

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 2

In the Matter of :

**Puerto Rico Electric Power Authority,**  
San Juan Plant  
P. O. Box 363549  
San Juan, PR 00936-3549

**Respondent**

In a proceeding under  
Section 113(d) of the Clean Air Act  
42 U.S.C. § 7413(d)

**COMPLAINT  
and  
NOTICE OF OPPORTUNITY  
TO REQUEST A HEARING**

Index No. CAA-02-2010-123

U.S. ENVIRONMENTAL  
PROTECTION AGENCY-REG.11  
2010 SEP 24 P 1:39  
REGIONAL HEARINGS  
CLERK

**STATUTORY AUTHORITY**

The United States Environmental Protection Agency (EPA) issues this Complaint and Notice of Opportunity for a Hearing (Complaint) to the Puerto Rico Electric Power Authority (Respondent) for violations of the Clean Air Act, 42 U.S.C. § 7401 *et seq.* (CAA or the Act). The Complaint is being issued pursuant to Section 113(d) of the Act, 42 U.S.C. § 7413(d), and proposes the assessment of penalties in accordance with the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties, 40 C.F.R. Part 22 (Consolidated Rules of Practice). The Complainant in the matter, the Director of the Caribbean Environmental Protection Division (Director), is duly delegated the authority to issue administrative complaints for violations that occur in the Commonwealth of Puerto Rico.

In this Complaint, EPA alleges that Respondent's facility (Facility), an electric generating plant located on Mercado Central Street, Lot #28, Portuary Zone, San Juan, Puerto Rico, violated requirements of the "Standards of Performance for Stationary Gas

Turbines," 40 C.F.R. Part 60, Subpart GG, 40 C.F.R. §§ 60.330-60.335 (NSPS Subpart GG).

On September 22, 2010, the Department of Justice (DOJ) granted EPA's request for a waiver of the twelve (12) month period limitation provided in Section 113(d) of the Act.

### **STATUTORY, REGULATORY AND PERMITTING BACKGROUND**

1. Section 111(b) of the Act requires EPA to publish a list of categories of stationary sources of air pollution which cause or contribute significantly to air pollution, and to adopt standards of performance for "new sources" within each listed category.
2. The term stationary source is defined by Section 111(a) of the Act to mean any building, structure, facility or installation which emits or may emit any air pollutant.
3. The term new source is defined by Section 111(a) of the Act to mean any stationary source, the construction or modification of which is commenced after the publication of regulations (or, if earlier, proposed regulations) prescribing a standard of performance which will be applicable to the source.
4. On November 17, 1975, EPA promulgated the Standards of Performance for New Stationary Sources, 40 C.F.R. Part 60, Subpart A (General NSPS regulations).
5. The applicable terms used in the Order, defined in Subpart A at 40 C.F.R. § 60.2, are as follows:

- a) "opacity" is defined as the degree to which emissions reduce the transmission of light and obscure the view of an object in the background;
  - b) "owner or operator" means any person who owns, leases, operates, controls, or supervises an affected facility or a stationary source of which an affected facility is a part;
  - c) "affected facility" means, with reference to a stationary source, any apparatus to which a standard is applicable;
  - d) "construction" means fabrication, erection, or installation of an affected facility; and
  - e) "startup" means the setting in operation of an affected facility for any purpose.
6. 40 C.F.R. § 60.7(a)(1) states that any owner or operator subject to the provisions of Part 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, of the date construction (or reconstruction as defined under § 60.15) of an affected facility is commenced, which is postmarked no later than 30 days after such date.
7. 40 C.F.R. § 60.7 (a)(3) states that any owner or operator subject to the provisions of Part 60 shall furnish the Administrator written notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
8. 40 C.F.R. § 60.8(a) states that within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be

