero Waste Montgomery County

HB 864 - MDLCV Favorable - Energy Efficiency and C
Uploaded by: Kristen Harbeson
Position: FAV

MARYLAND LEAGUE OF CONSERVATION VOTERS

February 29, 2024

Favorable: HB 864 - Energy Efficiency and Conservation Plans

Mr. Chair and Members of the Committee:

Maryland LCV is writing in support of HB 864 - Energy Efficiency and Conservation Plans - and we thank Delegates Crosby and Qi for their leadership. We also extend our gratitude to the Public Service Commission, Office of the People's Counsel, Moore-Miller Administration, and legislative leadership in both chambers who are working to find consensus around technical amendments to the bill. We have not seen the final version yet, but based on what stakeholders worked on over the summer, we expect to support these amendments. We support, for example, directing the PSC to establish greenhouse gas reduction goals for the utilities with a clear set of parameters. We would not support amendments to shift the EmPOWER program funding being moved into the rate base.

Energy efficiency initiatives are the most cost-effective way to meet Maryland's energy needs and for more than 15 years, EmPOWER has consistently saved Marylanders money while reducing per-capita energy demand.[1] As climate change becomes an increasingly pressing issue, EmPOWER also represents an opportunity for renewed emphasis on greenhouse gas (GHG) abatement and a key program in helping Maryland meet its GHG emissions reductions targets passed in the Climate Solutions Now Act.

The three main pillars of HB 864 are:

- **Reinforce EmPOWER's core function**, continuing to offer free or discounted energy audits, home weatherization, and rebates for efficient heating and appliances.
- **Align EmPOWER with Maryland's climate goals -**
    - Shift program goals from electrical savings to greenhouse gas emissions reduction goals, directing the Public Service Commission to set specific goals for each utility with a set of clear parameters.
    - Require that electric utilities provide incentives to their customers for switching to clean, efficient electric appliances and home heating.
    - Ensure consumers who want to make the switch to electric appliances have access to state and federal incentives.

[1] https://energy.maryland.gov/pages/facts/empower.aspx

    - Make these changes to both the utility run portion of EmPOWER and the Department of Housing & Community Development (DHCD) run programs directed at low-income households.
- **Deliver more savings to customers**
    - Establish a clear benchmark of 85% for what percent of goals are met though in home energy efficiency measures (behind the meter).
    - Direct DHCD to hire multilingual community outreach specialists to promote programs and help low-income households access federal & state incentives.
    - Bring down costs to utility customers by lowering the rate of return to utilities on existing EmPOWER debt.

Maryland LCV urges a favorable report on HB 864.

HB0864_Energy Efficiency & Conservation Plans_ECM_
Uploaded by: Laurie McGilvray
Position: FAV

Committee: **Economic Matters**
Testimony on: **HB0864 - Energy Efficiency and Conservation Plans**
Organization: **Maryland Legislative Coalition Climate Justice Wing**
Submitting: **Laurie McGilvray, Co-Chair**
Position: **Favorable**
Hearing Date: **February 29, 2024**

Dear Mr. Chair and Committee Members:

Thank you for allowing our testimony today in support of HB0864. The Maryland Legislative Coalition Climate Justice Wing, a statewide coalition of nearly 30 grassroots and professional organizations, urges you to vote favorably on HB0864.

HB0864 is one of three priority bills for the Climate Justice Wing because it will strengthen in important ways the original EmPOWER Maryland Energy Efficiency Act, passed in 2008 to incentivize energy efficiency and energy conservation. While the current EmPOWER Program has improved energy efficiency, saved consumers millions of dollars, and reduced greenhouse gas (GHG) emissions, it needs to be updated. The bill will help Maryland meet its ambitious GHG reduction goals and benefit the electric grid by reducing electricity use through efficiency while the state electrifies the building and transportation sectors.

HB0864 includes a number of important components. First, it will continue to offer free or discounted energy audits, provide rebates for efficient heating and appliances, and help offset the cost of weatherization for homeowners. Second, the bill shifts the goals from energy savings to GHG reductions, which is critical for Maryland to meet its GHG emission reduction targets. Third, it requires electric utilities to provide incentives for switching to clean, efficient electric appliances and home heating. Now is the time to make this change and offer fuel-switching incentives, because Marylanders can combine them with federal Inflation Reduction Act incentives to further reduce their costs. While the bill could be strengthened by eliminating EmPOWER subsidies for all gas appliances, thereby making homes healthier, we are pleased that the bill at a minimum will provide incentives for switching from gas to electric appliances. Fourth, HB0864 delivers greater benefits to ratepayers by setting a benchmark of 85% of GHG reductions coming from efficiency measures "behind the meter" or inside the home, and lowers utilities' rate of return on existing EmPOWER debt. Finally, the bill helps low-income households by directing the Department of Housing and Community Development to dedicate multilingual community outreach specialists to promoting the EmPOWER Program.

We also understand that the Public Service Commission (PSC), the Office of the People's Counsel, and the Moore Administration and Agencies have worked on technical amendments to

the bill, although we have not seen specific language. We would be supportive of amendments, for example, that direct the PSC to establish GHG reduction goals for utilities with a clear set of parameters, but would not support amendments to rate-base EmPOWER Program funding.

The benefits of HB0864 are clear:

- lower energy costs for homeowners and businesses,
- leverage state and federal funds for efficient appliances,
- healthier homes with less indoor fossil fuel combustion,
- help commercial and multi-family buildings meet their building energy performance standards;
- reduce demand on the grid as the state transitions to all-electric buildings and vehicles,
- reduce GHG emissions, and
- right-size utility profits and ratepayer impacts.

For these reasons, we strongly support HB0864 and urge a **FAVORABLE** report in Committee.

350MoCo
Adat Shalom Climate Action
Cedar Lane Unitarian Universalist Church Environmental Justice Ministry
Chesapeake Earth Holders
Chesapeake Physicians for Social Responsibility
Climate Parents of Prince George's
Climate Reality Project
ClimateXChange – Rebuild Maryland Coalition
Coming Clean Network, Union of Concerned Scientists
DoTheMostGood Montgomery County
Echotopia
Elders Climate Action
Fix Maryland Rail
Glen Echo Heights Mobilization
Greenbelt Climate Action Network
HoCoClimateAction
IndivisibleHoCoMD
Maryland Legislative Coalition
Mobilize Frederick
Montgomery County Faith Alliance for Climate Solutions
Montgomery Countryside Alliance
Mountain Maryland Movement
Nuclear Information & Resource Service
Progressive Maryland
Safe & Healthy Playing Fields
Takoma Park Mobilization Environment Committee
The Climate Mobilization MoCo Chapter
Unitarian Universalist Legislative Ministry of Maryland
WISE

EmPOWER testimony ECA.pdf
Uploaded by: Leslie Wharton
Position: FAV

Committee:	**Environment and Transportation**
Testimony on	**HB 864**
Organization:	**Elders Climate Action Maryland**
Submitting:	**Leslie Wharton, Chapter Leader**
Position:	**Favorable**
Hearing Date:	**February 29, 2024**

Dear Chair and Committee Members:

Thank you for allowing our testimony today in support of HB 864. Elders Climate Action Maryland is our state chapter of Elders Climate Action, a nationwide movement of elders striving for a future where our children, grandchildren, future generations, and all life can thrive. We strongly urge you to vote favorably on HB 516.

IMT Testimony MD HB864 EmPOWER 2024.pdf
Uploaded by: Marshall Duer-Balkind
Position: FAV

Testimony by Marshall Duer-Balkind, Institute for Market Transformation on HB 0864 – Energy Efficiency and Conservation Plans

February 29, 2024

House Economic Matters Committee

Position: FAVORABLE

Dear Chairman Wilson, Vice Chair Crosby, and Members of the Committee:

My name is Marshall Duer-Balkind, Policy Director for the Institute for Market Transformation, and a resident of district 47a. IMT is a nonprofit that focuses on innovative and pragmatic solutions to create high-performing buildings. We support HB 864 concerning energy efficiency and conservation plans. The bill also aligns with some recommendations of the state's Building Energy Implementation Task Force, which IMT facilitated and staffed.[1]

HB 864 will enable necessary and important revisions to the suite of energy efficiency and demand response programs known as "EmPOWER Maryland." Maryland has long been an energy efficiency leader.[2] However, EmPOWER is no longer in alignment with this Assembly's climate vision of net zero greenhouse gas emissions by 2045; it is incentivizing fossil-fuel powered heating equipment that will still be polluting then.

The bill would change the program savings metric from units of energy use to units of greenhouse gas emissions. Under the current EmPOWER program, incentives are based on energy use reductions by fuel type. So, if you replace an old gas-fired furnace with an efficient electric heat pump, you would not qualify for EmPOWER because electricity use would go up, even though greenhouse gas emissions would go down. This bill will enable beneficial electrification, making EmPOWER a useful resource for

[1] Maryland Department of the Environment, Building Energy Implementation Task Force. https://mde.maryland.gov/programs/air/ClimateChange/Pages/BETITF.aspx

[2] American Council for an Energy-Efficiency Economy (ACEEE). State Scorecard, 2022. https://www.aceee.org/state-policy/scorecard

residents seeking to leverage federal incentives, and for building owners seeking to comply with the state's Building Energy Performance Standards.

The bill will also improve equity by expanding energy efficiency programs to the approximately 100,000 customers of municipal utilities and rural electric cooperatives who do not currently offer these benefits.[3]

While IMT supports the bill, we think it could be stronger in two ways, as recommended by the BETI Task Force final report. The bill should be amended to:

1. *"Prohibit incentives for gas equipment in all residential market rate programs and commercial and industrial programs with a phase-out period ending in 2026, during which there will be narrow exceptions in cases where there are no viable electrification alternatives; and*
2. *"Permit funding for fuel switching for beneficial electrification."*[4]

12 other states have already made similar changes.[5] I previously served as Vice Chair of the Sustainable Energy Utility Advisory Board in Washington, D.C., where we oversaw a similar shift in program goals to focus on greenhouse gas emissions, and ended incentives for new gas-fired equipment.[6] By ending subsidies for fossil fuels, we are better preparing residents for a clean energy future, and reducing the risk of stranded assets. These changes worked in DC, and can work in Maryland.

IMT respectfully requests a favorable report on HB 864.

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[3] Based on IMT analysis of customer counts published by Choptank and A&N electric cooperatives and municipal utility customer counts published by the PSC in their 2022 report to DNR: https://www.psc.state.md.us/wp-content/uploads/2022-2031-Ten-Year-Plan-Final.pdf

[4] BETI TF report, page 15 https://mde.maryland.gov/programs/air/ClimateChange/BEPS/Final%20Report%20of%20the%20Building%20Energy%20Transition%20Implementation%20Task%20Force.pdf

[5] 11 states and the District of Columbia that encourage electrification through fuel-neutral energy or emissions goals for demand-side management programs: DC, NJ, NY, MA, VT, IL, WI, MN, TN, CO, CA, and AK. Source: ACEEE. 2022. "Leading States Chart Path for Cutting Emissions with Electrification." https://www.aceee.org/blog-post/2022/07/leading-states-chart-path-cutting-emissions-electrification-pointing-way-peers-1

[6] Sustainable Energy Utility Advisory Board 2022 Annual Report. https://doee.dc.gov/node/1227741

HB 864 EmPOWER Testimony - Health Professionals fo

Uploaded by: Maryland Health Professionals for Healthy Climate N/A

Position: FAV

MARYLAND
HEALTH PROFESSIONALS
FOR A HEALTHY CLIMATE

MdPHA
Maryland Public Health Association

February 29, 2024
Economic Matters Committee
FAVORABLE HB 864

Mr. Chairman and Honorable Members of the Committee:

Maryland Health Professionals for a Healthy Climate and the Maryland Public Health Association support HB0864, Energy Efficiency and Conservation Plans, and we thank Delegates Crosby and Qi for their leadership on this issue.

This bill would require that each electric company, gas company, and the Department of Housing and Community Development (DHCD) develop a plan for achieving certain energy efficiency, conservation and greenhouse gas emissions targets through programs and services that will surpass existing energy efficiency and conservation goals. It also requires the Public Service Commission (PSC) to promote efficient use of and conservation of energy in support of greenhouse gas emission reduction goals and targets.

As a public health coalition, our concerns include the connection between climate change, health issues, and promoting health equity for Marylanders. With regard to the EmPOWER Maryland program, this means assuring that energy efficiency efforts are designed to protect and strengthen health, most especially for people in our state who are more vulnerable to the impacts of climate change like high heat days due to poor health, low income, and living in historically disinvested communities. While Marylanders have seen the benefits of the EmPOWER program since it was created in 2008 in the form of "... more than $4 billion on their energy bills and reduced statewide greenhouse gas emissions of at least 9.6 million metric tons," the landscape of energy efficiency has evolved over time and so should the EmPOWER program (EmPOWER Maryland).

There is an inconsistency in the benefits from EmPOWER across populations with greater cost and less benefit going to disinvested communities and people who have lower incomes and/or minority backgrounds. Low-income people are paying more for this program than they are getting back. In addition, "...[l]ow-income Marylanders pay more than double what is considered a high energy burden, spending 13% of their household budget for energy bills. The lowest-income households in Maryland spend as much as 42% of their household budget on energy costs," according to Energy Efficient Maryland. This burdensome disparity for low-income households must be addressed. It undermines the health of people who live in these dwellings and it is a blot on fairness in our systems.

The disparity in access to energy causes negative health impacts on the children, adults, and elders who live in the affected households. Making matters worse, weather-proofing and insulation are frequently poor. Health and safety dangers threaten people who live where heating and cooling are too expensive to begin with and energy is lost through inefficiency.

Asthma is the number one reason that children miss school and adults miss work. Minority families, often in low-income neighborhoods with reduced quality housing, have a higher incidence of asthma and the presence of mold may be a factor. Leakage from roofs, pipes, and walls lead to excessive moisture and the growth of mold, which can trigger asthma attacks in susceptible children and adults (Pacheco et. al. 2014,Centers for Disease Control and

MARYLAND
HEALTH PROFESSIONALS
FOR A HEALTHY CLIMATE

MdPHA
Maryland Public Health Association

Prevention, Environmental Protection Agency). In addition, those who are allergic, immunosuppressed and those with chronic lung disease are all at higher risk of infection from mold. Inadequate heating and cooling systems in housing for low-income people may be a factor and thus it becomes an important equity issue. We are likely to see mold become a greater problem with this change in our climate. According to the International Energy Agency, "[c]hronic thermal discomfort and fuel poverty also have negative mental health impacts (anxiety, stress, and depression)."

Our understanding of how health problems respond to poor household energy systems and are also the cause of poor indoor air quality has increased over time. For example, poor ventilation is a significant issue which can lead to mold and damp environments that tend to exacerbate lung conditions, such as asthma. Retrofitting programs targeting energy efficiency by installing insulation have been shown to improve indoor air temperatures to healthy levels (Zota et. al. 2005). Covering the cost of retrofitting and weather proofing can meet needs of the rental communities. We note that temperature also has a large impact on employee productivity and comfort in the workplace (International Energy Agency).

The revenue generated by EmPOWER must be used simultaneously to address the problems of Maryland residents and to address climate change. These goals go hand in glove. The revenue to do this is already generated by the EmPOWER program. The increased profits of our utility companies reflect this fact.

New developments at the federal level and new technologies require adjustment and modernization of Maryland's groundbreaking state EmPOWER program. Improved and more efficient energy saving systems are already a program goal. Updated technologies like heat pumps that do not rely on gas are a step forward. They are an opportunity to expand efforts at electrification and will help Maryland link our electricity to renewable energy sources. HVAC systems, water heaters, and everyday appliances like stoves can be powered without fossil fuels and thus reduce escaping gas that creates a negative impact on our climate and unhealthy effects on the lungs of children. Incentive programs can make the opportunity more note-worthy. Incentives for gas powered appliances are now of questionable value except as part of a planned transition to lower use of fossil fuels. We hope the sector of our economy that produces natural gas and gas systems and appliances will work with us to support the achievement of net zero carbon. We must do this now. Later is too late.

The Inflation Reduction Act of 2022 created new federal subsidies that Maryland should utilize. Modernizing the Empower program will help Maryland's eligibility for federal climate reduction grants. The direct rebates, and generous tax incentives are a tremendous opportunity to continue Maryland's roadmap to a future that will support us and our children and our children's children.

Bill components:

- **Reinforce EmPOWER's benefits** by continuing to offer free or discounted energy audits, help weatherize homes, and provide rebates for efficient heating and appliances.

- **Align EmPOWER with Maryland climate goals**
  - Shift program goals from electrical savings to greenhouse gas emissions reductions goals, directing the Public Service Commission to set specific goals for each utility with a set of clear parameters.

- Require electric utilities to provide incentives for switching to clean, efficient electric appliances and home heating. Electric appliances and equipment are tremendously more efficient and less polluting than gas appliances.
- Ensure consumers who want to make the switch have access to state and federal incentives.
- Make these changes across the scope of EmPOWER, including the utility run portion of EmPOWER and the Department of Housing & Community Development (DHCD) run programs directed at low-income households.

- **Deliver more savings to customers**
  - Establish a clear benchmark of 85% for what percent of goals are met though in home energy efficiency measures (behind the meter).
  - Direct the Department of Housing to staff multilingual community outreach specialists to promote the programs and help low-income households access federal and state incentives.
  - Bring down costs to utility customers by lowering the rate of return to utilities on existing EmPOWER debt.

Thank you for your attention. We request a favorable report on HB 864.

HB 864 - CBF - FAV.pdf
Uploaded by: Matt Stegman
Position: FAV

CHESAPEAKE BAY FOUNDATION

Environmental Protection and Restoration
Environmental Education

House Bill 864

Energy Efficiency and Conservation Plans

Date: February 29, 2024
To: House Economic Matters Committee

Position: **Favorable**
From: Matt Stegman
MD Staff Attorney

Chesapeake Bay Foundation (CBF) **SUPPORTS** HB 864, which realigns the incentives of the existing EmPOWER Maryland program with the state's climate goals and leverages available federal funding to deliver additional benefits to energy ratepayers.

Since its creation in 2008, the EmPOWER Maryland program has been a tremendous success. Over the life of the program, a cumulative investment of $3.5 billion has returned savings of over $12.7 billion to utility ratepayers. Additionally, the program has reduced greenhouse gas emissions by the equivalent of at least 9.6 million metric tons of carbon dioxide.

HB 864 shifts the goals of EmPOWER from electrical savings to greenhouse gas emissions reduction, directing the Public Service Commission to set specific goals for each utility with clear criteria for meeting them. Electric utilities will be required to provide incentives for switching to clean, efficient electric appliances and home heating, which will open up access for the use of new federal incentives. Electric appliances and equipment are significantly more efficient and produce less pollution than gas appliances.

HB 864 does not mandate the use of electric appliances, however it ensures consumers who want to make the switch have access to state and federal incentives. The bill makes these changes to both the utility run portion of EmPOWER and the Department of Housing run programs directed at low-income households.

CBF urges the Committee's FAVORABLE report on HB 864.

For more information, please contact Matt Stegman, Maryland Staff Attorney, at mstegman@cbf.org.

Maryland Office ▪ Philip Merrill Environmental Center ▪ 6 Herndon Avenue ▪ Annapolis ▪ Maryland ▪ 21403

HB0864_EmPOWER_Updates_Testimony.pdf
Uploaded by: Michael Loll
Position: FAV

HB0864 - Energy Efficiency and Conservation Plans

Testimony before the Maryland House Committee for Economic Matters

February 29, 2024

Position: Favorable

Mr. Chair, Mr. Vice Chair and members of the committee, my name is Michael Loll, and I represent the Green Team of St. John the Evangelist Roman Catholic Church in Columbia, MD. Our group's mission is to care for God's creation as instructed by Catholic social teaching. To that end, we advocate for legislation that protects Maryland's environment and its citizens, particularly those who live in underserved and vulnerable communities. We provide written testimony today in ***strong support of HB0864***.

The EmPOWER Maryland Energy Efficiency Act of 2008 established incentives to make Maryland homes more energy efficient and less costly to heat and cool. Since its inception, EmPOWER has saved Marylanders over $12.7 billion from an investment of $3.5 billion in efficiency.

However, the Act passed in 2008 has not benefited all Marylanders equally. Many lower income residents have been left out of the program. HB0684 expands the program to include these residents (https://governor.maryland.gov/news/press/pages/governor-moore-announces-empower-maryland-plan-to-increase-energy-efficiency-and-reduce-utility-costs-in-more-than-60000-ma.aspx). HB0684 reduces greenhouse gas emissions, promotes our green economy, and helps the underserved and vulnerable members of our state. Our church emphasizes creation care and looking out for the common good, and this bill meets both of those stipulations.

Thank you for your time and attention.

We encourage a favorable report.

Michael Loll

Columbia, MD

Advanced Energy United HB 864 Testimony.pdf
Uploaded by: Nick Bibby
Position: FAV

ADVANCED ENERGY UNITED

HB 864 – Energy Efficiency and Conservation Plans (EmPOWER)

House Economic Matters Committee
February 29th, 2024

Nicholas Bibby, Maryland State Lead, Advanced Energy United

Position: Favorable

Mr. Chairman and Honorable Members of the Committee:

Advanced Energy United ('United') is writing in support of House Bill 864 to enhance the state's EmPOWER program. This legislation is crucial for Maryland's transition to clean buildings and for affordable implementation of the Climate Solutions Now Act ('CSNA').

United is a national industry association that educates and advocates for policies that allow our member companies to compete to repower our economy with clean, reliable, and affordable energy. We represent over 100 businesses working across the energy sector, including large-scale and distributed renewables, geothermal, energy storage, energy efficiency and demand response providers, transmission developers, electric vehicle (EV) manufacturers, charging infrastructure providers, and more.

Maryland has set an impressive standard for clean energy action with the CSNA. Now, the state must focus on affordable, equitable implementation to achieve net zero emissions economy-wide by 2045. Reducing the building sector's share of those emissions remains a challenge, with current laws only anticipated to reduce emissions 17% by 2030.[1] United has identified three core pillars to ensure that state's building sector policies are up to the task: 1) supporting widespread energy efficiency and electrification for all Marylanders; 2) minimizing new building-related fossil fuel investments; and 3) preparing the electric grid for new load. HB 864 touches upon all three pillars.

[1] Maryland State Scorecard, Rocky Mountain Institute. Available at: https://statescorecard.rmi.org/md

Supporting widespread energy efficiency and electrification

Energy efficiency and electrification are cornerstones of an affordable clean energy transition. But not all households know how – or can afford – to begin. The state's utilities, and the state's energy and housing agencies, have a big role to play in accelerating the deployment of energy efficiency (like insulation and air and duct sealing), funneling federal and state incentive programs to customers, and transitioning customers to high-performing electric technologies. HB 864 directs the state's electric and gas utilities to develop CSNA-aligned plans and programs to encourage efficiency, demand management, and importantly – electrification – with a focus on making the upgrades and benefits accessible to low- and moderate-income Marylanders.

