



Department of Energy
Washington, DC 20585

District of Columbia Public Service Commission)

Docket No. EO-05-01

Order No. 202-07-2

I. Background

On December 20, 2005, in Order No. 202-05-3, I determined that an emergency existed in the Central District of Columbia area due to a shortage of electric energy, a shortage of facilities for the generation of electric energy, a shortage of facilities for the transmission of electric energy and other causes, and that issuance of an order would serve to alleviate the emergency and serve the public interest. Therefore, pursuant to the authority vested in the Secretary of Energy by section 202(c) of the Federal Power Act (FPA), 16 U.S.C. 824a(c), and section 301(b) of the Department of Energy (DOE) Organization Act, 42 U.S.C. 7151(b), and for the reasons set forth in Order No. 202-05-3, I ordered Mirant Corporation and its wholly owned subsidiary, Mirant Potomac River, LLC (Mirant), to generate electricity at its Potomac River Generating Station (the Plant) in Alexandria, Virginia, pursuant to the terms of the order.

In Order No. 202-05-3, I noted that the Plant is one of only three sources of electricity that serve the central business district of Washington, D.C., many federal institutions, and the Georgetown area, as well as other portions of Northwest D.C., and the District of Columbia Water and Sewer Authority's Blue Plains Advanced Water Treatment Plant (Central D.C. area). The order further noted that:

PEPCO has applied to the [District of Columbia Public Service Commission] to construct two new 230 kV lines that would supply electricity to the Central D.C. area. In the same application, PEPCO has proposed building two new 69kV lines to supply the Blue Plains wastewater treatment plant. PEPCO proposes having the two 69 kV lines installed by the summer 2006 peak season, and the two 230 kV lines installed in 18 to 24 months. The two existing 230 kV lines that supply the Central D.C. area would need to be temporarily taken out of service sequentially in order to connect the new lines to the Central D.C. area. Once completed, these lines apparently would provide a high level of electric reliability in the Central D.C. area, even in the absence of production from the Plant.

The two 69 kV lines to the Blue Plains wastewater treatment plant have been completed and the two new 230 kV lines have been approved by the relevant regulatory authorities and are scheduled to be completed and in operation by June of this year.



On January 18, 2006, DOE issued a notice of the emergency order (published in the Federal Register on January 20, 2006, 71 FR 3279) in which it committed to preparing a Special Environmental Analysis (SEA) pursuant to the Council on Environmental Quality's Regulations Implementing the Procedural Requirements of the National Environmental Policy Act of 1969 (NEPA), 40 C.F.R. 1506.11. The SEA would examine the potential impacts of the operation of the Plant pursuant to Order No. 202-05-3. DOE stated it would make the SEA publicly available and would consider information contained in the SEA, and public comments on the SEA, in any future decision making regarding the operation of the Plant. The SEA was issued on November 22, 2006, with comments due by January 8, 2007.

Order No. 202-05-3's original expiration date was October 1, 2006. Because the reliability problems identified in Order No. 202-05-3 continued in the absence of the completion of the two new 230 kV lines, and because the SEA had not yet been completed, I issued two short-term extensions of the emergency order pending my consideration of the SEA and review of comments thereon. The first extension, Order No. 202-06-2, was issued on September 28, 2006 with an expiration date of December 1, 2006. The second extension, Order No. 202-07-1, was issued on November 22, 2006, and expires February 1, 2007.

Order No. 202-05-3 directed Mirant to operate the Plant during any period in which one or both of the 230 kV lines serving the Central D.C. area are out of service (Line Outage Situations), whether planned or unplanned, at the level needed (up to full capacity) to meet the electricity demand in the Central D.C. area as specified by PJM Interconnection, LLC (PJM). At all other times (Non-Line Outage Situations), Mirant was ordered to keep as many generation units at the Plant operational, and take measures to reduce the start-up time of units not in operation, as feasible without causing or significantly contributing to any exceedances of National Ambient Air Quality Standards (NAAQS).

Order No. 202-05-3 required Mirant to submit a plan detailing the steps it would take to comply with the order. On December 30, 2006, Mirant submitted a compliance plan to DOE which contained two operating options, Options A and B. In a letter order dated January 4, 2006, DOE instructed Mirant to implement Option A on an interim basis but noted that the two options proposed by Mirant were not the only possible compliance options that could be developed.

On June 1, 2006, the United States Environmental Protection Agency (EPA) issued an Administrative Compliance Order (ACO) pursuant to Section 113(a)(1) of the Clean Air Act (the "Act"), 42 U.S.C. § 7413(a)(1). The ACO provided, in part, for Mirant to operate the Plant, during Non-Line Outage Situations, in a manner that does not cause or contribute to modeled NAAQS exceedances by using "daily predictive modeling." The ACO also required Mirant to conduct a Model Evaluation Study. In a June 2, 2006, letter order to Mirant, DOE stated:

DOE has determined that the operation of the Plant under Option A pursuant to DOE's January 4, 2006 instructions does not provide an adequate level of electric reliability to the Central D.C. area under current circumstances. Operation pursuant to the ACO, in particular under the Model Evaluation Study, is necessary in order for Mirant to comply with the Secretary's December 20, 2005 Order, and to assure an adequate level of electric reliability under the circumstances. The ability of the Plant to be prepared to rapidly respond to Line Outage Situations will remain critical to reliability in the Central D.C. area until such time as Potomac Electric Power Company's two new 230 kV transmission lines are completed, which is anticipated to be in June 2007.

On November 21, 2006, the District of Columbia Public Service Commission (DCPSC) filed a request for a further extension of Order No. 202-05-3 until PEPCO's transmission upgrades "become operational, or such other date when the electric power supply situation in the Nation's Capital is deemed to be secure." DCPSC amended its November 21, 2006, request for an extension of Order No. 202-05-3 in the filing it made in response to the SEA.

II. The SEA and Response to Comments

The SEA covers a period of 24 months beginning in December 2005, and assesses impacts resulting from the DOE Orders and from potential future alternative actions DOE could take in this emergency matter. Because operation at the Plant has changed over time, pursuant to the DOE Orders and the ACO, the SEA examines several different operating modes of the Plant. As a result, the SEA does not make any single conclusion, but instead assesses impacts for different time periods and different conditions. The SEA assesses impacts associated with air emissions, health, water quality, ecological resources, waste management, transportation, and environmental justice.

The SEA discusses potential mitigation measures that DOE could consider imposing if the emergency order were extended or renewed. They include: (1) requiring Mirant to improve Plant operations and pollution control measures, (2) requiring Mirant to reduce exposure to pollutants to workers and nearby residents, (3) managing the demand for electricity in the Central D.C. area, (4) using alternative sources of generating electricity, and (5) expediting the installation of additional transmission lines.

DOE received comments on the SEA from the Potomac Electric Power Company (PEPCO), the DCPSC, the City of Alexandria, Virginia, the Institute of Public Representation (IPR) (on behalf of the Potomac Riverkeepers, Inc., the Patuxent Riverkeeper, and the Anacostia Riverkeeper at Earth Conservation Corps), the Virginia Chapter of the Sierra Club, Julie Crenshaw Van Fleet, and Elizabeth C. Chimento.