required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

9. On November 5, 1987, under the authority of Section 111 of the Act, EPA adopted the NSPS entitled "Standards of Performance for Stationary Gas Turbines," 40 C.F.R. Part 60, Subpart GG (NSPS Subpart GG).
10. 40 C.F.R. § 60.330(a) provides that NSPS Subpart GG is applicable to all stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hr), based on the lower heating value of the fuel fired.
11. 40 C.F.R. § 60.330(b) provides that NSPS Subpart GG applies to any facility under paragraph (a) of 40 C.F.R. § 60.330 that commences construction, modification, or reconstruction after October 3, 1977, except as provided in paragraphs (e) and (j) of § 60.332.
12. 40 C.F.R. § 60.331(a) defines the term "stationary gas turbine" as any simple cycle gas turbine, regenerative cycle gas turbine or any gas turbine portion of a combined cycle steam/electric generating system that is not self propelled.
13. 40 C.F.R. § 60.331(d) defines the term "combined cycle gas turbine" as any stationary gas turbine that recovers heat from the gas turbine exhaust gases to heat water or generate steam.
14. 40 C.F.R. § 60.331 defines the term "electric utility stationary gas turbine" as any stationary gas turbine constructed for the purpose of supplying more than

one-third of its potential electric output capacity to any utility power distribution system for sale.

15. 40 C.F.R. § 60.335 states that the owner or operator shall conduct the performance tests required by § 60.8, using either: (1) EPA Method 20; (2) ASTM D6522–00 (incorporated by reference, see § 60.17); or (3) EPA Method 7E and either EPA Method 3 or 3A in appendix A to Part 60, to determine NO<sub>x</sub> and diluents concentration.

### **FINDINGS OF FACTS**

16. On April 1, 2004, EPA issued a final PSD permit to PREPA to install and operate a 476 megawatt (MW) combined cycle turbine electric generating project in San Juan, Puerto Rico. The project consisted of two (2) No. 2 fuel oil fired combustion turbines and two steam turbines driven by two unfired Heat Recovery Steam Generators (HRSGs), known as Unit CT-5 and Unit CT-6. Each unit has a power output of 238 MW. The permit specifies that combustion emissions are controlled by the use of low sulfur fuel oil (0.05% sulfur by weight maximum), good combustion practices and air pollution control equipment. Each No. 2 fuel oil fired combustion turbines of Units CT-5 and CT-6 are only allowed to operate between a base load of 1,694 MM Btu/hr and a 60% load of 1,167 MM Btu/hr heat input levels.

17. The two No. 2 fuel oil fired combustion turbines of Units CT-5 and CT-6 are subject to 40 CFR Part 60 Subpart GG - entitled Standards of Performance for Stationary Gas Turbines.
18. In a letter dated January 25, 2008, PREPA informed the Puerto Rico Environmental Quality Board (PREQB) and EPA that newly permitted Unit CT-5 started operation on December 3, 2007, with the initial firing of No. 2 fuel oil in the combustion turbine. Based on the initial startup, PREPA had 180 days to conduct the initial performance tests, or until May 31, 2008.
19. On April 1, 2008, EPA and PREPA representatives met at the EPA's Caribbean Environmental Protection Division Office in San Juan to follow-up on the progress of the performance tests. During the meeting, PREPA representatives expressed their concerns about meeting the performance tests schedule for Unit CT-5. PREPA representatives informed EPA during the meeting that additional time beyond the May 31, 2008 deadline to complete the performance tests for Unit CT-5 might be requested. During the meeting EPA requested PREPA to submit additional information in order to evaluate its request. No further information or confirmation of the extension request was received from PREPA regarding the additional time to complete the initial performance tests.
20. On May 14, 2008, EPA approved the final stack test protocol for NO<sub>x</sub>, CO and VOC as well as the wet chemistry testing for PM, PM<sub>10</sub>, lead, acid mist (H<sub>2</sub>SO<sub>4</sub>) and SO<sub>2</sub> required under PREPA's PSD permit to be conducted at four operational loads. The protocol was amended by PREPA in response to EPA's

October 22, 2007 comments requesting additional information regarding the September 14, 2007 stack test protocol.

