



November 12, 2019

Pennsylvania Public Utility Commission
Attn: Secretary Rosemary Chiavetta
Commonwealth Keystone Building, Second Floor
400 North Street
Harrisburg, Pennsylvania 17120

Re: 2021 Total Resource Cost (TRC) Test
Tentative Order of September 19, 2019 at Docket No. M-2019-3006868
Reply Comments

Dear Secretary Rosemary Chiavetta:

The Building Performance Association appreciates this opportunity to provide reply comments on the Pennsylvania Public Utility Commission's (PA PUC) September 19, 2019 Tentative Order on the 2021 Total Resource Cost (TRC) at Docket No. M-2019-3006868.

Background on the Building Performance Association

The Building Performance Association (BPA) is a membership-driven 501(c)(6) industry association focused on the home and building performance industry. BPA's members and affiliates provide the "nuts and bolts" of efficiency upgrades to homes and buildings across Pennsylvania and the United States. BPA also helps to train Pennsylvania's skilled home performance workforce. For example, on September 30th to October 1st 2019, BPA hosted 427 home performance contractors, industry representatives and stakeholders at the **Pennsylvania Home Performance Conference & Trade Show** in State College, Pennsylvania.

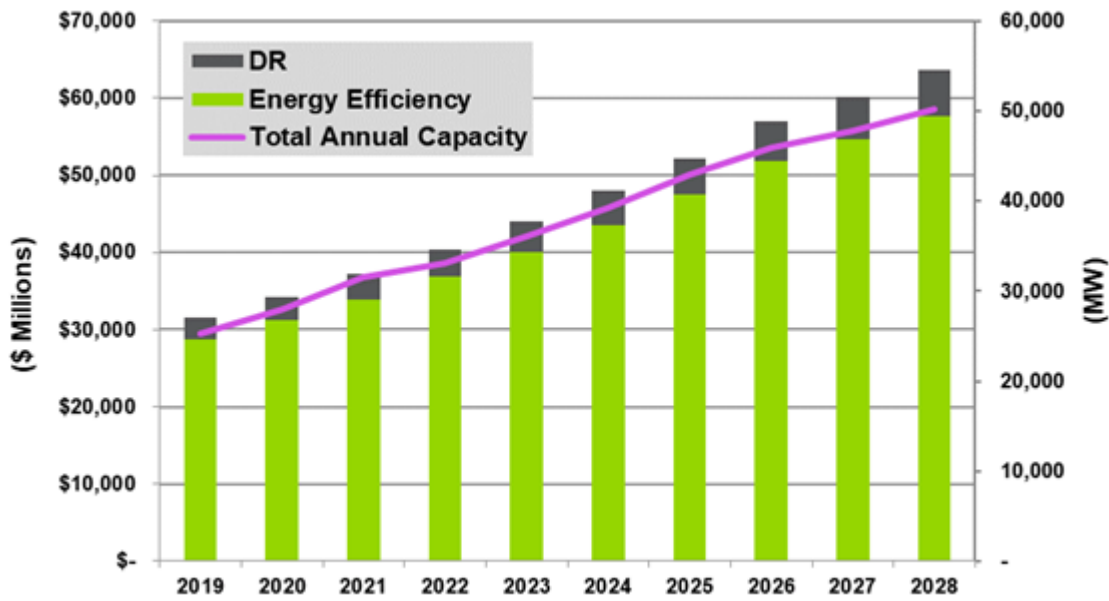
Value of Demand Response Programs in a Rapidly Changing Marketplace

Our reply comments are intended to share what we witness in states across the country: *that properly designed and implemented energy efficiency and demand response (EE/DR) programs save money, create jobs, and provide a broad mix of benefits to all customers.* We believe that the PA PUC should stay the course on DR policy under Act 129. A brief review of market trends and recent research Reports highlights the growing role that DR is playing in the nation's energy marketplace. Two recent studies are just part of a growing body of research on the increasing value proposition of DR.

Demand Response Market to Double in the Coming Decade

By the end of 2019, Navigant Research expects combined global spending on energy efficiency and DR will exceed \$31.5 billion; a number that will nearly double by the end of 2028.

