

UNITED STATES NUCLEAR REGULATORY COMMISSIONENERGY OPERATIONS, INC.DOCKET NO. 50-416ENVIRONMENTAL ASSESSMENT AND FINDING OF
NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. NPF-29 issued to Energy Operations, Inc. (the licensee), for operation of the Grand Gulf Nuclear Station, Unit 1 (GGNS), located in Clairborne County, Mississippi.

ENVIRONMENTAL ASSESSMENTIdentification of Proposed Action

The proposed amendment would terminate the Cooling Tower Drift Program of the Environmental Protection Plan (EPP) and alter references to the program to reflect the termination. The purpose of the Cooling Tower Drift Program is to determine whether the cooling tower drift is elevating salt deposition rates in the vicinity of GGNS.

The proposed action is in accordance with the licensee's application for amendment dated February 7, 1992.

The Need for the Proposed Action

The proposed change to the EPP is required in order to provide for the termination of the Cooling Tower Drift Program, which has shown cooling tower drift to have no statistically significant effect on the rate of salt deposition.

Environmental Impacts of the Proposed Action

The Commission has completed its evaluation of the proposed revision to the EPP and of the termination of the Cooling Tower Drift Program. The purpose of the Cooling Tower Drift Program is to determine whether cooling tower drift from the facility elevates salt deposition rates. Required monitoring for radiological effluents is not affected and continues as before. Accordingly, the Commission concludes that this proposed action would result in no significant radiological environmental impact.

The Notice of Consideration of Issuance of Amendment and Opportunity for Hearing in connection with this action was published in the Federal Register on March 4, 1992 (57 FR 7810). No request for hearing or petition for leave to intervene was filed following this notice.

With regard to potential nonradiological impacts, the proposed change to the EPP and the termination of the Cooling Tower Drift Program have been reviewed on the basis of the licensee's program submittal dated February 19, 1991. The submittal summarized the results of the drift studies conducted since 1982 and reviewed the 1989 Cooling Tower Drift Program results, originally reported in the 1989 Annual Environmental Operating Report for GGNS.

The analysis of variance (ANOVA) performed on the salt deposition data to compare the site stations to the offsite control stations did not result in a statistically significant difference between the site and the offsite stations. The staff finds that comparing site stations to offsite control stations is an acceptable method of evaluating the effect of GGNS on salt deposition rates in the vicinity of the station. The staff agrees with the licensee that the operation of the GGNS cooling tower does not have a

statistically significant effect on the salt deposit'on rate for the chemical species evaluated. Therefore, the staff finds that the intent of the requirement of Section 4.2.2 of the EPP has been met and that the Cooling Tower Drift Program can be terminated.

The staff's conclusion is supported by an unpublished review evaluating impacts associated with license renewal. The staff concluded that cooling tower drift at nuclear plants does not appear to be a threat to agricultural crops or lands or to other cultivated crops. No yield reductions from cooling tower operation have been reported for crops, except in situations where crops were experimentally placed close to cooling towers. In addition, no state agency has reported negative impact on agriculture from cooling tower operations.

Cooling tower drift from GGNS does not affect nonradiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed amendment.

Alternative to the Proposed Action

Since the Commission concluded that there are no significant environmental effects that would result from the proposed action, any alternatives with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested amendment. This would not reduce environmental impacts of plant operation and would result in reduce operational flexibility.

Alternative Use of Resources

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for GCNS dated September 1981.

Agencies and Persons Consulted

The NRC staff reviewed the licensee's request and did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed license amendment.

Based upon the foregoing environmental assessment, the staff concludes that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the application for amendment dated February 17, 1992, which is available for public inspection at the Commission's Public Room, the Gelman Building, 2120 L Street, N.W., Washington, D.C. 20555, and at the Judge George W. Armstrong Library, Post Office Box 1406, S. Commerce at Washington, Natchez, Mississippi 39120.

Dated at Rockville, Maryland, this 11th day of May 1992.

FOR THE NUCLEAR REGULATORY COMMISSION

Paul W. O'Connor

Paul W. O'Connor, Acting Director
Project Directorate IV-1
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation