

## GOVERNMENT OF PUERTO RICO PUBLIC SERVICE REGULATORY BOARD PUERTO RICO ENERGY BUREAU

IN RE: HIGHLY EFFICIENT FOSSIL GENERATION DEFINITION

CASE NO.: CEPR-MI-2016-0001

**SUBJECT:** Resolution on Request for Interpretation of Resolution in Case CEPR-MI-2016-0001, "Resolution Adopting the Definition of Highly Efficient Fossil Generation", presented by AES Puerto Rico, L.P.

### **RESOLUTION**

#### I. Introduction

On March 20, 2019, the Energy Bureau of the Puerto Rico Public Service Regulatory Board ("Energy Bureau") issued a Resolution ("March 20, 2019 Resolution") in the instant case through which it adopted the definition of the term "Highly Efficient Fossil Fuel Generation", as required by Article 6.29 of Act 57-2014.<sup>1</sup>

On August 19, 2020, AES Puerto Rico, L.P. ("AES-PR") filed a document titled *Request* for Interpretation of Resolution in Case CEPR-MI-2016-0001, "Resolution Adopting the Definition of Highly Efficient Fossil Generation" ("Request"). In the Request, AES-PR asked the Energy Bureau to clarify certain characteristics of the definition of the term "Highly Efficient Fossil Fuel Generation", as well as certain aspects of its application.

On the same day, AES-PR filed a document titled *Memorandum of Law Requesting Confidential Treatment for "Request for Interpretation of Resolution in Case CEPR-MI-2016-0001, "Resolution Adopting the Definition of Highly Efficient Fossil Generation"* ("Memorandum"). Through its Memorandum, AES-PR asked the Energy Bureau to treat the Request as a confidential document and keep it under seal.<sup>2</sup>

AES-PR argued that "[t]he information provided in the Request is privileged, confidential business information, commercially sensitive, and proprietary Trade Secrets that are internal to AES-PR." AES-PR also argued that "[t]he information in such Request is confidential, considering the data contained in AES-PR's questions and statements pertains





<sup>&</sup>lt;sup>1</sup> Known as The Puerto Rico Energy Transformation and RELIEF Act, as amended.

<sup>&</sup>lt;sup>2</sup> Memorandum, p. 3.

<sup>&</sup>lt;sup>3</sup> *Id.*, p. 2.

to detailed operational specifications of the generating units that could be used to compromise the integrity of Puerto Rico's electric system and should be protected as Critical Energy Infrastructure Information (CEII)."<sup>4</sup> According to AES-PR, "[t]he Request also contains information about AES-PR's capacity of operation and efficiency in specific scenarios, including a scenario where an investment has been made, that if disclosed could place AES-PR in a competitively disadvantageous position in dealing with potential proponents of services."<sup>5</sup> On September 22, 2020, the Energy Bureau issued a Resolution through which it granted confidential treatment to the information pertaining to AES-PR's units, operations, possible investment, emissions, supposed emissions and efficiency contained in the Request.

# II. AES-PR's Request for Clarification

In its Request, AES-PR seeks interpretation or clarification on five (5) topics regarding the definition of the term "Highly Efficient Fossil Fuel Generation" and its implementation: (1) to clarify the methodology regarding the emissions limits contained in the definition; (2) whether the unit's emissions would be adjusted based on load changes; (3) whether the Energy Bureau would require to validate the data provided through a third party; (4) to clarify how increased electric output, as a result of certain plant improvements, would be accounted in the overall emission calculation; and (5) to clarify if the compliance with the definition is a yearly requirement and, if the definition changes, would units be grandfathered to the previous definition. We will address each topic separately.

# a. Methodology

In its Request, AES-PR argued that the emissions limits established in the March 20, 2019 Resolution for coal plants differ from the data contained in the Environmental Protection Agency's ("EPA") Emissions & Generation Resource Integrated Database ("eGRID") report for the years 2014, 2016 and 2018.6 AES-PR requested the Energy Bureau to provide information as to whether a special calculation was applied in order to adjust the eGRID data to the value 1,998 lbs/MWh.<sup>7</sup>

Through the March 20, 2019 Resolution the Energy Bureau established, as part of the definition of the term "Highly Efficient Fossil Fuel Generation", emission limits for each type of fossil fuel used for the generation of electricity in Puerto Rico: Coal, Residual Fuel Oil, Diesel Fuel and Natural Gas.<sup>8</sup> To calculate the average emissions for each type of fossil fuel,



<sup>4</sup> Id.

<sup>&</sup>lt;sup>5</sup> *Id.*, pp. 2 – 3.

<sup>&</sup>lt;sup>6</sup> Request, p. 1, ¶ 1.

<sup>&</sup>lt;sup>7</sup> *Id.*, pp. 1 - 2.

<sup>&</sup>lt;sup>8</sup> March 20, 2019 Resolution, pp. 6 - 7.

the Energy Bureau used the 2016 eGRID's Generator (GEN16) and Plant (PLNT16) data, as it contained a differentiator between the different types of oil fuels (i.e. Residual Fuel Oil and Diesel). To maintain consistency, the Energy Bureau used the aforementioned data to calculate the average emission rates for Natural Gas and Coal.

