



# MARYLAND DEPARTMENT OF THE ENVIRONMENT

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Martin O'Malley  
Governor

Robert M. Summers, Ph.D.  
Secretary

Anthony G. Brown  
Lieutenant Governor

OCT 12 2011

Mr. Shawn. M Garvin  
Regional Administrator  
U.S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

Dear Mr. Garvin:

The purpose of this letter is to submit a revision (# 11-06) to the Maryland State Implementation Plan (SIP) requesting:

- (1) approval of appropriate portions, as indicated, of the 2011 GenOn Chalk Point Consent Decree that was entered by the Circuit Court for Prince George's County, Maryland, on March 10, 2011. The Consent Decree requires GenOn to control emissions of SO<sub>2</sub>, NO<sub>x</sub> and particulate matter at its Chalk Point electric generating station, and
- (2) removal of the 1978 and 1979 Consent Orders for the Chalk Point generating station. These two Consent Orders were approved as part of the Maryland SIP on April 2, 1979 (44 FR 19192, 44 FR 25840) and on September 3, 1980 (45 FR 58340), respectively. These Consent Orders are being replaced by the 2011 Consent Decree.

I hereby certify that the electronic copy of this SIP submittal (enclosed) is an exact duplicate of the official hard copy.

Notice regarding these SIP actions was prominently advertised in the Maryland Register published on July 29, 2011, and the Department's website from July 14, 2011 through August 31, 2011. A public hearing was held on August 31, 2011. All administrative procedures were properly followed for this SIP revision.

On June 12, 2007, the Department submitted a SIP revision (#07-07) requesting approval of the 2006 Mirant Consent Decree for its Chalk Point Station and the removal of the 1978 and 1979 Consent Orders for the Chalk Point generating station. On July 8, 2011 the Department withdrew the June 12, 2007 SIP revision. Today's SIP revision request (#11-06) supersedes that June 12, 2007 SIP revision request in its entirety.



If you have any questions concerning this SIP submittal, please feel free to call me at (410)537-3084 or have a member of your staff call Mr. George S. Aburn, Air and Radiation Management Administration, at (410) 537-3255.

Sincerely,



Robert M. Summers, Ph.D.  
Secretary

Enclosures

cc: Diana Esher  
George S. Aburn

L11-03495

STATE OF MARYLAND,  
DEPARTMENT OF THE  
ENVIRONMENT,  
1800 Washington Blvd.  
Baltimore, Maryland 21230

Plaintiff,

v.

GENON CHALK POINT, LLC  
b.d.a. MIRANT CHALK POINT, LLC  
in Maryland  
25100 Chalk Point Road  
Aquasco, MD 21201

Defendant.

\* IN THE  
\* CIRCUIT COURT  
\* FOR  
\* PRINCE GEORGE'S  
\* COUNTY,  
\* MARYLAND

Civil Action No.

2011-03495  
JUL 11 2011  
Clerk of the  
Circuit Court

\* \* \* \* \*

CONSENT DECREE

~~Plaintiff, the State of Maryland, Department of the Environment (the "Department") and GenOn Chalk Point, L.L.C., d.b.a. Mirant Chalk Point, L.L.C. in Maryland, ("GenOn") hereby present and aver that they enter into this Consent Decree following entry by the Court under the following terms and conditions.~~

~~WHEREAS, GenOn is a foreign entity incorporated under the laws of the State of Delaware.<sup>1</sup> GenOn owns and operates an electric generating station known as the Chalk Point Generating Station (the "Chalk Point Facility"), located in Aquasco, Maryland. The Chalk Point Facility was formerly owned and operated by Potomac Electric Power Company ("PEPCO") or one of its affiliates. GenOn acquired the Chalk Point Facility from PEPCO in December 2000.~~

~~WHEREAS, the Chalk Point Facility consists, in relevant part, of two cycling steam electric generating units rated at 640 MW each, identified as Units 3 and 4. Units 3 and 4 are permitted to burn natural gas and fuel oil, and are capable of simultaneously firing both fuels, in approximately 25% increments. Combustion gases are discharged to the atmosphere through individual stacks. Neither Unit 3 nor Unit 4 is currently~~

~~<sup>1</sup> On January 20, 2011, Mirant Chalk Point, L.L.C. filed an amendment to its Certificate of Formation with the State of Delaware, changing its name to GenOn. GenOn has not filed a change of name with the State of Maryland.~~

equipped with a dust collector or any other post-combustion particulate matter control device.

WHEREAS, construction of Units 3 and 4 commenced prior to July 1, 1975. Unit 3 was placed into commercial operation in June 1975. Unit 4 was placed into commercial operation in 1981. GenOn represents that Unit 4 was substantially completed in 1975.

#### Regulatory Authority

WHEREAS, the Chalk Point Facility is located in Maryland Air Quality Control Region IV, which is comprised of Montgomery and Prince George's Counties.

WHEREAS, the Chalk Point Facility is subject to State air pollution control laws codified in Title 2 of the Environment Article and Code of Maryland Regulations ("COMAR") 26.11. In particular, COMAR 26.11.09 establishes emissions limitations for electric generation units and other fuel burning equipment located in all of Maryland's Air Quality Control Regions, including Region IV.

WHEREAS, COMAR 26.11.09.06B(1) prohibits the combustion of residual fuel oil in Maryland Air Quality Control Regions III and IV unless the oil burning unit "is fitted with a dust collector which is so designed that it can reasonably be expected to produce sufficient dust particle force, residence time, and particle retention to satisfy the [particulate matter emissions limits] of Table 1." Under the Department's longstanding interpretation and application of its regulation, a dust collector is not required on a unit that can comply with its applicable particulate matter standard without the control device.

WHEREAS, COMAR 26.11.09.06B(2) establishes a particulate matter emissions limitation in Maryland Air Quality Control Regions III and IV of 0.020 grains per standard cubic foot dry ("gr/scfd") for residual oil burning units greater than 250 maximum rated heat input in million Btu per hour built before July 1, 1975; and a limitation of 0.01 gr/scfd for residual oil burning units greater than 250 maximum rated heat input in million Btu per hour built on or after July 1, 1975.

WHEREAS, COMAR 26.11.09.06B(6)(a) provides an exemption from the dust collector and particulate matter emissions limits of COMAR 26.11.09.06B for fuel burning equipment burning natural gas with an interruptible gas service.

WHEREAS, Units 3 and 4 were originally constructed with scrubbers to control particulate matter. Testing of Unit 3 revealed that particulate emissions were actually higher when the scrubbers were in use. Therefore, the scrubbers on Units 3 and 4 were removed from service.

WHEREAS, initial testing of Unit 3 demonstrated compliance with the applicable grain loading standard. Therefore, installation of a particulate matter control device designed to meet that standard was not required. Stack test results show that Unit 3 has been in compliance with the grain loading standard during its operational history.

#### Alleged Violations

WHEREAS, the Department alleges that because construction of Unit 4 was completed after July 1, 1975, the applicable particulate matter emission standard for Unit 4 is 0.01 gr/scfd if Unit 4 is not operating under interruptible gas service, as intended by COMAR 26.11.09.06B(6)(a).

WHEREAS, a particulate stack test was performed on Unit 4 on February 12 and February 13, 2008 that reported particulate matter emissions of 0.015 gr/scfd, which the Department alleges violates the applicable particulate matter emissions limit established by COMAR 26.11.09.06B(6)(a).

WHEREAS, GenOn contends that Unit 4 was "built", within the meaning of the term as used in COMAR 26.11.09.09(b), before July 1, 1975 and that the applicable particulate matter limit for Unit 4 is 0.020 gr/scfd.

