



**BEFORE THE GUAM PUBLIC UTILITIES COMMISSION**

**REVIEW OF COMPLAINT BY** ) **GPA DOCKET NO. 15-17**  
**1<sup>st</sup> GREEN SOLUTIONS GUAM, LLC** ) **ORDER**  
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**INTRODUCTION**

This matter comes before the Guam Public Utilities Commission (the “PUC”) pursuant to the April 20, 2015 Letter (the “Complaint”) addressed to the PUC from 1<sup>st</sup> Green Solutions Guam, LLC (“1<sup>st</sup> Green”), which generally contends that the Guam Power Authority (“GPA”) has inaccurate and inconsistent billing practices for customers having power factor ratings that exceed the established power factor rate of .85 as set forth in GPA’s tariff.

**DETERMINATIONS**

On April 20, 2015, 1<sup>st</sup> Green lodged a formal complaint against GPA with the PUC, alleging that GPA was inaccurately and inconsistently billing customers “having power factor ratings that exceed the established power factor rate of .85” within the approved tariff.<sup>1</sup> Specifically, 1<sup>st</sup> Green contended that “GPA is billing for more kWh usage now than they were before the implementation of USES which, per our own recordings, is providing significant reductions in actual power usage plus improvements in power efficiency.”<sup>2</sup>

<sup>1</sup> Complaint by 1<sup>st</sup> Green Solutions Guam, LLC against Guam Power Authority, p. 1 (Apr. 20, 2015).

<sup>2</sup> Complaint, p. 2.

Thereafter, the Administrative Law Judge of the PUC (the “ALJ”) assigned to this docket remanded the matter to GPA for resolution at the agency level. However, the parties were unable to arrive at a resolution.

On June 17, 2015, 1<sup>st</sup> Green issued a follow-up letter to the PUC, again requesting review of its Complaint against GPA. Thereafter, the ALJ forwarded the matter to the PUC’s energy consultants, Lummus Consultants (“Lummus”), for its technical review and investigation. On October 26, 2015, Lummus filed its report detailing its findings and recommendations related to its review (the “Lummus Report”).

On December 2, 2015, 1<sup>st</sup> Green lodged a response to the Lummus Report with the ALJ. On January 22, 2016, GPA provided its response to 1<sup>st</sup> Green’s Complaint. On January 25, 2016, the PUC considered the matter and issued an Order requiring GPA to submit certain documentation related to how GPA arrives at its power factor calculations. On February 24, 2016, GPA submitted material responding to the PUC’s January 25, 2016 Order. On March 21, 2016, 1<sup>st</sup> Green filed a response with the PUC, styled as a “Simplification to [the] Complaint,” narrowing the issues in this matter (“Simplified Complaint”).

**1. January 25, 2016 PUC Order**

In its January 25, 2016 Order, the PUC requested that GPA “provide the PUC with documentation detailing how it arrives at power factor adjustment for its customers . . . .” In addition, the PUC further requested that GPA provide “the PUC with documentation detailing how kWh was computed under the former analog meters, as well as how kWh is computed under the new Smart Meters . . . .”

**2. GPA's February 24, 2016 Response ("GPA's Response")**

**A. Information Related to the Smart Meters**

With regard to its Smart Meters, GPA stated that "[t]he current smart meters *directly read* KWH, KVAH, and KW"; and that "[t]he smart meter readings for KWH and KVAH are sent to the [Customer Care & Billing ("CC&B")] billing software, and the power factor is then calculated by CC&B."<sup>3</sup>

GPA further explained that "[i]f the power factor percentage is either below 83% or above 87% the CC&B software calculates either a penalty (<83%) or a credit (>87%) pursuant to Rate Schedule P which provides for either a penalty or credit of the power factor is either above 87% or below 83%."<sup>4</sup>

Therefore, according to GPA, "[t]he smart meters directly read KWH, KVAH, and KW. There is no computation or calculation of these readings."<sup>5</sup> In sum, "[t]he readings are sent automatically through the smart grid to the CC&B billing software, which calculates power factor using the formula KWH/KVAH."<sup>6</sup>

**B. Information Related to the Old Analog Meters**

According to GPA, "[t]he analog meters required a KWH reading to be obtained from the kWh meter, inputted into a manual reading device, and then uploaded to the Utiligy software."<sup>7</sup> Further, "a KQH usage was obtained from a kQh analog meter"

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<sup>3</sup> GPA's Response, p. 1 (Feb. 24, 2016) (emphasis added).

<sup>4</sup> GPA's Response, p. 1.

<sup>5</sup> GPA's Response, p. 2.

<sup>6</sup> GPA's Response, p. 2.

<sup>7</sup> GPA's Response, p. 2.

and that a “formula was then calculated to obtain KVARH and KVAH which was then used to calculate power factor using the formula  $KWH/KVAH$ .”<sup>8</sup>

### C. Documentation

GPA also filed with its material a spreadsheet explaining how power factor is calculated by its CC&B software, as well as how it was calculated by its Utiligy program. GPA provided a few of Onward Beach Resort’s electric bills as examples. GPA also provided a copy of “Schedule P,” a “Meter Read Flow Chart Between CC&B and MDMS,” a Smart Grid Process Flow, and a Memo that describes how to calculate power factor under the old analog meters.

