

**ORDER NO. 87669**

IN THE MATTER OF THE BALTIMORE \*  
 GAS AND ELECTRIC COMPANY'S \*  
 REQUEST FOR APPROVAL OF ITS PUBLIC \*  
 PURPOSE MICROGRID PROPOSAL \*  
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BEFORE THE  
 PUBLIC SERVICE  
 COMMISSION  
 OF MARYLAND  
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CASE NO. 9416  
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**Issue Date: July 19, 2016**

**To: All Interested Parties**

This matter comes before the Commission upon a request by the Baltimore Gas and Electric Company (“BGE” or the “Company”) for approval to construct, operate and recover costs associated with two “public purpose” microgrids located within BGE’s electric distribution service territory (hereinafter the “Microgrid Proposal” or “Proposal”). In connection with the Proposal, BGE also seeks a waiver of the requirement to obtain a certificate of public convenience and necessity (“CPCN”) under the Public Utilities Article of the Maryland Annotated Code (“PUA”).<sup>1</sup> The Commission has reviewed BGE’s Proposal and related submissions as well as comments received from various interested parties. The Commission has also considered the presentations made during a public hearing on June 9, 2016. For the reasons that follow, the

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<sup>1</sup> See PUA § 7-207.1.

Commission denies BGE's Microgrid Proposal as filed, without prejudice.<sup>2</sup> The Commission does not reach the CPCN waiver issue.

## **I. BACKGROUND**

On December 18, 2015, BGE submitted its Microgrid Proposal to the Commission for consideration and approval. Salient components of the Proposal are highlighted below along with brief summaries of the procedural posture and the positions of the various interested parties. Additional details of the Microgrid Proposal are discussed as needed throughout this Order.

### **A. BGE's Microgrid Proposal**

The Microgrid Proposal outlines a pilot project to deploy two public purpose microgrids in Maryland—one in Baltimore City at Edmonson Village and the other in the Kings Contrivance area of Howard County.<sup>3</sup> Each microgrid location would feature a small scale, natural gas-fired generation facility,<sup>4</sup> producing between 2-3 megawatts of power to support clusters of “critical service” business establishments within the designated footprint during significant or extended outages of the larger distribution system.<sup>5</sup> If and when an extended outage occurs, the microgrid would island itself from the larger distribution system and provide electricity to these critical business assets and enable their continued operation.<sup>6</sup> As proposed, BGE would construct, own and operate

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<sup>2</sup> Several interested parties have asked the Commission to establish a framework for microgrid deployment and conduct a general hearing to address issues related to microgrids. The Commission chooses not to do so in connection with this matter as the Microgrid Proposal is deficient on its face.

<sup>3</sup> BGE Proposal at 4.

<sup>4</sup> BGE stated that where natural gas distribution infrastructure is not available, diesel will serve as the alternative fuel source. *Id.* at 6.

<sup>5</sup> *Id.*

<sup>6</sup> *Id.* at 5-6.

both microgrid facilities, first as a pilot study and then as part of a wider program of additional microgrid facilities in each county within BGE's greater service territory.

BGE estimates the costs associated with this project to be around \$3.5 million per MW of load supported. Thus, for the 2 MW Kings Contrivance microgrid location, the estimated cost is approximately \$7 million, and approximately \$9.2 million for the 3 MW Edmonson Village location. To recover these costs, BGE includes with the Proposal a new rider to BGE's Electric Service Tariff—Rider 12, Microgrid Service Pilot—which would impose a monthly surcharge on all BGE ratepayers.<sup>7</sup> This surcharge would cover BGE's earnings and depreciation on the plants, operations expense, fuel and administrative costs of owning and operating both microgrids, and applicable taxes.<sup>8</sup> It is a per-kWh surcharge in addition to base distribution rates. In the first year, the estimated charge for an average residential customer using 930 kWh each month would be approximately \$0.04 per month, or \$0.48 annually. The charge would increase during the second year to \$0.13 per month, or \$1.56 annually. If BGE does not establish any additional microgrids after the pilot project, this cost would continue at \$1.56 per year until the microgrid generation assets are depreciated.<sup>9</sup>

## **B. Procedural Posture**

After receiving the Microgrid Proposal, the Commission issued a Notice on January 13, 2016,<sup>10</sup> requesting comments from BGE and any other interested parties

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<sup>7</sup> *Id.* at 12-13.

<sup>8</sup> *See id.* at 13.

<sup>9</sup> BGE Microgrid Hr'g Tr. 94:12-95:2, June 9, 2016; *see also* BGE Proposal at 13; Staff Comments at 1.

<sup>10</sup> ML 180913.

addressing the Commission’s previously identified issues concerning public purpose microgrids<sup>11</sup> or any other matter related to BGE’s Proposal, and suspending the proposed tariff for 150 days pursuant to PUA § 4-204. The Commission received a total of 22 comments, including BGE’s response as well as comments from the following interested parties: WGL Energy Systems, Inc. and WGL Energy Services, Inc. (together “WGL Energy”); Montgomery County; Howard County; Prince George’s County; the Microgrid Resource Coalition (“MRC”); Maryland Solar United Neighborhoods (“MD SUN”); IGS Energy, NRG Energy, Inc. and SunEdison (together “INS”); Kings Contrivance Community Association (“KCCA”); Baltimore Development Corporation (“BDC”); Community Action Council of Howard County (“Community Action Council”); Giant Food; Maryland Department of the Environment (“MDE”); Maryland Energy Administration (“MEA”); Commission Staff (“Staff”); and the Office of People’s Counsel (“OPC”). Nine state legislators and city officials from Baltimore City and Howard County also submitted comments on the Microgrid Proposal.<sup>12</sup> Upon consideration of the comments, on April 15, 2016, the Commission issued a Notice initiating this case, scheduling a hearing, and suspending the proposed tariff an additional

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<sup>11</sup> The Commission previously discussed the deployment of microgrids in Case No. 9298 – Order No. 85385 (Feb. 27, 2013) and Case No. 9361 – Order No. 86990 (May 15, 2015). In Order No. 86990, the Commission identified several areas for further study that would serve as conditions precedent to approval of any microgrid proposal in the case. *See* Order No. 86990 at A-18 to A-19 (“Condition 13”). Specifically, Condition 13 states in part that a report on the legal, financial, and practical issues associated with the planning and development of the microgrid proposals should address at minimum: different ownership and operational structures; a legal assessment of the ability of an investor-owned utility to own either or both of the distribution and generation assets integrated into a microgrid project; and a description of any federal, state, or local contribution to the development of the microgrid projects.

<sup>12</sup> The Commission received separate comments from Senator Guy Guzzone (District 13, Howard County), Delegate Frank Turner (District 13, Howard County), Delegate Vanessa Atterbeary (District 13, Howard County), Mayor Stephanie Rawlings-Blake (Baltimore City); Councilwoman Helen Holton (Baltimore City Council). The Commission also received collective comments from Senator Lisa Gladden and Delegates Jill Carter, Nathaniel Oaks, and Samuel Rosenberg (District 41, Baltimore City).

30 days, or until July 30, 2016. On June 9, 2016, the Commission conducted a legislative-style hearing to consider the Proposal and the responsive comments by the interested parties. At the conclusion of the hearing, the Commission took the matter under advisement.

### **C. Positions of the Interested Parties**

The general positions of the interested parties—either supporting or opposing the Microgrid Proposal—are summarized as follows:

#### *1. Supporting the Proposal*

Interested parties in support of BGE’s Proposal as filed include Baltimore Development, KCCA, CAC, Giant Food, and the nine state legislators and city officials. Three parties—WGL Energy, Montgomery County and Howard County—also support the Proposal but qualify their support upon certain modifications or conditions. WGL Energy recommended modifications that would allow for competitive energy markets and limitation of the project to a pilot program. Montgomery County conditioned its support on BGE’s incorporation of extensive community feedback and performance of a net cost-benefit analysis with respect to low-income communities. Montgomery County also encouraged BGE to consider and incorporate “smart grid” features and a greater amount of renewable energy and advanced energy storage. Howard County indicated support for the project, provided that the County retains final siting approval and the public is given notice and opportunity to participate throughout the process. Howard County further conditioned its support on the timely removal of the microgrid upon completion of the pilot program.