WHEREAS, Unit 4 began commercial operations in 1981 subject to a 0.020 gr/scfd standard with the consent of the Department of Health and Mental Hygiene ("DHMH"), the agency responsible for administration of the State's air pollution regulatory program at that time. The Department acknowledges that since its creation in 1987, the 0.020 gr/scfd standard was carried over as the proper standard for Unit 4 in subsequent agreements executed between Mirant/PEPCO and the Department.

WHEREAS, § 2-609 of the Environment Article authorizes the Department to initiate a civil action for a permanent or temporary injunction to enjoin any conduct that violates a provision of Title 2 or any rule, regulation or order adopted or issued pursuant to Title 2. In addition, § 2-610 of the Environment Article authorizes the Department to seek civil penalties of up to \$25,000 for each violation of Title 2 of the Environment Article or any rule, regulation or order adopted or issued pursuant to Title 2. Each day a violation continues is a separate violation.

#### The 1978 and 1979 Consent Orders

WHEREAS, on February 27, 1978, PEPCO entered into a Consent Order (the "1978 Consent Order") with the DHMH, pursuant to which PEPCO agreed that sulfur oxide emissions from Chalk Point Units 1 and 2 would not exceed 3.5 pounds per million Btu input averaged over a two-hour period as determined by Continuous Emissions Monitoring ("CEM") data, and that Unit 3 would burn residual oil with a sulfur content

not in excess of 2%. The 1978 Consent Order was approved by the EPA as part of the Maryland State Implementation Plan, 40 CFR § 52.1070(d).

WHEREAS, on July 19, 1979, PEPCO entered into a Consent Order (the "1979 Consent Order") with DHMH, pursuant to which certain requirements at Unit 3 were relaxed in order to conform with legislative changes generally requiring the State to set emissions limitations in attainment areas at levels no more stringent than Federal law. Specifically, the 1979 Consent Order established a particulate emissions limit of 0.05 gr/scfd, a maximum visible emissions limit of 20% opacity, and waived the particulate control equipment requirement for Unit 3. The 1979 Consent Order was approved by the EPA as part of the Maryland State Implementation Plan, 40 CFR § 52.1070(d).

#### The 2006 Consent Decree

WHEREAS, between 2003 and 2005, GenOn used oil for more than 95% of its annual heat input at Units 3 and 4.

WHEREAS, to resolve alleged violations of opacity limitations, GenOn entered into a Consent Decree with the Department (the "2006 Consent Decree"), pursuant to which GenOn agreed to burn natural gas in Units 3 and 4 for 95% of their heat input during the Ozone Season, beginning on May 1 and ending on September 30 of each calendar year. Under the terms of the 2006 Consent Decree, if GenOn uses natural gas to fuel less than 95% of Unit 3 and 4's Ozone Season heat input, GenOn agreed to burn the equivalent amount of natural gas to make up any such shortfall in the non-Ozone Season. Under the terms of the 2006 Consent Decree, no shortfall may exceed 3.84 million MBtu derived from No. 6 residual fuel oil.

WHEREAS, the 2006 Consent Decree terminated the 1978 and 1979 Consent Orders because Air Quality Control Region IV was no longer in attainment with the national ambient air quality standard for particulate matter and certain provisions of the Consent Orders were no longer consistent with State and Federal environmental laws. However, the Maryland State Implementation Plan was not revised to either remove the 1978 or 1979 Consent Orders, or include the 2006 Consent Order.

WHEREAS, GenOn has complied with the 2006 Consent Decree. Annual emissions of particulate matter, sulfur oxides and ozone forming pollutants have declined significantly in large part as a result of the shift to natural gas during the Ozone Season. In 2005, Units 3 and 4 emitted 3,975 tons of nitrogen oxides ("NOx"), 744 tons of particulate matter ("PM"), and 12,379 tons of sulfur oxides ("SOx"). In 2008, Units 3 and 4 emitted 446 tons of NOx, 49 tons of PM, and 244 tons of SOx.

WHEREAS, under the terms of the 2006 Consent Decree, the requirement to burn natural gas during the Ozone Season will terminate as to Units 3 and 4 if GenOn elects to

install and successfully tests, to the satisfaction of the Department, an electrostatic precipitator or other comparable particulate pollution control equipment on the Unit.

WHEREAS, combusting natural gas during the ozone season in accordance with the terms of the 2006 Consent Decree, and maximizing the use of natural gas consistent with the terms of this Consent Decree in the non-ozone season, results in greater overall environmental benefits than would be achieved with the installation of particulate controls, which would release GenOn from any regulatory or contractual obligation to burn natural gas.

WHEREAS, it is the intention of the parties to amend and restate the 2006 Consent Decree by replacing it with this 2011 Consent Decree.

#### The PJM Interconnection Electricity Supply System

WHEREAS, PJM Interconnection ("PJM") is a regional transmission organization that coordinates the movement of wholesale electricity in all or parts of 13 states, including Maryland. As part of its duties, PJM operates and monitors markets for the purchase and sale of electricity and capacity.

WHEREAS, PJM uses a uniform price auction to ensure availability of energy supply and establish locational energy prices. Demand for electricity varies greatly over the course of a day or week, and by season. The costs of running different types of generation units also varies greatly. To ensure the production of electricity at the lowest cost to reliably serve customers, PJM controls electricity generation through a system of "economic dispatch." The economic dispatch system takes costs of generation, conditions on the transmission network, demand for electricity, and other factors into account in selecting the generating units to dispatch during a defined time interval in order to deliver a reliable supply of electricity to consumers at the lowest possible cost in each dispatch time interval. Each day, electricity generators offer in the amount and price of electricity that they can supply. Generally, PJM dispatches electricity by generator according to the offer prices, in order of lowest to highest, until demand and system reliability for a particular region is met.

WHEREAS, Units 3 and 4 have historically run as cycling units that are dispatched primarily during times of high demand, requiring frequent startups, shutdowns, and load changes. Units 3 and 4 generally operate for fewer than 24 hours a day. During 2008, Unit 3 was dispatched 43 days, averaging 15.5 hours of operation per day; Unit 4 was dispatched 44 days, averaging 16 hours of operation per day.

WHEREAS, due to normal electricity demand fluctuations, GenOn does not know in advance the manner in which the units will run (e.g., how long the units will run; what the load requirements will be; how quickly the units will need to ramp up or down). The

demand profile for a particular day is largely a function of the weather, transmission constraints, and PJM's dispatch order.

### Transportation and Supply of Natural Gas

WHEREAS, GenOn obtains transportation for, and delivery of, natural gas for use at its Chalk Point Facility from the Dominion Cove Point LNG, L.P. Pipeline (the "Pipeline") pursuant to an interruptible transportation service agreement. This is the only pipeline available to serve Units 3 and 4. Neither the Pipeline nor the Chalk Point Facility has natural gas storage service or capability.

WHEREAS, the Federal Energy Regulatory Commission ("FERC") regulates the transportation, scheduling, and delivery of natural gas pursuant to the Pipeline's tariff. The tariff authorizes the pipeline operator to issue Operational Flow Orders, mechanisms by which the pipeline operator can regulate natural gas flow through the Pipeline and require shippers to maintain a strict balance between input and output volumes. These and other controls are utilized to maintain the operational integrity of the pipeline system.

WHEREAS, the Pipeline's tariff establishes four daily nomination periods, two for next day delivery and two for same day delivery, during which GenOn may request delivery of the volume of gas to be used in accordance with its submitted burn profile. Nominations are generally made 12 to 18 hours in advance, with opportunities to modify those nominations up to the nomination deadline during the operating day. Natural gas is only delivered after a nomination is submitted by GenOn and approved by the Pipeline.

WHEREAS, the Pipeline's tariff requires end users of natural gas to withdraw natural gas from the Pipeline on a ratable hourly basis, equivalent to 1/24th of the total daily transportation contract quantity. While the Pipeline may have the capacity to allow for variation of the physical offload rate, that is, to allow offloading in amounts greater or less than 1/24th of the total daily quantity, flexibility in usage rates is entirely subject to the discretion of the Pipeline.

