

Comments of the American Council for an Energy-Efficient Economy to the Maryland Energy Administration on EmPOWER 2020

These are brief initial comments by the American Council for an Energy-Efficient Economy (ACEEE) on the EmPOWER 2020 effort with particular focus on some of the issues discussed at the June 29, 2012 meeting in Annapolis.

ACEEE believes that significant strides have been made in implementing the current EmPOWER Maryland programs and as a result the state's ratepayers have saved, and will continue to save, substantial money due to lower energy bills. We commend MEA for beginning the effort to consider goals for 2015-2020 well in advance of when they will take effect in order to permit adequate time for debate, policy action and implementation planning.

As you know, ACEEE conducted a study finding that cost-effective programs and policies in Maryland can reduce electricity use in Maryland by about 29% by 2025 relative to forecasted levels of sales.¹ The current EmPOWER programs are likely to achieve roughly 10% savings, leaving large cost-effective savings still on the table. Furthermore, new efficiency measures continue to be developed, increasing the long-term pool of savings.

MEA commissioned GDS Associates, Inc. to study gas efficiency opportunities in Maryland and they found a 10.2% achievable savings potential by 2020 assuming 60% market penetration is possible in the long-term. If programs could begin in 2012, this works out to a little over 1% savings per year. GDS found the benefit-cost ratio for such programs to be 2.14. Additional savings beyond 2020 may be possible. For example, in a study on neighboring Pennsylvania ACEEE found that energy efficiency programs and policies (including both utility programs as well as other policies such as codes and standards) could reduce natural gas use by 15% by 2025.²

Given the large pool of remaining cost-effective savings, we recommend that the electric EmPOWER programs be continued and that the program be expanded to natural gas. We believe that the per capita adjustment in the current legislation is confusing and instead recommend that Maryland follow the 24 other states with energy-efficiency savings targets and peg targets to a percentage of electricity sales without a per capita adjustment. We recommend that targets each year be stated relative to average sales for the previous two years. Using two years can even out unusual, short-term effects such as particularly warm or cold years. We recommend using prior years so that the exact savings target is known at the beginning of a program year.

In terms of savings targets, we recommend an annual target of 1.5% of electricity sales for electric utilities and 1% of natural gas sales for natural gas utilities. Maryland's electric utilities have been gradually ramping up to about this level of savings and these efforts should be sustained. The best natural gas programs in the U.S. are saving about 1% of natural gas sales each year (e.g. Connecticut, Iowa, Massachusetts, Minnesota and Vermont) making this an appropriate target for Maryland. For natural gas, utilities should be given a few years to ramp-up to the 1% per year level. In addition, we recommend that MEA consider what savings it can achieve over and above utility programs and add these to arrive at total targets for Maryland.

If natural gas programs are started, joint programs for electric and gas should be encouraged where these will increase savings or reduce costs, with costs shared between the utilities proportionate to the savings and each utility given the credit for savings of its "fuel" (gas or electric savings). We also recommend that mechanisms be established to give utilities credit for savings from state building codes and equipment efficiency standards to the extent they contribute to the savings (we can comment more on the details at the appropriate time).

At the June 29th meeting some participants cautioned about the impacts of energy efficiency programs on rates. However, energy efficiency programs cost less per kWh than new generation, making efficiency the least-cost resource option.³ In the long-term, rates will go up less with aggressive use of energy efficiency compared to relying more on new power plants. Due to the need to upgrade and replace some existing power plants, in all

¹ <http://aceee.org/research-report/e082> .

² <http://aceee.org/research-report/e093> .

³ See for example Lazard, 2011, "Levelized Cost of Energy Analysis – Version 5.0." http://j.mp/Lazard_LCOE_ver5 .

likelihood, Maryland rates will go up, but they will go up less if we invest in energy efficiency. Furthermore, energy efficiency is the only energy resource option that reduces bills because it lowers consumption, an advantage that does not apply to new power plants.

In conclusion, we recommend that the MEA report to the legislature recommend that Maryland continue to invest in energy efficiency over the 2015-2020 period, building on the progress to date. We recommend that energy savings targets in these future years should be expanded to include annual savings of 1.5% of electric sales and 1% of annual gas sales, with no population-based adjustment. MEA savings targets should be set in addition to these amounts.