21. In a letter dated May 21, 2008, PREPA informed EPA that the performance evaluation tests of the Continuous Opacity Monitor (COM), Continuous Emission Monitor (CEM), and Continuous Monitoring Systems (CMS) for Unit CT-5 would be conducted on June 5, 2008. The PSD permit requires that these performance tests be conducted during the initial performance tests or within 30 days thereafter. PREPA made no reference as to when it planned to conduct the initial performance tests.
22. On September 22, 2008, EPA issued Compliance Order CAA-02-2008-1012, ordering Respondent to conduct the initial performance tests on Unit CT-5 and furnish a written report of the results of such performance tests to EPA and PREQB in accordance with its PSD permit and the applicable NSPS regulations by November 6, 2008.
23. PREPA conducted the initial performance tests for Unit CT-5 during the period of October 29 through November 4, 2008.
24. In a letter dated December 4, 2008, PREPA informed EPA that the initial performance tests results indicated full compliance with the PSD permit limits for NO<sub>x</sub>, CO and VOC, and PM/lead, PM<sub>10</sub>, and SO<sub>2</sub>, except for acid mist (H<sub>2</sub>SO<sub>4</sub>) at the 100% load which slightly exceeded the permit limits. PREPA identified problems with the use of Method 8 to determine H<sub>2</sub>SO<sub>4</sub> emissions from wet gas streams. PREPA requested EPA permission to re-test for acid mist (H<sub>2</sub>SO<sub>4</sub>) at the 100% load using the alternative method CTM-013 (Controlled Condensation

Method for Measuring Sulfuric Acid Emissions from Kraft Recovery Furnaces) to verify compliance.

25. On December 23, 2008, PREPA submitted to EPA the initial performance test results report. PREPA also requested EPA to provide written authorization to re-test for acid mist (H<sub>2</sub>SO<sub>4</sub>) at the 100% load using the alternative method CTM-013.
26. In a letter dated January 13, 2009, EPA approved the use of method CTM-013 as an alternate method for conducting the re-test for acid mist (H<sub>2</sub>SO<sub>4</sub>) at the 100% load as requested by PREPA.
27. On March 19, 2010, PREPA sent an email to EPA notifying that the acid mist re-test using Method CTM-013 for Unit CT-5 was scheduled to be conducted during March 23-25, 2010.
28. On May 10, 2010, Respondent submitted to EPA and PREQB a written report of the final result of Unit CT-5's performance re-test conducted on March 22, 2010 for acid mist (H<sub>2</sub>SO<sub>4</sub>) at its maximum production rate (100% load). The results demonstrated that Unit CT-5 was in compliance with the standards established in the PSD Permit for acid mist (H<sub>2</sub>SO<sub>4</sub>).

#### **Count 1**

29. Paragraphs 1-28 are repeated and re-alleged as if set forth fully herein.
30. Respondent is a "person" within the meaning of Section 302(e) of the Act.
31. Respondent is an owner and/or operator of Unit CT-5, which has among its components a stationary gas turbine constructed after October 3, 1977, and has



a heat input at peak load greater than 10.7 gigajoules per hour (10 million Btu/hr). Unit CT-5's stationary gas turbine is an affected facility within the meaning of 40 C.F.R. § 60.2.

32. Respondent's Unit CT-5's stationary gas turbine is subject to the Standards of Performance for Stationary Gas Turbines set forth in NSPS Subpart GG.
33. Respondent's failure to conduct initial performance tests for Unit CT-5 no later than 180 days after its initial startup or by the May 31, 2008 deadline is a violation of 40 C.F.R. § 60.8.
34. Respondent's violation of 40 C.F.R. § 60.8 is a violation of NSPS Subpart GG and Sections 111 and 114 of the Act, for which Respondent is subject to administrative penalties under Section 113(d) of the Act.

#### **PROPOSED CIVIL PENALTY**

Section 113(d) of the Act provides that the Administrator may assess a civil administrative penalty of up to \$25,000 per day for each violation of the Act. The Debt Collection Improvement Act of 1996 (DCIA) requires EPA to periodically adjust its civil monetary penalties for inflation. Pursuant to the DCIA, on December 31, 1996, February 13, 2004, and December 11, 2008, EPA adopted regulations entitled Civil Monetary Penalty Inflation Adjustment Rule, 40 C.F.R. Part 19 (Part 19). Part 19 provides that the maximum civil penalty per day, pursuant to Section 113(d) of the CAA, should be adjusted up to \$27,500 for violations that occurred from January 30, 1997 through March 15, 2004, up to \$32,500 for violations that occurred after March 15, 2004 through January 12, 2009, and up to \$37,500 for violations that occurred after