WHEREAS, Units 3 and 4 may be dispatched after the natural gas nomination deadlines have passed or during times of high natural gas demand. During these times, GenOn may be unable to obtain the necessary volumes of gas required to meet its operational needs due to insufficient supply, curtailments, or delivery restrictions.

WHEREAS, if GenOn were to contract for delivery of natural gas in quantities sufficient to meet the generation needs of Units 3 and 4 at anticipated peak demand, under the Pipeline tariff's uniform delivery provisions, the Pipeline could require GenOn to take deliveries of natural gas in ratable quantities that exceed the amounts needed by Units 3 and 4 to generate electricity consistent with PJM's dispatch order during off-peak periods. Because there is no natural gas storage capacity on the Pipeline or at the Chalk



install and successfully tests, to the satisfaction of the Department, an electrostatic precipitator or other comparable particulate pollution control equipment on the Unit.

WHEREAS, combusting natural gas during the ozone season in accordance with the terms of the 2006 Consent Decree, and maximizing the use of natural gas consistent with the terms of this Consent Decree in the non-ozone season, results in greater overall environmental benefits than would be achieved with the installation of particulate controls, which would release GenOn from any regulatory or contractual obligation to burn natural gas.

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WHEREAS, PJM uses a uniform price auction to ensure availability of energy supply and establish locational energy prices. Demand for electricity varies greatly over the course of a day or week, and by season. The costs of running different types of generation units also varies greatly. To ensure the production of electricity at the lowest cost to reliably serve customers, PJM controls electricity generation through a system of "economic dispatch." The economic dispatch system takes costs of generation, conditions on the transmission network, demand for electricity, and other factors into account in selecting the generating units to dispatch during a defined time interval in order to deliver a reliable supply of electricity to consumers at the lowest possible cost in each dispatch time interval. Each day, electricity generators offer in the amount and price of electricity that they can supply. Generally, PJM dispatches electricity by generator according to the offer prices, in order of lowest to highest, until demand and system reliability for a particular region is met.

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WHEREAS, the Federal Energy Regulatory Commission ("FERC") regulates the transportation, scheduling, and delivery of natural gas pursuant to the Pipeline's tariff. The tariff authorizes the pipeline operator to issue Operational Flow Orders, mechanisms by which the pipeline operator can regulate natural gas flow through the Pipeline and require shippers to maintain a strict balance between input and output volumes. These and other controls are utilized to maintain the operational integrity of the pipeline system.

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WHEREAS, Units 3 and 4 may be dispatched after the natural gas nomination deadlines have passed or during times of high natural gas demand. During these times, GenOn may be unable to obtain the necessary volumes of gas required to meet its operational needs due to insufficient supply, curtailments, or delivery restrictions.

WHEREAS, if GenOn were to contract for delivery of natural gas in quantities sufficient to meet the generation needs of Units 3 and 4 at anticipated peak demand, under the Pipeline tariff's uniform delivery provisions, the Pipeline could require GenOn to take deliveries of natural gas in ratable quantities that exceed the amounts needed by Units 3 and 4 to generate electricity consistent with PJM's dispatch order during off-peak periods. Because there is no natural gas storage capacity on the Pipeline or at the Chalk

~~Point plant, GenOn would have to run in conflict with the economic dispatch system utilized by PJM to manage the delivery of electricity to consumers.~~

~~WHEREAS, where the Pipeline cannot, or will not, authorize the offloading of natural gas in quantities that correspond with PJM's specific dispatch order for Units 3 and 4, GenOn must have the ability to burn oil as needed to meet its generation obligations.~~

~~WHEREAS, where economic conditions drive the cost of residual fuel oil below the cost of natural gas, GenOn has an incentive to maximize Unit 3 and 4's use of residual fuel oil, consistent with its operating restrictions. Conversely, where economic conditions drive the cost of natural gas below the cost of residual fuel oil, GenOn has an incentive to maximize Unit 3 and 4's use of natural gas, consistent with its operating restrictions and the Pipeline's tariff conditions.~~

~~WHEREAS, beginning in 2007 and continuing through the present, the cost of natural gas fell below the cost of residual fuel oil. From 2007 through 2009, GenOn was able to procure natural gas through its interruptible gas service contract for approximately 76 % of Unit 3 and Unit 4's annual heat input.~~

~~WHEREAS, GenOn used natural gas for at least 75 % of its annual heat input at Units 3 and 4 during the 2010 calendar year.~~

#### Environmental Benefits

~~WHEREAS, burning natural gas in accordance with this agreement, given the operating constraints of cycling electric generating units, is considered by the Department to be operating pursuant to interruptible gas service within the intended meaning of COMAR 26.11.09.06B(6)(a).~~

~~WHEREAS, burning natural gas produces significantly lower NOx, SO2, and PM emissions than burning residual fuel oil.~~

~~WHEREAS, the 2006 Consent Decree does not restrict the use of fuel oil during the non-ozone season, and allows GenOn to burn oil during the ozone season upon installation of a particulate control device.~~

~~WHEREAS, fuel switching to natural gas on a year-round basis in accordance with this Consent Decree can provide substantially greater air quality benefits than would be realized from installation of an ESP or comparable particulate control device.~~

~~WHEREAS, the parties recognize, and the Court, by entering this Consent Decree finds, that this Consent Decree has been negotiated in good faith and at arm's length and that this Consent Decree is a fair and reasonable resolution of the Department's claims as~~

~~alleged in the Complaint, is consistent with the goals of Title 2 of the Environment Article and the implementing regulations, and is in the best interest of the parties and the public.~~

~~NOW, THEREFORE, without any admission of fact or law, and with the consent of the parties, it is hereby ORDERED, ADJUDGED, and DECREED as follows:~~

### **I. TERMINATION OF CONSENT ORDERS**

1. This Consent Decree supersedes the 2006 Consent Decree between GenOn and the Department, entered in the Circuit Court for Prince George's County, Maryland, on September 11, 2006. It is the parties intent that only those obligations from the 2006 Consent Decree that are expressly restated in this 2011 Consent Decree shall be effective. Upon entry of this 2011 Consent Decree, the 2006 Consent Decree shall be null and void, and of no further effect.

2. GenOn agrees that as of May 1, 2007, the 1978 and 1979 Consent Orders became null and void and are of no further effect as between the State and GenOn. As of the date of this agreement, the 1978 and 1979 Consent Orders remain part of the Maryland State Implementation Plan, 40 CFR § 52.1070(d). GenOn agrees that it will not object to a revision of Maryland's State Implementation Plan which removes the 1978 and 1979 Consent Orders.

### **II. COMPLIANCE REQUIREMENTS**

#### **A. Particulate Matter Emissions**

3. Subject to Paragraph 4, GenOn Chalk Point, LLC ("GenOn") shall comply with the provisions of Subparagraphs (a) through (d) of this Paragraph.

(a) On days that GenOn is dispatched by PJM Interconnection ("PJM"), pursuant to the PJM's tariff, to operate Chalk Point Unit 3 and/or Unit 4, GenOn will request natural gas deliveries in the quantities GenOn anticipates will be needed to meet GenOn's estimate of PJM's hourly dispatch; provided that GenOn shall not be required to contract for natural gas delivery greater than the minimum operating load consistent with the PJM dispatch if doing so might require GenOn to accept delivery of natural gas in excess of the quantity needed to meet demand.

(b) GenOn may burn fuel oil only to the extent necessary to maintain operations, perform stack testing, respond to a PJM dispatch directive, or meet the required generation need where the natural gas supply company or pipeline operator interrupts natural gas service. Natural gas service is interrupted within the meaning of this Paragraph when:

(i) A natural gas supply company has limited GenOn's consumption of natural gas due to high demand or inadequate supply;

(ii) A pipeline operator will not permit GenOn to draw natural gas in non-ratable quantities sufficient to meet the dispatch profile authorized by PJM;

(iii) GenOn must discontinue or curtail gas consumption to comply with a directive from a pipeline operator;

(iv) GenOn is unable to obtain delivery of natural gas because natural gas scheduling nominations have closed; or

(v) The gas spur and pressure reducing station that connects the Chalk Point Facility and the pipeline is out of service.

(c) GenOn shall utilize its dual-fuel firing capabilities to burn natural gas to the maximum extent consistent with the provisions of Subparagraphs (a) and (b), and safety and engineering constraints where an interruption of natural gas requires load shaping with oil.

(d) When natural gas has been interrupted, GenOn will attempt to obtain natural gas in quantities needed to meet its generation needs consistent with Subparagraph (a) at the next available nomination period.

4. Notwithstanding the provisions of Paragraph 3, GenOn shall contract for interruptible gas transportation to supply natural gas as the primary fuel for operation of Chalk Point Unit 3 and Unit 4, and shall burn natural gas for no less than 75.0 % of the annual heat input of the Units, calculated on a calendar yearly basis. Note: Unit 4 is also subject to New Source Performance Standard ("NSPS") set forth in 40 C.F.R. § 60.42, which establishes a particulate emissions limitation of 0.10 lbs/million MBtu for residual oil burning units (see condition 9).

5. If the Pipeline or the spur to the plant is damaged, destroyed, or is otherwise not available, the requirements of Paragraphs 3 and 4 shall not apply until the Pipeline or spur is repaired, rebuilt or otherwise made available. Further, if PJM issues a dispatch order for Chalk Point Units 3 and/or 4 to run under Emergency Procedures or Abnormal Bulk Electric System Operations, invoked, among other reasons, to maintain system reliability, stability, and/or avoid load shedding events, the requirements of Paragraphs 3 and 4 shall not apply for the duration of that dispatch order.

6. Notwithstanding Paragraphs 3 and 4 and COMAR 26.11.09.06B(6)(a), particulate emissions from GenOn Chalk Point Unit 3 and Unit 4 shall not exceed an emissions limitation of 0.020 grains per standard cubic foot of dry exhaust gas (gr/scfd). GenOn shall demonstrate compliance with this emissions limitation through the use of

stack testing in accordance with the provisions of Subparagraphs (a) through (e) of this Paragraph.

(a) GenOn shall perform an initial stack test on Unit 3 and Unit 4 in the 2011 calendar year.

(b) Beginning January 1, 2012, GenOn shall perform subsequent stack testing when either Unit 3 or Unit 4 exceeds 570,000 MBtu (approximately 100 hours of operation) derived from residual fuel oil during any calendar year (the "Trigger"). In the event that GenOn fails a particulate matter stack test under Paragraph 6, the Trigger shall be reduced to 475,000 MBtu for subsequent stack tests triggered by residual fuel oil usage. When GenOn has performed four (4) consecutive stack tests triggered by residual fuel oil usage which demonstrate compliance with the particulate matter standard in Paragraph 6, the Trigger shall be reset to 570,000 MBtu.

(c) Stack testing shall be performed on the corresponding stack serving the Unit meeting the Trigger and shall occur within the one-hundred-eighty (180) days from the date the Trigger is met.

(d) A stack test conducted in accordance with Paragraphs 6 or 7 shall be exempt from the requirements of Paragraph 3 and residual fuel oil burned during such test shall not count towards the Trigger.

(e) Stack testing on oil shall be conducted in accordance with EPA Method 5, under conditions representative of normal operation.

(f) GenOn shall submit stack test protocols for each of Units 3 and 4 to the Department for approval and notify the Department of the scheduled test date(s) at least thirty (30) days in advance of the test(s). GenOn shall submit the stack test results to the Department no later than forty-five (45) days following completion of the applicable test.

7. In the event GenOn fails the stack test for compliance under Paragraph 6 for either Unit 3 or Unit 4 (as applicable), GenOn shall perform a second stack test no later than sixty (60) days following receipt of the stack test results. GenOn shall notify the Department of the scheduled test date at least two weeks in advance of the test(s).

8. In the event GenOn fails to pass the second stack test, GenOn shall evaluate the reasons for the failure, and no later than ninety (90) days following receipt of the second stack test results, submit to the Department for approval, a plan to achieve compliance at the applicable unit through the installation of control technology, fuel switching, or other measures.

9. Stack testing on Unit 4, performed in 2010 in accordance with the requirements of EPA National Stack Testing Guidance dated April 27, 2009, satisfies GenOn's obligations to determine compliance with the New Source Performance Standard ("NSPS") set forth in 40 C.F.R. § 60.42, which establishes a particulate emissions limitation of 0.10 lbs/million MBtu for residual oil burning units.

10. The residual oil burned during a stack test required by Paragraphs 6 or 7 shall not count toward the annual heat input of Chalk Point Unit 3 and Unit 4, for purposes of calculating compliance with Paragraph 4, if the residual oil burned during the stack test:

(a) Accounts for 50.0 % or more of the residual oil burned at the corresponding Unit during the calendar year in which the stack test was conducted; and

(b) The required stack test causes GenOn to violate the requirements of Paragraph 4.

#### **B. Ozone Season Restrictions**

11. (a) Notwithstanding and subject to Paragraph 4 and Subparagraph (b) of this Paragraph, GenOn shall burn natural gas in Units 3 and 4 for 95 % of their heat input during the Ozone Season, which begins on May 1 and ends on September 30 of each year.

(b) In the event GenOn burns natural gas for less than 95 % of the Units' Ozone Season heat input, GenOn shall record such shortfall and:

(i) burn the equivalent amount of natural gas to make up such shortfall outside the Ozone Season; or

(ii) if GenOn is unable to make up the shortfall outside the Ozone Season before the installation of controls described in Paragraph 15, GenOn agrees to burn the equivalent amount of gas to make up such shortfall following installation of the control equipment referenced in Paragraph 15 of this Consent Decree.

(c) In no event shall the shortfall exceed 3.84 million MBtu derived from No. 6 fuel oil.

#### **C. Visible Emissions**

12. Upon entry of this Consent Decree GenOn shall:

(a) use natural gas for start-up of Units 3 and 4 when gas is available from the Pipeline under GenOn's interruptible gas service contract;

(b) twice per year, optimize the air-to-fuel ratio in the boilers for Units 3 and 4;

(c) continue use of a chemical additive with Number 6 fuel oil in Units 3 and 4 to reduce opacity; and

(d) wash down the boiler tubes in Units 3 and 4 during each PJM approved planned outage to reduce opacity during sootblowing.

13. GenOn shall continue to maintain and operate a human machine interface (HMI), or other similar technology on Units 3 and 4, which includes proactive alarming and feedback from opacity monitors to controls to manage the duration and frequency of soot blowing.

14. GenOn shall demonstrate that Units 3 and 4 comply with the visible emission standard set forth in COMAR 26.11.09.05A(2) through the submission of continuous opacity monitor system ("COMS") data, in accordance with Paragraph 22.

#### **D. Pollution Control Equipment**

15. Except for the requirements of Paragraph 11(b)(ii), the requirements of Paragraphs 11, 12, and 13 will terminate as to each Unit after GenOn installs and successfully tests, to the satisfaction of the Department, an electrostatic precipitator or other particulate pollution control equipment on such Unit that GenOn demonstrates, and the Department's satisfaction, is comparable to an electrostatic precipitator in its effectiveness. Prior to terminating the requirements of Paragraphs 11, 12, and 13, except for 11(b)(ii), the Department will secure written concurrence of its determination from the United States Environmental Protection Agency ("US EPA").