## *2. Against the Proposal*

Parties opposed to the Proposal as filed include the Commission Staff, OPC, MEA, INS, MD SUN, and Prince George's County. In their comments and at the June 9, 2016 hearing, these parties raised a variety of objections, from the Proposal's lack of competitive process and generation diversity to its cost allocation and ratepayer impacts. Their specific various objections are addressed in the discussion below.

## *3. No opinion on the Proposal*

MRC and MDE abstained from taking positions on the merits of BGE's Proposal and whether the Commission should approve or deny the request. While both parties generally supported microgrid development in Maryland, MDE stated that improvements could be made to BGE's Proposal with the addition of more renewable energy sources.

## **II. DISCUSSION**

Maryland electric energy markets were restructured in 1999 following the passage of the Electric Customer Choice and Competition Act of 1999.<sup>13</sup> In 2006, the General Assembly amended PUA § 7-510 to allow the Commission to approve construction of new generation resources in Maryland as needed “to meet long-term, anticipated demand in the State....” PUA § 7-510(c)(6). It is under this provision that BGE seeks approval for its pilot project. The Resiliency Through Microgrids Task Force (“Task Force”), formed in February 2014, defined a “microgrid” as “a collection of interconnected loads, generation assets, and advanced control equipment installed across a defined geographic area that is capable of disconnecting from the macrogrid (the utility scale electric

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<sup>13</sup> See 1999 Md. Laws, Chap. 3 (codified at PUA §§ 7-501 to 7-517).

distribution system) and operating independently.”<sup>14</sup> Even if we assume, which we do not in this Order, that we may approve the development of public purpose microgrids pursuant to § 7-510(c)(6), we decline to do so vis-à-vis BGE’s Proposal. As filed, the Proposal is deficient in several key aspects which preclude us from finding that the project, despite its stated benefits, would provide adequate, reasonable, and proper electricity service in Maryland.<sup>15</sup>

**A. Proposed Cost Recovery**

Section 7-510(c)(6) provides, “In order to meet long-term, anticipated demand in the State for standard offer service and other electricity supply, the Commission may . . . allow an investor-owned electric company to construct, acquire, . . . and operate its own generating facilities, and transmission facilities necessary to interconnect the generating facilities with the electric grid, subject to appropriate cost recovery.”<sup>16</sup> BGE estimates the total cost of deploying both public purpose microgrids to be approximately \$16.6 million. Instead of seeking traditional ratebase recovery for capital projects, the Proposal places an upfront monthly surcharge in the proposed Rider 12 on all BGE ratepayers, regardless of the degree of benefit a customer is likely to receive from the islanded operation of the microgrid. Furthermore, this surcharge would take effect once we approve the project and would continue for the life of the microgrid assets.

This Commission has generally recognized that a surcharge is a departure from

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<sup>14</sup> Task Force Report at 1.

<sup>15</sup> See PUA § 5-101(a).

<sup>16</sup> Staff notes that BGE has failed to tie this microgrid proposal to Maryland’s long-term electricity demand. Staff Comments at 19. WGL Energy makes a similar argument in its Comments at 10-12. We decline to decide here whether the statute requires such a finding.

the industry's long-standing rate-making process and, consequently, is considered an extraordinary form of relief. Surcharges have been reserved for rare circumstances in which it is demonstrated that the traditional ratemaking process would not be appropriate.<sup>17</sup> That is not the case here based on the record before us. We are not convinced that the traditional ratemaking process could not have incorporated a microgrid pilot program. We find that the proposed rider would be inappropriate for this pilot study, especially when it is yet to be established that the two proposed microgrids will function as promised and deliver the anticipated benefits. We are further concerned that even upon conclusion of the pilot, ratepayers will continue to pay this cost through the bill surcharge for the life of the microgrid assets, which would last well beyond the pilot. Also, if the pilot project is successful and BGE deploys additional microgrids in the future, the collective bill surcharge amounts would rise significantly.

BGE stated that it did not perform any cost-benefit analysis to support allocating all risk of the pilot project to its customer base. When Staff inquired of BGE how it determined the cost effectiveness of its Proposal, BGE referred Staff to the reliability, energy supply, and technical benefits of public purpose microgrids espoused in the Task Force Report. BGE also mentioned additional benefits in avoiding costs associated with extensive weather-related outages. However, BGE has not quantified—or attempted to quantify—the tangible benefits to its customer base, including any benefit for avoided

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<sup>17</sup> The General Assembly has separately authorized prompt recovery of utility infrastructure costs through a customer surcharge. See “An Act Concerning Gas Companies—Rate Regulation—Infrastructure Replacement Surcharge,” 2013 Md. Laws, Ch. 161, § 2 (authorizing gas companies to recover infrastructure replacement costs through customer surcharge); see *Maryland Office of People's Counsel v. Maryland Pub. Serv. Comm'n*, 226 Md. App. 483, 504-05 (2016) (upholding Commission's interpretation of same to allow imposition of surcharge before project completion).



customer interruption at each microgrid location. Staff also could not estimate the benefits specifically associated with avoiding extensive outages within BGE's service territory.

To justify the surcharge on all ratepayers, BGE claims that the benefits of each public purpose microgrid would extend to other, non-microgrid customers throughout BGE's service territory, assuming non-microgrid residents are able to travel to the microgrid location during an outage event. BGE does not provide factual support for this claim. This reasoning contains multiple assumptions. First, it assumes that customers can reach the location during a particular outage event.<sup>18</sup> Depending on the circumstances of the outage event, customer travel to microgrid locations could be difficult.<sup>19</sup> A severe winter storm, for example, would likely present significant challenges to microgrid accessibility where streets are unplowed and transportation means become limited.<sup>20</sup> Second, BGE assumes that the critical commercial facilities within each microgrid location will have sufficient capacity to provide services to all who would access the microgrids during an extended outage.<sup>21</sup> While BGE may be confident that these businesses will be able to provide adequate services during a major outage event, it is not immediately apparent to us that these establishments are equipped to handle a large number of visitors to the microgrid during a major outage event. Third,

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<sup>18</sup> BGE Microgrid Hr'g Tr. 49:15-50:10; *see also id.* at 143:15-144:2 (OPC observing a number of "maybes" such as consumer access to the microgrid locations).

<sup>19</sup> *See generally id.* at 50:5-9 (discussing example of New Orleans hurricane that led to transportation issues in getting people to shelters).

<sup>20</sup> *See id.* at 30:6-11.

<sup>21</sup> *Id.* at 31:7-18; *see also id.* at 143:15-144:2 (OPC observing whether stores will be open and adequately stocked over the duration of an outage is unknown).

BGE never satisfactorily defines the “major event” or its duration in order to establish the resiliency requirements for its proposed microgrid or the plan to keep it fueled, maintained and operational, while presumably restoring service to all its customers with due alacrity.<sup>22</sup>

The Proposal also suffers from a lack of investment in the Project by the intended commercial beneficiaries within the microgrid or the Company’s shareholders. BGE’s pilot program focuses on sustaining merchant services used by residential customers—e.g., groceries, fuel, restaurants, pharmacies, banks, etc. Although these merchant tenants are the direct beneficiaries of a hardened infrastructure designed to insulate them from extended outages of the larger grid, BGE has not asked any of them to actively participate or share in any responsibility for the microgrid deployment.<sup>23</sup> Similarly, nowhere in the Proposal does BGE indicate a willingness to shift even a portion of this responsibility and risk to its shareholders.

It is further concerning that BGE made no attempt to seek alternative funding through state and federal agencies or the local subdivisions. BGE stated that it was unaware of any public funding opportunities at the state, federal or local level when it submitted the Proposal. But at the June 9, 2016 hearing, MEA indicated that public funds were available at least for campus-style microgrid development. BGE did not approach MEA or any other state or federal agency regarding potential grant opportunities. Had it

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<sup>22</sup> See *id.* at 39:20-40:8, 41:14-20, 75:16-76:16.

<sup>23</sup> At least two commenters suggest that it would be more appropriate to allocate the majority of the program costs to those customers that receive the most benefit from the microgrid. See WGL Energy Comments at 7-8; Staff Comments at 30. Although we do not take a position on how these costs could or should be allocated, we cannot endorse BGE’s proposed tariff rider under these specific circumstances.

done so, it could have discussed with MEA what funds were available and whether those funds could be used for public purpose microgrid development.

We find that BGE's focus on the tariff rider cannot be supported under the circumstances, especially in the absence of any cost-benefit analysis. BGE has not established that the rider represents the most appropriate method for recovering the costs of this pilot program. Moreover, based on BGE's comments at the June hearing, it does not appear that traditional ratebase was ever considered as a viable, alternative cost recovery method. Thus, we cannot find at this time that the benefit to ratepayers within BGE's distribution service territory is sufficiently clear as to justify the proposed upfront, mandatory surcharge for all BGE ratepayers.

**B. Site Selection Process**

BGE selected the Edmonson Village and Kings Contrivance microgrid site locations without engaging or soliciting input from any local or county officials or customers. Likewise, BGE did not involve any state agency, including MEA, in the site selection process. BGE only stated that it examined the reliability and resiliency of its distribution systems and identified prospective areas that could benefit from microgrid support. Based on this system review, which weighted both system average interruption frequency index ("SAIFI") and system average interruption duration index ("SAIDI"), BGE identified a list of prospective locations and proceeded to evaluate each one based

on additional factors.<sup>24</sup> BGE then culled the list of prospective locations and arrived at the Edmonson Village and Kings Contrivance locations.

A number of interested parties have pointed to the lack of community and county participation in this process as a critical fault thereof. We must agree. The absence of customer and county input during the selection process calls into question whether BGE carefully considered the particular needs of that location, whether a public purpose microgrid presented the best solution for that location, and whether the anticipated benefits to that community would reasonably outweigh the total cost of the project. Although BGE advised us at the June hearing that it has since engaged officials in Baltimore City and Howard County, it has not expressly agreed to re-evaluate or change either location if county and city officials ultimately object to the proposed location or insist on a different one.

Additionally, Staff raised several of its own concerns with BGE's selection factors. Staff pointed out that BGE used SAIFI and SAIDI data from 2010-2012, which preceded the implementation of Commission Rulemaking 43 and, consequently, might not reflect current improved feeder performance. Also, Staff could not determine whether BGE took into account any expected reliability-related benefits from reliability projects in 2015-2016. Lastly, BGE did not explain how the various scores were weighted or why a particular weighting method was chosen. Insofar as the weighting system may have been subjective, Staff could not draw a firm conclusion as to the

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<sup>24</sup> These factors included: a) the mix of services included within that location; b) the size of the population that would be supported in that location; c) the technical feasibility of incorporating a microgrid in that location; d) the availability of natural gas and existing 13kV distribution feeders; e) the proximity of the location to major thoroughfare and public transportation means; and f) available space for generation and interconnection equipment. *See* BGE Proposal at 7-8.

validity of BGE’s method for choosing its microgrid locations. These concerns are well-founded, and we adopt them as added reasons for denying the Proposal.