Minimizing new building-related fossil fuel investments

Residents and businesses that "fuel switch" from gas appliances to electric substitutes today will avoid the upward spiraling of gas bills forecasted by experts over the next 10-20 years.[2] Those who install new fossil appliances will face a choice of whether to continue paying those increasing rates, or to install a new, electric appliance before the end of their fossil appliance's end of live – an economically inefficient option. As such, the state's energy efficiency programs should incentivize Marylanders to make the switch to electric sooner rather than later.

HB 864 encourages fuel-switching by requiring the state's utilities to create new electrification programs, and requires gas and electric utilities to promote all federal and state programs, rebates, tax credits, and incentives that can be used to support clean building upgrades, so long as those upgrades are not powered by fossil fuels.

United believes that one additional provision, added via amendment, would best position Maryland for affordable achievement of its energy efficiency and electrification goals: the elimination of state or utility subsidies for new fossil fuel appliances and infrastructure (i.e. line extension allowances).[3] When the state uses its taxpayer or ratepayer dollars to support long-lived equipment and pipes that must be replaced (or become unnecessary) before the end of their useful life, critical public financing dollars are being used inefficiently. Instead, those dollars could either be back in Maryland wallets or used to build the clean energy infrastructure of the future.

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[2] Climate Policy for Maryland's Gas Utilities: Financial Implications, Office of People's Counsel. November, 2022. Available at: https://opc.maryland.gov/Gas-Rates-Climate-Report

[3] Case Studies: Gas Line Extension Allowances. Advanced Energy United December, 2023. Available at https://advancedenergyunited.org/hubfs/2023%20Reports/Gas%20Line%20Extension%20Allowances%201.23.pdf

Preparing the electric grid for new load

A focus on energy efficiency and demand flexibility is critical to mitigating the growth in demand for electricity as residents and businesses move towards electric buildings and transportation. This is because a reduction in energy waste at its point of use means that our current electric grid can power more of our lives at lower cost. The deployment of widespread energy efficiency programs along with electrification will also slow down and minimize increases in that demand, allowing Maryland's utilities to defer or avoid altogether some of the costly electricity system upgrades (including new power generation, transmission, and distribution infrastructure) needed to power customers lives. The more energy efficiency and demand flexibility pursued in Maryland, the more affordable full CSNA implementation will be for the state's residents.

For these reasons, United strongly supports House Bill 864. We respectfully request a favorable vote from this Committee.

2_29 LH HB 864 - Energy Efficiency and Conservatio

Uploaded by: Nikki Tyree

Position: FAV

TESTIMONY TO THE HOUSE ECONOMIC MATTERS COMMITTEE

HB 864 - Energy Efficiency and Conservation Plans

POSITION: Support

By: Linda T. Kohn, President

Date: February 29, 2024

Since the emergence of the environment movement in the 1970's, the League of Women Voters has advocated for policies that protect our planet, promote public health, and advance equity. The League believes in advancing the renewable energy transition by emphasizing energy efficiency and conservation.

The League of Women Voters of Maryland **supports HB 864,** which would enact critical updates to the EmPOWER Maryland Energy Efficiency Act in order to bring the program in line with Maryland's climate goals. The EmPOWER program currently only measures its goals in electricity savings, but this only accounts for a part of the picture. Maryland has established goals to reduce greenhouse gas (GHG) emissions 60% by 2031 and reach net-zero by 2045. In order to meet these goals, the Public Service Commission must facilitate the transition away from fossil fuel use. **HB 864** would require the Public Service Commission to set GHG emissions reduction goals for utility companies, and establish a plan to meet those goals.

HB 864 promotes equity by continuing and expanding EmPOWER's emphasis on providing financial incentives for energy efficiency and weatherization upgrades. Increasing energy efficiency saves consumers money by lowering their energy bills, which particularly benefits low-income households burdened by high energy bills. **HB 864** would also emphasize community outreach to help low-income households access the program's incentives.

The League of Women Voters of Maryland strongly urges a **favorable report on HB 864.**

HB864_IndivisibleHoCoMD_FAV_Alexander.pdf
Uploaded by: Peter Alexander
Position: FAV

HB864

Energy Efficiency and Conservation Plans

Testimony before House Economic Matters Committee
February 29, 2024
Position: Favorable

Chair Wilson, Vice Chair Crosby, and members of the committee, my name is Peter Alexander and I represent the 750+ members of Indivisible Howard County. Indivisible Howard County is an active member of the Maryland Legislative Coalition (with 30,000+ members). We are providing written testimony today **in support of HB864**. We appreciate the leadership of Vice-Chair Crosby and Delegate Qi for sponsoring this important legislation.

By enacting the EmPOWER Maryland Energy Efficiency Act in 2008, the MGA took a big step forward toward reducing green house gas emissions (GHG) while saving money for Maryland residents and utility ratepayers. Since then, this law has been highly successful, creating nearly $13 Billion in energy cost savings and reducing GHG emissions nearly 10 million metric tons of CO2 equivalents. Efficiency improvements from low-cost energy audits and weatherization, and discounted energy-efficient appliances actually decreased electricity usage in the state.

As good as it has been, EmPOWER is not enough to meet Maryland's 2031 GHG reduction targets. More efficiency improvements and more fossil fuel combustion reduction needs to be implemented. Since buildings are the second largest emitters of GHGs, converting homes and commercial buildings to clean renewable energy sources is imperative. Heat pumps avoid GHG emissions from gas and oil furnaces and are 3-fold more efficient than gas heat. Transitioning Maryland households from gas to electric space heating and appliances is essential for achieving our state's legislatively-enacted climate goals.

HB864 will set pollution reduction targets and measure the effectiveness of its implementation. It will expand access to state and federal energy efficiency programs for low-income households while improving resident's health by decreasing indoor air pollution from gas furnaces and appliances. HB864 will also increase gas utility transparency and accountability for infrastructure planning, service costs, and corporate profits and end ratepayer subsidies for GHG emitting home heating and other GHG emitting appliances.

Let's take another big step forward in climate and health stewardship by making these commonsense improvements to the EmPOWER program.

We respectfully urge a favorable committee report.

Peter Alexander, PhD
District 9A
Woodbine, MD

Testimony in support of HB0864.pdf
Uploaded by: Richard KAP Kaplowitz
Position: FAV

HB0864_RichardKaplowitz_FAV

2/29//2024

Richard Keith Kaplowitz
Frederick, MD 21703

TESTIMONY ON HB#/0864 – FAVORABLE

Energy Efficiency and Conservation Plans

TO: Chair Wilson, Vice Chair Crosby and members of the Economic Matters Committee

FROM: Richard Keith Kaplowitz

My name is Richard K. Kaplowitz. I am a resident of District 3. I am submitting this testimony in support of HB#0864, Energy Efficiency and Conservation Plans

"The Maryland's Climate Pathway report demonstrates how Maryland can meet its ambitious climate goals of 60% reduction of greenhouse gas emissions by 2031 relative to 2006 levels, and attain a net-zero economy by 2045, all while realizing health and economic benefits for Marylanders, including improved air quality, new jobs, and household cost savings.

Maryland can do this through the coordinated implementation of current and new policies across each sector of the economy, combined with a strong federal partnership and a broader all-of society approach that integrates actions from cities, counties, local jurisdictions, business and industry leaders, community organizations, and more." [1]

This bill mandates that sources which affect our climate; electric companies, gas companies, housing, must work towards the development of plans for climate change remediation. These plans must address energy efficiency, conservation, and greenhouse gas emissions reduction targets. The bill will reset existing targets to achieve goals and targets more closely as documented in the current climate plan. It will also make the Public Service Commission work as a partner to these businesses and organizations. The PSC will be mandated to encourage and promote the efficient use and conservation of energy to ensure we meet greenhouse gas emissions reduction goals and targets.

If Maryland is to meet the ambitious but vitally necessary climate change remediation this bill lays out that path and methodologies to be implemented.

I respectfully urge this committee to return a favorable report and pass HB0864.

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1 https://mde.maryland.gov/programs/air/ClimateChange/Documents/MARYLANDS%20PATHWAY%20REPORT%20AND%202031%20GHG%20PLAN/Maryland%27s%20Climate%20Pathway%20Report.pdf

HB 864_Maryland Catholics for Our Common Home_FAV.
Uploaded by: Robert Simon
Position: FAV

Maryland Catholics for Our Common Home

Responding to the cry of the Earth and the cry of the poor.

Hearing before the House Economic Matters Committee
Maryland General Assembly
February 29, 2024

Statement of Support (FAVORABLE)
of Maryland Catholics for Our Common Home on
HB 864, Energy Efficiency and Conservation Plans

Maryland Catholics for Our Common Home (MCCH) is a lay-led organization of Catholics from parishes in the three Catholic dioceses in Maryland: the Archdiocese of Baltimore, the Archdiocese of Washington, and the Diocese of Wilmington. It engages in education about, and advocacy based on, the teachings of the Catholic Church relating to care for creation. MCCH is a voice for the understanding of Catholic social teaching held by a wide array of Maryland Catholics—over 400 Maryland Catholics have already signed our statement of support for key environmental bills in this session of the General Assembly—but should be distinguished as an organization from the Maryland Catholic Conference, which represents the public policy interests of the bishops who lead these three dioceses.

MCCH would like to express its strong support for passage of House Bill 864, Energy Efficiency and Conservation Plans. As Catholics, we view care for God's creation and care for vulnerable groups in society as an integral part of our faith, as taught by recent Popes, including the forceful statements of Pope Francis in his encyclical, *Laudato Si': On Care for Our Common Home*[1] (2015), and in his more recent apostolic exhortation, *Laudate Deum*[2] (2023).

In *Laudato Si'*, Pope Francis calls for a comprehensive response to the threats from climate change, including "an urgent need to develop policies so that, in the next few years, the emission of carbon dioxide and other highly polluting gases can be drastically reduced, for example, substituting for fossil fuels and developing sources of renewable energy." (*Laudato Si',* no. 26) He identifies "promoting ways of conserving energy" as an important line of action, including "removing from the market products which are less energy efficient or more polluting…and encouraging the construction and repair of buildings aimed at reducing their energy consumption and levels of pollution." (*Laudato Si'*, no. 180) *Laudato Si'* also contains a call to "integrate questions of justice in debates on the environment, so as to hear both the cry of the earth and the cry of the poor" (*Laudato Si'*, no. 49).

The provisions of House Bill 864 build on the success of the EmPOWER program in ways that are consistent with the broad vision of Pope Francis. House Bill 864 ends incentives for the use of fossil fuels in home appliances and creates new incentives for electrification, efficient electric appliances, and home heating. Its provisions expand access for low-income households to state and federal funds for energy efficiency and whole-home retrofits. It also directs the Public Service Commission to set greenhouse gas emission reduction goals to align the program with Maryland's climate goals, thereby increasing the coherence of State policies in this area.

Laudato Si' and *Laudate Deum* herald a common message: The global environmental crisis is real. The clock is ticking. We must act now—and we must act courageously and decisively to correct our relationship with our common home. We cannot afford a failure of "conscience and responsibility" (*Laudate Deum*, no. 52). The expansions and improvements to the EmPOWER program in this bill will help Maryland to meet this environmental and moral challenge.

For these reasons we strongly urge your support for this bill. Thank you for your consideration of our views and our respectful request for a **favorable** report on House Bill 864.

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[1] The English text of the encyclical, to which the paragraph numbers in the parentheses, can be found at: https://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html.

[2] The English text of the apostolic exhortation, to which the paragraph numbers in the parentheses refer, can be found at: https://www.vatican.va/content/francesco/en/apost_exhortations/documents/20231004-laudate-deum.html.

GHHI Written Testimony - HB864.pdf
Uploaded by: Ruth Ann Norton
Position: FAV

Green & Healthy Homes Initiative®

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www.ghhi.org

February 27, 2024

Delegate C.T. Wilson, Chair
House Economic Matters Committee
House Office Building, Room 231
Annapolis, Maryland 21401

Re: **FAVORABLE** – HB864 – Energy Efficiency and Conservation Plans

Dear Chairman Wilson and Members of the Committee:

On behalf of the Green & Healthy Homes Initiative (GHHI), I submit our testimony in support of HB864. GHHI is a 501(c)(3) national nonprofit organization headquartered in Baltimore, MD. Our mission is to address the social determinants of health, opportunity and racial and health equity through the creation of healthy, safe and climate resilient homes. GHHI provides direct services in Baltimore and throughout the region including energy efficiency, weatherization and clean energy housing interventions. HB864 ensures that all EmPOWER programs, including DHCD's limited income programs, are designed to support state climate, energy, and affordability goals.

GHHI is the nation's lead authority on the benefits of a whole-house approach that aligns, braids and coordinates energy efficiency, health and safety to create an integrated home repair and retrofit delivery model to improve health, economic and social outcomes in line with the state's climate goals. The GHHI model has been supported by the US Department of Energy and the US Department of Housing and Urban Development as well as numerous states, cities and counties throughout the US. By delivering a standard of excellence, GHHI's work aims to eradicate the negative impact of historic disinvestment, the legacy of ill-conceived and unjust housing by creating holistically healthy housing for children, seniors and families in Maryland's low wealth communities. As GHHI's President and CEO, I serve on the Maryland Clean Energy Center Board, NESCAUM's Advisory Board, the EPA Children's Health Protection Advisory Committee, the Maryland Green and Healthy Homes Task Force and as Chair of the Maryland Lead Poisoning Prevention Commission among others. I oversee a number of related GHHI DOE, HUD and EPA funded programs and our organization's work has been recognized through national best practice awards from the EPA and HUD. In 2023, GHHI was awarded the Buildings Upgrade Prize award from the U.S. Department of Energy in recognition of its proposed initiative to complete electrification of low-income households in East Baltimore through a community-driven, whole home initiative with health and safety, workforce and efficiency benefits.

GHHI was among the lead advocates in the 2023 General Assembly session for the passage of the Low-Income Savings Target Bill (HB169) which completed a years-long effort to establish

savings targets for DHCD's limited income programs. HB864 will build off of that success. With the historic increase in homes served through DHCD's programs[1] it is key that EmPOWER allows for beneficial electrification and minimizes cost burdens on Maryland households.

Why is HB864 Needed?

Maryland has a nation-leading 2-percent-per-year electricity consumption savings target enacted by the legislature in 2017. With the recent passage of the Climate Solutions Now Act, the State of Maryland has set clear and ambitious statewide goals for emissions reductions including a nation-leading goal of 60% emissions reduction by 2031. According to the US Energy Information Administration, approximately 30% of Maryland's energy consumption comes from the residential sector. The state will not be able to meet climate goals or properly serve the needs of low-income clients without the types of housing energy retrofits directed by HB864. The Act aligns our state EmPOWER program with climate goals and strengthens the program. By implementing our home energy transition now, we can ensure a smooth transition including making sure that low-income residents are not left behind as we replace oil and natural gas sources in homes.

HB864 improves the use of federal rebates, program affordability, and maintains a focus on energy efficiency. The Low-Income Savings Target Bill (HB169) that passed last year and the low-income-specific goals in HB864 will ensure that all households—including the low-income households with the highest need—will have access to energy efficiency housing program services including fuel switching measures that place households on a long-term path towards energy affordability and healthy housing.

Benefits of Weatherization and Efficiency for Healthy Housing

This bill keeps the core of EmPOWER about delivering efficiency and related cost-savings to clients, including low-income households served by DHCD's programs. Efficiency upgrades from air sealing and insulation upgrades to mechanical improvements related to ductwork, furnaces, and water heating contribute to better thermal comfort, energy affordability, air quality, and moisture management. These improvements lead to both energy and non-energy benefits. They are the cheapest and cleanest form of energy—energy not used.

Additionally, the non-energy benefits are especially significant in low-income housing, communities of color, and disinvested communities. These communities often have the least efficient housing, highest energy burdens, and most deferred maintenance.

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[1] Maryland Department of Housing and Community Development. "Governor Moore Announces EmPOWER Maryland Plan to Increase Energy Efficiency and Reduce Utility Costs in More than 60,000 Maryland Households." February 13, 2024. Available at https://news.maryland.gov/dhcd/2024/02/13/governor-moore-announces-empower-maryland-plan-to-increase-energy-efficiency-and-reduce-utility-costs-in-more-than-60000-maryland-households/

As noted earlier, GHHI has developed the holistic energy efficiency, health and housing service delivery model that is implemented in our nationally recognized, Maryland-based direct service program. The model was adopted by the US Department of Housing and Urban Development and is currently being advanced in partner jurisdictions nationally.

Maryland DHCD is also embracing this approach in its Whole Home Efficiency program in the EmPOWER portfolio, which takes a holistic look at home efficiency and connects clients to related programs to address health, safety, and rehabilitation issues that would otherwise cause deferrals.

Studies for the US Department of Housing and Urban Development have shown the benefits of GHHI's whole house approach in Baltimore as follows:

- 66% reduction in asthma related hospitalizations
- 62% increase in school attendance by addressing chronic absences due to asthma
- 88% increase in parental work attendance related directly to healthier children
- 99% reductions in childhood lead poisoning
- Reductions in household injuries for children and trip and fall injuries for seniors
- Increased mobility and accessibility in the home for older adults who are able to Age in Place in the homes and communities where they choose to live
- Reductions in greenhouse gas emissions, energy consumption and overall energy costs.

Cost Savings and System Change

- Improved service delivery to low-income households and reductions in deferral rates from housing program services that clients are otherwise eligible to receive
- Program and government cost savings from efficiencies in implementing comprehensive assessment and housing intervention models utilizing cross-trained assessors and contractors
- Government innovation through the utilization of an integrated, comprehensive housing intervention model by state agencies that attracts new federal and philanthropic investment
- Reductions in medical costs including Medicaid costs
- Reductions in energy consumption and energy costs
- Reductions in housing maintenance costs

<u>Importance of Fuel-Switching for DHCD Programs</u>

By setting a greenhouse gas target and allowing for beneficial electrification, this bill will update the EmPOWER program to ensure it is aligned with the state climate goals and best practices related to both energy affordability and health. Doing so is imperative to ensure that EmPOWER interventions are placing households on a path towards long-term affordable energy savings while aligning EmPOWER program spending with state planning.

Under current program structure, EmPOWER programs (including DHCD limited income programs) cannot complete fuel-switching (such as replacing a gas furnace with an electric heat pump) even when the gas appliance is at the end of its useful life and a heat pump offers the best opportunity for cost savings in both the short- and long-term. These situations are clear cases where electrification benefits the household through cost savings, health benefits, and thermal comfort.

As DHCD has embraced a whole home approach and the federal government has allocated over $68 million in Home Electrification & Appliances Rebates (HEAR) to Maryland for electrification interventions, EmPOWER should be set up to best support fuel-switching interventions to tap into the related resources.

Importance of Energy Affordability and Cost Protections

GHHI is the lead facilitator of the Maryland Energy Efficiency Advocates (MEEA) coalition that participates in the EmPOWER proceedings and various PSC and DHCD workgroups. In those spaces, MEEA and others have consistently raised concerns about how energy cost burdens create inequities for low-income communities and disproportionate burdens on communities of color. In recent MEEA comments to the PSC on Limited Income Mechanism for Utility Customers (Public Conference 59), we note that a 2023 analysis of residential energy affordability found that around 400,000 Marylanders—18% of the population—have an energy burden over 6%, which is the threshold researchers use to define high burden.[2]

Aligning electrification and efficiency together as this bill does is the best path towards energy affordability at both a household and system-wide level. Already, many households are making the switch to heat pumps and for good reason. The same 2023 analysis describing the 18% of residents with high energy burdens also notes that the average home heated by natural gas would find average savings of $150 annually by switching to an electric heat pump based on 2021 utility prices. Long term, homes that move to heat pumps can more readily benefit from renewable energy such as community solar, can avoid risks of future high gas infrastructure costs, and are in alignment with state climate plans that commit to moving away from fossil-fuel heating systems.

The challenge has been that fuel-switching has not been accessible to low- and moderate-income households that rely on support from programs like EmPOWER to afford the upfront costs of appliance replacement. Updating EmPOWER will create a pathway for these households to access support for these changes. It will also help the state develop the administrative and market infrastructure that will benefit related initiatives such as the federal rebate programs.

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[2] Arjun Makhijani, et al, *Energy Affordability in Maryland: Integrating Public Health, Equity and Climate, Executive Summary* (Feb. 2023). https://www.psehealthyenergy.org/wp-content/uploads/2023/02/Energy-Affordability-in-Maryland-2023_-Final-Report-1.pdf.

Concerns with Gas Subsidies

GHHI supports the efforts to fully move the EmPOWER program away from subsidizing gas appliances and would support amendments to end gas subsidies in EmPOWER. Gas appliance subsidies are not aligned with state climate goals, send incorrect messages about the future affordability of gas as a fuel source, and contribute to pollution that harms health both for the individual household and wider community.

Growing evidence has highlighted the negative health impacts of fossil fuels from residential usage. In September 2023, GHH, CASA, CCAN, and RMI published the report *Cutting Through the Smog*[3] which highlighted that fossil fuel furnaces, HVAC systems, water heaters and other equipment emit more than three times as much health-harming nitrogen oxides as the Maryland's power plants. This disproportionately affects low-income residents and residents of color where pollution, environmental justice, and health issues are most likely to compound. The report highlights that outdoor pollution from fossil fuel equipment in Maryland caused an estimated 163 premature deaths in 2017 alone, driving about 3,500 cases of respiratory symptoms, 6,500 lost workdays, and $1.3 billion in public health impacts per year. That is just based on outdoor air pollution.

Furthermore, earlier this February the EPA and National Academies released a consensus study report, *Health Risks of Indoor Exposure to Fine Particulate Matter and Practical Mitigation Solutions*[4]. That report notes "natural gas combustion is a substantial source of UFPs [ultrafine particles], particularly if the particles are not properly exhausted above a stove or vented from appliances such as water heaters, dryers, or heating systems." The report concludes, "There is ample evidence that exposure to indoor fine particulate matter causes adverse health effects." These health impacts include respiratory effects, cardiovascular effects, neurological effects, and more.

Nitrogen oxides and fine particulate matter are just two of the major pollutants from fossil fuel combustion. Other pollutants include the carcinogen benzene, volatile organic compounds, and carbon monoxide. Moving to electric technologies such as electric heat pumps eliminates the source exposure of fossil fuel combustion and toxic gas leakage from fossil-fuel appliances.

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[3] CASA, Green & Healthy Homes Initiative, Chesapeake Climate Action Network, and RMI, *Cutting Through the Smog: How Air Quality Standards Help Solve the Hidden Health Toll of Air Pollution from Maryland's Homes and Businesses* (September 2023). https://www.greenandhealthyhomes.org/publication/cutting-through-the-smog/

[4] National Academies of Sciences, Engineering, and Medicine. 2024. *Health Risks of Indoor Exposure to Fine Particulate Matter and Practical Mitigation Solutions*. Washington, DC: The National Academies Press. https://doi.org/10.17226/27341

Between the federal government passing historic investments in climate, infrastructure, and housing through the Bipartisan Infrastructure Law and the Inflation Reduction Act, and the state of Maryland's leadership in climate commitments and planning, we are looking at a historic intersection of need, opportunity, and funding. Meeting this moment for climate, health, and equity will require innovative approaches and comprehensive solutions. This bill is a proactive and thoughtful way to update a program that has successfully delivered on targets since its inception. It will help Maryland lead in the housing and energy transitions that are necessary to create a sustainable future. I urge the Committee to support the passage of HB864.

Respectfully Submitted,

DocuSigned by:
Ruth Ann Norton
1A42B3060D6A435...

Ruth Ann Norton
President and CEO

HB0864_Energy_Efficiency_and_Conservation_Plans_FA
Uploaded by: Ruth White
Position: FAV

HoCoClimateAction.org
Howard County, Maryland

HB0864: Energy Efficiency and Conservation Plans
Hearing Date: February 29, 2024
Bill Sponsor: Delegate Cosby
Committee: Economic Matters
Submitting: Ruth White for Howard County Climate Action

HoCo Climate Action is a 350.org local chapter and a grassroots organization representing approximately 1,400 subscribers. It is also a member of the Climate Justice Wing of the Maryland Legislative Coalition. We strongly urge support for HB0864 for EmPOWER program reform.`

The EmPOWER Program created in 2008 has been effective in promoting energy efficiency and helping Marylanders reduce their electricity bills and save energy. Many members in our local community have taken advantage of free and discounted home energy audits and have been encouraged to change to more efficient lighting and more. This program is one way Marylanders have learned about the importance of saving energy by weatherization, other building shell improvements and the use of more efficient appliances.

However in 2024 we can and must do more. The Climate Solutions Now Act of 2022 (CSNA) requires that Maryland reach netzero emissions by 2045, a mere 21 years away. We can't reach that goal if we continue burning fossil fuels in buildings since this creates substantial methane emissions. Overall, space and water heating with fossil fuels creates 17% of Maryland's greenhouse gas (GHG) emissions.

HB0864 critically shifts target goals from reducing electricity usage to GHG reduction emissions. This is long overdue, and as stated above, aligns energy policy with climate goals set under CSNA. In addition, HB0864 provides EmPOWER incentives for Marylanders who choose to switch from fossil fuel appliances to the more efficient electrical appliances and home heating. This incentive, combined with federal Inflation Reduction Act incentives, will help Marylanders reduce climate causing emissions and save on their ongoing utility bills.

We would like to see the bill further strengthened by eliminating most or all EmPOWER subsidies for gas appliances since these subsidies are counter to the state's electrification goals. New fossil fuel appliances will last 15 years or more, and make it even more difficult and expensive to reach our 2031 and 2045 climate targets. We need to stop spending ratepayer dollars through our utility bills for subsidizing polluting gas appliances and home heating.

Also, we note large buildings subject to Buildings Energy Performance Standards (BEPS) under CSNA (those covered buildings over 35,000 square feet), will be aided to meet BEPS requirements by taking advantage of EmPOWER and other electrification incentives.

We support HB0864 for these and many other benefits elaborated in other's testimonies:

- lower energy costs for homeowners and businesses,
- leveraging of state and federal funds for efficient appliances,
- healthier homes with less indoor fossil fuel combustion,
- reduced demand on the grid as the state transitions to all-electric buildings and vehicles,
- reduced GHG emissions, and
- right-sizing utility profits and ratepayer impacts.

Finally, the bill helps low-income households by directing the Department of Housing and Community Development to dedicate multilingual community outreach specialists to promoting the EmPOWER Program.

For all these reasons, we strongly urge a FAVORABLE report for this bill.

Howard County Climate Action
Submitted by Ruth White, Steering and Advocacy Committee
www.HoCoClimateAction.org
HoCoClimateAction@gmail.com

RRUUC Earth Ministry Testimony HB 684.pdf
Uploaded by: Bruce Davis
Position: FWA

Testimony Concerning House Bill 684
Energy Efficiency and Conservation Plans

Position: Support with Amendment

Hearing date: February 29, 2023

Committee: Economic Matters

Testimony of the Earth Ministry of the River Road Unitarian Universalist Congregation Bethesda Maryland
Contact: Bruce Davis
701 King Farm Blvd, Apt 703
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(240) 477-5324

The Earth Ministry of the River Road Unitarian Universalist Congregation ("Congregation") urges a favorable report, with amendments, for HB 684, Energy Efficiency and Conservation Plans.

The Earth Ministry[1] comprises members and friends of the Congregation, which has received recognition as a "Green Sanctuary" by the Unitarian Universalist Association. The Earth Ministry focuses on education for action, raising awareness about reducing the impacts of climate change on the Congregation's building, in our homes, and in our county and State. We work for environmental justice for those disproportionately impacted by environmental degradation. The Earth Ministry calls upon all, in a loving and respectful way, to take the actions necessary to preserve the earth as a sustainable home for humanity and all living beings. Our actions are guided by the seven principles of Unitarian Universalism, including the inherent worth and dignity of every person, the goal of a world community with peace, liberty and justice for all, and the respect for the interdependent web of existence of which we are a part.

Humanity and all living beings are facing a climate calamity that people have created, and are continuing to create, by burning fossil fuels for energy. We feel a moral obligation to do all we can to prevent the enormous injury and suffering that a much warmer planet will bring to us, to our children and grandchildren, and to those unable to adapt to climate change. HB 684 will help mitigate the problem. We respectfully ask the Economic Matters Committee to report the Bill favorably, with clarifications and amendments described below.

[1] The Earth Ministry is a member-created committee established in accordance with the Congregation's bylaws. This testimony is submitted by and on behalf of the Earth Ministry. The Congregation has not taken a position regarding the Bill 684.

1. Establish a New Goal for EmPOWER Maryland: Greenhouse Gas Reduction.

The EmPOWER reform bill supports Maryland's goals of reducing greenhouse gas (GHG) emissions by 60% (from 2006 levels) by 2031 and to net zero by 2045.[2] The Bill accomplishes this by repealing outdated electricity conservation mandates and reorienting EmPOWER to target GHG emissions and establish specific GHG reduction goals.

The original EmPOWER statute did not address GHG reduction; instead, the statute responded to a concern that Maryland might soon be faced with a shortage of electricity. The statute required Maryland's utilities to establish programs to reduce electricity consumption and peak demand. The EmPOWER statute today requires electric utilities to reduce electricity consumption and peak demand: by 2.0% per year in 2022 through 2024; by 2.25% per year in 2025 and 2026; and by 2.5% per year in 2027 and thereafter.

EmPOWER's mandated electricity savings goals are outdated because we must increase electricity use to accomplish Maryland's GHG reduction goals. One of the most effective ways to reduce GHG emissions is to stop burning fossil fuels to heat buildings. This requires heating buildings with electric powered heat pumps instead of fossil fuel-burning furnaces. The Department of the Environment (DOE) so concluded in its 2030 Greenhouse Gas Reduction Plan.[3] When heating systems are electrified, Marylanders will need more electricity but less gas.

The Climate Solutions Now Act of 2002 established Maryland's GHG reduction goals (noted above) and directed DOE to study how to achieve them. DOE responded with Maryland's Climate Pollution Reduction Plan, published in December 2023. One of the Plan's key recommendations is to:

> **Modify EmPOWER** - In consultation with the PSC, pass legislation establishing GHG reduction goals for electric and gas utility companies and require the utilities' programs to facilitate beneficial electrification of fossil fuel heating equipment.[4]

While the DOE prepared the Climate Pollution Reduction Plan, the Public Service Commission (PSC) studied whether Maryland's electric grid could accommodate widespread building electrification. In December 2023 the PSC reported that a managed transition to a highly electrified building sector would increase Maryland's electric system load growth rates in a range of only 0.6–2.1% per year through 2031, which would be accompanied by a 33-32% reduction in building sector gas demand.[5] The projected electric load growth would be comparable to or less than the growth rate the Maryland system has seen over the past 40 years.

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[2] These goals were established in 2022 by the Climate Solutions Now Act (CSNA).

[3] "[Heat pump] heating systems are much more efficient than furnaces or boilers that burn natural gas, heating oil, or propane for heat, and electricity is a lower carbon source for energy than those other fuels. The result is that home heated by heat pumps are responsible for fewer GHG emissions than those heated by fossil systems. As Maryland's electricity system continues to decarbonize, the pollution benefits of heat pumps will continue to grow." The Greenhouse Gas Emissions Reduction Act: 2030 GGRA Plan, prepared for Governor Hogan and the General Assembly at page XX (Feb. 19, 2021)

[4] Maryland's Climate Pollution Reduction Plan (2023), at 90

[5] PSC letter dated Dec. 29, 2023, to the Senate President and House Speaker RE Compliance with Sect. 10 of the Climate Solutions Now Act of 2022, p.2. The PSC's conclusion is based on an Assessment of Electrification

The DOE plan and the PSC report establish that EmPOWER reform is necessary to achieve Maryland's GHG reduction goals and that the resulting increase in demand for electricity will be modest by historical standards and manageable.

The reformed EmPOWER law will continue to promote energy efficiency and conservation, augmented by "demand response"[6] and "beneficial electrification." The changes will realign EmPOWER with Maryland's climate goals while preserving the best aspects of the original EmPOWER law.

We ask the Economic Matters Committee to report the Bill favorably with amendments described below.

2. Require EmPOWER Programs to Include Fuel Switching

As noted above, Maryland's Climate Pollution Reduction Plan recommends that EmPOWER programs "require the utilities' programs to facilitate beneficial electrification of fossil fuel heating equipment." This recommendation encompasses: (1) installing heat pumps to heat newly constructed buildings; and (2) retrofitting existing fossil fuel-heating systems with electric heat pumps (fuel switching). To eliminate any doubt about this, we request that the Bill be amended to state explicitly that the utilities' EmPOWER programs must include fuel-switching.

3. Stop Subsidizing Fossil Fuel-burning Furnaces and Appliances

We have only 21 years left to achieve Maryland's goal of net zero GHG emissions by 2045. Every new fossil fuel-burning furnace or heating device can be expected to be emit GHG pollution over a service life of about 20 years. This would undermine Maryland GHG reduction efforts. As the title of the 2022 act says, we need climate solutions NOW, not 20 years from now. Therefore, we ask that the Bill be amended to state that EmPOWER programs may not subsidize the purchase of new fossil fuel-burning furnaces and appliances. We are in a deep hole; and we need to stop digging.

4. Expand EmPOWER Access for Low-income Households.

We support the Bill's provisions requiring the Department of Housing and Community Development to provide low- and moderate-income people with services to achieve certain GHG emissions reduction targets. We are concerned, however, that EmPOWER programs may be providing more benefits to the well-to-do than to the poor, and that people with low-and moderate incomes need help in confronting health problems caused by indoor gas-burning

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Impacts on the Maryland Electric Grid, prepared by the Brattle Group. A copy of the Brattle Group's assessment is attached to the PSC's letter.

[6] Demand response programs promote changes in electric usage by consumers through price changes or other incentives.

appliances. We ask the Committee to keep the needs of the less fortunate in mind while considering the Bill.

Utilities' EmPOWER programs are financed by surcharges on customers' electric or gas bills. This means that everyone, rich or poor, who pays a utility bill is funding EmPOWER programs. Unfortunately, EmPOWER historically has tended to provide more support to the well-off, who need less help, than to the poor, who need more.

Consider the case of a well-off utility customer who owns a house. EmPOWER may subsidize this homeowner's purchase of new, efficient appliances, or perhaps a new furnace, or maybe new insulation or weather sealing. The well-off homeowner has money available to pay his or her share of the cost and is happy for a utility company to pay the rest of the bill with EmPOWER funds. A homeowner of limited means, by comparison, may not be able to afford to make any payment for energy efficiency improvements; this homeowner will get no help from EmPOWER.

A utility customer who rents an apartment is unlikely to get help from EmPOWER. The renter, who may live in his dwelling for only a few years, has no incentive to buy long-lasting appliances. In any case, renters usually have no legal right to alter their dwellings with new appliances or insulation. Renters may also face health problems, like asthma, due to toxic combustion products from gas-burning stoves. Researchers at the University of Maryland report that:

> [Z]ero-emission appliances are critical, not only to achieving environmental goals but to create healthier homes. As gas-fired appliances are a significant source of nitrogen oxides (NOx) and methane, switching to zero-emission appliances will reduce the amount of harmful pollutants in homes, saving lives and reducing respiratory illnesses. To ensure equitable and affordable access to zero emission appliances, Maryland may consider additional support and incentives to alleviate these concerns and deliver health benefits for low-income homeowners and renters, who often face higher indoor air pollution levels.[7]

We ask that EmPOWER reform include financial help to renters in this situation, including support for fuel switching.

Conclusion

We ask the Economic Matters Committee to report the Bill favorably with the amendments proposed.

[7] Maryland's Climate Pathway: An analysis of actions the State can take to achieve Maryland's nation-leading greenhouse gas emissions reduction goals. Center for Global Sustainability, University of Maryland (2023), p. 54. (Footnotes omitted.)

HB0864 OPC Testimony.pdf
Uploaded by: David Lapp
Position: FWA

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BRANDI NIELAND
DIRECTOR, CONSUMER
ASSISTANCE UNIT

BILL NO.:	House Bill 864 – Energy Efficiency and Conservation Plans
COMMITTEE:	Economic Matters
HEARING DATE:	February 29, 2024
SPONSORS:	Delegates Crosby and Qi
POSITION:	Favorable – with amendments

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The Office of People's Counsel ("OPC") supports House Bill 864 with amendments. HB 864 makes important updates to the EmPOWER program and establishes greenhouse gas ("GHG") reduction goals for these important programs administered by the Department of Housing and Community Development ("DHCD") and the electric and gas utilities.

HB 864 includes measures that advance the interests of residential utility customers. It ensures that EmPOWER remains a program that primarily serves residential customers through "behind-the-meter" projects; it ensures the elimination of the massive unamortized balance from which the utilities have been profiting at great cost to customers; and it mandates moving to a full expensing model for EmPOWER programs that will generate significant customer savings every year forward.

In addition to requiring greenhouse gas reductions through energy efficiency, conservation, and demand response, HB 864 also requires beneficial electrification measures. With these changes, EmPOWER can help Maryland meet its climate goals while continuing to deliver energy bill savings to utility ratepayers. The bill's establishment of GHG reduction goals will remove barriers to both electrification and the prioritization of fuel-switching. It is imperative that the EmPOWER statute evolve to meet the needs of utility customers while consistent with Maryland's climate policy goals.

OPC has sought to coordinate with the Maryland Public Service Commission ("Commission") and other state agencies on potential amendments to improve and clarify aspects of the bill. OPC looks forward to working with the sponsors on these improvements.

Background

The EmPOWER statute was enacted in 2008 through the passage of the Maryland Energy Efficiency Act. The legislature found that "energy efficiency is among the least expensive ways to meet the growing electricity demands of the State"[1] and established requirements for Maryland's programs that promote energy efficiency and conservation. Energy efficiency provides direct benefits to customers by saving them money on their gas and electric bills and also helps reduce greenhouse gas emissions from the generation of energy.

The EmPOWER statute currently mandates that electric companies reach specific energy savings targets, measured in megawatt-hours ("MWh"). Gas companies do not have statutorily mandated targets. Until last year, programs for limited-income ratepayers,[2] administered by the Department of Housing and Community Development ("DHCD"), did not have statutorily mandated targets. This changed last year with the passage of HB 169. DHCD now has statutorily mandated energy savings targets.[3]

A Public Service Commission Work Group, the Future Programming Work Group, began meeting in 2021 and was charged with evaluating multiple topics regarding the next cycle of EmPOWER. The work group was widely attended by stakeholders, including the utilities, OPC, Commission Technical Staff, the Maryland Energy Administration, DHCD, Maryland Energy Efficiency Advocates, as well as other governmental agencies and organizations, including trade organizations, all of whom have a stake in the EmPOWER process. In the spring of 2022, the work group recommended that EmPOWER transition from MWh reduction goals to a GHG reduction goal.[4] The passage of the Climate Solutions Now Act of 2022, which sets

[1] Md. Code Ann., Pub. Util. § 7-211(b)(1).
[2] For purposes of DHCD's EmPOWER programs, limited-income residential households are currently considered to be those that earn either 250% or less of the Federal Poverty Level ("FPL") on an annual basis, or 80% of Area Median Income ("AMI"), whichever is higher (or whichever was used to qualify the individual through another, outside program). For multi-family buildings, the income threshold is 80% AMI. More information is available here: https://dhcd.maryland.gov/Residents/Pages/lieep/default.aspx.
[3] Md. Code Ann., Pub. Util. § 7-211(b)(1).
[4] Maryland Public Service Commission, Public Utility Law Judge Division, *Future Programming Work Group Report*, 1 (April 15, 2022). This report can be found at

GHG reductions goals for Maryland to mitigate climate change, further highlighted the importance of this transition. After the enactment of the CSNA, the Commission agreed with the work group that EmPOWER should transition to a GHG reduction target and—based on its view that it could not do so without changing the EmPOWER statute—recommended that the General Assembly change the target.[5]

The Commission released its GHG Abatement Potential Study in December 2022.[6] The study demonstrated that EmPOWER programs have enormous potential to reduce, in a cost-effective manner, GHG emissions in Maryland.[7] The study further demonstrated a significant opportunity for cost-effective fuel-switching from fossil fuel end-uses to efficient electric heat pump technology.[8]

Legislation that would have transitioned the EmPOWER program to a GHG reduction goal failed to pass in the 2023 legislative session.

The Commission ordered the EmPOWER utilities to model various levels of GHG reductions, based on the results of the GHG Abatement Potential Study. After accepting stakeholder comments and holding a hearing, the Commission ordered revised goals for the EmPOWER utilities on December 29, 2023.[9] However, as noted above, the EmPOWER statute's current energy savings goal continues to stymie efforts, in part, to prioritize fuel-switching from fossil-fuel end uses to efficient electrification under EmPOWER.

Comments

OPC strongly supports HB 864's goal of updating the EmPOWER statute to advance customer interests and ensure consistency with Maryland's climate goals.

The bill will advance the interests of residential utility customers. For

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https://webpsc.psc.state.md.us/DMS/maillogsearch by performing a search for MailLog number 240203.

[5] Public Service Commission of Maryland, *Recommendations on the Future of EmPOWER Maryland*, 5 (July 1, 2022) https://www.psc.state.md.us/wp-content/uploads/EmPOWER-Recommendations-to-General-Assembly_Final.pdf.

[6] Applied Energy Group, *Maryland GHG Abatement Study – Final Results* (Case No. 9648, December 8, 2022). This document can be found at https://webpsc.psc.state.md.us/DMS/maillogsearch by performing a search for MailLog number 300426.

[7] Maryland Office of People's Counsel, *Office of People's Counsel Comments on The Greenhouse Gas Abatement Potential Study* (Case No. 9648, December 30, 2022) at 2. This document can be found at https://webpsc.psc.state.md.us/DMS/maillogsearch by performing a search for MailLog number 300687.

[8] *Id.* at 2.

[9] Maryland Public Service Commission, *Order No. 90957* (Case No. 9705, December 29, 2023). This order can be found at https://webpsc.psc.state.md.us/DMS/maillogsearch by performing a search for MailLog number 306928.

example, HB 864 requires the inclusion of beneficial electrification in plans to achieve GHG reductions. Requiring beneficial electrification programs will save customers money on their utility bills. A study by Energy + Environmental Economics (E3) for the Maryland Commission on Climate Change ("MCCC") found that electrification of residential homes—including the replacement of "almost all fossil fuel heaters with heat pumps in existing homes by 2045" and the construction of new buildings without fossil fuels—was the lowest cost pathway to meet the State's climate goals.[10] The E3 study is confirmed by analyses by OPC and other entities.

HB 864 also conforms the EmPOWER program to the recommendations made by EmPOWER's Future Programming Work Group, described above, to change the existing statute's energy savings goals to greenhouse gas reduction goals. This change is important to supporting electrification that is beneficial to residential customers, as well as the State's efforts to meet its climate goals. Electrification can cause electric consumption to rise—even as gas consumption declines—while lowering customer bills and reducing overall GHG emissions.

It is important that EmPOWER continues to focus on primarily behind-the-meter programs. The GHG Abatement Potential Study focused entirely on behind-the-meter programs and found significant opportunities for GHG reductions.[11] HB 864 would require that at least 80 percent of the GHG emissions reductions that count towards the utilities' goal achievement come from behind-the-meter programs, which OPC supports.

HB 864 protects utility customers by requiring the paydown of EmPOWER's unamortized balance—on which the utilities currently earn returns—and instead, allowing for reasonable financial performance incentives and penalties for investor-owned utilities. The utilities currently earn returns without regard for their goal achievement. Similarly, HB 864 requires a transition to a full expensing model to avoid the continued accrual of the unamortized balance.

While we support the overall bill, we have identified various improvements. For example, we are concerned that the 1.8 percent annual reduction assumes an improper baseline. We suggest language that would have the Commission establish the GHG targets

[10] MCCC, *Building Energy Transition Plan: A Roadmap for Decarbonizing the Residential and Commercial Building Sectors in Maryland*, 4 (November 2021) https://mde.maryland.gov/programs/air/ClimateChange/MCCC/Commission/Building%20Energy%20Transition%20Plan%20-%20MCCC%20approved.pdf

[11] Maryland Office of People's Counsel, *Office of People's Counsel Comments on The Greenhouse Gas Abatement Potential Study* (Case No. 9648, December 30, 2022) at 11. This document can be found at https://webpsc.psc.state.md.us/DMS/maillogsearch by performing a search for MailLog number 300687.

that correspond to the energy savings targets in the Climate Solutions Now Act. We also have suggestions for addressing the transition to the new targets from the current three-year cycles of EmPOWER. Our office is engaged with the Commission and others on these and other potential improvements and commits to working with the bill sponsor.

Recommendation: OPC requests a favorable report from the Committee on an amended version of HB 864, which would encompass the amendments described above and the amendments that have been agreed upon by multiple state agencies, including OPC.

HB 864_Favorable with Amendments_PSC.pdf
Uploaded by: Frederick Hoover
Position: FWA

STATE OF MARYLAND

PUBLIC SERVICE COMMISSION

February 27, 2024

Chair C.T. Wilson
Economic Matters Committee
Room 231 House Office Building
Annapolis, MD 21401

RE: HB 864 - Favorable with Amendments — Energy Efficiency and Conservation Plans

Dear Chair Wilson and Committee Members:

The Public Service Commission (PSC) is tasked with the implementation of the State of Maryland's energy efficiency programs, also known as EmPOWER. The PSC requests a favorable report for HB 864 and requests some amendments to best operationalize HB 864. HB 864 transitions the current energy efficiency programs, operated by the utilities and Department of Housing and Community Development (DHCD), from an energy efficiency goal structure to a greenhouse gas (GHG) reduction goal structure. This will allow Maryland to optimize the successful EmPOWER program to better serve the State's climate goals.

The recommendation to transition the EmPOWER Maryland program to a greenhouse gas reduction goal was supported by the Commission led workgroup that included a diverse group of stakeholders. Proposals to establish GHG reductions goals for EmPOWER have also been made by the Maryland Commission on Climate Change and within the Maryland Department of the Environment's State Climate Plan.

The PSC provides the following amendments for the Committee's consideration.

1) HB 864 uses calendar year 2020 and statewide power consumption to establish a baseline that greenhouse gas reductions will be measured against. The Commission requests that these be modified to be based on calendar year 2016 and to be based on participating utility consumption. This will ensure the baseline and subsequent goals are not impacted by the dramatic shift of power usage during the Covid pandemic, and avoid the need to translate a statewide number into both utility and customer class goals. If the baseline is modified, then the stated goal within the legislation will need to be re-determined. To achieve this, the legislation should specify that the Commission determine the GHG equivalent reduction of the Climate Solutions Act Now goals to ensure consistency with existing Maryland goals. The equivalent modifications would be needed for DHCD's goal language as well, and to ensure DHCD's goal aligns with the HB 169 legislation passed in 2023.

2) HB 864 establishes a new three year EmPOWER cycle at the start of 2025. Instead of starting a new three-year program cycle at the beginning of 2025, the Commission requests that the program be transitioned to a GHG goal within the existing program cycle for the remaining two years. It is anticipated this can be achieved within the existing program if the program goals are established by the Commission as GHG equivalencies of existing EmPOWER goals. This will minimize delays in better optimizing EmPOWER to help meet the State's climate goals.

3) While HB 864 allows for beneficial electrification programs within EmPOWER, the Commission requests the bill be amended to require that the utility plans **must** provide beneficial electrification programs.

4) HB 864 requires certain utilities to establish EmPOWER programs that have not previously provided EmPOWER programs. The impacted utilities are smaller and there is a concern that that it may not be cost effective to operate full scale EmPOWER programs. Therefore, the Commission would support an amendment that would permit some or all these utilities to be exempted from EmPOWER, while still requiring them to have energy efficiency programs.

5) HB 864 adds moderate income customers to DHCD's goal and thus programs. This may necessitate an expansion and spend on DHCD's programs which they are already expanding to meet the new goals established in legislation in 2023. The Commission would support an amendment that permits DHCD to continue to serve low-income customers while requiring the utilities to develop programs exclusively targeted to moderate income customers not covered by DHCD.

The Public Service Commission asks that you consider these comments when reviewing the language proposed in HB 864 and requests a Favorable report. Please direct any questions you may have to Christina Ochoa, Director of Legislative Affairs, at christina.ochoa1@maryland.gov.

Sincerely,

Frederick H. Hoover, Chair
Maryland Public Service Commission

HB0864 - FWA - EmPOWER.pdf
Uploaded by: Landon Fahrig
Position: FWA

Maryland Energy Administration

TO: Chair Wilson, Vice Chair Crosby, and Members of the Economic Matters Committee
FROM: MEA
SUBJECT: Energy Efficiency and Conservation Plans
DATE: February 29, 2024

MEA Position: FAVORABLE WITH AMENDMENTS

The Maryland Energy Administration (MEA) is heavily involved in the ongoing EmPOWER processes hosted by the Public Service Commission (PSC). MEA encourages the Committee to adopt the MEA and other State agencies' respective amendments (submitted separately) prior to rendering a favorable report as amended.

Several factors are putting upward pressure on utility costs for individuals and businesses; commodity prices, transmission and distribution projects, among others. This bill, including the various agency amendments, gives the PSC Commissioners the flexibility needed to incorporate costs, environmental impacts, energy goals, and a host of other factors into the EmPOWER goal-setting process; providing the most prudent approach to weigh the costs and benefits associated with each goal level within the context of broader State policy goals.

The language of the agency amendments was developed with the input of stakeholders including MEA, the Department of Housing and Community Development (DHCD), and the Maryland Department of the Environment (MDE), and it is an important step in helping us reach our energy and environmental goals, as established by the Climate Solutions Now Act of 2022. It follows the established processes for EmPOWER program design and adoption, and it adds greenhouse gas abatement as part of the overall program and its associated goals.

Specifically, MEA would amend the language of the bill to:

- require that electric companies offer beneficial electrification as a part of their respective EmPOWER plans and program offerings; and
- alter language to reduce the risk of jeopardizing federal funds.

Our sincere thanks for your consideration of this testimony. For questions or additional information, please contact Landon Fahrig, Legislative Liaison, directly (landon.fahrig@maryland.gov, 410.931.1537).

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HB 864 MDE SWA.pdf
Uploaded by: Les Knapp
Position: FWA

The Maryland Department of the Environment
Secretary Serena McIlwain

House Bill 864
Energy Efficiency and Conservation Plans

Position: Support with Amendments
Committee: Economic Matters
Date: February 29, 2024
From: Hadley Anthony

The Maryland Department of the Environment (MDE) **SUPPORTS** HB 864 **WITH AMENDMENTS**.

Bill Summary

House Bill 864 would require applicable electric or gas utilities, small rural electric cooperatives, and the Department of Housing and Community Development (DHCD) to provide programs that support energy efficiency and conservation, demand response, and beneficial electrification. The Public Service Commission (PSC) will review and approve these programs. The PSC would be required to encourage and promote the efficient use and conservation of energy in support of greenhouse gas (GHG) goals and targets. Alongside other agencies, MDE would be expected to provide feedback on the programs and provide baseline emissions data from consumption of gas and electricity across applicable utility companies and customer classes. MDE would also be responsible for conducting a GHG analysis for each of the three-year plans from utility companies and DHCD.

Position Rationale

This bill aligns with Maryland's statewide climate goals: to reach 60% GHG reductions, compared to 2006 levels, by 2031 and net-zero emissions by 2045. One of the most affordable ways to save on energy costs is to invest in energy efficiency, and EmPOWER programs have built-in requirements that consider verifiable outcomes, cost-effectiveness, job creation, and ratepayer impacts. MDE supports the new goal of achieving GHG reductions through EmPOWER energy efficiency and conservation programs in equitable ways. This bill also aligns with the recommendations made by the Climate Pollution Reduction Plan, the Maryland Climate Change Commission, and the Building Energy Transition Implementation Task Force.

Accordingly, MDE asks for a **FAVORABLE WITH AMENDMENTS** report for HB 864.

Contact: Les Knapp, Government Relations Director
Cell: 410-453-2611, Email: les.knapp@maryland.gov

Bill Amendments

AMENDMENT NO. 1

On page 8, in line 19 after "CYCLE" insert "**, BEGINNING IN 2027 AND EVERY 3 YEARS THEREAFTER**".

AMENDMENT NO. 2

On page 9, in line 4 strike "**2020**" and substitute "**2016**".

AMENDMENT NO. 3

On page 17, in line 17 strike "AN ANALYSIS" and substitute "**A STATEMENT**".

Amendment Rationale

MDE collaborated with other agencies in offering these amendments, including the changes relating to implementable timelines. Other agencies will also be offering amendments that align with the Department's amendments.The amendments will make the bill easier to implement.

The first amendment clarifies the start date and duration of a program cycle, as established elsewhere in the bill.

The second amendment intends to avoid 2020 as a baseline year due to COVID impacts and maintain 2016 as the baseline year for EmPOWER programs.

The third amendment reduces the burden on MDE to provide an in-depth analysis of each utility's plan and allows, when appropriate, MDE to provide a qualitative statement on the sufficiency of a utility's plan to achieve the state's greenhouse gas emissions reduction goals.

HB 864 Testimony_2.27.24.pdf
Uploaded by: Susan Labin
Position: FWA

Economic Matters Committee,

I am a long-time resident of Montgomery County and I am writing to propose an important Amendment to HB 864.

Proposed amendment: section 7-227 should expressly prohibit any entity, whether the public service commission, a utility provider, or the executive branch, from preventing any ratepayer from opting out of a smart meter on their residence, without fee or penalty.

My position is justified by both the considerable peer reviewed science on the effects of wireless technology. Below is a link to information about smart meters, including counties and cities that have called for a moratorium on smart meters: https://ehtrust.org/smartmeters-health-and-safety-faqs/

Furthermore, I have seen the devastating effects of wireless technology on those sensitive to radio frequency radiation (RFR). There are many others may need to opt out given their health conditions.

Mandates are not the way to move forward. Safer solutions will be encouraged when residents have choices.

Thank you for your service and consideration of this important issue that affects access to safe housing.

Susan N. Labin, Ph.D.

2024 - HB864 - PHI - UNF.pdf
Uploaded by: Anne Klase
Position: UNF

February 29, 2024

112 West Street
Annapolis, MD 21401

Oppose – House Bill 864: Energy Efficiency and Conservation Plans

Potomac Electric Power Company (Pepco) and Delmarva Power & Light Company (Delmarva Power) respectfully oppose **House Bill 864: Energy Efficiency and Conservation Plans.** While we understand there will be agency amendments offered for consideration, as drafted, House Bill 864 requires each electric company, each gas company, and the Department of Housing and Community Development to develop a plan for achieving energy efficiency, conservation and greenhouse gas emissions reduction targets through certain programs and services, superseding certain existing energy efficiency and conservation goals. The legislation also requires the Public Service Commission (PSC) to establish and determine certain greenhouse gas emissions reduction targets and adopt rate-making policies that provide, through a surcharge full cost recovery of reasonably incurred costs for programs and services, including full recovery on a current basis. Finally, on or before December 31, 2032, all unpaid costs and unamortized costs that existed on December 31, 2024, or were incurred before January 1, 2028, and were accrued for the purpose of achieving targets for energy savings must be paid in full.

In 2008, the General Assembly passed the EmPOWER Maryland Energy Efficiency Act, which set target reductions of 15% in per capita electricity consumption and peak demand, respectively, by 2015 from a 2007 baseline. Legislation in 2017 extended the program through its 2018-2020 and 2021-2023 program cycles and established a new annual energy savings goal of 2.0% per year, based on each electric company's 2016 sales. Since the enactment of the original EmPOWER legislation, the program has been an effective tool for incentivizing energy efficiency and other customer and environmental benefits. Moving forward, if properly structured, EmPOWER can meaningfully assist the state in achieving its ambitious decarbonization goals to reduce greenhouse gas emissions by 60% by 2031 and achieve net zero by 2045.

In December 2022, the PSC issued Order No.90456 requiring that all unamortized EmPOWER program costs and interest as of December 31, 2023 be paid for in full by the completion of the 2027-2029 EmPOWER program cycle. The order also required a change in future cost recovery to gradually move to full expensing of costs.

Additionally, on December 29, 2023, the PSC issued an order authorizing the transition to the next three-year program cycle for EmPOWER Maryland and approved various proposals by the program administrators to implement new energy efficiency programs for the 2024-2026 program cycle, as well as continue operating core programs, subject to conditions. The Commission also approved several new pilots and enhancements to the suite of energy efficiency programs.

Pepco and Delmarva Power oppose this legislation as drafted, because the prescriptive nature of this legislation does not allow the PSC, through a transparent regulatory process, the flexibility and discretion to review and analyze program designs offered by the utilities to ensure cost-effectiveness and affordability for Maryland utility customers. The PSC has already implemented a new cost recovery methodology for the 2024-2026 EmPOWER Maryland program cycle in order to eliminate the balance of EmPOWER funds that have not yet been collected and shorten the timeframe during which a utility may recover operating costs.

It also should be noted that the PSC's order issued in December 2023 directed a Cost Recovery Work Group to convene to determine if there is an improved method for balancing the shift to an expense model given rising program costs and increased surcharges. The PSC directed that work group to file a status report on its findings by April 15, 2024, a final report with recommendations by July 1, 2024, and directed the utilities to respond to the final report by August 1, 2024.

Finally, via an amendment added on the House floor in the 2023 legislative session that Pepco and Delmarva Power did not have an opportunity to discuss with members and other key stakeholders, House Bill 864, as introduced, requires any unpaid costs and unamortized costs related to the EmPOWER program to earn no more than each electric or gas company's average cost of outstanding debt. Utilities do not finance their operations solely on debt, rather a combination of debt and equity and the return allowed to utilities through the regulatory process should reflect that reality. Neither the capital markets, nor the PSC, should be in favor of having a utility highly leveraged in debt as this decreases the stability of the utility and the utility's financial health, all of which can lead to increased costs to finance operations. The utilities have already made and paid for the investments that have created the unpaid and unamortized balances impacted by this provision of House Bill 864, under the premise that the utility would earn the rate of return approved through the regulatory process. If the House Bill 864 were to pass as drafted, this would create a demonstrated loss for the utility and an unconstitutional taking.

As we consider all tools in the toolbox to meet Maryland's aggressive greenhouse gas reduction targets, including an equity and affordability lens to the analysis is imperative. Pepco and Delmarva Power believe the PSC should have flexibility and discretion to look at and analyze program designs offered by the utilities to ensure cost-effectiveness and affordability. For the reasons stated, Pepco and Delmarva Power respectfully request an unfavorable report on House Bill 864.

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BGE-ECM-OPP-HB864 EnergyEffiencyandConservationPla

Uploaded by: Brittany Jones
Position: UNF

bge
AN EXELON COMPANY

Position Statement

Oppose
Economic Matters
2/29/2024

House Bill 864 – Energy Efficiency and Conservation Plans

Baltimore Gas and Electric Company (BGE) opposes *House Bill 864 – Energy Efficiency and Conservation Plans.* House Bill 864 would require all gas and electric utilities and the Department of Housing and Community Development to alter existing energy efficiency and conservation programs to utilize greenhouse gas (GHG) reduction as the new performance metric at this time. While BGE is supportive of the change from a reduction in electricity consumption to a reduction in GHG emissions to reach the ambitious goals of the Climate Solutions Now Act, this bill presents several technical concerns along with affordability concerns for ratepayers.

The Maryland Public Service Commission (PSC) recently approved programs for BGE's 2024-26 EmPOWER cycle after completing a transparent, collaborative, and thorough review process involving all interested parties. The new programs went into effect on January 1, 2024. The filing of the next three-year cycle will take place in September 2026, which would be the appropriate time for utilities to present new program(s) under House Bill 864 that are designed to achieve the GHG emissions reduction targets that the PSC must first establish for each utility. This allows sufficient time for research, analysis, and case studies to ensure the program is optimized for success at the most affordable price to customers. In addition, the Commission required utilities to incorporate a new requirement that 80% of programs be behind-the-meter and 20% be in-front-of-the-meter, which aligns with the caps specified in House Bill 864. However, the PSC should have the discretion to approve including GHG reductions from Community Programs, as defined in this bill.

In July 2022, the PSC provided a report to the General Assembly where it recommended that the General Assembly adopt a GHG abatement goal stating that a goal based on reducing overall electricity sales no longer aligns with the needs of the state. Shifting from a MWh energy savings goal to a GHG abatement goal was a consensus item among all parties involved. An appropriate time to revise goals to further support of the Climate Solutions Now Act would be when the Maryland utilities develop their 2027-2029 EmPOWER Maryland programs. The timelines for reporting and plan development should align with the long-standing EmPOWER Maryland cycle requirements.

The subject of rate affordability remained a top focal point for BGE, the PSC and all parties involved throughout the most recent EmPOWER regulatory process. BGE continues to advocate for practical ratemaking alternatives to keep energy bills as affordable as possible for customers. House Bill 864 eliminates the PSC's discretion to find these solutions since it dictates the manner in which the EmPOWER costs are recovered from customers. **Under the current transition of EmPOWER to expensing, the monthly residential surcharge is expected to more than triple by 2026 to almost $29 per month and the monthly commercial surcharge is expected to increase more**

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than six-fold by 2026 compared to the 2023 EmPOWER surcharges. Severe spikes in the EmPOWER surcharge on customer bills risk eroding public support for the entire EmPOWER Maryland program. House Bill 864 inappropriately prevents the PSC from exercising agency discretion to consider surcharge impacts on customers when determining how to fund EmPOWER programs. BGE strongly urges the General Assembly to keep the PSC empowered to make these decisions given their expertise, closeness to real-time changes in EmPOWER costs and customer bills, and broader view of the expected costs necessary to achieve the state's energy transition.

The PSC has created a work group that includes many stakeholders to further investigate the drastic surcharge increases in efforts to find alternative solutions. The work group's report is due on July 1, 2024, which is another justification to pause further legislative action. It is critical to keep the regulatory authority empowered to take actions such as those that might stem from the work group's report to best support Maryland energy customers.

BGE respectfully requests an unfavorable report on House Bill 864. We look forward to continuing discussions with the bill sponsors and other vested parties so that, together, we can achieve the Climate Solutions Now Act goals in the most economical way possible.

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Opposition Letter - HB0864.pdf
Uploaded by: Kim Mayhew
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PotomacEdison
A FirstEnergy Company

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OPPOSE – House Bill 0864
HB0864 – Energy Efficiency and Conservation Plans
Economic Matters Committee
Thursday, February 29, 2024

Potomac Edison, a subsidiary of FirstEnergy Corp., serves approximately 285,000 customers in all or parts of seven Maryland counties (Allegany, Carroll, Frederick, Garrett, Howard, Montgomery, and Washington). FirstEnergy is dedicated to safety, reliability, and operational excellence. Its ten electric distribution companies form one of the nation's largest investor-owned electric systems, serving customers in Ohio, Pennsylvania, New Jersey, New York, West Virginia, and Maryland.

Unfavorable

Potomac Edison / FirstEnergy opposes House Bill 0864 – *Energy Efficiency and Conservation Plans*. HB-864 would require the Public Service Commission to encourage utilities to promote the efficient use and conservation of energy in support of greenhouse gas emissions reduction goals.

Potomac Edison / FirstEnergy requests an Unfavorable report on HB-864 because of cost recovery issues and potentially significant increases in customer's electric bills.

Electrification, delivered through cost-effective energy efficiency programs, can help Maryland reach its greenhouse gas emission reduction goals. However, when customers choose to participate in fuel-switching, building decarbonization, and other electrification programs – these choices often result in an overall increase in the usage of electricity. A goal based on reducing overall electricity sales no longer aligns with the needs of the state, and because of this, amendments should be made to eliminate the "mandated incremental electricity savings reductions" in the legislation.

While appreciative of the full cost recovery language in the bill, we are adamantly opposed to proposed changes in section 7-222 (C)(2)(III) that specify how utilities should be compensated for "any unpaid costs and unamortized costs" of the program. Switching from the current method, which is based on the utility's "Weighted Average Cost of Capital," to an "Average Cost of Outstanding Debt" method, would create a demonstrated loss for utilities. Past investments in the EmPOWER program were approved by the Public Service Commission, and these "unpaid costs," which were financed with a combination of debt and equity, should be recovered accordingly.

Utilities do not finance operations based solely on debt, so recovery utilizing an "Average Cost of Outstanding Debt" methodology is not logical or reflective of reality. Specifying how utility costs are calculated and recovered is not something that should be in statute. It is the Public Service Commissions responsibility to determine appropriate rate recovery for utility expenditures, and it would not be in the state's best interest to have its utility companies highly leveraged in debt. Earning an authorized rate of return for a utility's investment in the EmPOWER program is not only necessary, but also appropriate. For these reasons, section 7-222 (C)(2)(III) should be stricken.

It should not be overlooked that the EmPOWER program will have a major impact on customers electric bills. The estimated surcharge for the average Potomac Edison residential customer could be over $30 per month during the next phase of the program. Ensuring the Public Service Commission reviews each plan to determine its cost effectiveness, impact on rates, impact on jobs, and impact on achieving greenhouse gas reduction targets, is paramount.

Helping customers with the efficient use and conservation of energy through utility programs is smart, and if done correctly, can be good for the State of Maryland. **However, issues in this bill related to cost recovery, and increases to our customers' bills, leads Potomac Edison / FirstEnergy to respectfully request an Unfavorable report on HB-864.**

Washington Gas - HB 864 EmPOWER - Oppose.pdf
Uploaded by: Manuel Geraldo
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TESTIMONY
WASHINGTON GAS LIGHT COMPANY
ECONOMIC MATTERS COMMITTEE

FEBRUARY 29, 2024

HOUSE BILL 864
Energy Efficiency and Conservation Plans

Washington Gas respectfully submits this statement in **OPPOSITION** to *HB 864 - Energy Efficiency and Conservation Plans* ("HB 864").

Washington Gas Light Company ("the Company") provides safe, reliable natural gas service to more than 1.2 million customers in Maryland, Virginia, and the District of Columbia. Washington Gas has been providing energy to residential, commercial, government, and industrial customers for more than 175 years, and currently serves more than 500,000 Maryland customers in Montgomery, Prince George's, Charles, St. Mary's, Frederick, and Calvert Counties. The Company employs over 400 people within Maryland, including contractors, plumbers, union workers, and other skilled tradespeople. We strive to improve the quality of life in our communities by maintaining a diverse workforce, working with suppliers that represent and reflect the communities we serve, and giving back through our charitable contributions and employee volunteer activities.

Background

The Maryland General Assembly passed the EmPOWER Maryland Energy Efficiency Act of 2008, which created a statewide program that helps homeowners, renters, and businesses save energy and money. According to Energy Efficient Maryland, "combined with other energy initiatives, EmPOWER Maryland has helped 21,000 low-income households save $340 annually on their electric bills" and EmPOWER "has saved Marylanders more than $4 billion on their

energy bills and reduced statewide greenhouse gas emissions by at least 9.6 million metric tons".[1] These statistics exemplify the success and necessity of the EmPOWER programs.

