



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

December 10, 2019

Mr. Tam Tran
U.S. Nuclear Regulatory Commission (NRC)
Office of Nuclear Reactor Regulation
Mail Stop O-11F1
Washington, DC 20555-0001

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ADD=Tam Tran, Antoinette
Walker-Smith

COMMENT (6)
PUBLICATION DATE:
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CITATION 84 FR 56488

Re: Notice of Availability of the Draft Plant- Specific Supplement 6, Second Renewal to the Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants Regarding Subsequent License Renewal for Surry Power Station, Units 1 and 2 (EPID NO. L-2018-RNW-0024)
CEQ #20190255

Dear Mr. Tran:

In accordance with the National Environmental Policy Act (NEPA) of 1969, Section 309 of the Clean Air Act and the Council on Environmental Quality regulations implementing NEPA (40 CFR 1500-1508), the U.S. Environmental Agency (EPA) has reviewed the U.S. Nuclear Regulatory Commission (NRC) draft plant-specific Supplement 6, Second Renewal, to NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants" or draft Supplemental Environmental Impact Statement (DSEIS). The study evaluates renewal of Renewed Facility Operating License Nos. DPR 32 and DPR-37 for an additional 20 years of operation from May 2032 until May 2053 for Surry Power Station Units 1 and 2 (Surry). The Station is a nuclear power plant located in Surry County in southeastern Virginia. The power station lies on an 840-acre site adjacent to the James River across from Jamestown, up the river from Smithfield and Newport News. EPA has reviewed this document and is providing comments for your consideration.

The purpose and need of the proposed action (issuance of a renewal license) is to provide an option that allows for the power generation capability beyond the term of the current nuclear power plant's operating license to meet future system generating needs. Furthermore, we appreciate the thoroughness of the proposed alternatives discussion. EPA recommends that any future changes in conditions including environmental, demographics and technology be evaluated, as needed, over the operating license period. EPA suggests that approaches to monitoring conditions in the natural and social environment, to identify and address potential changes, be discussed in the final Supplemental Environmental Impact Statement (FSEIS).

We ask that you consider our comments in this letter and enclosure in preparation of the FSEIS. We would also welcome the opportunity to discuss any of these comments. Please feel free to contact me at (215) 814-3322 or the senior staff reviewer, Mr. Ralph Spagnolo at (215) 814-2718, spagnolo.ralph@epa.gov.

Sincerely,

A handwritten signature in cursive script, appearing to read "Barbara Rudnick".

Barbara Rudnick, NEPA Program Coordinator
Office of Communities, Tribes and
Environmental Assessment

Enclosure

Enclosure

Detailed Comments for Draft Supplemental Environmental Impact Statement Surry Power Station Relicensing

EPA has the following recommendations for consideration in the development of the FSEIS:

General Comments

EPA appreciates the thoroughness of the alternative considerations in the DSEIS. EPA suggests that the FSEIS discuss steps that may take place to assess conditions and advancements that may occur in the upcoming decades. EPA suggests that the FSEIS mention and discuss the need to evaluate future conditions, assess new technologies for the facility (such as stormwater management and water withdrawal), and how these updates will be shared with the public. This may include design adaptation measures taken to address any increase in population surrounding the facility such as emergency notification and evacuation planning. There is the potential for population growth or demographic change within the 50-mile radius of the Surry facility over the timeframe in question which may require upgrades to the notification systems. The FSEIS could benefit from a discussion on how the facility reviews, predicts and responds to change in natural and social environmental conditions over the next decades.

Wildlife and Vegetation Impacts

EPA appreciates the extensive research NRC has presented regarding the potential impacts to the local populations of aquatic species in the James River due to impingement. Since it is estimated that over 3.4 billion aquatic organisms are lost to impingement each year nationwide by energy facilities, any reduction in mortality rates caused by impingement would assist in reducing the cumulative impacts each year. It is suggested that any steps that may sustain or improve habitat for aquatic organisms and incorporate best management approaches to reduce impingement, be considered.