The suitability of the proposed locations notwithstanding, we queried BGE’s coordination with state and local emergency planning. While the continued operation of critical community assets such as grocery stores, pharmacies, and gas stations is undoubtedly the mainstay of public purpose microgrids, full realization of this benefit necessarily involves coordinating access to, and re-supply of, these establishments during or immediately following a catastrophic event. As Staff further observed in its comments, “[i]f roadways are not clear, then the delivery of gasoline, groceries, or other commodities would be compromised.”<sup>25</sup> BGE’s Proposal does not address how the Company proposes to coordinate efforts with state and local emergency personnel, nor does it suggest that BGE contemplated such issues during project development. Although BGE stated that it intends to engage Maryland agencies along with state and local authorities in its development efforts, the Company has not explained how it would handle communication and coordination activities between the key players. In fact, Baltimore’s Assistant Deputy Mayor for Operations testified that hospitals, police and fire department buildings, and other critical emergency functions already have backup power supply systems.<sup>26</sup>

### **C. Limited Generation Source(s)**

The Proposal relies nearly exclusively on natural gas as the sole fuel source for microgrid generation. Indeed, the proposed microgrid location’s proximity to natural gas

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<sup>25</sup> Staff Comments at 31.

<sup>26</sup> See BGE Microgrid Hr’g Tr. 183:16-185:1.

sources was a critical factor in BGE’s site selection process. And where natural gas is unavailable, BGE proposes diesel fuel as the alternative fuel source, which itself raises separate issues of reliability and air quality impacts. As one commenter observed, “[d]iesel generators are often unreliable, where they are seldom tested under islanding conditions, and can become riskier with age.”<sup>27</sup>

The Proposal does not contemplate any renewable energy options, CHP, or energy storage to diversify BGE’s generation portfolio. In the absence of diversification, the Proposal cannot capture the full breadth of potential benefits that public purpose microgrids could offer through fuel-diverse generation. Sole reliance on one fuel source further casts doubt on the resilience of the microgrid itself. BGE has not accounted for the possibility that the microgrid itself could experience an outage or become unable to provide service to the critical assets. To that end, the Proposal does not include any discussion of emergency or reliability testing or maintenance. Critics of the Proposal are dissatisfied with its failure to include clean renewable generation and energy storage, and at least one proponent encourages BGE to incorporate more sources.<sup>28</sup> While we recognize that the question of which exact sources of generation should be included in a microgrid generation portfolio is fact-specific to a proposal, we are disappointed that BGE’s Proposal does not contain, at least in part, forward-looking generation and storage concepts to test whether these elements could work in Maryland and be replicated in future microgrid projects.

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<sup>27</sup> MD SUN Comments at 9.

<sup>28</sup> Montgomery County Comments at 4.

#### **D. Competitive Process and Retail Choice**

The Proposal as filed does not contemplate third-party participation or service provider options. Several commenters objected to BGE's failure to include a competitive process in its public purpose microgrid development. Although BGE indicated a willingness to bid out the construction of the generation units for the microgrids, BGE would nevertheless retain ownership of generation. In the Commission's January 15, 2016 Notice, we requested comments from BGE addressing some of the issues previously identified as conditions precedent to approval of a public purpose microgrid project, including the issue of different ownership and operational structures.<sup>29</sup> Apart from stating that the Proposal presents "the most expeditious pathway" for deploying the pilot public purpose microgrid, BGE offered no further discussion on the subject. Therefore, we cannot conclude that BGE has satisfied this condition precedent to approving the Proposal.

While the Task Force left unanswered questions concerning the current state of Maryland law and the extent to which third-party providers can participate in public purpose microgrid development and deployment, we observe that campus-style microgrids already take advantage of competitive market forces to source generation. This feature is noticeably absent, however, from the BGE Microgrid Proposal, even though third-party generation owners could reasonably assume a portion of the risks associated with microgrids. We note that the spirit of the "Electric Customer Choice and Competitive Act" envisions a competitive market for energy generation and services; the

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<sup>29</sup> ML 180913 at 1.

competitive element is lacking in this Proposal. While the lack of third-party participation in BGE's design is not by itself dispositive, it lends additional credence to our conclusion that the Proposal is deficient as filed.

The Proposal also purports to accommodate customer retail choice in electricity suppliers under normal operating conditions. BGE explained, however, that once the microgrid switches to islanded configuration during an outage, all microgrid customers—i.e., all customers receiving service within the microgrid territory—must adopt BGE's Standard Offer Service and will be billed accordingly. In this sense, the Proposal creates a class of customers who will have little to no access to retail choice in microgrid services during islanded operation.