#### **E. Fuel Sulfur Content**

16. Unit 3 shall operate in compliance with the requirements of COMAR 26.11.09.07A(2), which establishes the standards for sulfur content in residual oil. In order to demonstrate compliance with this Paragraph, GenOn shall maintain appropriate documentation evidencing the fuel sulfur content from each delivery of residual fuel oil.

### **III. REPORTING AND RECORDKEEPING**

17. GenOn shall preserve for a minimum of five (5) years all fuel use data and other information relied upon to establish compliance with Paragraphs 3 and 4 of this Consent Decree for the time period beginning with entry of this Consent Decree through December 31, 2011. Such documentation shall include the documents described in Paragraph 19(a) and (b). GenOn shall provide the data and information to the Department within 30 days of receiving the Department's written request.



18. Beginning January 1, 2012, GenOn shall submit quarterly reports to the Department detailing the status of GenOn's compliance with Paragraphs 3 and 4 of this Consent Decree. Each quarterly report shall be submitted no later than 30 days following the end of the quarter, unless such date falls on a weekend or holiday, in which case the report shall be due on the next business day.

19. Each quarterly report submitted under Paragraph 18 shall document GenOn's attempts to procure and use natural gas to operate Chalk Point Unit 3 and Unit 4, and shall at a minimum, include:

(a) Documentation of the dates, hours, and quantity of fuel burned, and, for days where residual fuel oil is burned, the reason natural gas was not used;

(b) For days where any residual fuel oil is burned, the nominating documents and burn profiles submitted to the pipeline operator, and purchase orders between GenOn and any natural gas supplier. Equivalent documentation used in the normal and ordinary course of industry practice may be substituted for the specific documents described above. If the pipeline operator has notified GenOn in advance that GenOn will be required to take gas ratably and GenOn expects that it will not be dispatched for all 24 hours in that day (the "Notification"), GenOn will not submit a nominating document or burn profile to the pipeline operator nor enter into a purchase order with any natural gas supplier. Instead, GenOn will produce a memorandum or email memorializing the pipeline operator's Notification. In addition to providing that memorandum in its quarterly report, GenOn shall submit the memorandum to the Department within 11 business days of the Notification;

(c) A statement certifying the percent of the annual heat input of the Units derived from the burning of natural gas, as calculated from the beginning of the calendar year through the end of the applicable calendar quarter; and

(d) A compliance certification, signed by a responsible official under the penalty of perjury as to truth, accuracy and completeness of the report, indicating the compliance status with regard to each term of this Consent Order and whether that compliance was continuous or intermittent.

20. Beginning with the quarterly report for the quarter ending September 30 following entry of this Consent Decree, and each third-quarter report thereafter, GenOn shall submit to the Department documentation of its compliance with the requirements of Paragraph 11. Progress in addressing any shortfall shall be included in subsequent quarterly reports submitted pursuant to Paragraph 18.

21. GenOn shall submit semi-annual NSPS reports for Unit 4 that comply with the requirements of 40 CFR § 60.45(g).

22. GenOn shall submit quarterly opacity reports in accordance with COMAR 26.11.01.10D(2)(c). GenOn shall accurately calculate each Unit's operating time in accordance with the procedures in COMAR 26.11.01.10.

23. All reports and submissions required by this Consent Decree shall be mailed to:

Program Manager  
Air Quality Compliance Program  
Maryland Department of the Environment  
1800 Washington Boulevard  
Baltimore, Maryland 21230

24. Except for that information retention governed by Paragraph 17, GenOn shall preserve from the date of lodging of this Consent Decree, and for a minimum of five (5) years following the date of termination of this Consent Decree, all emissions data and other data relied upon to establish compliance with applicable regulatory standards as required by this Consent Decree.

~~**IV. STIPULATED PENALTIES**~~

25. Subject to the occurrence of a Force Majeure event as described in Paragraph 29, GenOn shall pay the following stipulated penalties upon demand by the Department.

Consent Decree Violations	Stipulated Penalty (per day per violation, unless otherwise noted)
(a) Failure to use natural gas for start-up of Units 3 and 4 pursuant to Paragraph 12(a)	\$5,000
(b) Failure to optimize air-to-fuel ratio pursuant to Paragraph 12(b)	\$5,000 per occurrence
(c) Failure to commence use of a chemical additive with No.6 fuel oil pursuant to Paragraph 12(c)	\$5,000
(d) Failure to wash down boiler tubes to reduce opacity pursuant to Paragraph 12(d)	\$5,000 per occurrence
(e) Failure to maintain and operate a human machine interface or similar technology pursuant to Paragraph 13	\$5,000
(f) Failure to perform stack testing pursuant to Paragraphs 6 and 7	\$5,000
(g) Failure to submit compliance plan, if required, pursuant to Paragraph 8	\$1,000

(h) Failure to provide documentation upon request, pursuant to Paragraph 17	\$1,000
(i) Failure to submit a quarterly report required by Paragraph 18	\$1,000
(j) Failure to submit the information required by Paragraph 19	\$5,000 per day for the first 30 days, \$10,000 per day thereafter
(k) Failure to submit an Ozone Season compliance report as required by Paragraph 20	\$1,000
(l) Failure to address natural gas shortfalls in a quarterly report as required by Paragraph 20	\$1,000 per quarter
(m) For each separate failure to preserve data pursuant to Paragraph 24	\$1,000 per occurrence
(n) Failure to provide the Department with documentation demonstrating compliance with Paragraph 32	\$1,000 one time only
(o) Failure to provide for enforcement of Consent Decree against transferee pursuant to Paragraph 33	\$10,000 one time only
(p) Failure to provide the Department with documentation demonstrating compliance with Paragraph 33	\$1,000 one time only

26. All stipulated penalties shall begin to accrue on the day after the performance is due, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of the Consent Decree.

27. All stipulated penalties shall be due and shall be payable in accordance with the instructions of Paragraph 28 unless GenOn contests that a violation has occurred. GenOn agrees not to contest the amount of the penalty but reserves the right to contest whether a violation has occurred. Neither demand for, nor payment of stipulated penalties under this Paragraph shall be construed as an election of remedy or other limitation on the Department's discretion to seek any form of injunctive relief available to it under the Environment Article for violations of this Consent Decree. Nothing in this Consent Decree shall be construed to limit the Department's discretion to seek, in lieu of stipulated penalties, civil or administrative penalties and any form of injunctive relief available to it under the Environment Article for violations of this Consent Decree. The absence of stipulated penalties for a violation of this Consent Decree shall not be construed to limit in any way the Department's discretion to seek civil or administrative penalties, any form of injunctive relief, or any other right, remedy or sanctions available to it for violations of the Consent Decree, or for any other violation of State law not expressly addressed in the Complaint in this action.

~~28. All penalties owed to MDE under this Section shall be due within forty-five (45) days following receipt of written demand by the Department. Such notification shall describe the noncompliance and shall indicate the amount of penalties due. Penalties shall be paid by check made payable to "Maryland Department of the Environment/Clean Air Fund" and sent to c/o The Maryland Department of the Environment, P.O. Box 2037, Baltimore, MD 21203-2037, and shall reference the caption of this Consent Decree.~~

#### V. FORCE MAJEURE

29. GenOn shall comply with the requirements of this Consent Decree unless performance is prevented by events which constitute a Force Majeure, including an Act of God, fire, flood, hurricane, strike, riot, catastrophe, or other cause beyond the control of GenOn (hereinafter, a "Force Majeure Event"). Force Majeure Events do not include (1) difficulties caused by reasonably foreseeable weather conditions which could have been overcome by reasonable efforts; (2) increased cost of performance; (3) natural market fluctuations; or (4) changed economic circumstances.

30. The burden of establishing a Force Majeure Event shall rest with GenOn. If GenOn establishes to the Department's satisfaction that it has been delayed in the implementation of any obligation under this Consent Decree for such a period of time as allows compliance to be achieved as expeditiously as practicable after the delay excused pursuant to this Paragraph. Any extension granted shall in no event exceed the period of delay caused by the Force Majeure Event. The Department shall seek written concurrence from the US EPA prior to granting any extension.