#### 3. 1<sup>st</sup> Green’s March 21, 2016 Simplified Complaint

In its Simplified Complaint, 1<sup>st</sup> Green rejected GPA’s position that KWH is “an actual measurement done by the meters.”<sup>9</sup> Instead, 1<sup>st</sup> Green contended that “KWH is *calculated* internally in the meter.”<sup>10</sup>

In particular, 1<sup>st</sup> Green maintained that “[a]ll power utility companies provide only Voltage (Volts) and Current (Amps) to their customers,” which are measured as KVAH, and that “[n]o utility company provides actual KWH as that has to be calculated to determine its quantity.”<sup>11</sup> “KVARH also has to be calculated to determine its quantity.”<sup>12</sup> “The actual only provided item to all power utility customers is KVAH,”

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<sup>8</sup> GPA’s Response, p. 2.

<sup>9</sup> Simplified Complaint by 1<sup>st</sup> Green Solutions Guam, LLC against Guam Power Authority, p. 1 (Mar. 21, 2016).

<sup>10</sup> Simplified Complaint, p. 1 (emphasis added).

<sup>11</sup> Simplified Complaint, p. 1.

<sup>12</sup> Simplified Complaint, p. 1.

which is made up of KWH and KVARH.<sup>13</sup> 1<sup>st</sup> Green further contended that “many utility companies no longer bill based on KWH, they bill based on KVAH.”<sup>14</sup>

Moreover, 1<sup>st</sup> Green maintained that “[a]ll improvements in power factor are the result of decreased KVARH and this proportionally reduces the amount of required KVAH that is supplied by the utility” since less KVAH is needed.<sup>15</sup> Accordingly, 1<sup>st</sup> Green contended that “[t]he accurate billed usage of KWH *should never be influenced* (increased or decreased) in direct proportion to the power factor.”<sup>16</sup>

1<sup>st</sup> Green added that “[i]f this is occurring, then there must be a method implemented to counteract the [effect] the power factor is influencing the billed KWH usage.”<sup>17</sup> Therefore, if this is the case, then “GPA Smart Meters are actually billing less KWH for lower power factors at .85 and billing more KWH when power factor is increased above .85 in direct proportion to the same KVAH usage.”<sup>18</sup>

On March 30, 2016, the ALJ issued an ALJ Report detailing his review of the instant matter. In the ALJ Report, the ALJ recommended, based on the information presented by the Parties, that the Smart Meters “be tested by an independent party,”<sup>19</sup> as originally recommended by Lummus. The record before this Commission shows that there may be some discrepancy on how KWh is being measured or calculated. The ALJ

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<sup>13</sup> Simplified Complaint, p. 1.

<sup>14</sup> Simplified Complaint, p. 1.

<sup>15</sup> Simplified Complaint, p. 1.

<sup>16</sup> Simplified Complaint, p. 1 (emphasis added).

<sup>17</sup> Simplified Complaint, p. 1.

<sup>18</sup> Simplified Complaint, p. 1.

<sup>19</sup> Lummus Report, p. 11 (Oct. 26, 2015).

indicated that he believes that a contractor should examine the Smart Meters to determine whether the meters are accurate, and if they have been calibrated properly to accurately measure KVAH, as well as calculate KVARH and KWh.

The ALJ further recommended that both 1<sup>st</sup> Green and GPA should submit names of contractors “that could perform the tests and have the Commission select one in common from each list and allow each party to be present during the testing”; and that the contractor “should first submit its approach to testing the meter so that each party understands and accepts the approach before the test is completed.”<sup>20</sup> Both Parties should further be required to cooperate fully and provide any and all needed access for the independent testing to be performed.

The Commission hereby adopts the findings made in the March 30, 2016 ALJ Report, and therefore issues the following:

### **ORDERING PROVISIONS**

Upon careful consideration of the record herein, and for good cause shown, on motion duly made, seconded and carried by the affirmative vote of the undersigned Commissioners, the Commission hereby ORDERS the following:

1. That GPA’s Smart Meters be tested by Landis+Gyr to determine whether the meters are taking accurate measurements, and if they have been configured properly to accurately measure KVAH, as well as calculate KVARH and KWh.

2. That payment for the cost of such testing, if any, shall be determined by the PUC at a later time and that GPA shall provide any and all needed access for the testing to be performed.

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<sup>20</sup> Lummus Report, pp. 11-12.

3. GPA is ordered to pay the PUC's regulatory fees and expenses, including and without limitation, consulting and counsel fees, and the fees and expenses associated with this docket. Assessment of the PUC's regulatory fees and expenses is authorized pursuant to 12 G.C.A. §§ 12002(b) and 12024(b) (renumbered as 12 G.C.A. §§ 12103(b) and 12125(b)), and Rule 40 of the Rules of Practice and Procedure before the PUC.

**SO ORDERED** this 31<sup>st</sup> day of March, 2016.



**JEFFREY C. JOHNSON**  
Chairman



**ROWENA E. PEREZ**  
Commissioner

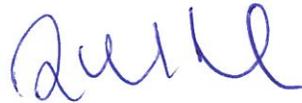


**JOSEPH M. MCDONALD**  
Commissioner

**FILOMENA M. CANTORIA**  
Commissioner



**MICHAEL A. PANGELINAN**  
Commissioner



**PETER MONTINOLA**  
Commissioner



**ANDREW L. NIVEN**  
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