The original intent of EmPOWER Maryland was to focus on reducing electricity consumption across the State. However, certain regulations authorized Washington Gas to deliver complementary energy efficiency programs through the EmPOWER Maryland regulatory framework. As of early 2015, Washington Gas has been an active participant of EmPOWER. Washington Gas has been delivering cost-effective energy efficiency programs to Maryland residents, businesses, and underserved communities. These programs have been designed to **reduce energy consumption by promoting and incentivizing the efficient use of natural gas**, which is realized through (1) installing high-efficiency equipment and appliances such as furnaces or commercial kitchen equipment, (2) optimizing home and commercial building operations to use less energy, and (3) educating customers and changing consumption behaviors towards energy conservation. The Company's energy efficiency programs have resulted in:[2]

- Serving over 413,000 Maryland customers through the various program offerings.
- Issuing a total of $35 million in incentives (rebates) to participating customers, making the investment of energy improvement projects more affordable.
- Investing over $14 million towards 3,200 projects that serve low-income customers and communities, making homes and buildings more efficient and safer.
- Reducing over 113 million therms in natural gas consumption over the useful lifetime of installed measure or equipment (lifecycle energy savings), which has resulted in helping Maryland residents and businesses save over $223 million in energy costs.

The Company supports Maryland's climate goals and believes that reducing emissions through pragmatic means is important. The Company's EmPOWER program is a pragmatic solution that can help the State achieve its climate goals and help Maryland consumers reduce their climate impact while retaining access to critically needed energy solutions. However, the Company is opposed to HB 864 due to the inclusion of certain clauses. These concerns are addressed in detail below, and a list of the Company's proposed amendments to HB 864 are included as an addendum to this testimony.

Beneficial Electrification

HB 864 mandates that the Company include beneficial electrification as one of the solutions it must promote or implement to meet the newly established greenhouse gas ("GHG") emissions reduction targets. HB 864 defines beneficial electrification as the replacement of the direct use of fossil fuels with electricity that meets only one (1) of three (3) criteria: a reduction in overall lifetime GHG emissions, a reduction in customers' energy costs, or enables better management of

[1] Energy Efficient Maryland. How Energy Costs Affect Maryland Households
[2] Washington Gas EmPOWER Maryland Semi-Annual Report (Jul. 1, 2023 – Dec. 31, 2023)

the electric distribution system. As currently written, if a project reduces emissions, then it falls under "beneficial" electrification, even if the project would subject customers to inflated energy-related costs. This outcome would likely not create net benefits for customers, and therefore should not be considered "beneficial" electrification. For an electrification project to be considered beneficial, the Company believes it should have to meet all three (3) criteria. There is industry precedent to support this change. The Environmental and Energy Study Institute ("EESI") defines beneficial electrification as "replacing direct fossil fuel use with electricity in a way that reduces overall emissions and energy costs."[3] Maryland should adopt a similar definition to ensure customers are not unduly burdened by the high costs that can be associated with electrification. Furthermore, the Company should not be required to implement beneficial electrification programs as part of its obligations under EmPOWER, as electrification is outside the scope of services the Company offers. Electrification programs should only be implemented where it makes sense for both the utility and the customer and can maintain energy choices for customers.

The Company believes many electrification programs will be challenged to meet any one (1) of the three (3) criteria identified in HB 864 given the dynamics affecting Maryland's energy systems and the financial challenges electrification presents.

1. Reduction in Lifetime GHG Emissions

PJM's current and future electricity generation mix presents challenges to reducing GHG emissions through electrification. Today, fossil fuel resources comprise over 55% of PJM's generation mix,[4] with fossil generation often being higher during periods of peak demand,[5] and PJM has documented challenges in interconnecting new renewable energy resources.[6] Maryland's Climate Pollution Reduction Plan further anticipates that the State's reliance on imported power from PJM will increase ~81% by 2030 and ~142% by 2035 as it retires additional in-State fossil resources and fails to add in-State zero-emission generation at a commensurate pace.[7] The high reliance on fossil-fuel heavy electricity imports from PJM underlines the fact that electrification is not guaranteed to reduce GHG emissions.

The State's inability to meet its own in-State renewable energy generation targets also highlights the challenges that the electric sector is facing to meet Maryland's climate goals. The Bureau of Ocean Energy Management ("BOEM") recently excluded a proposed offshore wind energy area in Maryland from an offshore wind lease sale that is set to occur this year. 278,000 acres off the shores of Delaware and Virgnia were approved by BOEM, while 78,265 acres off the shore of Ocean City, MD,[8] were deemed unviable due to the significant costs and mitigation of negative environmental effects that would be required.[9] The excluded area was projected to generate

[3] EESI. Beneficial Electrification
[4] PJM. Markets & Operations (last accessed Feb. 23, 2024).
[5] PJM. Winter Operations of the PJM Grid: December 1, 2020 – February 28, 2021 (Apr. 7, 2021).
[6] PJM. Energy Transition in PJM: Resource Retirements, Replacements & Risks (Feb. 24, 2023).
[7] MDE. Climate Pollution Reduction Plan – Climate Plan Data (Dec. 28, 2023).
[8] BOEM. BOEM Finalizes Wind Energy Areas in the Central Atlantic (Jul. 31, 2023).
[9] BOEM. Biden Harris Administration Advances Offshore Wind in the Central Atlantic (Dec. 11, 2023).

between 1.1 – 2.2 GW of power.[10] Meanwhile, Ørsted has cancelled its Maryland offshore wind projects as the State and the broader Northeast region has hit major stumbling blocks in adding their own in-State renewable energy sources.[11] In 2021, Senate Bill 65 revised down the solar carve-out requirement in Maryland's renewable energy portfolio standard for every year from 2023-2029,[12] and the State has been challenged to add sufficient new solar resources. According to the Public Service Commission's 2022 Annual Report, applications for in-State photovoltaic solar renewable energy credits were down by ~3.9% from 2021 and the total capacity of projects approved was only 263 MW, down more than 40% from 2021.[13]

2. Reduction in Customers' Energy Costs

According to the United States Department of Energy ("DOE"), natural gas costs 3.3x less than electricity on a per-unit of energy basis.[14] Besides increased energy bills, studies have shown there are large costs associated with electrifying homes and buildings. For example, Home Innovation Research Labs found that electrifying an average efficiency gas house in the Baltimore climate zone provides minimal annual benefit and incurs a 48-60 year payback period, far above the 15-20 year useful life of many home appliances, such as heat pumps.[15] In contrast, upgrading to a high-efficiency gas house from an average efficiency gas house can yield annual savings between $176 and $196, with a payback period of only 5-7 years.[16] High-efficiency natural gas equipment has low up-front and ongoing operating costs and can provide energy savings in-line with the EmPOWER program and Maryland's climate goals.

3. Enables Better Management of the Electric Distribution System

The Company is uncertain of what criteria must be met to achieve "efficient electric grid operations." However, there is a growing risk that Maryland's power system may not be able to accommodate the increased load associated with widespread electrification. By comparison, natural gas appliances do not add significant load to the electric distribution system, and necessarily present less risk than appliances that add higher loads to the electric distribution system. The DOE's 2023 Transmission Needs Study found that PJM must increase within-region transmission by 61% by 2035 and interregional transfer capacity with the Midwest region by 474% by 2035, both relative to 2020 to accommodate high load and high clean energy growth.[17] It can

[10] Offshore WIND. BOEM Issues Draft EIS for Maryland Offshore Wind Project (Oct. 2, 2023).
[11] Maryland Matters. Md. offshore wind developer announces 'repositioning' of project, seeks new financial support (Jan. 25, 2024).
[12] Maryland General Assembly. Senate Bill 65 (Jun. 1, 2021).
[13] Maryland Public Service Commission. 2022 Annual Report (April 2023).
[14] DOE. Energy Conservation Program for Consumer Products: Representative Average Unit Costs of Energy (Aug. 28, 2023).
[15] Home Innovation Research Labs. Cost and Other Implications of Electrification Policies on Residential Construction Page 15, Table 13 (Feb. 2021).
[16] Home Innovation Research Labs. Cost and Other Implications of Electrification Policies on Residential Construction Page 14, Table 12 (Feb. 2021).
[17] DOE. Transmission Needs Study Mid-Atlantic Region (Oct. 30, 2023).

take decades to obtain permits for major transmission lines,[18] and more time is needed to plan, purchase land, construct, and complete other transmission development activities.

Behind-the-Meter Mandate

HB 864 states that, starting in 2025, at least 80% of GHG emissions reductions counted towards utilities' targets must come from behind-the-meter ("BTM") programs. A BTM program is defined as a program that impacts the customer side of the utility meter, which can include energy efficiency measures, demand response programs, and "beneficial" electrification. This 80% threshold would severely limit gas utilities from pursuing programs such as front-of-the-meter methane reductions from pipeline leaks. Addressing distribution system leaks are one example of useful front-of-the-meter solutions that the Company and other gas utilities should be able to include in their EmPOWER portfolios to help the program and the State achieve their climate goals. Gas utilities should not have to forego cost-effective solutions that reduce GHG emissions in favor of less impactful offerings to meet the 80% threshold created by HB 864, and therefore should not be subject to this requirement.

Feasibility of Targets

HB 864 requires the Public Service Commission ("PSC") to establish new GHG emissions reduction targets for gas and electric utilities that will achieve an average annual reduction of at least 1.8% against a baseline consumption of gas and electricity in Maryland buildings. The Company believes it is fair to distribute the burden of reducing emissions across all of the State's utilities but is concerned that the final target assigned to Washington Gas will not be feasible. The *EmPOWER Greenhouse Gas Abatement Potential Study* analyzed each the State's utilities' ability to reduce energy consumption and GHG emissions across multiple modeled scenarios. For both the Achievable Potential BAU and Achievable Potential Maximum Scenarios, the study found that Baltimore Gas & Electric and Pepco have a significantly higher potential to reduce emissions through energy efficiency programs than the rest of the State's utilities.[19] More generally, the study found that energy efficiency measures that address electricity consumption can have the largest impact on GHG emissions reductions in the State.[20] The targets created in HB 864 should be established in accordance with the findings of this study. No utility should be required to meet an emissions reduction target that exceeds a reasonably achievable threshold.

Plan Reporting Timeline

The Company interprets the new timelines identified in HB 864 to mean there will be a new cadence for the three-year plan cycles, with 2025-2027, 2028-2030, 2031-2033, etc. being the new cycle. The bill language should be amended to maintain the current cadence of EmPOWER

[18] National Governors Association Center for Best Practices. Transmission Siting and Permitting: How Governor Leadership Can Advance Projects (Feb. 2023). Page 7

[19] PSC Mail log No. 300751. EmPOWER Maryland 2024-2029 GHG Abatement Potential Study – Final Report (Jan. 6, 2023) Pages 38 (BG&E) and 42 (Pepco)

[20] PSC Mail log No. 300751. EmPOWER Maryland 2024-2029 GHG Abatement Potential Study – Final Report (Jan. 6, 2023) Page 27

program filings and eliminate the need for refiling current energy efficiency programs less than a year after the 2024-2026 cycle was approved.

Conclusion

The Company is committed to working with stakeholders to help achieve Maryland's GHG emissions reduction targets. EmPOWER Maryland is an important tool in reducing GHG emissions from both electricity and gas usage. Electrification is not the sole solution to climate change in Maryland and should not be treated as such. There is a role for existing and future technology innovation to support diverse pathways to decarbonizing Maryland, and the State's existing gas infrastructure can and should be leveraged to preserve affordability, reliability, safety, and security of energy delivery.

For the above reasons Washington Gas respectfully requests an unfavorable report on House Bill 864. Thank you for your consideration of this information.

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ADDENDUM: PROPOSED AMENDMENTS

Amendment 1 – Definition of Behind-the-Meter

Context:

The current definition of behind-the-meter program is very vague and could be misinterpreted. Having a more rigid definition is significant, especially with the proposed requirement for 80% of emissions reductions to come from behind-the-meter programs.

WGL Position:

WGL recommends providing additional language that clarifies the criteria that must be met for a program to be considered 'behind-the-meter.'

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-220 (B) should be amended to state:

"Behind–the–meter program" means a program that impacts the onsite customer usage of energy in a manner that results in reductions in energy consumption or reductions in greenhouse gas emissions. ~~program that impacts the customer side of the utility meter.~~

Amendment 2 – Definition of Beneficial Electrification

Context:

Amend the definition of beneficial electrification so that any replacement of fossil fuels with electricity must meet all three (3) criteria listed, not just one (1) of the three (3), to be considered beneficial electrification by changing an "or" to an "and".

WGL Position:

In order to be beneficial, an electrification project must be able to reduce GHG emissions, reduce energy costs to customers, and enable better management of the electric distribution system. For example, by only requiring one (1) of these three (3) criteria, customer may be burdened with higher energy costs due to "beneficial" electrification projects that reduce emissions but increase costs.

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-220 (C) (1)-(3) should be amended to state:

"Beneficial electrification" means the replacement of the direct use of fossil fuels in buildings with the use of electricity in a manner that:

- reduces overall lifetime greenhouse gas emissions;
- reduces customers' energy costs; and ~~or~~
- enables better management of the electric distribution system.

Amendment 3 – Definition of Demand Response Program

Context:

The definition of demand response program should be expanded to incorporate both gas and electric programs.

WGL Position:

Gas utilities can implement demand response programs and should be allowed to do so under the EmPOWER statute, as HB 864 is currently written gas utilities would be excluded.

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-220 (E) should be amended to state:

"Demand response program" means a program established by an electric company or a gas company, an electricity supplier or a gas supplier, or a third party that promotes changes in electric or gas usage by customers from their normal consumption patterns in response to:

(1) changes in the price of electricity or gas over time; or

(2) incentives designed to:

(i) induce lower electricity or gas use at times of high wholesale market prices; or

(ii) ensure system reliability.

Amendment 4 – Definition of Front-of-the-Meter

Context:

Front-of-the-meter programs have never been clearly defined through EmPOWER, and providing clarity would help to determine what programs and services are eligible to be undertaken through EmPOWER.

WGL Position:

Adding specific language around utility operations can open the door for utilities to explore a wider range of cost-effective measures that can lower emissions, such as the potential to blend the existing natural gas supply with lower carbon fuels.

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-220 (H) should be amended to state:

"Front–of–meter community program" means a utility-administered program that:

(1) is separate from front–of–meter utility programs;
(2) impacts ~~the~~ utility ~~side of the meter~~ operations; and
(3) directly benefits a set of customers.

7-220 (I) should be amended to state:

"Front–of–meter utility program" means a program that impacts ~~the utility side of a meter and benefits all utility customers~~ utility operations in a manner that results in reductions in energy consumption or reductions in greenhouse gas emissions. Utility operations may include:

(1) the production and generation of energy;

(2) the transmission and distribution of energy; or

(3) the storage of energy.

Amendment 5 – Definition of Greenhouse Gas Emissions Reductions

Context:

The current definition of greenhouse gas emissions reductions excludes any measures taken by gas utilities and gas customers to reduce emissions, and only considers measures related to electric utilities and electric customers. The definition of greenhouse gas emissions reductions should include efforts related to reducing emissions from both upstream and end-use natural gas delivery.

WGL Position:

The definition of greenhouse gas emissions reductions should include efforts related to reducing emissions from both upstream and end-use natural gas delivery.

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-220 (K) (1)-(2) should be amended to state:

"Greenhouse gas emissions reduction" means a reduction in greenhouse gas emissions, measured in metric tons of carbon dioxide equivalents, including:

(1) greenhouse gas emissions from the generation of electricity delivered to and consumed in the state; and

(2) greenhouse gas emissions from the combustion of natural gas by end users in the state; and

(~~2~~3) line losses from the transmission and distribution of electricity, regardless of whether the electricity is generated in the state or imported; and

(4) pipeline leakage of methane from the transmission and distribution of natural gas within the state.

Amendment 6 – Definition of Non-Energy Program

Context:

The current definition of nonenergy program is very broad and could result in confusion relative to what can qualify as a nonenergy program.

WGL Position:

HB 864 should contain a more detailed definition of what a nonenergy program is to reduce confusion around what programs would qualify.

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-220 (N) should be amended to state:

"Nonenergy program" means a program ~~with greenhouse gas emissions reductions benefits that are primarily nonenergy based~~ that results in reductions in greenhouse gas emissions that are not associated with the consumption, production, distribution, or storage of energy.

Amendment 7 – Required Programs and Services

Context:

Amend the requirements of the gas and electric companies' plans to only have to consider one (1) of the three (3) proposed programs and services instead of all three (3) by changing an "and" to an "or" in several places.

WGL Position:

Utilities and their customers should be able to have the flexibility to choose which programs and services best fit their energy needs. If one (1) of the included proposed programs and services does not align with the current needs of customers or falls outside the scope of services a utility offers, a utility should not be forced to implement it to comply with the proposed legislation.

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-220 (O) (1) should be amended to state:

- achieve greenhouse gas emissions reductions through energy efficiency, conservation, demand response, or ~~and~~ beneficial electrification;

7-222 (A) should be amended to state:

- Subject to review and approval by the Commission, each electric company, each gas company, and the Department shall develop and implement programs and services in accordance with §§7–223, 7–224, and 7–225 of this subtitle to encourage and promote the efficient use and conservation of energy, demand response, or ~~and~~ beneficial electrification by consumers, electric companies, gas companies, and the Department in support of the greenhouse gas emissions reduction goals and targets specified in title 2, subtitle 12 of the environment article

7-222 (B) should be amended to state:

- As directed by the Commission, each municipal electric or gas utility and each small rural electric cooperative shall include energy efficiency and conservation, demand response, or ~~and~~ beneficial electrification programs or services as part of their service to their customers.

7-223 (A)(3) should be amended to state:

- Achieves the greenhouse gas emissions reduction target established for the electric company or gas company under subsection (b) of this section through cost–effective energy efficiency and conservation programs and services, demand response programs and services, or ~~and~~ beneficial electrification programs and services.

7-224 (A)(1) should be amended to state:

- Beginning January 1, 2025, and every 3 years thereafter, the Department shall procure or provide to low– and moderate–income individuals energy efficiency and conservation programs and services, demand response programs and services, or ~~and~~ beneficial electrification programs and services that achieve the greenhouse gas emissions reduction targets established for the Department under paragraph (2) of this subsection.

Amendment 8 – PSC Programs and Services Determination

Context:

As currently written, utilities may implement any program or service that the PSC determines to be appropriate and cost-effective. The term appropriate is highly subjective and should be replaced with a more definitive criterion.

WGL Position:

Utilities should be able to implement programs or services that are not only cost-effective, but that can either reduce energy consumption or GHG emissions. This aligns with the ultimate goals of EmPOWER Maryland and the State's climate goals.

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

7-222 (C)(1) should be amended to state:

Requiring each electric company and gas company to establish any program or service that the commission determines to be ~~appropriate and~~ cost–effective and reduces energy consumption or greenhouse gas emissions;

Amendment 9 – Ability to Pursue all GHG Reducing Measures

Context:

Through EmPOWER Maryland, utility-administered energy efficiency programs offer a wide array of energy savings measures to customers. Certain measures, such as energy conservation kits, home energy reports, and demand response events, offer shorter-lived energy savings. While other measures, such as boiler system and heat pump installations can produce tangible energy savings for 20 years or longer. The legislation calls for the Commission to prioritize the measures that produce longer-lived energy savings and GHG emission reductions by establishing a minimum weighted average measure life.

WGL Position:

While the Company agrees with the need to prioritize long-lived greenhouse emissions reduction measures, doing so with a minimum weighted average measure life would potentially eliminate long-standing EmPOWER energy efficiency programs that reduce shorter-lived (annual), but equally valuable GHG emissions. As long as EmPOWER cost-effectiveness thresholds are met, all sources of energy savings should be leveraged to achieve GHG reduction targets.

Proposed Amendment:

WGL proposes the following section be amended as shown by the text **in bold**:

7-223 (C) should be amended to state:

The Commission may give priority to long-lived greenhouse gas emissions reduction measures in the plans ~~**by establishing a minimum weighted average measure life for the plan of each electric company and gas company**~~**.**

Amendment 10 – 80% Behind-the-Meter Requirement

Context:

HB 864 states that at least 80% of the GHG emissions reductions for both electric and gas utilities should come from "behind-the-meter" (BTM) programs that impact the customer's side of the utility meter. The main driver of having this split historically has been to limit the electric utilities' ability to claim energy savings towards their EmPOWER energy efficiency targets from the most prevalent "front of the meter" (FTM) electric utility program, Conservation Voltage Reduction (CVR).

WGL Position:

It should be clearly understood that the issue concerning the level of impact a FTM program has on a utility's ability to achieve a GHG reduction target is a broader categorization of a more specific debate. That specific debate is determining the appropriate level of contribution that electric utility CVR programs have towards achieving GHG reduction targets. CVR programs are specific to electric utilities and do not apply to WGL and other gas utilities.

WGL believes that gas utilities have a narrower pathway to reduce emissions compared to electric utilities, and that all tools in the "toolbox" should be available for gas utilities to pursue higher levels of GHG emission reductions. Applying an 80%/20% BTM/FTM mandate to gas utilities will limit the Company's ability to achieve those higher levels of GHG emission reductions. WGL believes no such split should apply to gas utilities.

Proposed Amendment:

WGL proposes the following section be amended as shown by the text **in bold**:

> 7-223 (E) should be amended to state:
>
> Beginning January 1, 2025, at least 80% of the greenhouse gas emissions reductions counted toward each electric company's ~~**and each gas company's**~~ greenhouse gas emissions reduction targets established under this section shall come from behind-the-meter programs.

Amendment 11 – Full Cost Impact to Customers for Retrofits

Context:

Amend the required contents of the DHCD's plan to provide energy efficiency retrofits to all low–income households by 2032 to include a full breakdown of what this plan will cost any participating customers – including energy costs, electric rate impacts, panel upgrades, appliance costs, weatherization, and grid upgrade costs.

WGL Position:

The State should, as a part of developing the plan outlined in the bill to provide energy efficiency retrofits to all low–income households by 2032, include all costs associated with implementing the plan. When considering a conversion from gas to electric, customers should be aware of the costs associated with that transition.

Proposed Amendment:

WGL proposes the following section be amended as shown by text in red:

> 7-224 (J)(1) should be amended to state:
> The Department shall collaborate with the members of the Task Force to develop a plan, including a budget, a timeline, a complete breakdown of what a retrofit will cost the average low-income household, including but not limited to the change in their energy bills, cost to upgrade their appliances, cost to upgrade their paneling and wiring, cost to weatherize their home, and any charges due to required grid upgrades, and potential funding sources, to provide energy efficiency retrofits to all low–income households by 2032.

