

February 21, 2006

John B. Britton  
Direct Dial 202-419-4218  
Facsimile 202-419-3454  
Email address [jbritton@schnader.com](mailto:jbritton@schnader.com)

Mr. Lawrence Mansueti  
Permitting, Siting, and Analysis Division  
Office of Electricity Delivery and Energy Reliability (OE-20)  
U.S. Department of Energy  
1000 Independence Avenue SW  
Washington, DC 20585-0119

**Re: City of Alexandria, Virginia Comments Regarding Department of Energy  
Emergency Order, Operating Plan by Mirant and Proposed Special  
Environmental Analysis**

Dear Mr. Mansueti:

The City of Alexandria, Virginia ("Alexandria") hereby submits the following comments in response to the notice of emergency action published in the Federal Register on January 20, 2006 by the U.S. Department of Energy ("DOE") entitled "Emergency Order To Resume Limited Operation at the Potomac River Generating Station, Alexandria, VA, in Response to Electricity Reliability Concerns in Washington, D.C." (71 Fed. Reg. 3279). Alexandria incorporates by reference its objections pertaining to the DOE's Emergency Order ("Order") and the Operating Plan submitted by the Mirant Corporation as set forth in Application for Rehearing filed with the DOE on January 19, 2006 (appended hereto as Attachment 1).

The Application for Rehearing challenges the DOE Emergency Order and the Mirant Operating Plan on the following bases: (i) there is no statutory basis for the Order, (ii) the Order violates federal and state environmental laws, (iii) the Order fails to implement alternative measures to mitigate electricity reliability concerns, and (iv) the Order fails to evaluate the public health and environmental impacts of the Mirant Operating Plan. Put simply, the Application for Rehearing challenges the validity of the Order and the efficacy and credibility of the proposed Operating Plan for the Mirant Potomac River Generating Station ("PRGS"). The comments set out below address the DOE's proposed Special Environmental Analysis ("SEA").

### BACKGROUND

The National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321 *et seq.*, requires that, in the event of an agency action that may significantly affect the quality of the human environment, the federal agency must prepare a detailed statement on the environmental impact of the action and alternatives to the proposed action. 42 U.S.C. § 4332(c). The DOE did not

prepare such a statement. Rather, it invoked the provision of the Council on Environmental Quality (“CEQ”) regulations that accommodate an emergency federal agency action resulting in significant environmental impact without first conducting a NEPA review. In such a situation, the agency must consult with CEQ to determine alternative arrangements to a pre-action environmental impact statement.

DOE consulted with the CEQ on December 20 and 22, 2005, and January 13 and 17, 2006 and memorialized its proposed alternative arrangements in an exchange of letters between the two agencies on January 18, 2006. In its January 18, 2006 letter, the DOE stated that it issued its Order despite “potentially significant environmental impacts” and “without observing all of the normal provisions of the CEQ Regulations for Implementing the Procedural Requirements of [NEPA].” The DOE’s proposed alternative arrangements include (i) the preparation by August 2006 of an SEA to determine the impacts of the Order and alternatives and mitigation for future DOE action and (ii) the opportunity for public comments on the Order, the Mirant Operating Plan and the proposed SEA.

### **SCOPE OF SEA**

Alexandria disputes the emergency nature of DOE’s Order and the resultant reliance on a post-hoc SEA to determine the impacts of the DOE’s action on the public health and the environment. The DOE proposes to finalize the SEA in August 2006, only one month before the DOE Order expires. Thus, there will be no public health and environmental analysis throughout the duration of this Order. Any showing of adverse impact by the SEA will be after the imposition of the harm. Pursuant to DOE’s Order, the PRGS’s emissions will continue to exceed the National Ambient Air Quality Standards (“NAAQS”)--a violation of federal and state environmental laws--before analysis and mitigation. The DOE’s timetable is woefully inadequate for the protection of the health and welfare of the residents of Alexandria.

Furthermore, the scope of the proposed SEA is not sufficiently defined in the public notice. In light of the significant environmental impacts of the DOE’s Order, the SEA should be consistent with the requirements of a NEPA environmental impact statement including, but not limited to (i) a comprehensive determination of the environmental impact of the Order, (ii) an evaluation of alternatives to the Order, (iii) identification of mitigation for any adverse public health and environmental effects, and (iv) identification of any irreversible and irretrievable commitments of resources related to the continuation of the Order. Also, the SEA should consider and propose remedies, such as comprehensive demand response programs, installation of temporary back-up electricity generating equipment and other administrative or regulatory mechanisms to alleviate the DOE’s emergency, that allow compliance with all applicable federal and state environmental laws, regulations and standards, and accommodate fully the health, safety and welfare of the residents of Alexandria.

## PUBLIC HEALTH AND ENVIRONMENTAL IMPACTS

The Mirant PRGS is a sixty-year-old, obsolete, coal-burning power plant adjacent to and nearby densely populated residential areas. Its continued operation will result in adverse public health and environmental consequences. Accordingly, the SEA must include, but not be limited to, the following:

**Comprehensive Analysis of the Impacts of All Criteria Pollutants.** The Mirant proposed Operating Plan focuses on limiting the emissions of only one pollutant--sulfur dioxide (“SO<sub>2</sub>”). There are many other pollutants that negatively affect the environment and the health of the residents of Alexandria. These include other criteria pollutants such as nitrogen dioxide (“NO<sub>2</sub>”), carbon monoxide (“CO”) and particulate matter. Neither DOE nor Mirant has focused on the broad impacts of any operating scenario proposed by Mirant. For example, the Mirant Operating Plan completely ignores analysis of the PRGS’s fine particulate matter (“PM<sub>2.5</sub>”) emissions, which have a serious detrimental effect on human health. In a June 25, 2005 report entitled “Review of the National Ambient Air Quality Standards for Particulate Matter: Policy Assessment of Scientific and Technical Information,” the U.S. Environmental Protection Agency (“EPA”) identified a broad range of adverse health effects from both short and long-term exposure to PM<sub>2.5</sub>, including an increase in pulmonary and cardio-vascular illnesses and diseases and adverse effects on human development such as low birth weight and infant mortality. The SEA must evaluate the impacts of all criteria pollutants, in particular PM<sub>2.5</sub>, emitted from the PRGS, with particular attention to the downwash effects of the plant’s emissions caused by the short emissions stacks.

**Comprehensive Analysis of the Impacts of Hazardous Air Pollutants.** Prior to the shutdown of the PRGS in August 2005, air quality analyses showed elevated levels of hazardous air pollutants (“HAPs”) emitted from the PRGS, in particular, the acid gases of hydrogen fluoride and hydrogen chloride and the trace metals. The SEA should evaluate these and other HAPs as set out in the EPA’s AP-42 Compilation of Air Pollutant Factors for coal-fired utility boilers burning bituminous coal.

It should be noted that EPA based its action to remove coal-burning power plants from the Maximum Achievable Control Technology (“MACT”) requirements for HAPs on assumptions that are inapplicable to the PRGS. These assumptions include (i) overall reductions of HAPs from new source performance standards and the NO<sub>x</sub> SIP Call Rule, all premised on advanced technology that cannot be implemented at the PRGS, (ii) cap and trade programs used effectively only by large power plants because of economies of scale and capital investment issues, and (iii) the understanding that coal-fired plants are sited away from densely populated residential communities. Furthermore, EPA has recently initiated a reconsideration of its decision to remove facilities such as the PRGS from the MACT requirements, pending a review of its public health thresholds. Accordingly, the SEA should evaluate HAPs impacts against the significant ambient air concentration (“SAAC”) guidelines set out in the Virginia Code, that if exceeded have the potential to injure human health, and anticipate proposed modifications to the federal MACT regime.

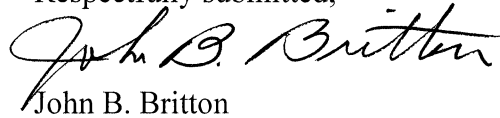
**The SEA Must Determine Compliance with the Virginia State Implementation Plan.**

As set out in Alexandria's Application for Rehearing, the DOE Order violates the Clean Air Act because Section 176(c)(1) of the Act requires that DOE's action conform to Virginia's State Implementation Plan ("SIP"). *See* 42 U.S.C. § 7506(c)(1). Virginia's SIP is an appropriate measure of compliance with the law and a guide for the SEA process. Its purpose is to eliminate or reduce the number of exceedances of the NAAQS for, among other things, SO<sub>2</sub>, NO<sub>2</sub> and particulate matter. In light of Alexandria's status as a non-attainment area for ozone and PM<sub>2.5</sub>, the need to determine conformity is compelling. Accordingly, the SEA must fully analyze whether the DOE's action causes or contributes to any violation of the NAAQS.

**The SEA Must Calculate the Deposition Metal Load to the Surrounding Watershed and Soils.** Due to the combustion of coal at the PRGS, the plant's emissions contain arsenic, beryllium, lead, chromium, cadmium, nickel and mercury. Due to its location immediately adjacent to the Potomac River and other nearby tributaries of the Chesapeake Bay watershed, the SEA must determine the level of aquatic impairment as a result of the PRGS's emission of these metals. Accordingly, the SEA should calculate total loads of these and other metals through both wet and dry deposition to the nearby watershed. The reactivation of the PRGS also increases the level of soil contamination. The SEA should include, therefore, a deposition analysis of the soil in the vicinity of the plant site and in the nearby communities.

**The SEA Should Thoroughly Analyze Mirant's Use of Trona.** Mirant's proposed Operating Plan relies on the injection into the coal combustion process of sodium sesquicarbonate—Trona: T-200<sup>®</sup> ("Trona") to reduce emissions of SO<sub>2</sub>. There has been no analysis of the impact of such extensive and sustained use of Trona in the coal combustion process. The SEA must evaluate the impact not only on SO<sub>2</sub> emissions but also on the emissions of all other pollutants, in particular PM<sub>2.5</sub> and the acid gases. In addition, the unreacted Trona itself may be a pollutant. Some portion of the unreacted Trona is expected to be silica, an acutely toxic substance even in very small quantities and a federally regulated air toxic pollutant. Trona use in other power plants indicates that slagging--the accumulation of unreacted Trona and flyash upstream of the baghouse--occurs and is a serious operational problem. The SEA also should evaluate the effects of Trona on the watershed and the environmental impacts of a significant increase in truck traffic to the PRGS site for delivery of Trona and removal of any by-product of the use of Trona.

Respectfully submitted,



John B. Britton

SCHNADER HARRISON SEGAL & LEWIS LLP  
Counsel for the City of Alexandria

Ignacio B. Pessoa  
City Attorney  
City of Alexandria

JBB/maj

DCDATA 31717\_1

UNITED STATES OF AMERICA  
DEPARTMENT OF ENERGY

Emergency Petition and Complaint of )  
The District of Columbia ) Docket No. EO-05-01  
Public Service Commission ) Re: Order No. 202-05-3

**CITY OF ALEXANDRIA’S APPLICATION FOR REHEARING**

Pursuant to Section 313 of the Federal Power Act (“FPA”), 16 U.S.C. § 8251, and Section VI.H. of Department of Energy (“DOE”) Order No. 202-05-03, the City of Alexandria, Virginia (“Alexandria”) hereby submits this Application for Rehearing and avers the following in support of its Application.

**I.**

**INTRODUCTION**

On December 20, 2005, pursuant to section 202(c) of the Federal Power Act (“FPA”), 16 U.S.C. § 824a(c), Secretary Samuel W. Bodman (the “Secretary”) issued DOE Order No. 202-05-3. The Order was the Secretary’s response to an emergency petition and complaint filed by the District of Columbia Public Service Commission (“DCPSC”) on August 24, 2005 in the above-captioned docket requesting the Secretary to invoke the FPA’s emergency powers provision and to issue an order directing the Mirant Corporation (“Mirant”) to resume power generation operations at its Potomac River Generating Station (“PRGS”) in Alexandria, Virginia. In his Order, the Secretary determined the existence of an “emergency” and ordered Mirant to operate under certain scenarios and conditions to alleviate the “emergency”. The Secretary failed, however, to identify any history of power outages for the District of Columbia, acknowledged that the Order would result in a violation of the Air Pollution Prevention and Control Act (“Clean

Air Act” or “CAA”), 42 U.S.C. § 7401 *et seq.*, and imposed the burden of the “emergency” solely on the residents of Alexandria. For the reasons set out below, Alexandria opposes the Secretary’s Order and respectfully requests a rehearing on the issues contained therein.

## II.

### **THE SECRETARY LACKS AUTHORITY TO ISSUE ORDER NO. 202-05-3**

#### **A. Application of Section 202(c) of the FPA is Inappropriate.**

The FPA, upon which the Secretary relies in issuing his Order, must be read in its entirety to properly evaluate its application to the shutdown of the PRGS. Section 202(c), the emergency powers section, begins its list of applicable emergency situations with “continuance of any war,” an overall context with which to apply the section that does not encompass a situation such as the one at issue here. The United States Court of Appeals for the District of Columbia assessed the legislative purpose of section 202(c) and found that any emergency powers granted were intended for ‘temporary’ emergencies epitomized by wartime disturbances. . . ,” and not ongoing problems. Richmond Power & Light v. Federal Energy Regulatory Comm’n, 574 F.2d 610, 615 (D.C. Cir. 1978). This is particularly true in situations in which, such as here, remedies other than invoking “emergency powers” may exist and have not been fully analyzed.

The length of time--four months--that elapsed between the DCPSC’s filing of its emergency petition and the date of the Secretary’s Order belies a determination of “emergency” in this situation. The Secretary acknowledges that simultaneous failure or outage of both transmission lines serving the District of Columbia—the sole basis for the determination of “emergency”—is not a high probability. Order at 7. “Moreover, the

recent tripping of one circuit does not in itself dictate the existence of an emergency justifying the issuance of a 202(c) order.” Id. The fact that it took “several weeks” (Order at 8) to gather information does not support such a delay for a deemed “emergency.” Moreover, the quality of and deficiency in this information and reliance on the industry entities for environmental and public health determinations, raise questions concerning the credibility and bias of the information-gathering and analysis process.

Even assuming *arguendo* that Section 202(c) applies to the present situation, it contains the requirement that emergency action be in the public interest. The Secretary fails, however, to give full effect to actual public health consequences of his Order. Rather, the Secretary gives undue weight to a speculative result as defined solely by industry interests. (See Sections IV.A. and B. infra). While stating that “ordering action that may result in even local exceedances of the NAAQS [National Ambient Air Quality Standards] is not a step to be taken lightly,” (Order at 8), the Secretary then proceeds to take just such action. The Secretary merely states that he has sought to “harmonize” the competing interests of electrical reliability and public health “to the extent reasonable and feasible” by ordering Mirant to provide “reasonable” electrical reliability while “minimizing” any adverse environmental consequences. Order at 8-9. This language makes clear that energy reliability is to take precedence over public health and welfare. Consequently, the Order does not protect the public interest against actual harm and therefore is in violation of section 202(c).

There is no provision in the FPA that exalts electricity reliability over federal and state environmental laws. Such a legislative intent would eviscerate the environmental laws. The Secretary’s dismissiveness of the Virginia Department of Environmental

Quality's ("VDEQ") interpretation of its federally-enforceable mandate to uphold the environmental laws is further evidence of the Secretary's unwarranted bias towards reliability as defined by the industry.<sup>1</sup>

**B. The Secretary Lacks Authority to Violate the Provisions of the Clean Air Act.**

Similarly, the FPA does not trump the provisions of the Clean Air Act. A Federal agency may not issue an order that is contrary to law. See FCC v Nextwave Personal Communications, Inc., 537 U.S. 292, 300 (2003) (holding that agency must act in accordance with any law); Administrative Procedures Act § 10(e), 5 U.S.C. § 706(2)(A) (requiring that agency decisions be in accordance with law). As determined by the VDEQ, the Secretary's Order mandates Mirant to operate in violation of the Clean Air Act.<sup>2</sup>

Section 109(b)(1) of the Clean Air Act directs the Environmental Protection Agency ("EPA") to promulgate National Ambient Air Quality Standards ("NAAQS") at concentrations that adequately protect public health. These air quality standards are incorporated into Virginia's State Implementation Plan ("SIP") and are enforceable on both the federal and state levels. Put simply, NAAQS violations constitute a violation of the Clean Air Act and Virginia's SIP. As discussed in Section V. infra, the proposed

---

<sup>1</sup> Also militating against the invocation of section 202(c) emergency powers in this situation is the fact that section 201(a) of the Federal Power Act expressly preserves state jurisdiction over electrical power generation. (See Section II.B. infra).

<sup>2</sup> The Secretary also determined that he could take action without performing an analysis under the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321, et seq. Order at 5. Without explanation but acknowledging that his action has a "significant environmental impact", the Secretary stated that he had consulted with the Council on Environmental Quality ("CEQ") about "alternative arrangements" to a required NEPA analysis. See 40 C.F.R. § 1506.11. The Secretary should disclose such arrangements.



Mirant operating plan would exceed the NAAQS for a number of pollutants, an impermissible consequence of the Secretary's Order.<sup>3</sup>

### III.

#### THE SECRETARY LACKS AUTHORITY TO OVERRIDE STATE LAW PROVISIONS

##### A. The Secretary Cannot Preempt State Law.

The Secretary's Order impermissibly encroaches upon VDEQ's authority under Virginia law. The Virginia Constitution includes the mandate "to protect [the Commonwealth's] atmosphere . . . from pollution, impairment, or destruction" so that "the people have clean air." Virginia Const. art. XI. § 1. VDEQ is also charged with enforcing Virginia's Air Pollution Control Law, Code of Virginia § 10.1-1300 *et seq.* and the regulations and orders of the Virginia Air Pollution Control Board. Code of Virginia § 10.1-1307.3. Virginia Air Pollution Control Board regulations and orders in turn implement, as federally enforceable State law, programs to achieve compliance with federally established NAAQS. Virginia Administrative Code, 9 VAC 5 Chapters 10, 20, 30, 40, 50, 80 and 91.

The Secretary's Order results in a violation of Virginia's Air Pollution Control Law by mandating Mirant's exceedances of NAAQS. The FPA grants no such authority to the Secretary. To the contrary, FPA § 201(a) provides in pertinent part that:

---

<sup>3</sup> In their collective environmental and public health wisdom, DCPSC, Potomac Electric Power Company ("PEPCO") and PJM Interconnection, LLC, ("PJM") contend that there were no actual monitored exceedances of the NAAQS at the PRGS during operation and that the plant's operation at full power does not exceed the emissions limits contained in the PRGS's operating permit. Order at 5. The Secretary evidently relies on these entities' environmental expertise. This reliance is misplaced. There is no monitoring of exceedances at the plant site. Rather, the VDEQ appropriately relied on a modeling and downwash analysis to determine the PRGS's widespread and severe impacts and localized exceedances many times above the federal standards, a process every facility must successfully undertake to obtain a permit to operate. Furthermore, the PRGS's current and proposed operating permits contain an emission limit only for one pollutant, falling far short of comprehensive air emissions regulation.

Federal regulation of matters relating to generation to the extent provided in this subchapter and subchapter III of this Chapter and of that part of such business which consists of the transmission of electric energy in interstate commerce and the sale of such energy at wholesale in interstate commerce is necessary in the public interest, *such Federal regulation, however, to extend only to those matters which are not subject to regulation by the States.*

16 U.S.C. § 824(a)(emphasis added). Assuming arguendo the application of Section 202(c) here, there is nothing inherent in the emergency powers that gives the Secretary authority to encroach on matters relegated to the authority of Virginia. In this situation, it is Virginia's authority to achieve and maintain the NAAQS through its SIP and the enforcement provisions available under its own law. The FPA does not grant the Secretary authority to override Virginia law by requiring exceedances of NAAQS pursuant to his Order.

**B. The Secretary Cannot Violate Virginia's SIP.**

The Secretary's Order also violates the Clean Air Act because Section 176(c)(1) of the Act requires that DOE's action conform to Virginia's SIP. Section 176(c)(1) provides in pertinent part:

No department, agency, or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve, any activity which does not conform to an implementation plan after it has been approved or promulgated under section 7410 or this title.

42 U.S.C. § 7506(c)(1). The Supreme Court reiterated this mandate in a recent case stating that a Federal agency must "undertake a conformity determination with respect to a purported action to ensure the action is consistent with 42 U.S.C. § 7506(c)(1)." DOT v. Public Citizen, 541 U.S. 752, 771 (2004). The purpose of this requirement is to

“prohibit the Federal Government and its agencies from engaging in, or supporting in any way, any activity which does not conform to a state implementation plan.” Id. at 758.

This is particularly true in this situation where Alexandria is a non-attainment area for ozone and particulate matter (“PM<sub>2.5</sub>”). See 42 U.S.C. § 7413. The Secretary completely ignores the conformity requirement, a blatant dismissal of a full analysis of the public health consequences of his Order.<sup>4</sup>

VDEQ’s SIP is an appropriate measure of compliance with the law. In this situation, the Virginia SIP has the purpose of eliminating or reducing the number of exceedances of the NAAQS for, among other things, sulfur dioxide (“SO<sub>2</sub>”), nitrogen dioxide (“NO<sub>2</sub>”) and particulate matter (“PM<sub>10</sub>”). This is in accordance with the SIP’s purpose of “provid[ing] for implementation, maintenance, and enforcement of national ambient air quality standards.” Environmental Defense Fund, Inc. v. EPA, 82 F.3d 451, 454 (D.C. Cir. 1996). It is also the basis for VDEQ’s August 19, 2005 letter to Mirant,

---

<sup>4</sup> Section 176(c)(1) defines conformity with an implementation plan as follows:

(A) conformity to an implementation plan’s purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards and

(B) that such activities will not—

- (i) cause or contribute to any new violation of any standard in any area;
- (ii) increase the severity of any existing violation of any standard in any area; or
- (iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

The determination of conformity shall be based on the most recent estimates of emissions, and such estimates shall be determined from the most recent population, employment, travel and congestion estimates or determined by the metropolitan planning organization or other agency authorized to make such estimates. 42 U.S.C. § 7506(c)(1).

notifying it of widespread and extensive exceedances of the NAAQS, which resulted in the shutdown of the Mirant plant.<sup>5</sup>

The VDEQ exercised its authority under Virginia Administrative Code 5-20-180(I), which is incorporated into the SIP as one of VDEQ's enforcement mechanisms. The Secretary's Order in effect usurps the VDEQ's authority. Since the DOE may only act consistent with the SIP's purpose to eliminate or reduce the severity and number of violations of the NAAQS and achieve expeditious attainment of such standards, the Secretary's Order impermissibly violates the SIP.

#### **IV.**

#### **THE ORDER IS SUBSTANTIVELY DEFICIENT**

##### **A. The Order Fails to Implement Alternative Measures.**

The Secretary's Order begins with the determination that "an emergency exists 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." Order at 1. The Secretary bases his action entirely on the obligation to "meet demand" regardless of the magnitude of such demand. Despite his determination of an "emergency", the Secretary fails to pursue alternative methods to alleviate the shortage of electricity such as a reduction in demand programs. Rather than order decreased usage as befits a true emergency thereby allocating some of the burden to communities outside of Alexandria, the Secretary merely states that he "expects" the DCPSC to develop "demand response programs". Order at 9. The Secretary does not even make any suggestions for a

---

<sup>5</sup> The applicable standard for small particulate matter ("PM<sub>2.5</sub>") is found in the Virginia Code at 9 VAC 5-30-65. PM<sub>2.5</sub> is a fine particle that is inhaled deep into the lungs and causes and exacerbates pulmonary and cardio-vascular illnesses.

voluntary plan for reduction in energy demand. Neither does he provide a target, either mandatory or voluntary, for reduction in the use of electricity. Since it cannot be enforced, the Secretary's "expectation" is woefully inadequate.

Considering the status of the Federal agencies as major users and drivers of electricity demand in the central DC area, the Secretary's "emergency" is unconvincing in the absence of any mandatory demand response programs for these Federal agencies. The Secretary's action is unfair, biased toward the industry and lacks substantive commitment by other stakeholders in this "emergency".

The Secretary hopes to deflect public scrutiny by merely listing the facilities and functions that would be affected by an extended power outage of his Order—Federal agencies responsible for national security, law enforcement and regulatory functions; hospitals, police and fire facilities, and the Blue Plains Wastewater Treatment Plant. Order at 7. The Secretary makes no attempt, however, to determine the existence and extent of power back-up sources at these facilities. Nor has the Secretary determined the actual extent of a power outage and the ability to expeditiously resume power transmission in the highly improbable scenario of the loss of both 230 kV transmission lines. It is incredulous that, in this post 9/11 world, none of these facilities can survive an emergency power outage. Obviously, the Secretary found it easier to flip a switch at the PRGS and increase the health risk for the residents of Alexandria.<sup>6</sup>

Also, with respect to enhancing electricity reliability, the Secretary's Order is deficient. The Order describes two proposed 230kV lines to supply electricity to the

---

<sup>6</sup> The Secretary fails to satisfy DOE's own regulation requiring the status of all interruptible customers for each day of the expected duration of the emergency. See 10 C.F.R. § 205.373(d)(3).

central D.C. area and two 69kV lines to supply the Blue Plains Wastewater Treatment plant. The completion of these transmission infrastructure improvements would obviate the need for the PRGS to satisfy electricity reliability concerns for the central D.C. area. Here again the Secretary merely “expects” DCPSC to expedite approval of these transmission system upgrades. Order at 9; Ordering Paragraph F at 11. If the Secretary’s “emergency” warrants adverse health impacts for Alexandria, it should also support, as a matter of national security, mandatory expedited action for any transmission infrastructure enhancement. Furthermore, the Secretary’s expectation only goes to the approval process and leaves unstated the actual construction of the transmission lines.

Despite his determination of an “emergency”, the Secretary fails to mandate, or even suggest, a precise time-table for the approval and construction of the transmission lines. For no apparent reason, the Secretary fails to impose any countervailing obligations on DCPSC, PEPCO or PJM. The only solution the Secretary offers to this “emergency” is the resurrection of an outmoded, dirty, coal-burning power plant in the heart of Alexandria’s residential communities.

**B. The Secretary Diminishes the Legitimate Public Health Concerns of Alexandria.**

In its December 22, 2005 letter to the Secretary, Alexandria stated, to no avail, that the Secretary’s Order completely ignores the health and welfare of the residents of Alexandria. The residents of the city are simply expected to live with and endanger their health and welfare because of the increased operation of the PRGS plant. The Secretary assumes no liability for the health of Alexandria’s residents and fails to impose any liability on Mirant, the DCPSC, PEPCO or PJM. If the Secretary rightfully believes this is an “emergency” and insists on imposing the burdens of such emergency on only one

community, then the Secretary should develop and implement a mitigation plan. One possibility for such a plan is the compensation of affected residents for the reasonable cost of living and working at alternative locations further from the PRGS where their health would not be endangered.<sup>7</sup>

In an unprecedented show of arrogance, Mirant intimates that the air quality standards imposed upon it by NAAQS are overly stringent because they take into consideration the most physically sensitive members of the population. Mirant's proposed Operating Plan observes that "[s]pecifically, in the case of SO<sub>2</sub>, it has been determined that mild and moderate asthmatic children, adolescents, and adults that are physically active outdoors represent the population segments at most risk for acute SO<sub>2</sub>-induced respiratory affects. *Individuals with more severe asthmatic conditions have poor exercise tolerance and, therefore, are less likely to engage in sufficiently intense outdoor activity to achieve the requisite breathing rates for notable SO<sub>2</sub>-induced respiratory effects to occur.*" Operating Plan at 11, fn.1 (citation omitted) (emphasis added). This footnote succinctly summarizes Mirant's attitude toward the residents of Alexandria. Furthermore, Mirant's outdated references distort what is now known and acknowledged as adverse health effects of airborne pollution to the population at large. Alexandria is unable to find any reference in the Secretary's Order to the medical professionals,

---

<sup>7</sup> In limiting those residents, who are most vulnerable to the public health impacts of the Order by reason of chronic or other life-inhibiting illnesses, in their enjoyment of any right, privilege, advantage or opportunity enjoyed by others, the Secretary may be in violation of section 504 of the Rehabilitation Act of 1973, as amended by section 119 of the Rehabilitation, Comprehensive Services and Developmental Disabilities Amendments of 1978, implemented through DOE regulations, 10 C.F.R. Parts 1040 and 1041.

members of the scientific community and public health researchers on which the Secretary relies to inform his decisions on the public health impacts in this matter.<sup>8</sup>

## V.

### **MIRANT'S OPERATING PLAN IS SUBSTANTIVELY DEFICIENT**

#### **A. Mirant's Testing Methodology Is Flawed.**

On December 30, 2005, Mirant submitted to the Secretary its proposed Operating Plan. Apart from the egregious public health analysis described above, the Operating Plan's underlying assumptions and analyses are seriously flawed. As submitted, Mirant's analyses for its temporary phase operations rely on manipulated data. Put simply, they fall short of a necessary compliance scenario. They fail to accommodate worst-case conditions at receptors adjacent to the PRGS where its impacts are greatest. For example, although Option B relies on the use of actual, historical emissions and PRGS's capacity factor to show a reduction in annual impacts, Mirant's methodology does not correctly simulate the actual load conditions, reduced buoyancy and momentum effects. In fact, the correct result is an increase in actual impacts.

Mirant also takes comfort from data from the nearest monitoring site, approximately one mile from the PRGS. Again, manipulated data. Mirant's comparison

---

<sup>8</sup>In a seminal report published by the American Thoracic Society in 1996 entitled "Health Effects of Outdoor Air Pollution", clinical and public health researchers compiled a state of the art summary on inhalable pollutants and their effects on human health. The report identifies pollutants such as ozone, nitrogen dioxide, sulfur dioxide, particulate matter, lead and acid gases, all of which are pollutants emitted by the PRGS. The adverse health impacts included increased cardio-respiratory mortality, increased heart and lung disease deaths, increased respiratory illnesses and infections, decreased lung function, asthma exacerbations, lung inflammation and increased hospitalizations and clinic and emergency room visits. These impacts were felt by large segments of the population depending on the pollutant, ranging from children, asthmatics and others with respiratory illnesses to athletes, outdoor workers and healthy adults. It is ludicrous for Mirant to suggest a public health impact limited to asthmatics who exercise outdoors. Furthermore, Mirant's analysis completely discounts the impacts of PM<sub>2.5</sub>—an invisible harmful particle that penetrates indoors. It defies logic and standards of governmental responsibility for the Secretary to rely on a public health analysis from Mirant.



between modeled data and impacts recorded at the monitoring site is irrelevant in determining localized exceedances. The monitoring station is neither sited nor designed to evaluate modeled exceedances at the PRGS. Modeled results are expected to differ from results at the monitoring site because of differences in wind speed and direction, SO<sub>2</sub> decay in an urban environment such as Alexandria that increases in relation to distance from the source, and Mirant's use of plume characteristics that do not represent historical, actual load conditions.

Mirant's assertions notwithstanding, the computer modeling used to show NAAQS exceedances at the PRGS actually underpredicts concentrations in settings with downwash such as in the present situation. Put differently, the air quality studies showing extensive and severe NAAQS exceedances underestimate the public health harm.<sup>9</sup>

Mirant states that it has conducted analyses, testing and computer modeling to determine the PRGS's impact on ambient air quality. Any analysis of the impacts of the PRGS must be broad in scope and science-based. The Secretary should not exclusively rely on the PRGS's data. In earlier submissions, Alexandria stressed the importance of an open and public process with respect to the implementation of the Secretary's Order. There is nothing in the Order or any subsequent discussion from the Secretary that obligates Mirant to fully disclose the underlying data and assumptions of these analyses,

---

<sup>9</sup> This is based on a peer-reviewed analysis of the capabilities of the AERMOD methodology used by both Mirant and Alexandria in their August 2005 air quality analyses. This peer-reviewed evaluation carefully selected monitors and source pairs, and controlled model inputs. Monitors were located both in remote areas, and in close proximity to the modeled source. Importantly, the highest modeled result is compared to the highest observation from a full set of monitors, spanning a wide arc around the modeled source, in order to minimize the impact of differences in wind direction between the source and the monitor on the test results. Mirant must be required to conduct a study that meets all of these requirements.