January 12, 2009. Consistent with Part 19, EPA has amended its civil penalty policies, for example, its CAA Stationary Source Civil Penalty Policy, to increase the initial gravity component of the penalty calculation by 10% for violations which occurred on or after January 30, 1997, increase the gravity component by an additional 17.23% for violations which occurred March 15, 2004 through January 12, 2009, for a total increase of 28.95%, and further increase it by an additional 9.83% for violations that occurred after January 12, 2009.

In determining the amount of penalty to be assessed, Section 113(e) of the Act requires that the Administrator consider the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation as established by any credible evidence, the payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, the seriousness of the violation and other factors as justice may require.

Respondent's violation alleged in Count 1 results in Respondent being subject to the assessment of administrative penalties pursuant to Section 113(d) of the Act. The proposed penalty has been prepared in accordance with the criteria in Section 113(e) of the Act, and in accordance with the guidelines set forth in EPA's "Clean Air Act Stationary Source Civil Penalty Policy" (CAA Penalty Policy), which reflects EPA's application of the factors set forth in Section 113(e) of the Act.

EPA proposes a total penalty of \$95,858.70 for the count alleged in this Complaint. Below is a brief narrative explaining the reasoning behind the penalty

proposed, along with the reasoning behind various general penalty factors and adjustments that were used in the calculation of the total penalty amount.

**Preliminary Deterrence Component of Proposed Penalty:**

The CAA Penalty Policy indicates that the preliminary deterrence amount is determined by combining the gravity component and the economic benefit component of the penalty calculated. The gravity component includes, as applicable, penalties for actual harm, importance to the regulatory scheme, size of violator and adjustments to the gravity component for degree of willfulness or negligence, degree of cooperation, prompt reporting, correction, history of non-compliance and environmental damage. Actual harm is calculated, where applicable, in accordance with the level of the violation, the

**Gravity Component**

**Count 1:** Violation of 40 C.F.R. § 60.8

Respondent failed to timely conduct the required initial performance test, which is a testing violation. The CAA Penalty Policy directs that the proposed initial gravity component of the penalty be \$5,000 for late performance tests. Therefore, for this Count, EPA proposes a gravity component of \$5,000 for Respondent's penalty associated with the importance to the regulatory scheme.

The CAA Penalty Policy also directs that a penalty be assessed, where appropriate, for the length of time of a violation. The affected unit (CT-5) started operations on December 3, 2007, and was required to conduct the initial tests no later than May 31, 2008. The tests were conducted and completed on March 22, 2010,

twenty-two (22) months and nine (9) days after the latest allowable compliance date. The CAA Penalty Policy directs that a \$25,000 penalty be proposed for the length of violation where the length of violation is between nineteen and twenty-four months. Therefore, for this Count, EPA proposes a penalty of \$25,000 for the length of violation component of the penalty.

### **Inflation Adjustment**

Pursuant to the Debt Collection Improvement Act (DCIA), 31 U.S.C. §§ 3701 *et seq.*, and 40 C.F.R. Part 19, the regulation promulgated pursuant to the DCIA, and the associated amendments to EPA's CAA Penalty Policy, the CAA Penalty Policy preliminary deterrence amount should be adjusted 10% for inflation for all violations occurring January 30, 1997 through March 15, 2004, further adjusted an additional 17.23% for all violations occurring on March 15, 2004 until January 12, 2009, and further adjusted an additional 9.83% for all violations occurring after January 12, 2009. The gravity component, which includes the penalties proposed for Count 1 unadjusted for inflation, is \$30,000. Inflation adjustments for violations were done in accordance with the DCIA requirements. Eight months of the violation alleged in this Complaint occurred prior to January 13, 2009, therefore, the inflation adjustment applied for this period of the violation was 28.95%, which resulted in an inflation adjustment of \$3,126.60. Fourteen months of the violation alleged in the Complaint occurred after January 12, 2009, therefore, the inflation adjustment applied for this period of the violation was 41.63%, which resulted in an inflation adjustment of \$7,946.75. The total inflation adjustment for the entire period is violation is \$11,073.35 resulting in an

inflation adjusted proposed penalty of \$41,073.35 for the gravity component of the penalty.