MD HB 864_Formaldehyde Panel Position_FINAL 022624

Uploaded by: Sahar Osman-Sypher

Position: UNF

MD HB 864

(2024 Regular Session - House Bill 864 First Reader (maryland.gov))

On behalf of the American Chemistry Council's Formaldehyde Panel, we oppose the following provision in MD HB 864 and ask that the language below be struck from Section 7-224 (F)(1)(2).

Section 7-224

~~(F) THE PROGRAMS AND SERVICES PROVIDED UNDER SUBSECTION (A) OF THIS SECTION MAY NOT USE THERMAL INSULATING MATERIALS FOR BUILDING ELEMENTS, INCLUDING WALLS, FLOORS, CEILINGS, ATTICS, AND ROOF INSULATION, THAT CONTAIN FORMALDEHYDE IF THE FORMALDEHYDE:~~

~~(1) WAS INTENTIONALLY ADDED; OR~~

~~(2) IS PRESENT IN THE PRODUCT GREATER THAN 0.1% BY WEIGHT.~~

---

1. Formaldehyde is One of the Most Studied Chemicals is Use Today

Formaldehyde is a naturally occurring substance made of carbon, hydrogen, and oxygen. All life forms—bacteria, plants, fish, animals and humans—naturally produce formaldehyde as part of cell metabolism. For example, an adult produces about 1.5 ounces of formaldehyde a day as part of our normal metabolism.[1] For this reason, the body is well equipped to handle formaldehyde.

Formaldehyde is one of the most well studied compounds in commerce, and its risk profile has been well characterized. More than 40 years of advanced science and practical experience clearly indicate that there is a safe exposure level. Dozens of peer-reviewed studies all support a safe exposure level to formaldehyde that is higher than typical concentrations in our homes and protective of worker health. According to the CDC, formaldehyde metabolizes quickly in the body; it breaks down rapidly, is not persistent and does not accumulate in the environment.[2]

2. Formaldehyde Technologies Contribute to Sustainable Building Materials

It is a core building block of the U.S. chemical industry that is used across a wide variety of sectors, including agriculture, healthcare, construction, automobiles, funeral services, semiconductors, national security and aviation. Products that are based on formaldehyde technologies have broad roles in the economy, are critical to the integrity of the supply chains, supporting nearly 1 million jobs.

Formaldehyde-based resins are used as the adhesive system to bind wood chips and other materials together to make engineered wood construction materials such as plywood, particleboard and fiberboard, sheathing and cladding, asphalt shingles, furniture and paneling, kitchen cabinets, molding and trim work, and flooring systems, as well as non-wood based construction materials such as insulation, paints and varnishes and numerous other applications for the housing industry.

No known compounds can serve as a cost-effective and reliable replacement for formaldehyde as a critical raw material in the production of adhesives without compromising product quality and

---

[1] Endogenous formaldehyde turnover in humans compared with exogenous contribution from food sources - - 2014 - EFSA Journal - Wiley Online Library.

[2] Agency for Toxic Substances and Disease Registry: https://www.atsdr.cdc.gov/toxprofiles/tp111.pdf

performance. Formaldehyde-based building products enable the more sustainable use of renewable resources, increasing energy efficiency while addressing greenhouse gas emissions.

Relevant ACC infographics:

- Infographic: Formaldehyde Building and Construction Applications
- Infographic: Formaldehyde Contributing to a Sustainable Future for Wood Products
- Infographic: Formaldehyde Producers Boost US Economy

3. The 0.1 Percent by Weight Threshold is Not Appropriate

The bill proposes banning the use of thermal insulating products that contain formaldehyde if formaldehyde is present in the product greater than 0.1 percent by weight. Measuring formaldehyde content by weight is not an appropriate measure. It is more important to measure the formaldehyde emissions of a product, than the percentage by weight. This measurement accurately correlates with potential exposure. This dynamic has been recognized by product regulations for formaldehyde including the California Air Resources Board's airborne toxic control measure (ATCM) to reduce formaldehyde emissions from composite wood products and U.S. EPA's formaldehyde emission standards for composite wood products under Title VI of the Toxic Substances Control Act (TSCA). EPA's Office of Air and Radiation has also recently proposed that products containing below 0.1 percent formaldehyde are non-hazardous air pollutant products.

Furthermore, this provision inappropriately applies a threshold based on a broad definition that is currently used by two federal agencies (OSHA and EPA) as a *de minimis* level for certain reporting obligations. In other words, if the 0.1 percent threshold is exceeded for a chemical, it only means that those concentrations would be listed for safety data sheets or that reporting of releases under the Toxics Release Inventory (TRI) may be required. The 0.1 percent threshold is not an indication of potential human health risk.

Formaldehyde is an essential building block in a diverse range of products, and its presence in these products is primarily in a converted form. Virtually all formaldehyde is consumed in the production of finished goods. In other words, little, if any, formaldehyde remains in the final products that consumers use.

Through many years of voluntary stewardship efforts, formaldehyde resin producers and wood panel manufacturers are now delivering products that emit at, or near, naturally occurring background levels from wood itself. As required by TSCA, EPA has established national emission limits based on California's airborne toxics control measure to control formaldehyde emissions from composite wood products.

4. Formaldehyde is Currently Under Review by EPA

The U.S. Environmental Protection Agency designated formaldehyde as a high-priority substance and the chemical is currently undergoing risk evaluation under the Toxic Substances Control Act. EPA is planning to release the draft risk evaluation for formaldehyde in March of this year and is targeting finalization by December 2024. EPA has indicated that they will not exclude conditions of use from the scope of the risk evaluation, assessing all exposure routes and pathways relevant to the chemical substance under the conditions of use. TSCA preempts state restrictions on a chemical for which EPA: is conducting a risk evaluation; has determined that the substance does not present an unreasonable risk; or when EPA takes final action to address the chemical's risk.

HB 864_Chesapeake Utilities_Unfav (02-27-24) (Fina
Uploaded by: Steve Baccino
Position: UNF

February 29, 2024

HOUSE ECONOMIC MATTERS COMMITTEE
HB 864 – Energy Efficiency and Conservation Plans

Statement in Opposition

Chesapeake Utilities Corporation ("Chesapeake Utilities") respectfully **OPPOSES** certain provisions contained in HB 864. Among other things, HB 864 modifies Maryland's existing EmPOWER program.

Chesapeake Utilities operates natural gas local distribution companies that serve approximately 32,000 customers on Maryland's Eastern Shore in Caroline, Cecil, Dorchester, Somerset, Wicomico, and Worcester Counties. These public utilities are regulated by the Maryland Public Service Commission and have provided in the coldest months of the year safe, reliable, resilient, and affordable service in the State for decades. As a company, Chesapeake Utilities serves as a positive and informed resource in the State's ongoing energy discussions.

EmPOWER History – Electric Utilities. Since its creation in 2008, the goal of the EmPOWER program has been to encourage retail customers to utilize less electricity, by allowing electric utilities to offer a variety of programs (e.g., more efficient light bulbs, energy audits, home weatherization, etc.). The electric companies have been authorized to recover the full costs (plus a return) for these EmPOWER programs through a surcharge on the utility bill of each and every customer in the State (whether the customer participates in the EmPOWER program or not). Since the inception of the program, gas only companies were not included in the EmPOWER program because its goals were focused on electricity reductions/efficiencies. Until recently, the EmPOWER program was successful because the Maryland law authorized the Maryland Public Service Commission (the "Commission") to impose a cost-effectiveness test that ensured that any costs for the programs was more than offset by reductions in electricity usage. The Climate Solutions Now Act of 2022 completely changed the focus of the EmPOWER program from encouraging *less* electricity usage to greenhouse gas reduction ("GHG") targets, which in turn requires customers to use *more* electricity. The current EmPOWER surcharge is already significant, averaging between $6 and $12 per month / per customer bill. In 2021, the utilities participating in the program spent $253 million, which is amortized (i.e., the utilities are allowed to recover their authorized rate of return on these funds) and collected over 5 years.

HB 864 Now Requires Gas Utilities Participation. HB 864 now requires both electric and gas companies to participate in the EmPOWER program. As Chesapeake Utilities does not currently participate in EnPOWER, the Company would need approximately 18 months to prepare and file a thoughtful and comprehensive gas energy efficiency program, which would require engaging a consulting firm that specializes in developing utility-specific energy efficiency programs and information technology system changes, as well as hiring additional personnel to administer the EmPOWER program.

HB 864 Imposes Artifical Requirements on Gas Utilities. HB 864 artificially and unnecessarily: (1) restricts the types of programs utilities may offer and (2) restricts actual GHG reductions that may be credited towards the goals of each utility (utilities only receive 20% credit for actual GHG reductions simply because the reductions were created by utility side of the meter programs, instead of customer side of the meter programs, such as energy efficient appliance offerings inside customers' homes). HB 864 requires each electric company and gas company to reduce GHG emissions by 1.8% *annually* from an artificial baseline of GHG emissions set by the Maryland Department of the Environment (MDE) from the year 2020, an historic anomaly because of the significant and unusual usage patterns caused by the COVID-19 pandemic lockdowns. Accordingly, by definition, any emissions in 2020 are not representative of traditional measured usage. In addition, the 1.8% annual GHG reduction target is similarly arbitrary and unrealistic, not based on any sound analysis, especially for gas only companies that have never participated in the EmPOWER program.

Moreover, gas companies are artificially restricted in how they can accomplish this goal by forcing at least 80% of these reductions to come from behind-the-meter programs (i.e., inside the customer's home). This 80% / 20% (behind-the meter / in-front of-the meter programs) is arbitrary, based on no scientific analysis and is counter-intuitive. If the goal of HB 864 is to reduce GHG emissions, programs that reduce emissions should not be curtailed. For example, gas companies achieve almost all of their GHG emission reductions from in-front of-the meter programs such as fuel switching (conversions to natural gas from fuel oil) and through the use of renewable fuels, such as Renewable Natural Gas ("RNG") and hydrogen. Specifically, through fuel switching programs, Chesapeake Utilities is significantly reducing GHG emissions, including on Maryland's Eastern Shore, especially from converting customers to natural gas who are still using fuel oil for their heating and cooking needs. Finally, HB 864 (p. 16) re-defines the standard "cost-effectiveness" test to include vague and undefined criteria (e.g., "utility nonenergy benefits" and "societal nonenergy benefits") that artifically skew the outcome of the test, allowing the Commission to potentially impose extremely costly programs on customers.

Chesapeake Utilities is Committed to Reducing Emissions. To be clear, Chesapeake Utilities is committed to reducing its GHG emissions, which we have consistently done and have detailed in our 2022 Sustainability Report (Sustainability Reporting - Chesapeake Utilities Corporation chpk.com). We implement cost-effective solutions to expand energy options that increase efficiency and reduce carbon emissions and we collaborate with companies and organizations, both within our industry and beyond, along with community partners, to promote best practices and raise awareness of environmental issues.

On behalf of Chesapeake Utilities Corporation, and our thousands of employees and their families who deliver energy safely and contribute every day in the communities where they live, work and serve, we respectfully request an unfavorable vote on HB 864.

Sincerely,

Chesapeake Utilities Corporation
Steve Baccino, Governmental Affairs Director / Contact: sbaccino@chpk.com

HB864_Choptank Electric Cooperative_Connelly_UNF.p
Uploaded by: Valerie Connelly
Position: UNF

Choptank Electric Cooperative
A Touchstone Energy® Cooperative

P.O. BOX 430, Denton, MD 21629
Toll-Free: 1-877-892-0001
Z_info@choptankelectric.coop
www.choptankelectric.coop

February 27, 2024

The Honorable C.T. Wilson
Economic Matters Committee
231 House Office Building
Annapolis, MD 21401

Re: Opposition to HB 864-Energy Efficiency & Conservation Plans

Dear Chairman Wilson and Members of the Committee:

On behalf of the members of Choptank Electric Cooperative, I respectfully oppose HB 864 because of the significant fiscal impact it will have on the families in Choptank's service territory. As drafted, the bill adds Choptank to the EmPOWER program for the first time. We are a small electric distribution company, and this change will cause electric bills for families to increase by $200-$400 per year. The EmPOWER surcharge will have to be set somewhere between $20 and $35 per month, which will be an 18% increase on an average residential electric bill.

Choptank Electric Cooperative serves some of the lowest income areas of the state. While we provide service in 9 counties, we are in the most rural portions of those counties, with an average of only 8 customers per mile. We are a not-for-profit company formed to serve families and farm businesses left behind by for-profit electric companies in the 1930s. All the revenue to run the cooperative comes from the member-owners.

When possible, Choptank uses grant funding to implement important projects like energy efficiency upgrades. In the spirit of the EmPOWER goals, Choptank has coordinated our Chop-A-Watt program for the last 8 years with funding from the Maryland Energy Administration and Old Dominion Electric Cooperative (ODEC), our energy supplier. In 2023, working with Eleventh House Solutions, we administered $500,000 in grants that helped families secure weatherization repairs and upgrade efficiency or convert fossil fuel appliances to electric. Here is a list of some of those changes:

- Heat pump and AC replacements
- Weatherstripping for doors and windows
- LED lighting upgrades
- Air duct sealing and blown insulation
- Replace refrigerators with energy star rated appliances
- Seal interior crawlspace door and air leakage points

In coordination with ODEC, Choptank is also launching a new mid-cycle update for all members to let them know how much energy they have used, how much they will use and what their bill will be if unchanged. This will also give us additional opportunity to promote energy efficiency changes supported through Chop-A-Watt and other state and federal resources.

When the original EmPOWER program was debated and passed by the Maryland General Assembly in 2008, municipal electric companies and cooperatives with fewer than 250,000 customers, like

Choptank, were exempted because it was simply too expensive to implement. The exemption was continued in the 2017 amendments and in the bill this Committee and the full House passed last year. Nothing has changed at Choptank in terms of size or ability to administer the full program.

We urge the Committee to give HB 864 an Unfavorable Report as drafted. If you plan to move a bill, we urge you to restore the exemption for electric cooperatives with fewer than 250,000 customers to avoid an increase in electric bills of $200 to $400 per family per year.

Sincerely,

VALERIE T. CONNELLY
Vice President of Government Affairs & Public Relations

Maryland HOUSE BILL 864_02272024.pdf
Uploaded by: Irene Polansky
Position: INFO

February 27, 2024

Maryland Economic Matters Committee:

While HB 864 is about “Energy Efficiency and Conservation Plans,” I would like to address issues not expressed (as well as issues implied) regarding utility smarter meters and the directly-related role of Maryland’s Public Service Commission

consider an amendment to 7-227

As a possible amendment to 7–227, *Maryland would benefit its residents by emulating NY Senate bill 5632-A*. The bill allows residents to keep their electric, gas, or water analog meter with no fee, penalty , or service charge.— and to get an analog meter reinstated.

In Maryland, pepco is mandated by the PSC to install a radiofrequency-emitting bubble-up meter as an opt-out instead of a safe, non-transmitting, watt-hour, digital meter. Bubble-Up meters send their meter readings as wireless signals every second or so, all day and all night long, every day of the year. The purpose of such frequent transmissions is to assure that a signal is available whenever a drive-by or a walk-by employee of the electric company passes with electronic equipment that can pick up and store the information carried by that signal.

I last confirmed the actual pepco opt-out meter in Nov. 2020 with a software engineer at Itron as an **Itron Centron C1SR R400 IDM High Power RF module** that contains a “radio” — hence, the “R” in the model name. Data is reported via RF emissions. Itron Centron C1SR is admittedly

designed for hard-to-read installations -– including commercial. This meter is "**overkill" for easy access**, above-grade residential use of a majority of dwellings statewide. Clearly, the PSC/pepco alliance wants to lower its on-site metering costs by irradiating its residential customers at the highest levels WHILE charging and opt-out fee.

Further, *it'd be interesting to calculate how many folks are paying the opt-out fee without even being aware that they are STILL being irradiated by an AMR (automatic meter reading) bubble up meter*.

recognize the prevalence of wireless harms

Many residents are clinically aware of the adverse health effects linked to EMF exposures include:

- excess oxidative stress
- opening of the blood-brain barrier, allowing toxins to enter the brain
- DNA damage and altered microbiome
- impaired proton flow and ATP production
- altered cellular function due to excessive charge

Residents need all elected officials and state agencies (including boards of health) must recognize that *wireless harms are not potential — but existing and growing* — already **epidemic in scale**. The phrase "canary in the coal mine" is not just for coal miners. The phrase so applies to every health-threatening wireless structure and device. What happened to consent or an opt-in? What happened to bringing this Class 2B Carcinogen to the public forefront?

In 2019, Michael Bevington from the Stowe School in the UK reported **"**The Prevalence of People with Restricted Access to Work in Manmade Electro-magnetic Environments**."** The study was based on analyses of the two different types of surveys of people with Idiopathic Environmental Intolerance attributed to Electromagnetic Fields (IEI-EMF), or Electromagnetic Hyper-Sensitivity (EHS), either of the general population or of people with IEI-EMF/EHS. Bevington found that about 0.65% of the general population are restricted in their access to work due to disabling symptoms of EMF/EHS, about 1.5% have severe symptoms, about 5% of the general population have moderate symptoms, and **up to 30% have mild symptoms**. In addition, **subconscious symptoms** from man-made electromagnetic exposure **cover most of the general population up to 80%**. (2019) Bevington M. Journal of Environment and Health Science. Vol 5:1, 01-12.

According to the U.S. Census Bureau, the July 1, 2022 population of Maryland is **6,164,660**. Based on Bevington's 2019 results, percentages for **Maryland residents** suffering EMF/EHS symptoms are worth noting.

Percentages	**Number of Maryland EMF Sensitive/ Disabled**
Can't work – 0.65%	40,070
Severe symptoms – 1.5%	92,470
Moderate symptoms – 5%	308,233
Mild symptoms – 30%	1,849,398

Tangential, and of major import, is a 9/2/2004 Swiss-Com Ag application for *"reduction of electro-smog in wireless local networks."* The applicant stated, *"the influence of electrosmog on the human body is a known problem"* *[whereby]* ***"both the DNA itself is damaged and the number of chromosomes changed -– this mutation consequently lead[ing] to increased cancer risk [with] this destruction not dependent upon temperature increases (i.e., non-thermal)."***

give residents reliable and safe options

Many residents medically need to have their pepco smart meter replaced with a legacy meter that's totally free of RFs/EMFs — and *cannot consent (or continue to consent) to a radiating meter.*that spikes high frequency voltage transients and magnetic common mode currents backwards onto the home wiring system. The spikes of RF frequencies created by the meter's Switch Mode Power Supply's AC/DC conversion process enter the house's electric wiring, transforming the entire house into an antenna while amplifying transients and magnetic currents. Meters that pulse intense levels of RF radiation up to 190,000 times a day exceed Federal Communications Commission's (FCC) allowed levels. *It's impossible to get well in an environment in which one got ill.* ADA/FHAA accommodations for safe pepco smart meter opt-out need addressed in this bill.

Even customer appliances are breaking down, especially any appliance with an electric motor or critical electronics including pace makers, CPAP machines and other life sustaining medical

equipment. Residents need options to safely replace a current smart meter so as to improve their health and their home's environment.

opt-out of an opt-out!

- To pay an opt-out to be irradiated by a transmitting, bubble-up meter alleged as an opt-out for a smart meter **= a scandalous PSC travesty in which pepco is mandated to participate**.
- To pay an opt-out for a manual meter reading so as to NOT be irradiated by a basic digital electronic meter (that's a non-transmitting, watt-hour meter) **is not optimal.** Further, the RF-impaired cannot be required to endure expensive legal proceedings when, in fact, safe and reliable opt-out accommodation itself costs less than $100.
- To pay NO opt-out fee to NOT be irradiated by a basic digital electronic meter (that's a non-transmitting, watt-hour meter) **is more optimal.**
- **IDEAL, however, is to allow a resident to reinstate a smart meter with a meter that has the radio module removed meter — and to do so REGARDLESS of how or when the customer opted out.**

give up false energy & conservation narratives

- The AMI meters are increasing CO2 causing climate change, not preventing it.
- Most are unaware of billing and KWh/carbon footprint calculation issues.
- The infrastructure of AMI networks are not 100% secure and private like analog meters are.
- The suggestion that consumers can use AMI meter information to reduce their energy use is a fabrication because the consumer data is not real time. One-day-old data is useless.
- AMI meters are not more accurate than analog meters.

stake out other issues

- False readings by the meters have resulted in much higher bills for consumers.
- Smart meters have caused fires and violated privacy rights by selling consumers' usage data.
- Ample evidence shows that consumers have had to carry a rate hike to fund the ever-increasing costs of smart meters.

the bottom line

The Telecommunications Act does not grant any state the power to issue a license to mandate harmful radiation without accommodation. Rather, Section 332(c)(7) preserves local authority. A state cannot lawfully force a customer to accept a smart or digital meter when mandatory installation results in disability discrimination, exacerbates existing impairments, or forces people to abandon their home. There must be effective accommodation.

Further, no state should engage in surveillance that allow companies to "punish" users for using electricity during high demand periods and reward them for using it at less busy times all the while creating a "Smart Grid" and a network for the "Internet-of-Things."

Your consideration regarding the matters herein is sorely needed.

Thank you,
Irene Polansky; Silver Spring, MD

See the attached Advanced Metering Infrastructure (**AMI**) exhibit entitled **"AMI Meters add to CO2/Climate Change and Higher Bills"** by William Bathgate, BBEC, EMRS, IEEE RFSO Vice President of the Residential Consumer Group.

AMI Meters add to CO^2/Climate Change and Higher Bills

By William Bathgate, BBEC, EMRS, IEEE RFSO
Vice President of the
Residential Consumer Group
January 25, 2023

Note: This report has been written in terms that a common person with limited knowledge of electricity and engineering can understand.

BACKGROUND: William S. Bathgate

William practices as a professional in electrical engineering and mechanical engineering disciplines. He was recently employed at Fiat Chrysler Automotive on electronics systems for such things as radio communication for electric and autonomous vehicles etc. William was previously employed through late 2015 for 8 years at the Emerson Electric Company. While at Emerson Electric he was the Senior Program Manager for Power Distribution Systems and in charge of RF and IP based digitally controlled high power AC power switching system product lines in use in over 100 countries. He was also directly responsible for product certifications such as UL (USA), CE (EU), PSE (Japan) and many other countries electrical certification bodies. He is very familiar with the electrical and electronic design of the AMI meters in use because he was responsible for very similar products with over 1 Million units installed across the world. William also has over 20 years work experience with IBM and Hewlett Packard in computer systems design and manufacturing.

He holds a DOD Top Secret Clearance, serving in Cyber Security with the US Missile Defense Agency, NASA and Homeland Security. He is a Certified Building Biologists and a Certified Electro Magnetic Radiation Specialist by the Building Biology Institute https://buildingbiologyinstitute.org/. He is an IEEE Certified Radio Frequency Safety Officer and conducts radio antenna surveys for assurance to the FCC specifications.

