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Terry J. Romine, Executive Secretary
Public Service Commission
6 St. Paul Street, 16th Floor
Baltimore, MD 21202

Re: Comments on Behalf of the Alliance for Industrial Efficiency on Maryland Register Publication of RM61 Regulation Changes for 20.50.02 and 20.50.09

Dear Ms. Romine:

The Alliance for Industrial Efficiency appreciates the opportunity to offer these comments on the Maryland Register Publication of RM61 Regulation Changes for 20.50.02 and 20.50.09. The Alliance for Industrial Efficiency is a diverse coalition that includes representatives from the business, labor, contractor, and academic communities, including approximately 60 companies in Maryland alone. We are committed to enhancing manufacturing competitiveness and reducing emissions through industrial energy efficiency, particularly through the use of clean and efficient power generating systems, such as combined heat and power (CHP) and waste heat to power (WHP).

Our comments focus on changes concerning utility monitoring and control of small generator facilities in Section J of the Maryland Register Vol. 44, Issue 20, dated September 29, 2017. We are concerned that a lack of clarity in the proposed changes may result in fewer hosts pursuing such projects in Maryland.

CHP and WHP in Maryland

As the Public Service Commission recognizes, CHP and WHP offer significant grid benefits. By generating both heat and electricity from a single fuel source, CHP dramatically lowers emissions and increases overall fuel efficiency – allowing utilities and companies to effectively “get more with less.” CHP can operate using more than 70 percent of fuel inputs – compared to fossil-fueled power plants, which have an average efficiency of 33 percent.¹ As a consequence, CHP can produce electricity with roughly one-quarter the emissions of an existing coal power plant.² Due to its scale, a single CHP investment can achieve significant emissions reductions.

¹ U.S. EPA, Mar. 21, 2016, “CHP Benefits” (<https://www.epa.gov/chp/chp-benefits>).

² Natural Resources Defense Council (NRDC), Apr. 2013, “Combined Heat and Power Systems: Improving the Energy Efficiency of Our Manufacturing Plants, Building, and Other Facilities,” (<http://www.nrdc.org/energy/files/combined-heat-power-ip.pdf>); David Gardiner & Associates and Institute for Industrial Productivity, Jul. 2015, “Combined Heat and Power as a Compliance Option under the CPP” (reporting incremental emissions of natural gas CHP of 450 to 600 lbs/MWh, compared to 2000 to 2200 lbs/MWh for coal) (<http://www.dgardiner.com/wp-content/uploads/2015/08/CHP-Pathway-Final-Report-8-18-15.pdf>).



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WHP, which uses waste heat as its energy source to generate electricity and requires no additional fuel and generates no incremental emissions. CHP and WHP can produce electricity while lowering costs for both host companies and all Maryland ratepayers.

Further, CHP enhances electric reliability in two major ways.³ First, because CHP systems have the ability to operate independently of the grid, they can provide reliability during a power outage. For example, Hurricanes Sandy and Irene combined left nearly 2.7 million Marylanders without power.⁴ Critical infrastructure and manufacturing facilities with CHP have been able to keep the lights on during power outages that occurred during disasters like these throughout the region.⁵ Second, CHP and WHP systems alleviate burdens on transmission and distribution lines because they depend on localized, on-site electricity generation. In this way, CHP and WHP can help avoid costs associated with investment in and construction of transmission infrastructure.

We want to make sure that the PSC's proposed changes to monitoring requirements for small (less than 2 MW) CHP and WHP systems does not discourage investment in these technologies. According to a technical potential study from the Department of Energy, there are 2,645 MW of remaining CHP technical potential capacity at 4,920 sites in Maryland, including 40 MW of WHP.⁶ Yet, deployment lags far behind this potential. To date, Maryland has deployed about one-quarter of its technical potential for CHP. Currently, there are 40 CHP sites in Maryland, generating 672 MW of clean and efficient power.⁷

Recommendations for Maryland Register Publication of RM61 Regulation Changes for 20.50.02 and 20.50.09

The original small generator interconnection language that was included in Maryland Register Vol. 44, Issue 20, dated September 29, 2017, read:

(1) Utility monitoring and control of a small generator facility shall be permitted only if the nameplate rating is greater than 2 MW.

