DOCKET ITEM #14a City of Alexandria, Virginia

MEMORANDUM

- TO: THE CHAIRMAN AND MEMBERS OF THE PLANNING COMMISSION
- FROM: IGNACIO PESSOA CITY ATTORNEY

DATE: SEPTEMBER 29, 2004

SUBJECT: TEXT AMENDMENT # 2004-0008 AMENDMENT TO NONCOMPLYING USE REGULATIONS APPLICABLE TO COAL FIRED POWER PLANTS

<u>ISSUE</u>: Consideration of a text amendment to the Zoning Ordinance to revoke the noncomplying use status of coal fired electrical power generating plants, and to categorize such plants as nonconforming uses, subject to abatement.

RECOMMENDATION: That the Planning Commission adopt the following amendment to add new Section 12-216 (NONCONFORMING ELECTRICAL POWER GENERATING PLANTS) under Section 12-200 (NONCONFORMING USES) of Article XII (NONCOMPLIANCE AND NONCONFORMITY) of the City of Alexandria Zoning Ordinance:

[The following is all new language.]

Section 12-216 Nonconforming electrical power generating plants.

- (A) Notwithstanding any contrary provision of this ordinance, any electrical power generating plant in existence on (date of final adoption), which produces power through the combustion of coal, and is located in a zone in which such use is neither a permitted or special use permit use, or in a zone in which such use is a special use permit use but for which a special use permit for the entire use has not been granted, shall be deemed a nonconforming use, and shall be subject to abatement as provided in Section 12-214(A) of this ordinance.
- (B) Any nonconforming use subject to this Section 12-216 shall comply with the following rules regarding repairs, improvements and alterations to the building and the use, unless a special use permit has been granted pursuant to Section 12-214(A), which provides otherwise:
 - (1) No alteration to a building which directly prolongs the life of the nonconforming use shall be permitted.

- (2) Fixtures used in connection with the generation of power, such as turbines, generators, boilers, smokestacks, fuel or ash receiving or handling facilities, control systems and pollution control equipment, may not be installed, replaced or upgraded, although ordinary repairs and maintenance to such fixtures as existed on (date of final adoption) is permitted; provided, however, that the installation, replacement or upgrade of pollution control equipment may be permitted if approval therefor is obtained by special use permit issued pursuant to the Section 11-500 of this ordinance.
- (3) Ordinary repairs and maintenance to building components, such as HVAC equipment, electrical service, siding, shingles and roofing, are permitted.

<u>DISCUSSION</u>: Under the 1992 Zoning Ordinance, electrical power generating plants are permitted in the UT/Utilities and Transportation Zone, if approved by special use permit. Power plants which predate the SUP requirement were classified as noncomplying uses.¹

Noncomplying use status is a benefit or privilege conferred by the City in 1992, and, *inter alia*, allows a use such as a power plant, which now requires, but has never obtained, special use permit approval, to continue in existence indefinitely, and to be repaired, modernized and reconstructed.

Since 1992, several types of uses have had this favored status revoked because the City has determined that the prolonged operation of such uses would have an adverse impact on the community.

Revocation of noncomplying use status results in the use becoming a nonconforming use, and thus Section 12-214 of the Zoning Ordinance requires that operation of the use terminate within seven years, unless (1) a special use permit allowing continued operation of the use is approved, or (2) a special use permit extending the seven year abatement period to such longer period as an individual operator demonstrates would be reasonable given the operator's legitimate investment in the affected business is approved. Alternatively, where the zone in which the existing use is located permits the use by special use permit, the operator has the additional avenue of seeking to obtain such a permit and thus to remove altogether the burden of nonconforming status.

¹ As the term is used in the Alexandria Zoning Ordinance, only one "electrical power generating plant" presently exists in the City, the Mirant Potomac River Generating Station at 1400 North Royal Street, and this plant is currently a noncomplying use. The Arlington-Alexandria Waste to Energy Plant is classified in the Zoning Ordinance as a "waste to energy plant," and this use is permitted in the I/Industrial Zone by special use permit. The existing waste to energy plant at 5301 Eisenhower Avenue, however, is located in the OCM(100) Zone, as is thus also classified as a noncomplying use. Nothing in the proposed text amendment affects the "waste to energy plant" use in any fashion.

Absent one of these special use permits, financial investment to prolong the life of the nonconforming use is severely restricted.²

On June 22, 2004, City Council adopted as City policy that "coal-fired, power-generation operations are not compatible with the Council's long-term vision for Alexandria, from both an environmental and land use perspective, and, accordingly... that all [such] operations cease and all [such] facilities be removed from Alexandria." As part of its implementation of this policy, Council adopted Resolution No. 2111, and formally initiated the process of revoking the noncomplying use status of coal fired power plants which have not obtained a special use permit for the lawful operation of the use. See docket materials, Attachment 1.