He is Vice President of the Residential Consumer Group https://residentialcustomergroup.org/. This organization has legal representation in all Public Utility Rate Cases submitted in Michigan. To date the group has caused the cancellation of numerous rate increases in excess of over 1 Billion in increased utility costs to Michigan Residents.

He has done this analysis due to his own curiosity without conflict of interest of this new technology. He has 40 Years work experience in design and deployment of:

High tech power management systems, UPS and power distribution
Switched Mode Power Supplies
Electrical and Electronic hardware engineering
Computer systems engineering
Radio Systems design and testing
High Current and High Voltage switches
Internet communications using both wired and wireless technologies
UL, CE (Europe), Africa, Japan, Australia and China product safety certifications
Cyber encryption (DOD Level) and protection of Radio Communications using digital signals
RFI/EMI mitigation

Agenda – What you need to know

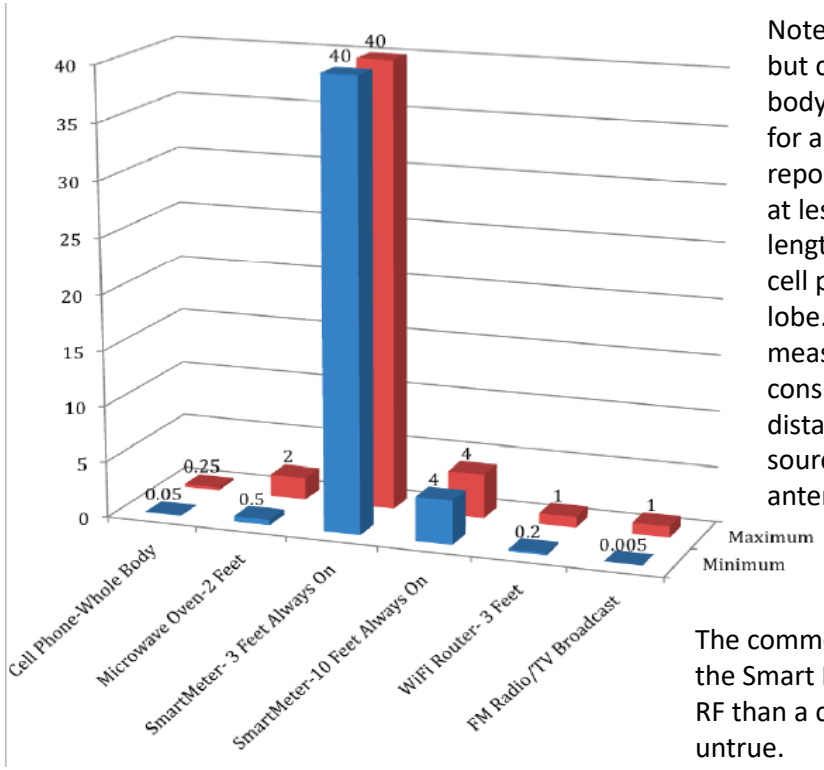
- **The assertion that the RF from an AMI meter is less than a cellphone is simply proven as untrue.**
- **The AMI meters are increasing CO^2 causing climate change, not preventing it.**
- **Billing and KWh/Carbon Footprint calculation issues you were not told of.**
- **The infrastructure of AMI networks are not 100% secure and private. Analog meters are.**
- **The suggestion that consumers can use AMI meter information to reduce their energy use is a fabrication because the consumer data is not real time. The one Day old data is useless.**
- **The suggestion that AMI meters are more accurate is false. AMI and analog meters both have to meet the ANSI C12 specifications on accuracy.**
- **The Meter RF signal can travel 1,400 – 1,500 feet, right through a brick wall, making an opt out program useless in an apartment complex scenario. This is from the one of the meter manufacturers itself.**

It is not less than a cell phone call
The Truth on RF Smart Meter Emissions

µW/CM²
Note: 1µW/CM²
= 10,000 µW/M²

The Smart meter is
400,000 µW/M² peak
@ 10 ft it is 100,000
µW/M² peak

Smart Phone is
0.25 µW/CM² = 2,500
µW/M² peak



Note – Initial ERPI report but corrected for whole body exposure vs at the ear for a cell phone. The original report from CCST measured at less than 3 RF wave lengths from the source i.e. cell phone right at the ear lobe. When conducting RF measurements you must consider the recommended distance between the RF source and the instrument antenna. Typical rule is 3.

The common assertion that the Smart Meter emits less RF than a cell phone is untrue.

Source – Dr. Daniel Hirsch on the CCST Report – is all in µW/CM²
CCST = California Council on Science and Technology

Examples of Digital Meter Installations in Apartment Buildings

Note this is exceeding the FCC equipment Grant
separation distance of 20 cm

Where:
S = power density (in appropriate units, e.g. mW/cm2)
P = power input to the antenna (in appropriate units, e.g., mW)
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure*							
Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm2)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm^2)
902.25	21.36	0.60	136.77	3.5	2.239	20	0.061
2405	-3	1.00	0.50	4	2.512	20	0.000
824	32.4	0.55	1737.80	0	1.000	20	0.346
1850	30	1.00	1000.00	3	1.995	20	0.397

Summation of Power Densities – Simultaneous Transmissions
This device contains multiple transmitters which can operate simultaneously and therefore the maximum RF exposure is determined by the summation of power densities. The maximum power density as calculated by a summation of power densities for each transmitter is as follows

GPRS Modem Operating in the 800MHz Cellular Band:

900MHz LAN:	0.061 (mW/cm^2)
2.4GHz Zigbee:	0.000 (mW/cm^2)
GSM 850 (GPRS):	0.346 (mW/cm^2)
TOTAL:	**0.407 (mW/cm^2)**

Examples of Digital Meter Installations in Apartment Buildings

From the FCC Equipment Grant (ITRON Meter Example)

Where:
S = power density (in appropriate units, e.g. mW/cm2)
P = power input to the antenna (in appropriate units, e.g., mW)
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure*							
Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm2)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm^2)
902.25	21.36	0.60	136.77	3.5	2.239	20	0.061
2405	-3	1.00	0.50	4	2.512	20	0.000
824	32.4	0.55	1737.80	0	1.000	20	0.346
1850	30	1.00	1000.00	3	1.995	20	0.397

Summation of Power Densities – Simultaneous Transmissions

This device contains multiple transmitters which can operate simultaneously and therefore the maximum RF exposure is determined by the summation of power densities. The maximum power density as calculated by a summation of power densities for each transmitter is as follows

GPRS Modem Operating in the 800MHz Cellular Band:

900MHz LAN:	0.061 (mW/cm^2)
2.4GHz Zigbee:	0.000 (mW/cm^2)
GSM 850 (GPRS):	0.346 (mW/cm^2)
TOTAL:	**0.407 (mW/cm^2)**

µw/cm²	µw/m²	Plus gain of 3.5
0.407	4,070.00	14,245.00

Examples of Digital Meter Installations on Exterior Walls

Albemarle St. and Nostrand Ave. in Brooklyn

51st Street between 4th and 5th Avenue in Brooklyn

Building Biology International Safety Standards for RF for Human Exposure

RF Radiofrequency Radiation		No Concern	Slight Concern	Severe Concern	Extreme Concern
Power Density in microwatt per square meter	µW/m²	< 0.1	0.1 - 10	10-1000	> 1000

As anyone who walks within 3 Meters of these meters their exposure is considered an Extreme Concern @ 14,245 µW/M²

How far can the AMI meter transmit?

- Between 1,400 ft and 2,300 ft. An AMI can also transmit thru a brick wall, wood, drywall etc.

Landis+Gyr
manage energy better

CONFIDENTIAL TO LANDIS+GYR

- Service Disconnect/Reconnect Commands for 0.5% of residential advanced electric meters population per day (which includes prepay customers)
- Meter configuration for 0.5% of electric population per day
- Firmware downloads for electric population twice yearly
- Advanced meter change outs for 0.1% of electric population per day
- Meter Events pushed for 1.0% of advanced electric endpoint population per day (Tamper Alarms, Quality of Service Alarms)
- Endpoints communicate to other endpoints and Routers at up to 115.2 kbps
- Routers communicate to other Routers and Collectors at up to 115.2 kbps

- The following are standard Propagation parameters:
  - The antenna for C6500 Series Collector is installed at a minimum of 20 feet above ground level (AGL) on poles and a minimum of 45 feet if installed at a substation
  - As a standard, Router antennas are installed at a minimum of 20 feet AGL
  - Typical design communication ranges for endpoint to endpoint communication is up to 1,400 feet
  - Typical Router to endpoint communication is up to 2,300 feet
  - Typical Router to Router communication is a half mile to two (2) miles depending on standard power output, antenna, foliage, buildings, and terrain

How far can the AMI meter transmit?

- At 1,400 ft and 2,300 ft. RF would impact a consumer especially in an apartment or condo complex. If just one consumer request an opt out meter, that consumer would be impacted by anyone within 1,400 feet that has an AMI meter. The same is true in single family home residences or neighborhood.

- The utility consistently states the RF emissions of the meters meet FCC requirements, this is a misleading statement. FCC requirements are for the effects of enough non-ionizing power to cause the brain to heat up 1° C. This is a deception because there are effects of non-ionizing radiation. There have been over 800 peer reviewed independent studies not funded by the industry that have linked this type of low level non-ionizing RF radiation to a group of diseases including brain cancer, Parkinson's, Alzheimer's, high blood pressure, tinnitus, skin rashes and open sores as an example. Industry funded studies always fail to point our that 32% of their funded studies show an effect on health from non-ionizing radiation. The industry NEVER mentions these studies. This adds to confusion on the health effects attributed to the meters. I have personally met many of the affected consumers and this is no joke or set of psychological conditions.
- https://magdahavas.com/wp-content/uploads/2020/04/Havas-5G-health-humans-and-biota-April-15-2020.pdf

AMI – "AMI - Smart Meters" use power from the Grid to operate – This adds to Climate Change

- **Consider that the AMI meter is actually a powerful computer, not a just a meter. In fact, the federal government classifies the AMI as a computer, not a meter.**
- **The AMI meters require power from the grid to run the computer inside the meter.**
  - **There is a Two Way radio in each AMI meter**
  - **There are special circuits that convert the AC power to DC to power the electronics of the circuit boards, CPU's, memory switching power supplies, LCD's, a solenoid and many others functions, etc. Those all consume power.**
  - **The analog meter consumes no power to operate. It has no electronics inside.**

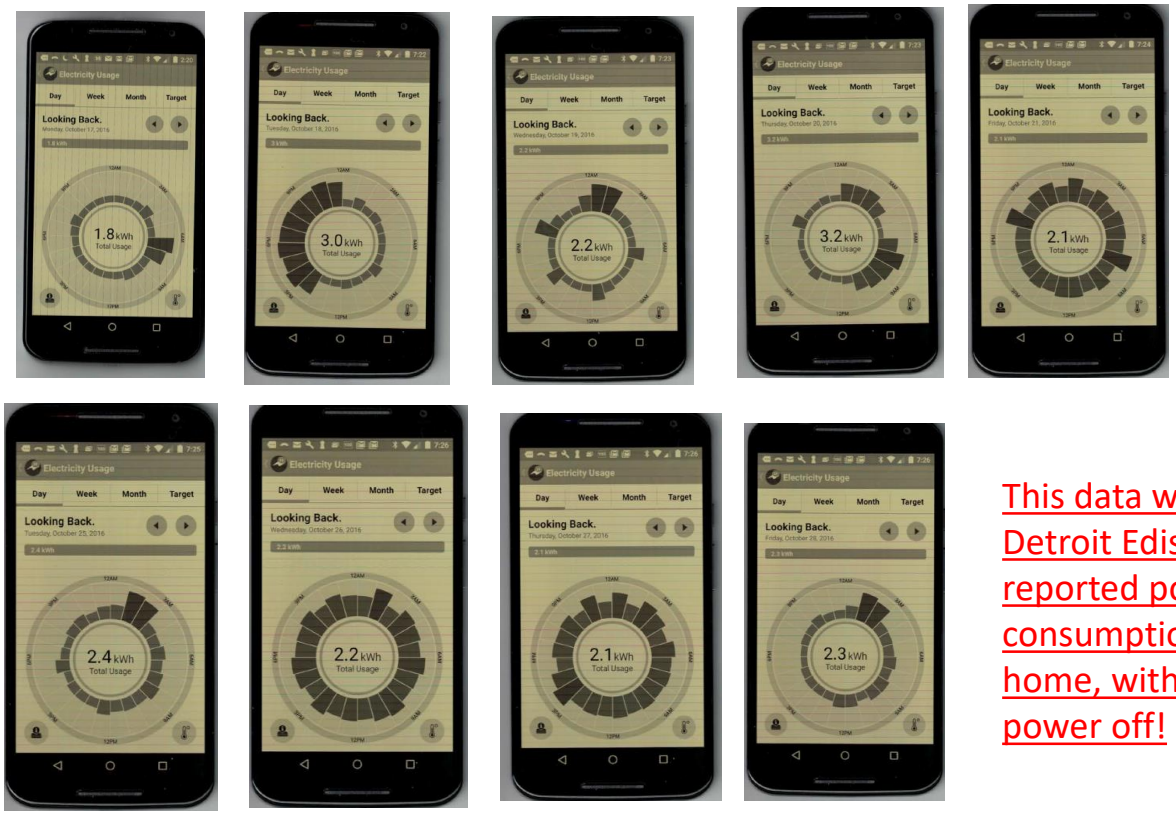
How much power does the AMI meter consume?

- **I did a field test of the meter on my own home. I was in a unique position of not living in the home at the time and there were no lights or appliances operating.**
- **I turned all the breakers off in power panel, so there was nothing "On".**
- **The result was the AMI meter consumes ~2.7 KWh 's per day on average. Multiply that times the number of meters. It's a big number. It did not "Save" any power.**
- **Subsequently I built a special test set up so I can repeat the same test at any time. I can plug in any AMI meter in and see how much power the meter consumes all by itself. I get the same ~2.7 KWh 's/day regardless of meter brand. Analog meters consume no power.**

My Smart Meter Test Setup

Proof - My Field Test - My Energy Insight Readings – Michigan example

Average Daily AMI kWh Use 2.37 kWh @ 0.13 per kWh = $0.31/day (865 kWh/Yr.)



This data was from Detroit Edison, as the reported power consumption on the home, with all the power off!

Note – No breakers were on and the time and reading of the meter is not a simple "Text" message these are clearly two way communication activity and the power to run the meter itself. It is not the same as a simple cell phone call.

Impact to the Environment – Detroit Example

Annual Cost per Customer	Rev $ per Detroit Edison	Rev $ per Consumer Energy	kWh per Detroit Edison	kWh per Consumer Energy	CO^2 Per Detroit Edison	CO^2 Per Consumer Energy
$113.15/Yr.	$235.35M	$203.67M	1.816B	1.521B	3.924BT	3.879BT

Total Consumer Costs Yr.	Total kWh Consumed Yr.	Total CO^2 Per Yr. (Coal @ 2.16lbs per kWh)
$439.02M	3.337B	7.803BT

Note: Solar is 2.2 Lbs. total Embedded CO^2/kWh including Mining, transport, maintenance, etc.

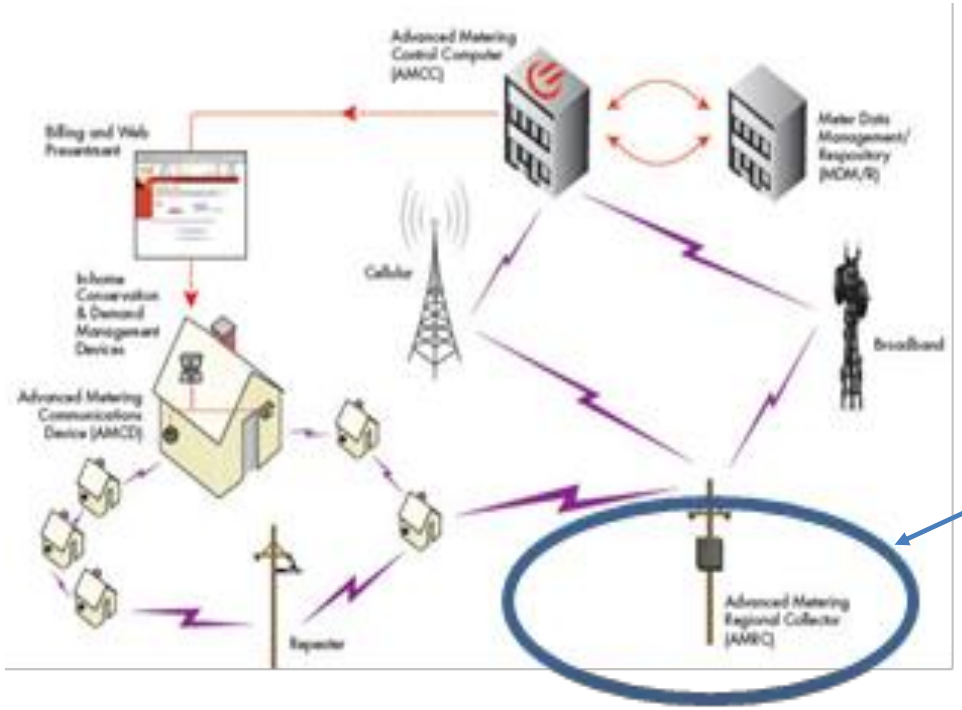
Conclusion: There is absolutely NO evidence the AMI Meter program saves CO^2, energy in kWh or money, in fact it only drains the bank accounts of the impoverished consumer, pads utility revenue and adds to Global Climate Change.

The only way the AMI program will save kWh's is to use it to ration power to consumers via Demand Response/Time of Use rate structures at 5-10 X normal rates where the elderly, disabled and young families with a parent and small children at home can least afford it or do without power during the Demand Response/Time of Use period. Under this scenario the AMI program is the largest fleecing of the consumer to ever exist and a deception to our citizens regarding saving power, reducing costs, reducing CO^2 and protecting our environment. We would be better off taking the money to be invested in AMI meters and plant trees.

AMI is not Secure – It has a Physical Back Door

There is a special tool that is used to program the meter. A malicious actor can easily obtain one of these tools.
A physical connection to the meter directly by-passes encryption, allowing privacy to be violated and hacking risk; insertion of code, altering the network traffic and injecting malicious code. They can even shut down the power. The default passwords are published in the meter documentation.

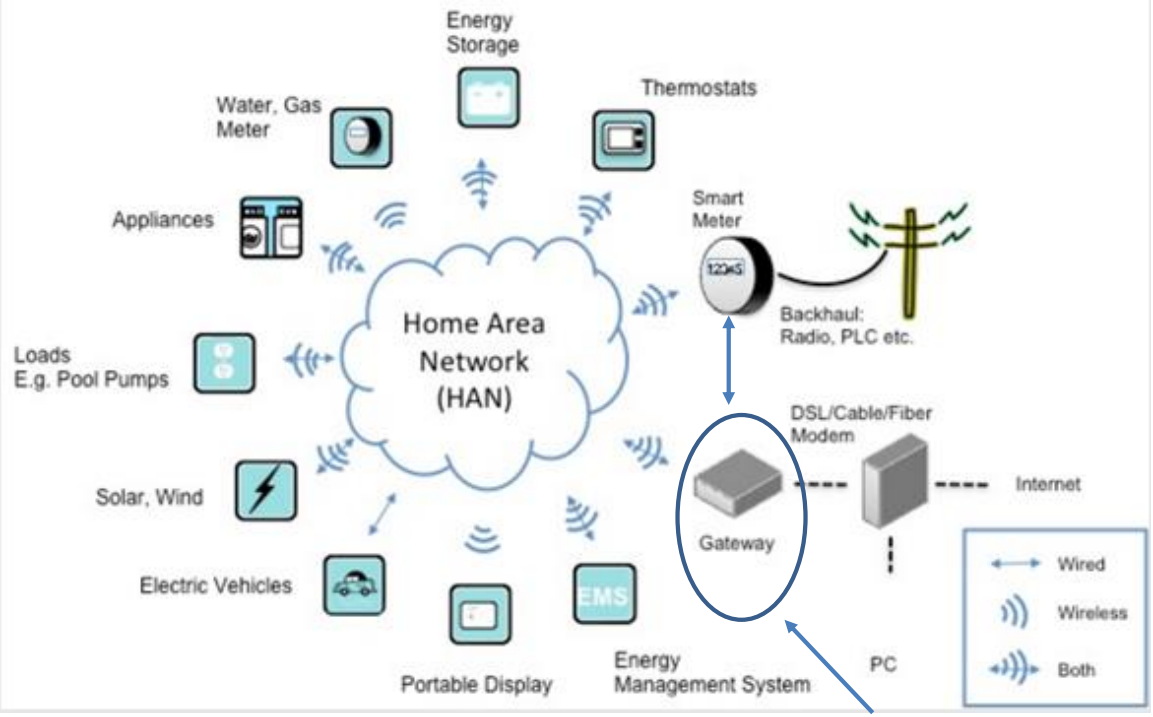
Network Weak Link



Weak Link

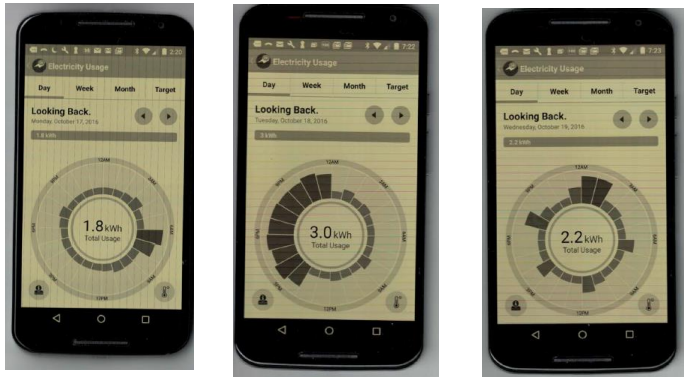
A malicious actor can send a strong RF broadband signal (multiple frequencies all at once) pointed at this network point, blocking transmission and no readings can be sent to the utility. The AMI meters have tamper protection in them and when they do not get an acknowledgment back from the utility over a certain period of time they begin to shut down. You do not need to know the encryption key, just block the transmission to the network access point with an overwhelming RF signal

Back Door to the Data, Zigbee Net



Once access via the gateway is enabled there is no firewall to block data access, so personal email, video downloads data, etc. can be accessed by utilities and hostile actors. If you can get on the ZIGBEE network you can observe all this type of data. I can easily hack my neighbors ZIGBEE 2.45 GHz network and see all his information Realtime.