testing and computer modeling. Past experience with Mirant dictates that such activities be subject to public and agency scrutiny.<sup>10</sup>

**B. Mirant's Operating Plan Does Not Consider Exceedances of PM<sub>2.5</sub>.**

Inexplicably, Mirant's Operating Plan focuses exclusively on SO<sub>2</sub> impacts and excludes analysis of other pollutants, in particular PM<sub>2.5</sub>. A simple Guassian dispersion model, such as AERMOD, is capable of calculating primary PM<sub>2.5</sub>. Even excluding background levels of PM<sub>2.5</sub> (and ignoring an increase in PM<sub>2.5</sub> as a result of Mirant's new operating process, see section V.C. infra), the PRGS exceeds the allowable PM<sub>2.5</sub> standard.

PM<sub>2.5</sub> is the pollutant whose short-term health effects may be the most serious for residents of communities adjacent to and nearby the PRGS. In a June 25, 2005 report entitled "Review of the National Ambient Air Quality Standards for Particulate Matter: Policy Assessment of Scientific and Technical Information", the EPA identified a range of adverse health effects from short-and long-term exposure to PM<sub>2.5</sub>, including developmental impacts such as low birth weight and infant mortality. Based on this report, the EPA recently proposed an almost 50% reduction in the 24-hour standard of PM<sub>2.5</sub>. It is not surprising that a discussion of PM<sub>2.5</sub> is not included in Mirant's Operating Plan. Unfortunately, and to the detriment of the residents of Alexandria, such discussion is also conspicuously absent from the Secretary's Order.

---

<sup>10</sup> In its Operating Plan, Mirant relies on a reconfiguration of its emission stacks for long-term resolution of the public health and environmental issues related to the operation of the PRGS. Operating Plan at 2. In response to Mirant's application for an increase in stack height, the Federal Aviation Administration issued on September 30, 2005 its initial finding that any increase in stack height would have

**C. Mirant's Proposed Trona Injection System May Increase the Levels of Particulate Matter and Other Pollutants.**

An additional flaw in Mirant's Operating Plan is the analysis of the use of a Trona injection system to reduce levels of SO<sub>2</sub>. Such a process may capture sulfur from the combustion process but it also creates a byproduct that is emitted as particulate matter in the flue gas. In addition, Mirant's proposed use of imported low-sulfur coal may also increase the amount of ash in the flue gas because of higher ash content.

Mirant touts its early results of the Trona system as a "marginal" exceedance of the 24-hour SO<sub>2</sub> standard. In fact, accommodating for background SO<sub>2</sub>, the exceedance is actually 140% of the standard. Furthermore, there is no evaluation of the effects of this process on emissions of other pollutants, in particular PM<sub>2.5</sub>, and no showing of the durability and sustainability of the process. Without a comprehensive analysis of the effects of this new process, the Secretary and the public cannot know the actual impacts of the PRGS's operations pursuant to the Secretary's Order.

Moreover, the use of Trona is a change in the method of operation and requires at a minimum an air permit application or a New Source Review application under the Clean Air Act. Any increase in a pollutant, such as PM<sub>2.5</sub>, over 15 tons per year (a very low threshold for the PRGS) requires such review and a comprehensive NAAQS compliance analysis. Mirant should not simply change its operating process to satisfy the Secretary's Order without complying with environmental laws.

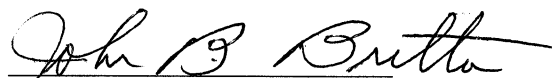
---

a substantial adverse effect constituting a hazard to air navigation at nearby Ronald Reagan National Airport.

## CONCLUSION

For the above reasons, Alexandria requests the Secretary's reconsideration of his December 20, 2005 Order.

Respectfully submitted,



John B. Britton  
Neil Thomas Proto  
Schnader Harrison Segal & Lewis LLP  
2001 Pennsylvania Avenue, N.W.  
Suite 300  
Washington, D.C. 20006-1825  
Telephone (202) 419-4200  
Facsimile (202) 419-3454  
[jbritton@schnader.com](mailto:jbritton@schnader.com)

Ignacio B. Pessoa  
City Attorney  
City of Alexandria  
301 King Street, Suite 1300  
Alexandria, Virginia 22314  
Telephone (703) 838-4433  
Facsimile (703) 838-4810  
[Ignacio.pessoa@alexandriava.gov](mailto:Ignacio.pessoa@alexandriava.gov)

DCDATA 31298\_1