Since 1992, substantial evidence of harmful effects from the continued operation of older, coal fired power plants has become available. Such older plants have been shown to emit into the air and water high volumes (up to 10 times dirtier as compared to newer plants with more advanced control technology or different fuel sources) of oxides of nitrogen (NOx) and sulphur dioxide (SO2 or SOx), small (PM2.5) and large (PM10) particulate matter as well as compounds of barium, chromium, copper, lead, manganese, mercury, nickel, selenium, vanadium and zinc. The harmful impact on the surrounding area from older plants with shorter stacks (as opposed to newer plants with taller stacks) is magnified because short stacks offer less opportunity for dilution and dispersion of the contaminants, resulting in higher concentrations in the environs of the plant. These pollutants contribute to summer ozone problems, cause acid rain, increase the incidence of pulmonary, cardiovascular and other diseases, and rain nuisance dusts and toxic metals on the plant's environs and the entire region.

As discussed above, nonconforming use status carries with it restrictions on financial investment which will prolong the life of the use. Because such restrictions might prevent the installation of new or enhanced pollution control equipment on a nonconforming power plant, and thus prevent interim improvements to air and water quality during the abatement period, the Council requested that this text amendment include, as it does, a provision allowing improvements in pollution control equipment, subject to special use permit approval.

I conclude that the imposition of nonconforming use status in these circumstances, coupled with the provisions of the text amendment which allow a nonconforming power station to remove the onus of nonconforming status by obtaining a special use permit under the UT Zone to operate indefinitely subject to conditions, or in the alternative to continue operation as a nonconforming use but subject to special use permit conditions, and to implement improved pollution control

² A copy of Section 12-214 of the Zoning Ordinance is Attachment 2.

technology, will afford the City the necessary flexibility to address from a zoning perspective and in an orderly fashion the land use impacts and harmful environmental effects from the continued operation of older, coal fired power plants. Accordingly, I recommend that the Planning Commission adopt the proposed text amendment.³

³ As described in the memorandum from the City Manager and T&ES Director to Council dated September 28, 2004, Attachment 3, the Mirant Potomac River Generating Station is the subject of a proposed consent decree and regulatory order by consent which address some, but not all, of the health and environmental issues related to this vintage plant. In particular, the consent decree, which is subject *inter alia* to approval by the Texas court handling Mirant's bankruptcy case, would permit Mirant to install "technology more effective than SOFA [Separated Over-Fire Air] at reducing NOx emissions" at the plant. Such technology would involve the shipment, storage and use of ammonia at levels which would pose additional and different environmental risks to Alexandria. In addition, any investment in new technology at the plant may prolong the life of this use, contrary to the position adopted by Council that the plant should be closed. The proposed text amendment gives the City a formal, regulatory role in determining the future, and the future land use and environmental impacts, of this facility, and nothing in the consent decree excuses Mirant from complying with otherwise valid local zoning regulations. Thus, the proposed consent decree should not be seen as obviating the need for this text amendment.

Attachment 1 Docket materials, June 22, 2004

Attachment 2 Zoning Ordinance Section 12-214

Attachment 3 Memorandum, September 28, 2004

ATTACHMENTS AVAILABLE IN THE PLANNING AND ZONING OFFICE

City of Alexandria, Virginia

MEMORANDUM

TO:THE CHAIRMAN AND MEMBERS OF THE PLANNING COMMISSION

FROM:IGNACIO PESSOA CITY ATTORNEY

DATE:SEPTEMBER 30, 2004

SUBJECT: SPECIAL USE PERMIT # 2004-0089 1300 & 1400 NORTH ROYAL STREET MIRANT POTOMAC RIVER GENERATING STATION

SPECIAL USE PERMIT # 2004-0090 1300 & 1400 NORTH ROYAL STREET MIRANT POTOMAC RIVER GENERATING STATION

REVOCATION OF SPECIAL USE PERMITS

ISSUE: Consideration of the revocation of Special Use Permit No. 2296, granted in 1989, which approved the construction and use of 18,000 square feet of new administrative offices, laboratories, conference, training and other space, at the Mirant Potomac River Generating Station, and Special use Permit No. 2297, also granted in 1989, which approved the Transportation Management Plan required for the continued operation of the Generating Station.

RECOMMENDATION: That Special Use Permit Nos. 2296 and 2297 be revoked.