We must point out that on November 6, 2020, the Energy Bureau issued a Resolution in the instant case through which it updated the emissions standards contained in the definition of the term "Highly Efficient Fossil Fuel Generation". The Energy Bureau based this update on the revised 2018 eGRID report published by the EPA on March 9, 2020. 10

## b. Adjustment based on performance

On the Request, AES-PR argued that  $CO_2$  emissions are tied to fuel type and Heat Rate. According to AES-PR,  $CO_2$  emissions will vary as a function of the generator's load. To that effect, AES-PR requested the Energy Bureau to indicate if all periods of operations will be considered for the purpose of calculating  $CO_2$  emissions.

Regarding the emissions standard established in the March 20, 2019 Resolution, the Energy Bureau determined that the owner or operator of a fossil-fueled generation unit may demonstrate compliance by having an annual rate of  $CO_2$  emissions, as measured in pounds per megawatt-hour (lbs/MWh), that is lower than the established limit for the type of fuel. The annualized emission rate for each unit is calculated by dividing the total emissions (in lbs of  $CO_2$  equivalent) by the total net output (in MWh) of the unit. Therefore, the annual emission rate considers **all periods of operations**.

#### c. Data validation

AES-PR requested the Energy Bureau to provide information whether it would require a qualified third party to validate any data provided. They Energy Bureau informs



<sup>&</sup>lt;sup>9</sup> See Resolution, <u>In Re: Highly Efficient Fossil Generation Definition</u>, Case No. CEPR-MI-2016-0001, November 6, 2020.

<sup>&</sup>lt;sup>10</sup> *Id.*, p. 2. The Energy Bureau based its update on the data contained in "egrid2018\_data\_v2.xlsx", Tab "PLNT18", Column "BA", "Plant annual CO2 total output emission rate (lb/MWh)", available at https://www.epa.gov/egrid/download-data, visited on October 6, 2020.

<sup>&</sup>lt;sup>11</sup> Request, p. 2, ¶ 2.

<sup>12</sup> Id.

<sup>&</sup>lt;sup>13</sup> *Id.* 

<sup>&</sup>lt;sup>14</sup> March 20, 2019 Resolution, p. 7.

<sup>&</sup>lt;sup>15</sup> Request, p. 2, ¶ 3.

AES-PR that it may require a qualified third party to validate any data AES-PR submits for consideration.

# d. Increased output

AES-PR indicated that it might invest in certain infrastructure that could increase the electrical output of its generation units without an increase in fuel input.  $^{16}$  AES-PR requested the Energy Bureau to confirm that this would qualify as a method for making the thermal unit more efficient.  $^{17}$ 

As previously discussed, the annualized emission rate for each unit is calculated by dividing the total emissions (in lbs of  $CO_2$  equivalent) by the total net output (in MWh) of the unit. Therefore, if the electric output of a thermal unit increases without an increase in fuel input due to certain plant modifications, the annualized emission rate may be expected to decrease. Therefore, such modifications, as described by AES-PR in its Request, can be considered as a method for making the thermal unit more efficient.

### e. Compliance Requirement

AES-PR requested the Energy Bureau to clarify whether compliance with the definition of the term "Highly Efficient Fossil Fuel Generation" is subject to a yearly evaluation. AES-PR also requested the Energy Bureau to clarify whether the classification of a unit as Highly Efficient will be grandfathered indefinitely if the Energy Bureau modifies the definition, as stated in the March 20, 2019 Resolution. 19

In accordance with the provisions of the March 20, 2019 Resolution, compliance with the definition of the term "Highly Efficient Fossil Fuel Generation" is subject to a yearly review.<sup>20</sup> The Energy Bureau will evaluate compliance based upon the standards applicable to the reporting period (*i.e.* the definition that was in effect during the reporting period). Since compliance is subject to a yearly evaluation based upon the applicable standards for the reporting period, no unit will be grandfathered to a specific standard.

Be it notified and published.

<sup>&</sup>lt;sup>16</sup> *Id.*, ¶ 4.

<sup>17</sup> Id.

<sup>&</sup>lt;sup>18</sup> Request, pp. 2 – 3, ¶ 5.

<sup>19</sup> Id.

<sup>&</sup>lt;sup>20</sup> March 20, 2019 Resolution, p. 7. "PREPA and any party who owns and operates any fossil-fueled generation units that inject power to PREPA's grid, must file its compliance report with the Energy Bureau on or before March 31 of the year following the reporting year. All compliance reports must contain detailed information for each unit and shall include all supporting documents and workpapers, in native format, with formulae intact."

Angel R. Rivera de la Cruz
Associate Commissioner

Ferdinand A. Ramos Soegaard
Associate Commissioner

Lillian Mateo Santos
Associate Commissioner

Sylvia B. Ugarte Araujo
Associate Commissioner

#### CERTIFICATION

For the record, I sign this in San Juan, Puerto Rico, today November <u>9</u>, 2020.

Wanda I. Cordero Morales

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