### **Size of the Violator**

The CAA Penalty Policy directs that a penalty be proposed that takes into account the size of violator, determined by the violator's net worth. Respondent's net worth is estimated at more than \$1,000,000,000. The CAA Penalty Policy directs EPA to propose a penalty of \$70,000, plus \$25,000 for every additional \$30,000,000 or fraction thereof for violators with this net worth. However, the CAA Penalty Policy states that where the size of the violator figure represents more than 50% of the total preliminary deterrence amount, the litigation team may reduce the size of the violator figure to 50% of the preliminary deterrence amount. The preliminary deterrence amount includes the penalties for the importance to the regulatory scheme, the length of time a violation continues, the size of violator and economic benefit. In this case EPA is using the discretion provided in the policy and is proposing a \$47,929.35 penalty for the size of violator component of the penalty.

### **Economic Benefit**

In addition to the Gravity component of the proposed penalties, the CAA Penalty Policy directs that EPA determine the economic benefit derived from non-compliance. The policy explains that the economic benefit component of the penalty should be derived by calculating the amount the violator benefited from delayed and/or avoided

costs. EPA determined that Respondent was required to conduct an initial performance test for NOx, CO and VOC as well as the wet chemistry testing for PM, PM10, lead, acid mist (H2SO4) and SO2 required at four loads on the affected facility. EPA estimates that the combined costs for such tests is approximately \$100,000, and that delaying the tests from May 31, 2008, to March 22, 2010, results in an economic benefit of \$6,856 gained by Respondent.

### **Total Proposed Penalty for Violations Alleged in this Complaint**

The preliminary deterrence amount is the combined total of the gravity component and the economic benefit. Therefore, EPA proposes a total penalty of \$95,858.70 for the violations alleged in this Complaint.

### **NOTICE OF OPPORTUNITY TO REQUEST A HEARING**

The hearing in this matter is subject to the Administrative Procedure Act, 5 U.S.C. § 552 *et seq.* The procedures for this matter are found in EPA's Consolidated Rules of Practice, a copy of which is enclosed with the transmittal of this Complaint. References to specific procedures in this Complaint are intended to inform you of your right to contest the allegations of the Complaint and the proposed penalty and do not supersede any requirement of the Consolidated Rules of Practice.

You have a right to request a hearing: (1) to contest any material facts set forth in the Complaint; (2) to contend that the amount of the penalty proposed in the Complaint is inappropriate; or (3) to seek a judgment with respect to the law applicable to this matter. In order to request a hearing you must file a written Answer to this

Complaint along with the request for a hearing with the EPA Regional Hearing Clerk within thirty (30) days of your receipt of this Complaint. The original and a copy of the Answer and request for a hearing must be filed at the following address:

Karen Maples  
Regional Hearing Clerk  
U.S. Environmental Protection Agency - Region 2  
290 Broadway - 16<sup>th</sup> Floor  
New York, New York 10007-1866.

A copy of the Answer and the request for a hearing, as well as copies of all other papers filed in this matter, are to be served on EPA to the attention of EPA counsel at the following address:

Héctor L. Vélez Cruz  
Assistant Regional Counsel  
Office of Regional Counsel, Caribbean Team  
U.S. Environmental Protection Agency - Region 2  
Centro Europa Building, Suite 417  
1492 Ponce de León Avenue  
San Juan, Puerto Rico 00907

Your Answer should, clearly and directly, admit, deny, or explain each factual allegation contained in this Complaint with regards to which you have any knowledge. If you have no knowledge of a particular factual allegation of the Complaint, you must so state and the allegation will be deemed to be denied. The Answer shall also state: (1) the circumstances or arguments which you allege constitute the grounds of a defense; (2) whether a hearing is requested; and (3) a concise statement of the facts which you intend to place at issue in the hearing.