DISCUSSION: In 1989, the City approved two special use permits in connection with Pepco's then contemplated expansion of the Potomac River Generating Station.⁴ The first, SUP No. 2296, approved a Transition SUP for 18,000 square feet of new administrative offices, laboratories, conference, training and other space.⁵ This physical expansion triggered the requirement for a Transportation Management Plan for the plant, which was approved by SUP No. 2297. Under then existing as well as current law, both permits were approved "subject to

⁴ The generating station was acquired by Mirant from Pepco in 2000, and Mirant succeeded to Pepco's rights and obligations under these two SUP's.

⁵ A Transition SUP was required for this expansion of the existing use under interim regulations in effect as the City was proceeding with adoption of the 1992 Master Plan and Zoning Ordinance.

compliance with all applicable codes and ordinances," and the provision, now codified as Zoning Ordinance Section 11-506(A), that SUP's are revocable for "failure to comply with any law."

The plant is a noncomplying use located in the UT/Utilities and Transportation Zone, in which this use is permitted as an "electrical power generating plant" only by special use permit. Zoning Ordinance Section 4-1303(B).⁶ All uses operating in the UT Zone are subject to the "Use Limitations" set forth in Section 4-1306(A), which provides as follows:

No use shall be conducted in any manner which would render it noxious or offensive by reason of dust, refuse matter, odor, smoke, gas, fumes, noise, vibration or glare.

Implicit in this standard is that the failure to comply with applicable federal and state environmental regulations may constitute a violation of Section 4-1306(A), and may justify revocation under Section 11-505(A). In addition, operational discharges which are not federal or state violations, but which are nonetheless noxious or offensive as contemplated by Section 4-1306(A) may constitute separate and independent violations of the Zoning Ordinance, and warrant SUP revocation.

A review of the U.S. Environmental Protection Agency's *Enforcement and Compliance History Online*)(ECHO) report for this facility, Attachment 1, reveals a persistent pattern of noncompliance with three significant federal environmental statutes: the Clean Air Act (reported 8 out of 8 quarters in the two year reporting period, and "High Priority Violator" status for this facility), the Clean Water Act (reported 6 of 8 quarters), and the Resource Conservation and Recovery Act (reported 8 of 8 quarters).⁷ This record includes one formal enforcement case predicated on the plant's discharge of 2,139 tons of NOx, in 2003, more than double the permit limit of 1,019 tons.⁸ Attachment 2.

A review of the EPA's *Toxics Release Inventory* for the Potomac River Station, Attachment 3, discloses that in 2002, the most recent reporting year, the plant, as reported to EPA by Mirant, discharged more than 2.7 million pounds of toxic inventory chemicals into the air, and more than 2,500 pounds into the Potomac River. The highest levels reported were 3.3 million pounds into

⁶ As explained more fully in the discussion of Text Amendment No. 2004-0008, the plant, which was constructed between 1949 and 1957, predates the SUP requirement and is presently categorized as a noncomplying use. The possible revocation of its noncomplying use status does not affect the revocation of these special use permits, nor does the possible revocation of these permits affect the revocation of its noncomplying use status.

⁷ In March, 2003, Mirant challenged the accuracy of some of the data in the then pilot program ECHO Report for the Potomac River Station. However, the data base includes formal error correction and reporting functions in order to help assure accuracy of the data, and the attached EPA report contains the agency's data updated through the beginning of September, 2004.

⁸ This violation forms the basis for the Consent Decree discussed in the materials related to Text Amendment No. 2004-0008.

the atmosphere in 1999, and 172,000 pounds into the river in 1998. City staff have noted minor incidental oil spills into the Potomac, on June 10, 2004 and January 7, 1996.

Based upon this environmental compliance history for the Mirant Potomac River Generating Station, I conclude that revocation of these two SUP's is warranted.

Revocation would prohibit, as a violation of the Zoning Ordinance, the continued use of the designated administrative and related office space, as well as the operation of the entire plant without a valid Transportation Management Plan. Given the nature of the plant's public utility function, and the limited scope of these special use permits, it would be unrealistic to expect that revocation could lead to the immediate closure of the plant. Upon revocation the plant would be categorized as an illegal use, and no City permits for construction or upgrades could be approved. However, the operator could seek to cure the illegal status of the use by seeking from City Council new special use permits, subject to appropriate and reasonable new conditions. Under current practice, any such new SUP's would apply to and regulate the entire plant, including the five power generating units.

Attachment 1:EPA Enforcement and Compliance History on Line Attachment 2:Enforcement Case Report Attachment 3:Toxics Release Inventory Attachment 4:SUP No. 2296 Attachment 5.SUP No. 2297