



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

December 2, 2005

Chief, Rules Review and Directives Branch
U.S. Nuclear Regulatory Commission
Mail Stop T6-D59
Washington, D.C. 20555-0001

9/7/05
TOFR 53254
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2005 DEC -7 PM 3:29

RULES AND DIRECTIVES
SECTION

**RE: EPA Review and Comments on
Draft Generic Supplemental Environmental Impact Statement (DGSEIS)
License Renewal of Nuclear Plants, Supplement 25
Regarding Brunswick Steam Electric Plant, Units 1 and 2
CEQ No. 20050362**

Dear Sir:

The U. S. Environmental Protection Agency (EPA) Region 4 reviewed the Draft Generic Supplemental Environmental Impact Statement (DGSEIS), pursuant to Section 309 of the Clean Air Act, and Section 102 (2)(C) of the National Environmental Policy Act (NEPA). The purpose of this letter is to provide the Nuclear Regulatory Commission (NRC) with EPA's comments regarding potential impacts of the proposed renewal of the Operating Licenses (OLs) for Brunswick Steam Electric Plant, Units 1 and 2.

The Carolina Power & Light Company (CP&L) submitted an application to renew the Operating Licenses (OLs) for the Brunswick Steam Electric Plant Units 1 and 2 for an additional 20 years. The proposed action (license renewal) would provide for continued operation and maintenance of existing facilities and transmission lines. The facility uses water from the Cape Fear River Estuary for plant cooling, and discharges wastewater through underwater pipes into the Atlantic Ocean 2000 ft offshore.

Based on the review of the DGSEIS, the document received an "EC-1" rating, meaning that environmental concerns exist regarding some aspects of the proposed project. Specifically, protecting the environment involves the continuing need for appropriate storage and ultimate disposition of radioactive wastes generated on-site, as well as continuing measures to limit bioentrainment and other impacts to aquatic species from surface water withdrawals and discharges.

The National Pollutant Discharge Elimination System (NPDES) Permit Program authorizes the discharge of pollutants from certain facilities to waters of the United States. Administration of the NPDES permit program in North Carolina is delegated by EPA to the North Carolina Department of Environment and Natural Resources' (NCDENR's) Division of Water Quality. The Brunswick Steam Electric Plant has an NPDES Permit issued by the Division of Water Quality. The NPDES Permit limits specified pollutant discharges from the

SISP Review Complete

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plant, requires monitoring of discharges, and regulates the flow and thermal impacts of discharges. The NPDES permittee has operated and is operating in compliance with the NPDES permit requirements.

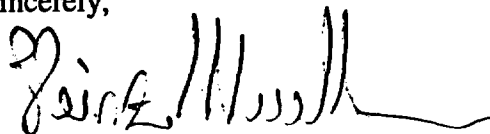
Consistent with most of the Environmental Impact Statements that the NRC is approving from utilities requesting license renewals, the NRC is not requiring that utilities plan for the possibility of having to store spent nuclear fuel onsite. This DSGEIS does state that spent fuel is temporarily stored onsite in spent fuel pools, or is shipped offsite for storage in spent fuel pools at Shearon Harris Nuclear Power Plant. The document states that the applicant is considering construction of an independent spent fuel storage installation for storage of spent fuel in dry storage casks at the Brunswick Steam Electric Plant.

The EIS should discuss a scenario that addresses the impact of a release from a spent fuel storage cask, and the resulting implications of a dose to plant personnel and the public. The resulting effective dose equivalent at the exclusion area boundary and in the low population zone should be calculated. The document does not address the consequences of a breach on this facility and the resulting consequences to the public. In addition, since Brunswick is located on the Atlantic Coast, additional contingencies may need to be considered to secure fuel stored in casks onsite during category 4 or 5 hurricanes.

The DGSEIS acknowledges that OL renewal of the Brunswick Steam Electric Plant will require continuing radiological monitoring of all plant effluents. Appropriate storage of spent fuel assemblies and radioactive wastes on-site is required, in order to prevent impacts. In the Waste Confidence Rule (10 CFR 51.23), the Commission generically determined that the spent fuel generated by any reactor can be safely stored onsite for at least 30 years beyond the licensed operating life of the reactor. Ultimately, long-term radioactive waste disposition will require transportation of wastes to a permitted repository site. We note the information in the DGSEIS regarding the expected availability of Yucca Mountain as a geological repository for spent nuclear fuel and high-level waste.

In conclusion, the document states that the OL renewal would result in fewer environmental impacts than the feasible alternatives for generating power, and the NRC considers impacts of OL renewal to be small. Overall, the impacts as defined in the DGSEIS appear to be within acceptable limits. Thank you for the opportunity to comment on this document. If we can be of further assistance, please contact Ramona McConney of my staff at (404) 562-9615.

Sincerely,

A handwritten signature in black ink, appearing to read "Heinz Mueller", with a long horizontal flourish extending to the right.

Heinz J. Mueller, Chief
Office of Environmental Assessment