DSM Spending and Capacity Data by Technology, World Markets: 2019-2028



Source: Navigant Research:

<https://www.navigantresearch.com/reports/demand-side-management-overview>

Benefits of Integrated EE/DR Programs

A September 2019 Report by the American Council for an Energy-Efficient Economy (ACEEE) on “Integrated Energy Efficiency and Demand Response Programs” (See Report at: <https://aceee.org/sites/default/files/publications/researchreports/u1906.pdf>) highlights the benefits that states can gain by providing policy support for and incentives for the deployment of combined EE/DR programs:

Integrated EE/DR programs can benefit customers, program administrators, and system operators. Customer benefits include utility bill savings, easier program participation, increased resource and service options, and greater satisfaction. Integrated programs help program administrators increase impacts and reduce costs through more streamlined, coordinated communications and integrated services. Utilities and other grid operators benefit through reduced system costs, improved reliability, and optimized grid performance. (Executive Summary at iv).

The ACEEE Report emphasizes how a rapidly changing marketplace and new developing technologies are creating opportunities for energy savings:

Several new technologies are facilitating the integration of energy efficiency and demand response programs. They include smart thermostats and Wi-Fi-enabled appliances and devices such as water heaters, refrigerators, clothes dryers, and air conditioners. This equipment allows utilities to simultaneously enroll customers in DR programs and provide energy efficiency incentives such as rebates for efficient appliances. Direct load control (DLC) switches and automated DR (ADR) for HVAC equipment remain critical for DR programs and therefore for integration. Finally, advanced metering infrastructure (AMI) supports integrated programs by enabling time-varying rate designs, customer targeting, and advanced feedback for energy management, which in turn enable new program and market models.

Integrated EE/DR programs can serve as a foundation for grid-interactive efficient buildings that incorporate a portfolio of technologies to benefit customers and the grid. These integrated programs can build on energy efficiency programs and their market infrastructure and increase customer engagement with new technologies and services. Program administrators are increasingly interested in developing and offering integrated programs in order to realize their potential services, benefits, and cost savings for both customers and utilities. (Executive Summary at vi).

BPA believes that the EE/DR opportunity should continue to be pursued in the Commonwealth and salutes the PA PUC's approach in encouraging and supporting the adoption of new technologies that will benefit consumers and utilities.

Value of Energy Efficiency Advisory Committees

The research cited above is just the tip of the iceberg of new data and information on demand response programs. In fact, BPA believes that the discussion only in reply comments of a highly complex and rapidly emerging policy topic such as the value of demand response programs will probably not be sufficient to inform the PA PUC of the best policy choice moving forward. In order to properly implement Act 129 (and other Commonwealth laws and regulations with a direct impact on state energy policy), the PA PUC should adopt the best practices of other states and create a technical advisory stakeholder group on energy efficiency policy issues.

BPA has seen how other states utilize an energy efficiency technical advisory committee to serve as a group of advisors who apply their experience and expertise with energy issues to evaluate, advise, and assist the state's utility companies (and their regulators) in developing and implementing comprehensive, cost-effective energy conservation and market transformation plans. Arkansas, Illinois, New Hampshire, Massachusetts are just four states that have created technical advisory councils to assist with implementation and policy issues on energy efficiency. BPA's has direct experience working with these states and others. More detailed analyses on how technical advisory committees have worked on policy issues such as

cost effectiveness testing are contained in the case studies published at the [National Efficiency Screening Project](#).

BPA believes that the PA PUC has the authority to create a comparable stakeholder group that could develop positions and recommendations on technical issues related to energy efficiency in the Commonwealth. A technical advisory committee could fill gaps by developing recommendations to the PA PUC and/or keeping up with evolving technologies in the energy efficiency marketplace. As mentioned in the BPA's November 1, 2019 comments, updating the PA Technical Resource Manual every four or five years is not adequate to capture all the rapidly changing technologies and products in the energy efficiency marketplace. BPA suggests that the PA PUC adopt the best practices of other states and create an energy efficiency advisory council to support and inform the current work of the PA PUC and the statewide evaluator on energy efficiency policy.

Conclusion

BPA appreciates this opportunity to provide reply comments on the PA PUC's September 19, 2019 Tentative Order on the 2021 Total Resource Cost (TRC) at Docket No. M-2019-3006868. BPA respectfully requests that the PA PUC maintain its current policies toward DR and consider creating an advisory council or stakeholder group on energy efficiency policy issues.

Please feel free to contact BPA via the email listed below should you have any questions about the research and policy information described in these comments.

Respectfully Submitted,



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