#### VI. RETENTION OF JURISDICTION

31. This Court shall retain jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of the Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, modification, or adjudication of disputes. During the term of this Consent Decree, any Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree. Any changes to the Maryland State Implementation Plan ("SIP") - approved conditions of this Consent Decree shall be submitted to the US EPA as a SIP revision.

#### VII. SALES OR TRANSFERS OF OWNERSHIP INTERESTS

32. The provisions of this Consent Decree shall apply and be binding on GenOn and its successors and assigns, including any transferee of any legal or equitable interest in the Chalk Point Facility, except for a lender or lenders taking a security interest in the Chalk Point Facility or Chalk Point Units 3 or 4, provided such lender or lenders exercise no operational or other control over Units 3 or 4. Prior to the transfer of such legal or equitable interest in GenOn Chalk Point Units 3 or 4, GenOn shall provide a copy of this

Consent Decree to the prospective successor-in-interest. GenOn shall provide the Department with documentation satisfactory to the Department demonstrating its compliance with the provisions of this Paragraph upon consummation of the transaction.

33. Any agreement for the transfer of Chalk Point Units 3 or 4 shall provide that the transferee shall comply fully with the terms of this Consent Decree and that the Department may enforce the terms of this Consent Decree against the transferee. GenOn agrees that within 20 business days following the consummation of any agreement for the transfer of Chalk Point Units 3 or 4, GenOn will provide the Department with documentation satisfactory to the Department demonstrating its compliance with the provisions of this Paragraph upon consummation of the transaction.

#### VIII. EFFECT OF SETTLEMENT

34. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall be construed to alter GenOn's obligation to comply with all applicable federal, state, and local laws and regulations, permits, and orders.

~~35. Nothing in this Consent Decree shall be construed to limit or prevent the Department from pursuing any remedies, including civil or administrative penalties, injunctive relief, or sanctions, available to the State pursuant to Title 2, Subtitle 6 of the Environment Article for violations of this Consent Decree or for any other violations of State law, regulations, permits, or orders that are not expressly addressed in this Consent Decree.~~

~~36. Nothing in this Consent Decree shall be construed to prevent the Department from taking direct action or ordering any additional corrective or other action it deems necessary to prevent or abate any threat to public health, welfare or the environment to the extent otherwise authorized by State law.~~

~~37. Nothing in this Consent Decree shall be construed as an admission of liability by GenOn.~~

~~38. This Consent Decree constitutes the entire agreement and settlement between the Parties.~~

~~39. This Consent Decree shall not be construed to create any rights in persons other than the Department and GenOn.~~

#### IX. GENERAL PROVISIONS

40. Performance standards, emissions limits, and other quantitative standards set by or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed.

41. The Department and GenOn agree that the Department will submit this Consent Decree to the US EPA for incorporation into the SIP. GenOn agrees that it will not object to a revision of the SIP which incorporates provisions of this Consent Decree.

42. The provisions of this Consent Decree are not severable and, should any provision be declared by a court of law to be invalid or unenforceable, the remainder of this Consent Decree shall be invalid. In the event of such occurrence, the 2006 Consent Decree shall be revived and reinstated in its entirety, and the Department shall seek a SIP revision to remove any SIP - approved provision of this 2011 Consent Decree and incorporate any applicable provision of the 2006 Consent Decree. GenOn agrees that it will not object to a SIP revision in accordance with the requirements of this Paragraph.

43. This Consent Decree may not be modified except by the written consent of all Parties. Where modification constitutes a material change to any term of this Consent Decree, it shall be effective only upon approval by the Court. Any changes to the SIP - approved provisions of this Consent Decree shall be submitted to the US EPA as a SIP revision.

44. The Consent Decree shall be construed in accordance with Maryland law.

45. All continuing obligations under this Consent Decree shall be incorporated into GenOn Chalk Point's Title V operating permit. GenOn waives its right to contest such incorporation into the Title V operating permit.

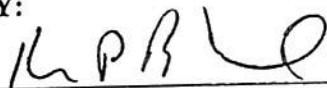
46. The effective date of this Consent Decree shall be the date upon which the Consent Decree is entered by the Court.

~~47. In consideration of GenOn's undertakings in this Consent Decree, the Department releases GenOn and its affiliates and their predecessors from all civil liability arising from the violations alleged in the Complaint filed in this case through the date of the lodging of the Consent Decree.~~

IT IS SO AGREED AND CONSENTED TO:

GENON CHALK POINT, LLC

BY:



KEVIN A. BOUDREAUX  
Printed Name

VP ASSET MANAGEMENT, Eastern PSM

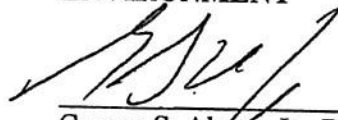
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Date

Signature Page for Consent Decree in:

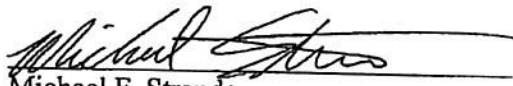
*State of Maryland, Department of the Environment v. GenOn Chalk Point, LLC*

STATE OF MARYLAND,  
DEPARTMENT OF THE  
ENVIRONMENT

2/2/11  
Date

  
George S. Aburn, Jr., Director  
Air and Radiation Management  
Administration


Approved as to form and legal sufficiency  
this 11<sup>th</sup> day of February, 2011.

  
Michael F. Strande  
Assistant Attorney General

**CASE CLOSED  
STATISTICALLY**

IT IS SO ORDERED:

3-10-11  
Date

  
Judge  
Circuit Court for Prince George's County





SECRETARIAL ORDER  
(By Consent)

The Potomac Electric Power Company ("Pepco" or the "Company") and the Department of Health and Mental Hygiene (the "Department") hereby agree to the following Findings of Fact and Order;

FINDINGS OF FACT

1. On June 29, 1971, the Company was issued by the Maryland Public Service Commission (the "PSC") a Certificate of Public Convenience and Necessity (Order No. 59383 in PSC Case No. 6409) to construct a third electric generating unit at its Chalk Point Station, Prince George's County, Maryland. This unit (Chalk Point Unit #3) was constructed as a 630 megawatt oil-fired unit and came into operation in 1975.

2. The PSC Certificate specifies in Paragraph (2)(d) that "the 630 megawatt unit shall meet all requirements of air quality regulations 43PO5, Area IV regulations, as related to control of particulate matter discharges, visible emissions, and use of dust collectors". As a result of changes in the numbering system for codifying Maryland regulations, and as a result of revisions by the Department to the air quality regulations, the particulate matter, visible emissions and dust collector regulations presently require:

Particulate Matter: COMAR 10.18.05.03B(2)

"Residual Fuel Oil Burning Equipment.  
A person may not cause or permit particulate matter caused by the combustion of residual fuel oil to be discharged into the atmosphere in excess of the amount shown and in accordance with the effective date set forth in Table 1."

(Table 1 specifies that the particulate standard for Chalk Point Unit #3 is either 0.01 gr/SCFD or 0.02 gr/SCFD depending on whether the unit is

strictive requirement. Resolution of this issue is unnecessary, however, at this time).

Visible Emissions: COMAR 10.18.05.02A

"Visible Emissions. A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which are visible to human observer."

(Various exceptions are set forth in Part B of the regulations, but are not relevant to this matter.)

Dust Collectors: COMAR 10.18.05.03B(1)(a)

(This regulation also refers to Table 1 and, therefore, is redundant with COMAR 10.18.05.03B(2)).

The above requirements have been approved as Federal law by the U. S. Environmental Protection Agency ("EPA") as part of the Maryland State Implementation Plan (SIP).