The Virginia Department of Environmental Quality (VADEQ) is responsible for administering the NPDES program and regulating water quality under the Clean Water Act. Therefore, Dominion will submit certain impingement and entrainment information on sampling, reduction technologies and operation modes to VADEQ by June 3, 2020 to comply Section 316(b) of the Clean Water Act. EPA would appreciate new reduction technologies if required by VADEQ be incorporated into the FSEIS.

EPA understands that continued maintenance dredging will take place in the future within the intake channel and to ensure direct removal of soft bottom substrate along with the benthic community (prey of sturgeon). EPA suggests that if consultation among agencies related to the dredging of sturgeon habitat occurs that it should be documented in the FSEIS.

Water Resources

One of the leading causes of water quality impairment in the James River watershed is related to stormwater runoff, including the waters and marshes adjacent to the facility. Stormwater runoff can carry excess nutrients, which contribute to large blooms of phytoplankton (eutrophication) which decompose after

dying causing oxygen depletion. Over the last 25 years, stormwater management (SWM) practices have evolved including for peak flow attenuation and low impact development (LID).

EPA recommends the facility consider incorporating upgraded SWM practices into the facility infrastructure over the licensing period. If plans exist to replace or enhance SWM, it would be helpful to include information in the FSEIS. Also, NRC may want to consider the use of Green Infrastructure (GI) techniques such as rain gardens, pervious pavement, bio-swales, among others to address stormwater. Also, we suggest the incorporation of LID design features where possible, for building design, parking, paving, landscaping, and stormwater management. Technical guidance in implementing GI and LID practices can be found at the following sites:

<https://19january2017snapshot.epa.gov/sites/production/files/2015-09/documents/eisa-438.pdf>
www.epa.gov/greeninfrastructure
www.epa.gov/nps/lid
www.epa.gov/smartgrowth <http://www.bmpdatabase.org>

Air

Table 3-1 Ambient Air Quality Standards lists the annual primary $\text{PM}_{2.5}$ standard of $12 \mu\text{g}/\text{m}^3$ as the secondary standard. $12 \mu\text{g}/\text{m}^3$ is the primary annual standard for $\text{PM}_{2.5}$.

Table 3-2 does not accurately reflect Title V permit conditions:

- Oil Fired Boilers (ES-101 and ES-102) are also subject to 40 CFR 63 Subpart JJJJJ
- The two propane emergency generators (IS-132 and IS-135) do have requirements including 20% opacity limit, 40 CFR 63 Subpart ZZZZ applicability
- The permit does not organize requirements into groups in the way that Table 3-2 does; for example, one of the backup electric generators (IS-103), one of the diesel air compressors (IS-130), and the fire pump (ES-108) are subject to requirements of 40 CFR 60, Subpart IIII
- The paragraph above Table 3-2 states that Table 3-2 lists the air permit conditions; however, it would be more accurate to say it summarizes some of the applicable requirements and limits. There are other general, monitoring, recordkeeping, and reporting requirements not captured by Table 3-2.

Please clarify what is meant by the “threshold for major sources” for NO_x emissions in sections 4.3.5 Natural Gas Combined-Cycle Alternative and 4.3.6 Combination Alternative (Natural Gas Combined-Cycle, Solar, and Demand-Side Management). Since the project is in an attainment area, an applicability analysis for general conformity is not required. See 40 CFR 93.153(b)(1).

Environmental Justice

EPA appreciates that a discussion of environmental justice was included in the DSEEIS. The low-income and minority statistics provided indicate that the project activities may disproportionately impact areas of potential environmental justice concern. Specifically, the block group which contains the Surry Nuclear Power Plant exceeds the state average for both low-income and minority populations. Likewise, many of the block groups surrounding the Skiffes Creek Switching Station also exceed the state average for low-income and minority populations. Moreover, several of the block groups within the project area also exceed the state average for linguistic isolation. Specifically, almost 10% of block group 510950801021 is non-English speaking at home, with Spanish being the language primarily spoken. We suggest that any public communication consider these communities. Additionally,

consideration should also be given as to whether these linguistically-isolated communities may be disproportionately impacted by the activities described in the Supplemental EIS. EPA's environmental justice screening tool, <https://www.epa.gov/ejscreen> can be utilized to provide such refined information.