³ Alliance for Industrial Efficiency, 2018, "CHP Response in Natural Disaster Mitigation: Delivering Reliability, Saving Lives" (<https://bit.ly/2mTDsmk>).

⁴ U.S. Department of Energy, Apr. 2013, "Comparing the Impacts of Northeast Hurricanes on Energy Infrastructure" (<https://bit.ly/2MUJvT8>).

⁵ U.S. Department of Energy, U.S. Department of Housing and Urban Development, and U.S. Environmental Protection Agency, Sep. 2013, "Guide to Using Combined Heat and Power for Enhancing Reliability and Resiliency in Buildings" (https://www.hud.gov/sites/documents/ENERGY_CHP_FOR_RC.PDF).

⁶ U.S. Department of Energy, Mar. 2016, "Combined Heat and Power (CHP) Technical Potential in the United States" (<https://bit.ly/2N7QfN0>).

⁷ U.S. DOE Combined Heat and Power Installation Database, (<https://doe.icfwebservices.com/chpdb/state/MD>).



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This limited ensured that small systems had some autonomy from their utilities. The Maryland Public Service Commission now proposes to allow utilities to monitor these systems under some circumstances. The July 20, 2018 Public Register (Vol. 45, Issue 15) provides:⁸

J. Utility Monitoring [and] or Control of Small Generator *Facility*.

- (1) Utility monitoring [and] or control of a small generator facility shall be permitted [only if the nameplate rating is greater than 2 MW] *subject to the conditions in §J of this regulation.*
- (2) Any monitoring [and] or control requirements shall be:
 - (a) Consistent with the utility published requirements, *as available on the utility's website*; and
 - (b) Clearly identified [as part of] *in an interconnection agreement executed by the interconnection customer and the utility.*
- (3) ***For a small generator facility under 2 MW, utility monitoring or control is not permitted unless:***
 - (a) ***The Commission approves a utility monitoring or control plan addressing such facilities in the aggregate; or***
 - (b) ***The customer consents to utility monitoring or control.***
- (4) *The Commission may require a utility to submit a monitoring or control plan for the Commission's review and approval.*
- (5) *Equipment certified under the latest published editions of IEEE 1547, IEEE 1547.1, and UL 1741 shall be permitted to be used for monitoring or control upon mutual agreement of the utility and the interconnection customer.*

We are concerned that the highlighted language may create some uncertainty regarding utility monitoring for small generators. The notice does not define “utility monitoring or control plan.” This could create uncertainty for CHP developers, which may discourage distributed energy resource (DER) project development.

Further, while Section 3(b) may be needed to allow customers who choose to seek utility monitoring to do so, we want to clarify that there will not be any consequences for customers who do not seek nor consent to such monitoring. To avoid any implication that customer “consent” is expected or required, we suggest substituting: “(b) *The customer requests utility monitoring or control.*”

We also have several clarification questions about the proposed changes to Section 3(a) and 3(b):

⁸ Maryland Public Register, Volume 45, issue no. 15, page 746-747, issued on July 20, 2018 (<http://www.dsd.state.md.us/MDR/4515.pdf>).



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1. Why does the PSC believe these changes are necessary?
2. Are there documented issues with the current interconnection language? If yes, we recommend that those issues be specifically addressed.
3. Can the PSC clarify the meaning of “addressing such facilities in the aggregate”?
4. Under what circumstances would the PSC approve a utility monitoring or control plan?

These questions will help us better understand the rationale for these changes and help ensure that they do not discourage project development.

Further, we recommend that the final regulation follow two principles:

1. That any new monitoring of CHP systems would come at **no additional cost to the CHP site itself**, but would be handled on the utility side; and
2. That any control of the CHP system would be done only in emergency situations unless a control plan was developed and approved by the site.

Ensuring these two principles are met will prevent new barriers from being introduced as a result of the regulation changes.

Conclusion

We request that the PSC provide more clarification about the proposed changes to the Maryland Public Register, including providing more background information on reasons for the changes, clearly defining the terms included in this proposal, and providing details on the circumstances in which the PSC would change this rule by approving a utility monitoring or control plant. We believe that these modest clarifications and additions will ensure that the proposal does not discourage continued CHP and WHP investments in Maryland.

Thank you for the opportunity to comment.

Sincerely,

Jennifer Kefer
Executive Director
Alliance for Industrial Efficiency