If you fail to serve and file an Answer to this Complaint within thirty (30) days of its receipt, Complainant may file a motion for default. A finding of default constitutes an

admission of the facts alleged in the Complaint and a waiver of your right to a hearing. The total proposed penalty becomes due and payable without further proceedings thirty (30) days after the issue date of a Default Order.

### **SETTLEMENT CONFERENCE**

EPA encourages all parties against whom the assessment of civil penalties is proposed to pursue the possibilities of settlement by informal conferences. However, conferring informally with EPA in pursuit of settlement does not extend the time allowed to answer the Complaint and to request a hearing. Whether or not you intend to request a hearing, you may confer informally with the EPA concerning the alleged violations or the amount of the proposed penalty. If settlement is reached, it will be in the form of a written Consent Agreement which will be forwarded to the Regional Administrator with a proposed Final Order. You may contact EPA counsel, Héctor L. Vélez Cruz at (787) 977-5850 or at the address listed above, to discuss settlement. If Respondent is represented by legal counsel in this matter, Respondent's counsel(s) should contact EPA.

### **PAYMENT OF PENALTY IN LIEU OF ANSWER, HEARING AND/OR SETTLEMENT**

Instead of filing an Answer, requesting a hearing, and/or requesting an informal settlement conference, you may choose to pay the full amount of the penalty proposed in the Complaint. Such payment should be made by a cashier's or certified check payable to the Treasurer, United States of America, marked with the docket number and

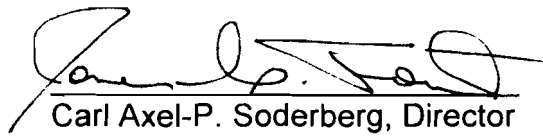


the name of the Respondents which appear on the first page of this Complaint. The check must be mailed to:

U.S. Environmental Protection Agency  
Fines and Penalties  
Cincinnati Finance Center  
PO Box 979077  
St. Louis, MO 63197-9000.

A copy of your letter transmitting the check and a copy of the check must be sent simultaneously to EPA counsel assigned to this case at the address provided under the section of this Complaint entitled Notice of Opportunity to Request a Hearing. Payment of the proposed penalty in this fashion does not relieve one of responsibility to comply with any and all requirements of the Clean Air Act.

Dated: 9-23-10



Carl Axel-P. Soderberg, Director  
Caribbean Environmental Protection Division

To: Eng. Miguel Cordero  
Executive Director  
Puerto Rico Electric Power Authority  
G.P.O. Box 364267  
San Juan, Puerto Rico 00907-0386

cc: Blanche González, Esq.  
Program Liason  
Enforcement Section Air Quality Area  
Puerto Rico Environmental Quality Board  
P.O. Box 11488  
Santurce, Puerto Rico 00910

IN THE MATTER OF:

**Puerto Rico Electric Power Authority**  
San Juan Plant  
P.O. Box 363549  
San Juan, PR 00936-3549

**Respondent**

In a proceeding under Section 113(d) of  
the Clean Air Act 42 U.S. C. §7413(d)

**COMPLAINT  
And  
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Index No. CAA-02-2010-1235

**CERTIFICATE OF SERVICE**

I certify that the foregoing Complaint was sent to the following persons, in the manner specified, on the date below:

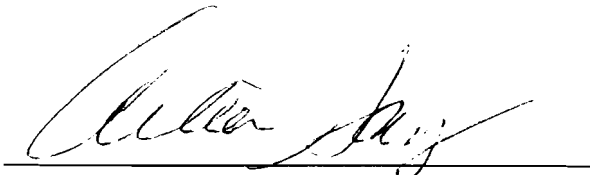
Original and Copy via UPS Mail to:

**Karen Maples**  
Regional Hearing Clerk  
Region II  
U.S. Environmental Protection Agency  
290 Broadway, 16<sup>th</sup> Floor  
New York, NY 10007-1866

Copy by Certified Mail Return Receipt:

Eng. Miguel Cordero  
Executive Director  
Puerto Rico Electric Power Authority  
G.P. O. Box 364267  
San Juan, Puerto Rico 00907-0386

Dated: September 23, 2010



A handwritten signature in black ink, appearing to read "Miguel Cordero", is written over a horizontal line.