Smart Meter - Day Old Data - will never let a consumer help prevent a “Brown Out”



Note – These are the readings of my electric use coming from DTE. This data is a day old. It is impossible to adjust my usage today based on usage from yesterday. Yesterday is gone and nothing can be done about it. Unless the meter information is “Continuously Real Time” there is no purpose in building out this capability. The utility costs to provide day old data is pointless. It is cute to see this information but the consumer cannot change behavior to effect a result to something that has already occurred.

AMI versus Analog Meter Accuracy

Key Differences

- *Analog Meter*
  - The Analog meter has a direct one-for-one relationship between the current consumed in kWh's and the wheels turning the dials. There is no influencing factor or software that can alter this relationship. Also, since this is a current measuring device with no electronics, it is not readily affected by extremes in temperatures and humidity or short circuits.

  - The analog meter has a means to direct excessive power surges to the house ground rod per UL 1449 specs. The life span of the analog meter is typically 30-50 years and is UL Listed (which means it is stamped with the UL logo). It has the same ANSI C12 specs for accuracy as the AMI meter. Categorizations that the AMI meter is more accurate is not true, since they both must meet the same ANSI C12 specs.

AMI versus Analog Meter Accuracy

Key Differences

- *AMI Meter*
  - The AMI measured current does not have a one-for-one relationship between current consumed and indicated reading. This must be measured via an electronic sensor, converted to a digital signal and then a computer calculation averages all of the sensor input and posts the data in computer memory and the reading on the LCD display. There is a manipulation of the indicated reading that can be affected by many factors.

  - All electronics components are rated between 1% to 20% accuracy. Most of the components on the AMI meters are 5% rated, with the current transformers rated at 1% accuracy within the permitted range of temperatures. I will point out that this 1% is only related to temperature, **not the measured load characteristic**. This is important because testing at the University of Twente in 2016 showed very high smart meter inaccuracies of 582% (https://www.utwente.nl/en/news/2017/3/313543/electronic-energy-meters-false-readings-almost-six-times-higher-than-actual-energy-consumption) with current transformers, such as in the all AMI meters, are generally accurate to within ±10%. That is a 20% range. So claims by utilities that the AMI is more accurate is highly suspect. This is only true in a very tightly controlled setting such as ten 100 watt incandescent bulbs, not with electronic appliances, motors, CFL's, LED's etc. (Note - a 100 watt light bulb can vary 5%)

AMI versus Analog Meter Accuracy

Key Differences

- *The ANSI C12 Standard – "Gold Standard" Missing*
  - The standard that all meters must meet is ANSI C12. It sounds impressive, however, there are two extremely important characteristics that this standard leaves out – a Gold Standard for reference and a real time clock to calculate kWh hrs.

  - I found it amazing to discover ANSI C12 does not present a "Gold Standard" reference for all meters to be compared to. For example your average meat market has a weight scale which is calibrated to a known standard such as weights in standard calibrated sizes for pounds and ounces. There is a seal affixed to that scale to assure the consumer they are not getting cheated. This characteristic does not exist in the ANSI C12 Standard.

AMI versus Analog Meter Accuracy

Key Differences

- *The ANSI C12 Standard - Real Time Clock*

  - There is no time standard reference in the ANSI C12 specification. In other words no “real time clock”. The analog meter did not need a clock; the gears in the meters did the calibrated settings to indicate kWh’s. This is extremely important because without a universal time standard, the AMI computer circuitry has no standard means to measure current consumption over a known reliable time period. So, how it calculates kWh measurements requires a very reliable and uniform time standard. In computer circuitry, a time synch process in the “stack” of processes is the least serviced characteristic leaving other more important computational process to have a higher priority. You may have had a home computer, which was not connected to the Internet where the indicated clock reading is off occasionally, with the time reading tending to drift a bit. The RF Emitting AMI meters have a means to keep the clock synced via the mesh network or cellular network. However, the Opt-Out AMI meter has no network connection so its clock will drift over time, which will affect the calculation of kWh’s. So, a consumer may not get the actual reading of the power they consumed. The Analog meter uses the gears to indicate the reading and does not drift, and therefore maintain accuracy.
  - If you have an AMI opt out program, you must use an analog meter to be accurate to the ANSI C12 standard.

AMI versus Analog Meter

Key Differences

- *The ANSI C12 Standard - Real Time Clock*

  - This is important to recognize because many utilities offer a Non – Communicating AMI meter. This has no real time clock reference. It will give erroneous readings as I have experienced.

  - Here is a photo of my meter installation. Note my calibrated analog meter is in series with my electronic AMI opt out meter. I read both meters every month at the same time and day of the month and compare them. I typically find the Electronic AMI is a higher reading than the Analog meter. I send these findings to the utility and they adjust my bill down to a matching reading. The utility now has given up any added charges of $10.00/month to my bill for manually reading my AMI meter.

Meter accuracy and your bill

- As professed by Landis+Gyr, their AMI meter is “accurate” based on the Navigant Consulting Report in 2010 and referenced their web site. However, within this report the extremely high rate of billing complaints after the installation of the new meters is evident and explanations were difficult to verify as to their cause. The number of complaints was dramatic. This baseline of complaints was done in Texas with real temperature ranges from ~30 to ~88 degrees.

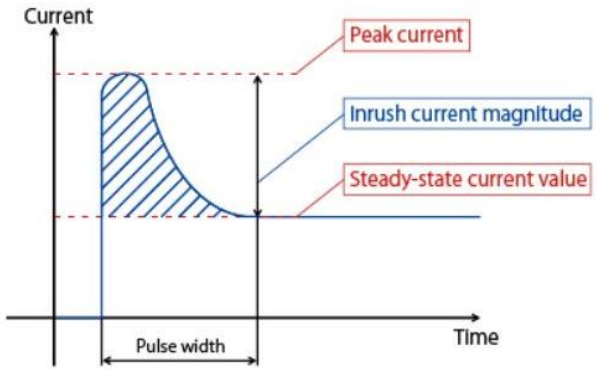
- Control testing conditions were not well explained in this report such as ambient temperatures ranges, and in particular the type of load the meter accuracy was compared to.

    - Resistive loads such as light bulbs with standard incandescent bulbs (linear loads), versus CFL’s, Halogen, Switched mode AC/DC power supplies i.e. Home phone chargers, TV and appliance controls, LED’s and overhead florescent light with electronic ballasts (non Linear loads).
    - Inductive loads such as electric motors in refrigerators, washing machines air conditioners etc.
    - No discussion on how the AMI meters did the kWh calculation, since it is really not a meter, but is a computer, with peak samples not averaged over a fixed period of time? **Whatever your peak use is in a 15 minute window is what you get charged for the full 15 minute window**.

- What is very different in the AMI meter is the algorithm used to calculate the readings from the sensor into the indicated display. The analog meter is a type of “totalizing” meter just like a gas pump. The AMI meter is very different, typically using peak use as a basis for calculations over a fixed window of time. (any peak in 15 minutes is used for billing the entire 15 minute window)
    - The AMI meter uses sensor data, which has to be averaged by a mathematical calculation, then registered into memory and on the LCD display.
    - The gas pump has a weights and measures standards sticker to assure the consumer they are getting what they paid for, there is no such concept on an AMI meter. ANSI standards are laboratory measurements under tightly controlled conditions and are inadequate for accounting for in the field variances for temperature and humidity.

Meter accuracy and your bill

- The Navigant Report tried to explain the billing inaccuracies in Texas using complex mathematic explanations and reference to “degree” days, but the degree variance was typically within 10% year over year, yet this did not explain power bills increasing as much as 25%-40% higher year over year.
- Their test lab control setups were done at room temperature as shown in pictures in the report.
- There was no field test at various temperatures for accuracy, nor was there a test using electric motors, they only lab tested with incandescent light bulbs, two completely different load variables.



Electric Motor Current Draws are different than a light bulb

- There is a short .5 to .6 sec burst of current needed to start an electric motor, so a 5 amp rated motor may need 8-9 amps to get rotating up to rated speed.
- If the utility is measuring peak current and averaging this over a window of time you can skew the average when you combine the two types of loads.
- Only the utility knows the math in the software.
- If you have an “Energy Star” refrigerator/freezer, it starts and stops frequently, and so the skew of the average is worse, imagine the impact on the average reading after 3-5 motors start and stop in the sample window.

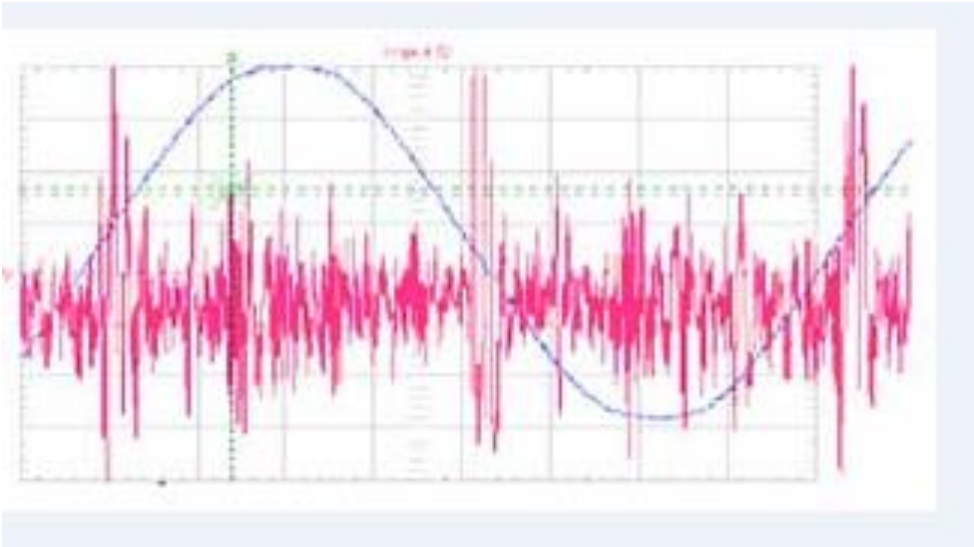
Conducted Emissions “on the wire”

- **US FCC Title 47 Part 15.109 and International Standard CIPSR 32 Conducted Emissions (EMC and EMI/RFI)**

  - **The AMI meter, Opt-Out Meter (no RF) and various versions of the Electronic meters all currently exhibit spiked high frequency voltage transients and magnetic common mode currents backwards onto the home wiring system creating a huge antenna amplifying these transients and magnetic currents.**
  - **There is no way to “fix” the current design without a direct connection to an Earth Ground source and a circuit redesign.**
  - **An external fix at your service panel costs anywhere from $2,000 to $7,000 for UL approved filters.**
  - **Customer appliances are breaking down, especially any appliance with an electric motor or critical electronics including pace makers, CPAP machines and other life sustaining medical equipment .**
  - **People are getting sick from the both RF generating and the Opt-Out meters as the result of conducted emissions and common mode currents.**

SMPS with Common Mode Filter – Principles You Need to Understand

The Standard Single Phase 60 Cycle/Second Waveform with EMI/RFI introduced by the SMPS



This waveform displayed is the same as an oscilloscope trace would look like, you cannot see this on a common voltmeter. Now we have introduced the effects of EMI/RFI via the SMPS to the same wire carrying the house current. This effect can be less depending on the environment, especially how good the house earth ground is magnetically coupling the house voltage currents Especially if they are using the water pipe as a ground reference which makes it worse. There are many variables that affect this waveform. The image in red should never be there, I have found this pattern consistent with every AMI meter, including the AMI meter with the radios off and the various digital meter alternatives. It is typically not compliant to FCC rules over all required frequencies for “conducted” Emissions Class A or Class B.

The claim the meter meets FCC specs, maybe not true

Here is an example:
This the section of a report on a Sensus brand meter that is non compliant at 300 KHz note they are over spec for both FCC QP and AV Class B specs

I have the full reports of each example I present here. These are the parameters for “Conducted Emissions” not the RF 900 MHz transmissions

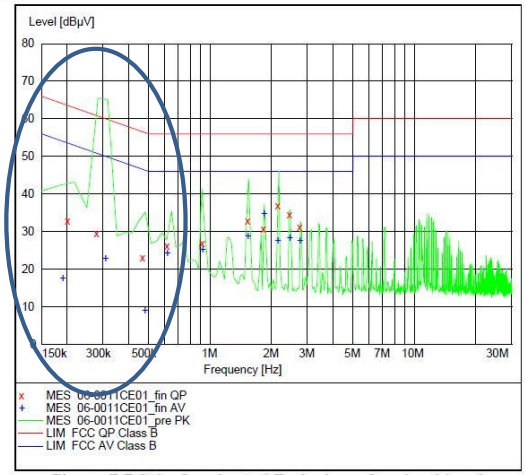


Figure 7.7.2-1: Conducted Emissions Graph – Line 1

How does the utility get a non-compliant meter accepted as compliant?

Here is an second example:
The previous section of a report on the same Sensus brand meter that is non compliant at 300 KHz where they are over spec for both FCC QP and AV Class B spec. They then submitted a second report to the Iowa Commission for the same meter a report that obviously “Cherry Picks” the data points avoiding the 300-320 KHz frequency range to make it appear to be compliant. They avoided the graph shown in the previous chart. I find this be a common ploy in submission for approvals to state commissions. Since the meter companies pay the certification service they can be easily influenced to create a report favorable to outcome the meter company desires.

Zigbee, S/N 33 065 394

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
2.064750	---	15.19	46.00	30.81	1000.0	9.000	L1	OFF	9.8
2.064750	27.11	---	56.00	28.89	1000.0	9.000	L1	OFF	9.8
2.154750	---	12.94	46.00	33.06	1000.0	9.000	L1	OFF	9.8
2.154750	24.10	---	56.00	31.90	1000.0	9.000	L1	OFF	9.8
2.699250	---	11.95	46.00	34.05	1000.0	9.000	L1	OFF	9.8
2.699250	21.12	---	56.00	34.88	1000.0	9.000	L1	OFF	9.8
13.697250	---	21.20	50.00	28.80	1000.0	9.000	L1	OFF	10.4
13.697250	26.80	---	60.00	33.20	1000.0	9.000	L1	OFF	10.4
14.320500	---	25.23	50.00	24.77	1000.0	9.000	L1	OFF	10.4
14.320500	30.20	---	60.00	29.80	1000.0	9.000	L1	OFF	10.4
15.987750	---	17.86	50.00	32.14	1000.0	9.000	L1	OFF	10.6
15.987750	28.04	---	60.00	31.96	1000.0	9.000	L1	OFF	10.6

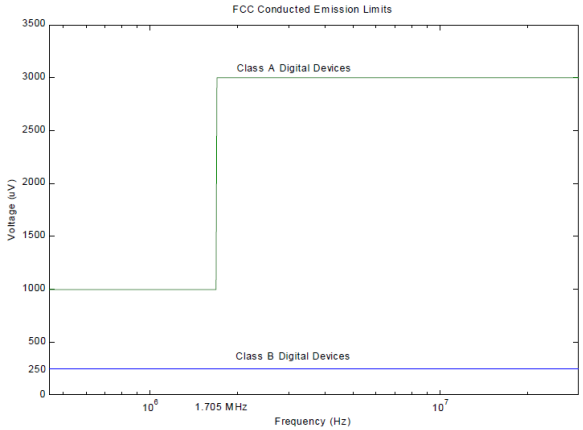
Line 1: AC Mains

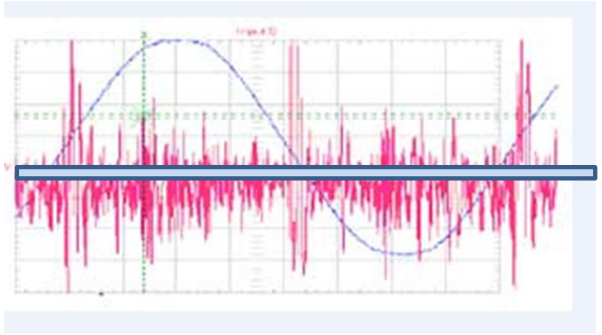
Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.357000	---	17.60	48.60	31.00	1000.0	9.000	N	OFF	9.7
0.357000	26.57	---	58.63	32.06	1000.0	9.000	N	OFF	9.7
0.379500	---	15.99	48.12	32.13	1000.0	9.000	N	OFF	9.7
0.379500	24.34	---	58.15	33.81	1000.0	9.000	N	OFF	9.7
0.640500	---	13.72	46.00	32.28	1000.0	9.000	N	OFF	9.7
0.640500	23.18	---	56.00	32.82	1000.0	9.000	N	OFF	9.7
1.329000	---	17.67	46.00	28.33	1000.0	9.000	N	OFF	9.8
1.329000	25.90	---	56.00	30.10	1000.0	9.000	N	OFF	9.8
2.064750	---	17.08	46.00	28.92	1000.0	9.000	N	OFF	9.8
2.064750	27.38	---	56.00	28.62	1000.0	9.000	N	OFF	9.8
2.103000	---	16.52	46.00	29.48	1000.0	9.000	N	OFF	9.8
2.103000	26.25	---	56.00	29.75	1000.0	9.000	N	OFF	9.8

Neutral: AC Main

AMI meter without Common Mode Filter – Principles You Need to Understand

The Standard Single Phase 60 Cycle/Second Waveform with EMI/RFI introduced by the SMPS





Class A limits

The image in red is for both AMI meters (with the radios on or off) and the various forms of “Electronic Meters." They are not compliant to FCC rules for “conducted” Emissions Class A or Class B. Shown here are the limits for CONDUCTED emissions not Radio Emissions, which is a different specification, which are being fed back into the home wiring at the load panel. This is placing stress on all electronics and electric motors in the home, causing early appliance motor failures, appliance electronic control failures and radio interference, in addition to health effects such as insomnia, tinnitus, headaches, high blood sugar levels and nervous disorders such as neuropathy and heart arrhythmia. In order to become compliant the meter manufactures would have to scrap the current SMPS design, and include one that connects to an earth ground path to sink the oscillations to the home ground rod.

What can be done to remove conducted emissions within the meter?

- A complete redesign of the SMPS board to include UL and FCC specifications for "conducted" emissions of EMC/EMI/RFI and stray common mode magnetic currents.
- Inclusion of common mode filter components.
- Inclusion of a direct connection to an Earth Ground to “Sink” the Conducted Emissions directly to ground.

Katzin Amend HB 864.pdf
Uploaded by: Katherine Katzin
Position: INFO

My name is Katherine Katzin, and I am writing to urge the Committee to amend HB 864 Energy Efficiency and Conservation Plans so that section 7-227 expressly prohibits any entity, whether the public service commission, a utility provider, or the executive branch, from preventing any ratepayer from opting out of a smart meter on their residence, without fee or penalty.

According to the Environmental Health Trust, “Most smart meters emit very strong pulses of RFR (radiofrequency radiation) twenty-four hours a day. Contrary to claims made by utility providers that the exposure is “low,” many smart meters continuously emit RFR in millisecond blasts. These short bursts of radiation can be very powerful. Wireless smart meters typically produce very short high levels of pulsed RF/microwaves. They emit these millisecond-long RF bursts on average 9,600 times a day with a maximum of 190,000 daily transmissions and a peak level emission two and a half times higher than the stated safety signal.” (https://ehtrust.org/smartmeters-health-and-safety-faqs/)

According to Dr. David O. Carpenter, M.D. Director, Institute for Health and the Environment University at Albany; Dr. Lennart Hardell, MD, PhD, Professor, Department of Oncology, University Hospital Orebro, Sweden; and Dr. Magda Havas, BSc, PhD, Environmental & Resource Studies Trent University, “Smart meters and cell phones occupy similar frequency bands of the electromagnetic spectrum, meaning that cell phone research directly applies to smart meter RFR.” However, as they point out, “an individual can choose whether or not to use a cell phone and for what period of time. When smart meters are placed on a home the occupants have no option but to be continuously exposed to RFR.” (https://smartmeterharm.files.wordpress.com/2021/01/florida-dr-david-carpenter-to-fl-psc-2017.pdf)

According to the Environmental Health Trust, “Peer reviewed published studies show the adverse biological effects of pulsed electromagnetic radiation, such as RFR, on the body at emissions levels far below FCC limits.” These studies can be found at the BioInitiative Report, JustProveIt.net, and Environmental Health Trust. (https://ehtrust.org/smartmeters-health-and-safety-faqs/)

Soon after smart meters were installed, residents have reported symptoms including “sleep disturbances, rashes, hyperactivity, changes in children’s behavior, high blood pressure, endocrine problems, thyroid problems, facial flushing, nausea, flu-like symptoms, body pain, leg cramps, cardiac symptoms, heart palpitations, heart arrhythmias, dizziness, fatigue, physical weakness, difficulty concentrating, memory

loss, learning problems, ringing in the ears, headaches, and more." (https://ehtrust.org/smartmeters-health-and-safety-faqs/)

Additionally, smart meters can malfunction by allowing surges to flow into buildings that can burn and destroy appliances and electronics. Smart meters can also explode and cause fires. ("Overview: Fire and Electrical Hazards from 'Smart', Wireless, PLC, and Digital Utility Meters")

Many localities have no fees for opting out including Indiana, New Mexico, Oregon, Tennessee, Vermont, Los Angeles, California, New York/Central Hudson. North Carolina has no fee, if the opt-out is for health reasons. Texas offers low-income fee option.

Please amend HB 864 Energy Efficiency and Conservation Plans so that section 7-227 expressly prohibits any entity, whether the public service commission, a utility provider, or the executive branch, from preventing any ratepayer from opting out of a smart meter on their residence, without fee or penalty.

HB0864_AMD_Bailey.pdf
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Position: INFO

Regarding HB 864 While I support energy efficiency, I take no position on the overall bill.

Proposed amendment: section 7-227 should expressly prohibit any entity, whether the public service commission, a utility provider, or the executive branch, from preventing any ratepayer from opting out of a smart meter, AMR or any type of meter that uses a wireless transmission on their residence. The ratepayer should be able to opt out without any fee or penalty.

Many people have health issues related to wireless EMF exposure and have done all they can to limit or totally negate their radiation exposure while in their homes—which is probably the only remaining place one can seek respite from the constant wireless exposure in cities and more and more now in residential areas. To allow the installation of smart/AMR devices without consent and without the ability to opt out would mean that residents rights to create a home that is free of wireless radiation would be taken away. I would like to see an opt out option, but without an associated fee. Placing a fee on opting out means many people will have an undue burden. Creating a healthy home the way one sees fit should be a right. Don't take that away. If there is no way to opt out and opt out without a fee, utilities will be infringing on the ADA and possibly in violation of other statutes or laws.

Ensure there is clear language about an opt-out option and ensure no fees can be charged to the ratepayers for this option.

Sincerely,

Michelle Bailey
Montgomery County Maryland