#### **E. PJM Participation**

BGE proposes to offset some of the costs of the pilot project by bidding microgrid generation capacity into PJM's energy, capacity and ancillary service markets. BGE explained that in addition to participating in these PJM markets, its public purpose microgrids can offer other benefits, including normalization of market energy peaks. For example, the Proposal provides that microgrid generation can be used for load reduction and bid into the PJM demand response market. BGE roughly estimates that approximately \$215,000 in annual revenue per generation unit could be recovered through PJM market participation.<sup>30</sup> For these potential benefits, BGE assumes that PJM will accept the additional generation. At the June hearing, BGE stated that the public purpose microgrids are not intended to provide continuous electricity during normal grid

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<sup>30</sup> See BGE Microgrid Hr'g Tr. 58:12-16.



operations and will power up only during an outage. When we inquired about the deliverability of microgrid generation to PJM, given its sporadic operation, BGE replied only that PJM has not objected to this design as a nonstarter. It remains unclear whether PJM will accept microgrid benefits that are not likely to be available year round. While the interplay between BGE's public purpose microgrids and PJM leaves open questions, we nonetheless welcome BGE's initiative in this pilot proposal identifying PJM as a potential revenue source that would offset the ratepayer impact and maximize the functionality of the public purpose microgrids.

#### **F. Other Deficiencies**

In addition to the above-stated defects, the Proposal fails to capture other potentially significant benefits of public purpose microgrids, such as reduced pollution and carbon emissions, greater efficiencies, and customer load management opportunities. For a pilot study, the Proposal overlooks the opportunity to explore sophisticated integration of microgrid resources in any smart grid or grid modernization design, partnerships with third parties to provide microgrid services, integration of customer-owned generation, integration of diversified distributed generation with storage, and demand response capabilities. Apart from addressing improvements to grid resiliency, the Proposal offers no further explanation of how the public purpose microgrids relate to BGE's long-term distribution plan. Although BGE presents the Proposal as a pilot study for the purpose of gathering information and incorporating "lessons learned" to advance public purpose microgrid development in Maryland, the Proposal does not include any tangible metrics by which performance, let alone success of the project, may be

evaluated. It is unclear how this study will be used specifically for the greater advancement of public purpose microgrids in Maryland.

### **III. CONCLUSION**

Public purpose microgrids have the potential to improve reliability and resiliency and to facilitate the incorporation of new, sustainable technologies into our distribution network. While we commend BGE for endeavoring to design a pilot study for public purpose microgrid deployment in Maryland, we cannot approve BGE's Proposal at this time. For the above-stated reasons, we find the Proposal deficient and not in the public interest in several key aspects, including but not limited to BGE's site selection process, cost recovery and associated ratepayer impacts, and non-inclusive generation design. We would also note that the Commission is looking at the broader "grid of the future" topic and issues of specific relevance to Maryland, including distributed generation, net metering, congestion and LMP costs, etc., and accordingly it may be premature to consider a specific project of this nature. Accordingly, we deny the Proposal as filed. We do not reach BGE's request for a CPCN waiver. This denial is without prejudice to BGE's ability to submit a different proposal for a public purpose microgrid pilot project.

**IT IS THEREFORE** this 19th day of July, in the year Two Thousand and Sixteen, by the Public Service Commission of Maryland,

**ORDERED:** (1) That the Baltimore Gas and Electric Company's December 18, 2015 Public Purpose Microgrid Proposal is hereby denied without prejudice to BGE's ability to resubmit a pilot project proposal to deploy one or more public purpose

microgrids in Maryland;

(2) That BGE's proposed Electric Service Tariff – Rider 12, Microgrid Service Pilot is hereby rejected; and

(3) That all motions not granted herein are denied.

*W. Kevin Hughes* \_\_\_\_\_

*Harold D. Williams* \_\_\_\_\_

*Anne E. Hoskins* \_\_\_\_\_

*Jeannette M. Mills* \_\_\_\_\_

*Michael T. Richard* \_\_\_\_\_  
Commissioners