3. Unit #3 was constructed with a wet scrubber to control particulate matter. Stack tests conducted during 1976 and 1977 indicated an average particulate emission rate of .055 gr./SCFD. Based on these tests, on August 29, 1977, the Department issued a Notice of Violation and Order to Appear alleging that Unit #3 was in violation of Regulation 10.03.39.03B(2) (now COMAR 10.18.05.03B(2)). In negotiations with the Company, it was agreed to conduct ammonia injection experiments on the wet scrubber to attempt to improve its performance. These experiments were not successful. Moreover, it has been concluded that the wet scrubber failed to achieve reductions in particulate emissions as compared to a well-operated and maintained unit without the scrubber.

4. In the 1978 Session of the Maryland General Assembly, certain amendments to the Maryland Air Quality Act (known as House Bill 1164) were approved. These amendments became effective July 1, 1978, and are found

require the Department to reevaluate its emissions limitations and make certain relaxations where this is consistent with Federal law and will provide for growth within the State.

5. Consistent with House Bill 1164, the Department, on September 1, 1978, issued Pepco its annual operating permit for Unit #3 subject to the conditions that the Company conduct certain studies to determine whether the Unit could comply with a particulate emissions standard equivalent to the Federal New Source Performance Standards (NSPS) for new large oil-fired boilers (0.10 lb/M BTU heat input (approximately .05 gr/SCFD)), and what the effect of those limitations would be on attainment and maintenance of Federal ambient air quality standards in the vicinity of the Chalk Point Station. The Company has complied with the requirements of the September 1978 permit by conducting stack tests on emissions from the unit with and without the scrubber in service. These tests showed an average emission rate without the scrubber of 0.044 gr/SCFD (0.088 lb/M BTU), and this demonstrates the ability of the Unit to comply with a 0.05 gr/SCFD requirement without the scrubber. The tests also showed an average emission rate with the scrubber in service of 0.073 gr/SCFD (0.145 lb/M BTU), thus demonstrating that particulate emissions are actually increased by the scrubber. The Company has also demonstrated that attainment and maintenance of the Federal ambient air quality standards in the vicinity of the Chalk Point Station will not be jeopardized if the emission standard for Unit #3 is equivalent to the Federal NSPS. Therefore, the Department has concluded that the emission standard applicable to Unit #3 should be relaxed to 0.05 gr/SCFD.

Pursuant to Article 43, § 698(b) and other authority vested in the Department, the following Order is agreed to:

ORDER

1. Effective upon EPA approval of a revision to the Maryland State Implementation Plan (SIP), the particulate and visible emission limitations

emission limitation of 20% opacity.

2. Nothing in this Order shall alter any requirements applicable to Chalk Point Unit #3 except for particulate matter, visible emissions, and dust collectors.

3. The Department will hold a public hearing on this Order as a proposed revision to the Maryland SIP. Following this hearing and any changes to this Order that may result from the hearing, the Order will be submitted to EPA as a revision to the SIP.

4. This Order may be enforced by the Department in any manner provided by law, including:

a. An action pursuant to Article 43, §703, for injunctive relief and/or civil penalty. Each day of violation of the Order shall constitute a separate violation as specified in §703(b).

b. The issuance of a notice of violation and/or corrective order under Article 43, §698.

5. In the event that this Order is voided or otherwise held unenforceable by any court of law, COMAR 10.18.05.03B(2) (particulate matter), 10.18.05.02A (visible emissions) and 10.18.05.03B(1)(a) (dust collectors) shall be fully applicable to Chalk Point Unit #3.

7/19/79  
Date

Charles R. Buck  
Charles R. Buck, Jr., Sc.D.  
Secretary of Health and Mental Hygiene

The above Order is agreed to and the within terms and conditions consented to.

POTOMAC ELECTRIC POWER COMPANY

May 7, 1979.  
Date

Alan G. Kirk II  
By: Alan G. Kirk II

Title: Vice President & General Counsel

DEPARTMENT OF HEALTH AND MENTAL HYGIENE  
this 9<sup>th</sup> day of May 19 79  
Ann Marie DeBiase  
ANN MARIE DEBIASE  
Assistant Attorney General

Implementation Plan Revision  
Summary  
Potomac Electric Power Company  
Chalk Point Station

The Potomac Electric Power Company, Chalk Point Station, located in Prince George's County, 35 miles southeast of Washington, D.C., consists of three electric generating units referred to as Units Nos. 1, 2, and 3. Units Nos. 1 and 2 are coal fired and Unit No. 3 is oil fired. The purpose of this plan revision is to allow use of a fuel in these units having a sulfur content above the present 1% requirement and to set forth a schedule to bring the Nos. 1 and 2 coal-fired units into compliance with particulate requirements.

The Company, through its consultant, Tera Corporation, provided a diffusion modeling study for the Chalk Point plant which was reviewed by the Department and forwarded to EPA for a preliminary assessment. This study provides the necessary assurance that Maryland's Implementation Plan could be revised, for this facility, without interfering with the attainment and maintenance of applicable ambient air quality standards in the area affected by the plant's emissions. The result of the analysis shows that no violation of the applicable standards for  $SO_2$  and particulates should occur while operating at an emission limitation of 3.5 lbs/million Btu for Nos. 1 and 2 units and a maximum sulfur content of 2% for the oil used in No. 3 unit.

This plan revision, with respect to  $SO_2$ , is designed such that following a 1979 review of actual monitored data and predicted values, a five-year incremental review would be conducted to determine if violation of standards has or will occur. This revision would remain unaltered providing the review shows no violation of standards. The revision also sets forth a schedule whereby the Company will meet the requirements for particulates of 0.03 gr/scfd by 1981 by constructing electrostatic precipitators. Included in this schedule is an interim requirement for particulates which is in an attachment to the Consent Order.

At the present time, the Company is in compliance with the enclosed Consent Order, and it is the Department's opinion that if this revision is approved, there would be no serious affect on air quality that would give rise to violations of the primary and secondary National Ambient Air Quality Standards.

vs.  
POTOMAC ELECTRIC POWER COMPANY  
Defendant

\*  
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\*  
\*  
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MONTGOMERY COUNTY  
No. 49352 - Equity

\*\*\*\*\*

Amended Consent Order

On May 30, 1974, the Maryland State Department of Health and Mental Hygiene (the Department) filed suit against the Potomac Electric Power Company (PEPCO or the Company), pursuant to Article 43, Section 703 of the Annotated Code of Maryland. The Department contended that the Dickerson and Chalk Point generating stations of PEPCO were in violation of an administrative order of the Secretary of Health and Mental Hygiene dated September 21, 1971, and that the Dickerson, Chalk Point and Morgantown stations of PEPCO violated air quality control regulations of the Department which generally prohibit the discharge of visible emissions into the atmosphere. PEPCO demurred to the Department's Bill of Complaint.

On June 7, 1976, this Court approved a Consent Order which the parties agreed and stipulated would provide full settlement of this proceeding if accepted by the Federal Environmental Protection Agency (EPA) pursuant to Section 110 of the Federal Clean Air Act. The Consent Order was never formally submitted to EPA, however, and the parties now agree that an Amended Consent Order regarding the Chalk Point station should partially replace the Order of June 7, 1976. A similar Amended Consent Order is presently being prepared regarding the Dickerson station.

NOW, THEREFORE, pursuant to Article 43, Section 703 of the Annotated Code of Maryland, upon the stipulations and consent of the parties that this Amended Consent Order, with respect to the Chalk Point station as hereinafter set forth, will become effective in lieu of the Consent Order dated June 7, 1976, it is this 27<sup>th</sup> day of February, 1978, by the Circuit Court for Montgomery County, ORDERED:

FILED  
1-27-1978

of the State of Maryland, except as hereinafter specified.