These commenters expressed concern about the following broad categories of issues:

- The accuracy and appropriateness of DOE's assumptions and methodology in assessing impacts in the SEA. Specifically, several commenters claim that the SEA underestimates emissions of sulfur dioxide (SO₂) and particulate matter with a diameter of 10 micrometers or less (PM₁₀), fails to independently assess impacts, differs from findings of a report performed on behalf of the City of Alexandria by AERO Engineering, and uses a spatial distribution for modeling that is too wide.
- Inadequate assessment of impacts of fine particulate matter (PM_{2.5}) on human health, including assertions that the SEA used inappropriate assumptions to analyze PM_{2.5}, and that daily predictive modeling under the ACO should include PM_{2.5}.
- Inadequate assessment of hazardous air pollutants (HAPs), bacteria in the Plant's effluent discharge into the Potomac River, and health effects of trona use.
- Questions concerning the need for the Plant to operate to achieve full power in Line Outage situations, and the need for the Order after the new 230 kV lines are operational.
- Further consideration of mitigation measures.

I have considered these comments. However, I continue to believe that DOE has used reasonable assumptions, methodology, and data to assess impacts from the Plant's operation. I recognize that the assumptions and data used for modeling in the SEA are not the only way to assess impacts from Plant operations. In the SEA, DOE discussed at length the uncertainties associated with respect to impacts of the Plant's operation, and the reasons for the approach used in the SEA. While commenters suggest that DOE should have used different assumptions, methodologies, and data in assessing impacts of the Plant's operations, the fact is, each of the commenters' suggestions comes with its own set of uncertainties. The existence of multiple approaches to assessing impacts from the Plant does not mean that DOE's approach is inaccurate or inappropriate, and the commenters have not demonstrated that their suggested alternative approaches are superior to the approach taken in the SEA.

The nature of an impact analysis for NEPA purposes is to provide Federal decision makers with an overall understanding of the range of impacts of their actions and to identify appropriate means to mitigate adverse impacts. A precise empirical analysis of the effects of the DOE action would require consideration of a myriad of factors and a highly complex, speculative analysis of the interaction among them. Such a detailed calculation may be appropriate in other contexts but is outside the scope of an impact analysis.

DOE has carefully considered the comments on the SEA and discussed those comments with EPA. Based on DOE's own review of the comments, and the discussions with EPA, I believe that DOE has used a reasonable set of assumptions, sound methodology, and an

appropriate level of detail in preparing the SEA in the context of the existing situation, and in light of the purpose of NEPA.

III. Decision

A. The Existence of an Emergency

The reliability situation in the Central D.C. area has improved somewhat since 2005 when DOE reviewed DCPSC's request for an emergency order under section 202(c) of the FPA. As outlined in the DCPSC's January 8, 2007, filing on the SEA, a pilot demand response program is underway, and further initiatives are being considered. In addition, the Blue Plains water treatment plant now has an additional source of electricity. However, the fundamental problem identified in Order No. 202-05-3 remains the same: the Plant is one of only three electric generation sources serving the Central D.C. area. As was stated in the December 20, 2005 order:

More specifically, if the Mirant plant is not available to generate electricity and one of the two transmission lines serving the Central D.C. area goes out of service, the Central D.C. area would be served by only one transmission line. Should that remaining line fail for any reason, a blackout would occur in the Central D.C. area, potentially for an extended period of time.

Therefore, for the reasons detailed at length in Order No. 202-05-3, and reiterated in Order Nos. 202-06-2 and 202-07-1, I find that an emergency continues to exist due to a shortage of electric energy, a shortage of facilities for the generation of electric energy, a shortage of facilities for the transmission of electric energy and other causes, and that issuance of this order would serve to alleviate the emergency and serve the public interest. As a result, operation of the Plant will continue to be required under FPA section 202(c) to address this emergency, also for the same reasons detailed in the earlier Orders. I now must determine whether any mitigation measures are appropriate, in light of the SEA and public comments on the SEA.

B. Mitigation Measures

The first potential mitigation measure discussed in the SEA is to require Mirant to improve Plant operations and pollution control measures. Order No. 202-05-3 required Mirant, during Line Outage Situations to "utilize pollution control equipment and measures to the maximum extent possible to minimize the magnitude and duration of any exceedances of the NAAQS." Since the issuance of Order No. 202-05-3, Mirant has worked with DOE and EPA to maximize the readiness of the Plant to respond to a Line Outage Situation while avoiding NAAQS exceedances. The ACO contains detailed provisions designed to protect air quality. DOE believes that imposing additional pollution mitigation measures, such as increasing use or storage of trona, is not necessary. Should the ACO expire before expiration of this Order, DOE will consider requiring Mirant to continue to comply with the provisions of the ACO to ensure maximum environmental protection through the term of this Order.

The second potential mitigation measure discussed in the SEA is to require Mirant to reduce exposure to pollutants to workers and nearby residents. This includes the idea that DOE consult with EPA about the need for PM monitoring. DOE understands from EPA that both EPA and the Virginia Department of Environmental Quality (DEQ) are working on the issue of particulate matter emissions from the Plant. This potential mitigation measure also includes the proposal that DOE post on its website dedicated to this proceeding (<http://www.oe.energy.gov/permitting/372.htm>) Mirant's monthly report to EPA, as required by the ACO. DOE has posted the November and December, 2006, monthly reports on the DOE website and will continue to post Mirant's monthly reports to EPA.

The SEA also discusses expanding the list of persons that PEPCO must inform of Line Outage Situations. Several of the commenters on the SEA also request better notification. Order No. 202-05-3 required PEPCO to give advance notice of planned outages, and notice of unplanned outages as soon as possible, to Mirant, DOE, EPA, PJM, the Federal Energy Regulatory Commission (FERC), and DEQ. In addition, PEPCO's notices have been posted on DOE's website dedicated to this proceeding. DOE required this so that all interested governmental agencies and other persons would be fully apprised of Line Outage Situations. However, to address the concerns raised by the commenters, DOE will order PEPCO to notify the originally listed persons, as well as the Virginia Attorney General's Office, and the City of Alexandria's attorneys, of planned outages and of unplanned line outages. DOE believes this will provide sufficient notification to interested persons and will not require other means, such as newspaper, e-mail distribution, sirens, or radio/television announcements of Line Outage Situations.

This potential mitigation measure also discussed the possible requirement that when the Plant is operated at levels which show modeled NAAQS exceedances, Mirant pay the reasonable expenses of relocating affected persons. Several of the commenters supported relocation as a potential mitigation measure. However, based on the Plant's operation during the Line Outage Situation in December of 2006, DOE does not believe this mitigation measure is necessary. The Plant was in a Line Outage Situation for approximately three weeks in December, 2006. According to information supplied by EPA, during that time Mirant, while operating all five of its generation units, modeled slight NAAQS exceedances on December 4 and 8. Follow-up modeling with data from certain monitoring sites (pursuant to the ACO) indicated 3 hour and/or 24 SO₂ NAAQS exceedances on the following five days: December 4, 6, 7, 8 and 17. However, during the Dec 1 through 17, 2006 timeframe, all of the data from the six SO₂ monitoring stations around the Plant, as required by the ACO, showed continuous NAAQS compliance. Even on the days during which the follow-up modeling showed potential NAAQS exceedances at certain monitor sites, there were never any actual exceedances demonstrated by any monitors. It is also noteworthy that on January 4, 2007, the U.S. Department of Health and Human Services' Agency for Toxic Substances and Disease Registry issued a letter to the Alexandria Health Department stating that "because of the uncertainty in the air dispersal model and the need to collect additional monitoring data, we cannot determine at this time if a public health hazard exists." These facts alone

indicate that there is an insufficient basis to require Mirant to pay for relocation of residents during Line Outage Situations.

The third potential mitigation measure discussed in the SEA concerns a demand response plan to reduce the demand for electricity in the Central D.C. area. Order No. 202-05-3 stated that "DOE expects that DCPSC, having sought an emergency order, will take such actions as are within its authority to provide adequate and reliable electric service for the Central D.C. area including, for example, expediting approval of PEPCO transmission system upgrades and instituting demand response programs." DCPSC, as outlined in its January 8, 2007, filing with DOE, has undertaken a number of demand response programs and initiatives over the past 10 months, including establishing a Demand Response Working Group, approving "smart meter" installation for the SmartPowerDC program, and soliciting comments from the public on how to address demand response issues in DCPSC proceedings. In today's order, DOE reiterates the expectation that DCPSC will continue to take such actions as are within its authority to institute demand response programs. DCPSC has expeditiously approved PEPCO's proposed electric transmission upgrades. DOE believes that no additional DOE-imposed requirements in this area are necessary or appropriate at this time.¹

The fourth potential mitigation measure discussed the consideration of alternative electricity generation sources. With the limited time between the date of this order and the date the two new 230 kV transmission lines are scheduled to become operational - only about five months - DOE does not believe this mitigation measure to be practical.

The fifth and final potential mitigation measure discussed in the SEA is expediting the installation of additional transmission lines. The two new 230 kV transmission lines that PEPCO proposed to alleviate the reliability situation in the Central D.C. area are under construction and on schedule. DOE has monitored the progress of these lines and will continue to do so in the future.

¹ In its January 8, 2007, filing in response to the SEA, DCPSC questioned whether section 202(c) of the FPA "permits the Secretary to 'require' DCPSC to develop a plan for reducing electric demand in the Central D.C. area." While section 202(c) of the FPA authorizes the Secretary to order the generation, delivery, interchange or transmission of electricity, the Secretary can and has conditioned such orders on certain specific action by the person requesting the emergency order. For example, in the FPA section 202(c) orders issued in connection with the California electricity crisis in late 2000 and early 2001, the electric generators which had been ordered to supply electricity to the California Independent System Operator (CAISO) were not obligated to do so until CAISO had filed a signed certification to DOE that CAISO had been unable to acquire in the market adequate supplies of electricity to meet system demand. See Order Pursuant to Section 202(c) of the Federal Power Act (December 14, 2000). This condition precedent was expanded in the January 5, 2001, Amendment No. 3 to the Order Pursuant to Section 202(c) of the Federal Power Act, by adding a requirement that CAISO could not submit the certification described above unless it had submitted to DOE "a certification by a responsible official of the State of California that the state has initiated a program to reduce peak load electricity consumption by at least 5%."

C. Additional Issues

In its January 8, 2007 filing, DCPSC requested that Order No. 202-05-3 be extended and that it not terminate once the two new 230 kV transmission lines become operational. DCPSC stated that: "it is not definitive that some or all of the emergency measures provided in the December 20 Order would automatically become unnecessary once the 230 kV lines have been constructed." In Order No. 202-05-3, DOE stated that "once completed, [the new 230 kV transmission lines] apparently would provide a high level of electric reliability in the Central D.C. area, even in the absence of production from the Plant." DOE reiterated that finding in the two extensions of Order No. 202-05-3. DOE has no reason to believe that the emergency which formed the basis for its actions in this matter will continue to exist once the two new 230 kV transmission lines become operational, which is scheduled to occur in June 2007. Therefore, today's order will terminate on July 1, 2007. Nevertheless, if DCPSC or any other person believes at some future time that it can demonstrate that there is or continues to be an emergency situation that warrants the issuance of a FPA section 202(c) emergency order, it can file a request for such an order pursuant to DOE regulations and seek to make the showing required to justify issuance of such an order.

On February 17, 2006, I issued Order No. 202-06-1 granting the rehearing requests of the Commonwealth of Virginia's Department of Environmental Quality, the City of Alexandria, Virginia, and the District of Columbia Public Service Commission. I granted rehearing of Order No. 202-05-3 for the limited purpose of further consideration. The rehearing requests continue under consideration and are not being denied by the issuance of this order.

Based on the above, I find that the circumstances which led to my previous determination that the Central D.C. area was experiencing a shortage of electric energy continue, and therefore I hereby extend Order No. 202-05-3, as herein amended, until 12:01 a.m., July 1, 2007. The Ordering Paragraphs of Order No. 202-05-3 are hereby amended by replacing them in their entirety and inserting the Ordering Paragraphs contained in section IV below.

IV. Ordering Paragraphs

For the reasons set forth above, pursuant to section 202(c) of the Federal Power Act, it is hereby ordered that:

A. During any period in which one or both of the 230 kV lines serving the Central D.C. area is out of service, whether planned or unplanned, Mirant will operate the Potomac River Generating Plant to produce the amount of power (up to its full capacity) needed to meet demand in the Central D.C. area as specified by PJM for the duration of the outage.

1. In the event of a planned outage, Potomac River units will generate that amount of electricity specified by PJM to meet demand.

2. In the event of an unplanned 230 kV line outage, Potomac River units will generate that amount of electricity specified by PJM to meet demand as soon as possible.

When producing electricity pursuant to this paragraph, Mirant shall utilize pollution control equipment and measures to the maximum extent possible to minimize the magnitude and duration of any exceedance of the NAAQS. Compliance with the ACO shall constitute compliance with this requirement.

B. During periods when the two 230 kV lines serving the Central D.C. area are not out of service, Mirant shall keep as many units in operation, and shall take all other measures to reduce the start-up time of units not in operation, for the purpose of providing electricity reliability, but without causing or significantly contributing to any exceedance of the NAAQS or causing serious risk of danger to the Plant or unreasonable risk to Plant personnel. Pursuant to DOE's June 2, 2006 letter to Mirant, Mirant will operate the Plant in accordance with paragraph B of Part IV of the ACO, and any other applicable terms of the ACO.

C. Notice

In instances of scheduled outages of one of the 230 kV lines, PEPCO will give advance notice of the planned outage and the estimated duration of such outage to Mirant, PJM, DOE, FERC, EPA, DEQ, the Virginia Attorney General's Office, and the City of Alexandria's attorneys. The notice must be sufficiently in advance of the outage to allow Mirant to bring the required amount of generation needed for reliability purposes on line by the time the outage is scheduled. PEPCO will ensure that only those planned outages needed to maintain or enhance the reliability of the 230 kV lines (or to install new lines) are scheduled and that such outages are scheduled to minimize the environmental effects of the operation of the Plant.

PEPCO will notify DOE, PJM, FERC, EPA, DEQ, the Virginia Attorney General's Office, and the City of Alexandria's attorneys of any unplanned outage of one or both of the 230 kV lines as soon as possible, but in no event later than two hours after informing Mirant.

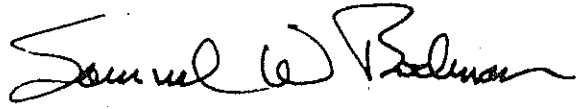
In the event of either a planned or unplanned outage, PJM will specify the amount of electricity that Mirant must provide in order to meet demand.

D. Pursuant to the terms of FPA section 202(c) and DOE regulations at 10 C.F.R. § 205.376, Mirant and its customers should agree to mutually satisfactory terms for any costs incurred by Mirant under this order. If no agreement can be reached, just and reasonable terms shall be established by a supplemental order.

E. DOE expects that the DCPSC will take all reasonable actions to augment electrical reliability and to reduce electricity demand in the Central D.C. area.

F. DOE will periodically reexamine the need for this order with particular emphasis on:
(1) Mirant's progress, working with environmental regulators, in reducing emissions and/or the impact of emissions; and (2) whether the DCPSC is taking all reasonable actions available to it to support electricity reliability in the Central D.C. area.

Issued in Washington, D.C. this 31 day of January, 2007.

A handwritten signature in black ink, appearing to read "Samuel W. Bodman". The signature is fluid and cursive, with a large initial "S" and "B".

Samuel W. Bodman
Secretary of Energy