## II. Chalk Point Particulate Control Program

A. PEPCO has completed upgrading of the existing particulate control equipment on Units #1 and #2. Within thirty (30) days after start-up of Units #1 and #2, a stack test shall be performed on each unit and a report submitted to the Department. During the term of this program, the Company shall comply with the requirements of the curve in Attachment 1 which sets forth particulate requirements for existing fuel burning equipment based on equipment capacity. If, following the stack test, it is necessary to operate a unit which does not comply with the interim requirements set forth in the curve, that unit shall be operated at a load reduced by an amount which is linearly proportional to the amount by which the stack test result exceeded the interim requirement. The Company thereafter may increase the load of a unit only for the purposes of testing the unit to determine compliance at an elevated load. In such cases, the Company will notify the Department not later than 48 hours before conducting such tests. Upon determining the maximum load at which each unit may operate in compliance with the curve, PEPCO shall thereafter comply fully and continuously with the requirements of the curve. If at any time compliance with the curve is achieved at an elevated load, the Company may operate at that load.

B. By letter, A. Kirk to G. P. Ferreri, dated January 4, 1978, the Company has elected to install cold electrostatic precipitators to assure compliance with Regulation 10.03.39.03B. Construction of the precipitators shall proceed in accordance with the following schedule:

1. Not later than April 30, 1978, PEPCO shall award contracts for the engineering and construction services necessary for the project.
2. Not later than June 30, 1978, PEPCO shall award the contract for the cold electrostatic precipitators and begin site preparation.
3. Not later than May 31, 1979, PEPCO shall begin construction.



full and continuous compliance with Regulation 10.03.39.03B by not later than December 31, 1981.

### III. Chalk Point Visible Emissions

Until December 31, 1981, the visible emissions from Units #1 and #2 may not be darker in shade or appearance than that designated as No. 2 on the Ringelmann Smoke Chart or exceed an opacity greater than forty (40) percent. After December 31, 1981, the visible emissions may not exceed the limitations specified in Regulation 10.03.39.02A.

### IV. Chalk Point Fuel Ash Content

Until December 31, 1981, the ash content of the coal used as fuel in Units #1 and #2 shall not exceed an average of fifteen (15) percent for any month, based on a minimum of four (4) weekly composite samples collected and tested by the Company. The samples shall be representative of the coal burned in each unit. The test results of this sampling shall be reported to the Department upon request and in accordance with the requirements of Part V.

### V. Reporting (Particulate Control Program)

Semi-annual progress reports shall be submitted to the Department by July 10 and January 10 of each year until compliance is achieved.

### VI. Chalk Point Sulfur Oxides Control Program

PEPCO shall reduce sulfur oxide emissions from Units #1, #2 and #3 by effecting the following action:

A. Sulfur oxide emissions from Units #1 and #2 may not exceed 3.5 pounds per million Btu input averaged over a two (2)-hour period as determined by continuous in-stack measurement. In-stack monitoring equipment shall be installed and operational for each unit by March 1, 1978. Unit #3 shall burn residual oil with a sulfur content by weight not in excess of two (2) percent.

B. On or before July 1, 1979, PEPCO shall report to the Department emissions and ambient air quality levels in the vicinity of the plant for the period commencing with the date of this Order to July 1, 1979, and shall pro-

air quality standard for sulfur oxides or other compounds of sulfur is or will be exceeded at any time through the year 1985, the Company shall proceed to purchase fuel which meets the requirements of Regulation 10.03.39.04B in accordance with the following schedule:

October 1, 1979: PEPCO shall be informed by the Department, in writing, that it is necessary for the Company to secure a complying fuel. PEPCO shall immediately commence to contact fuel suppliers regarding the availability of complying fuel.

January 1, 1980: PEPCO shall make a decision as to the selection of a complying fuel and the suppliers of such fuel. The Company shall commence equipment modifications which may become necessary to burn complying fuel.

May 1, 1980: PEPCO shall complete equipment modifications to burn complying fuel. PEPCO shall provide the Department with all pertinent data relative to the purchase and delivery of the complying fuel.

November 1, 1980: PEPCO shall achieve full compliance with Regulation 10.03.39.04B.

D. A review, similar to that described in Paragraph VIC, above, shall be repeated by both parties in five (5)-year intervals commencing with the year 1984 and continuing thereafter. If at any time the Department determines that any applicable ambient air quality standard for sulfur oxides or other compounds of sulfur will be exceeded, PEPCO shall submit a timetable for purchase and use of fuel in compliance with Regulation 10.03.39.04B similar to the schedule in Paragraph VI.C, above.

#### VII. Civil Penalty and Effective Date

A. The Company shall pay a civil penalty to the State of Maryland in the amount of Eighteen Thousand Seven Hundred Fifty Dollars (\$18,750.00). Payment of the civil penalty is not to be construed as an admission of liability for the facts alleged for purposes of this action or any other action based on the same or similar set of facts. Payment of the civil penalty shall be made not later than thirty (30) days after this Amended Consent Order is ap-

Company involving matters covered by this Order so long as the Company is acting in compliance with the terms of this Order. Upon indication by letter from EPA to the Department that the SO<sub>2</sub> portion of the Order (Part VI) is approvable, the Company will proceed in accordance with the requirements of this Order.

*[Handwritten signature]*  
\_\_\_\_\_  
Judge, Circuit Court for  
Montgomery County

CONSENT

**STANLEY B. FROSH**

The Plaintiff and the Defendant, by the signatures of their attorneys hereafter, indicate their consent to the passage of this Order.

DEPARTMENT OF HEALTH AND MENTAL  
HYGIENE

POTOMAC ELECTRIC POWER COMPANY

By: *Jeffrey E. Howard*  
Jeffrey E. Howard, Assistant  
Attorney General

By: *Alan G. Kirk, II*  
Alan G. Kirk, II, Vice President  
and General Counsel

*Francis B. Burch*  
Francis B. Burch, Attorney General

*Robert A. Shelton*  
Robert A. Shelton, Attorney of Record

APPROVED:

*Neil Solomon*  
Neil Solomon, M. D., Ph.D.  
Secretary of Health and Mental Hygiene

10:01... 1-10-1974

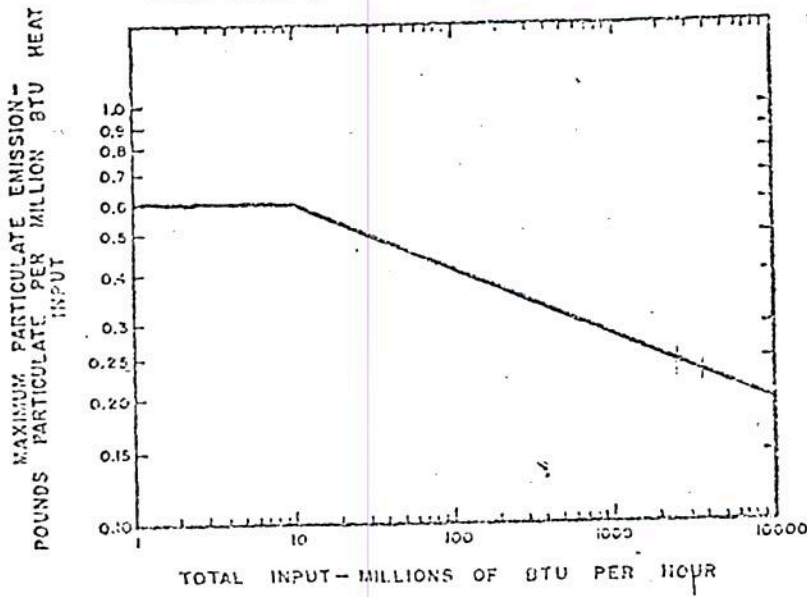
Defendant

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ATTACHMENT 1

AIR QUALITY

Figure 1  
Maximum Emission of Particulate Matter  
from Existing Fuel Burning Installations



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