NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50-313 and 50-368]

Entergy Operations, Inc.; Arkansas Nuclear One, Units 1 and 2 Environmental Assessment and Finding of No Significant Impact

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an exemption from certain requirements of its regulations to Facility Operating License Nos. DPR–51 and NPF–6, issued to Entergy Operations, Inc. (the licensee), for operation of Arkansas Nuclear One, Units 1 and 2 (ANO–1&2), located in Pope County Arkansas.

Environmental Assessment

Identification of Proposed Action

The proposed action is in accordance with the licensee's application dated October 24, 1994, for exemption from certain requirements of 10 CFR 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage." The exemption would allow implementation of a hand geometry biometric system for site access control such that picture badges and access control cards for certain non-employees can be taken offsite.

The Need for the Proposed Action

Pursuant to 10 CFR 73.55, paragraph (a), the licensee shall establish and maintain an onsite physical protection system and security organization.

10 CFR 73.55(d), "Access Requirements," paragraph (1), specifies that "licensee shall control all points of personnel and vehicle access into a protected area." 10 CFR 73.55(d)(5) specifies that "A numbered picture badge identification system shall be used for all individuals who are authorized access to protected areas without escort." 10 CFR 73.55(d)(5) also states that an individual not employed by the licensee (i.e., contractors) may be authorized access to protected areas without escort provided the individual "receives a picture badge upon entrance into the protected area which must be returned upon exit from the protected area * * *.''

Currently, employee and contractor identification/access control badges are issued and retrieved on the occasion of each entry to and exit from the protected areas of the Arkansas Nuclear One site. Station security personnel are required to maintain control of the badges while the individuals are offsite. Security personnel retain each

identification/access control badge when not in use by the authorized individual, within appropriately designed storage receptacles inside a bullet-resistant enclosure. An individual who meets the access authorization requirements is issued the individual picture identification/access control card which allows entry into preauthorized areas of the station. While entering the plant in the present configuration, an authorized individual is "screened" by the required detection equipment. The individual provides a personal identification number (PIN) to the issuing guard and is screened again by the issuing security officer using the picture identification on the access card. Having received the badge, the individual proceeds to the access portal, inserts the access control card into the card reader, and passes through the turnstile which is unlocked by the access card. Once inside the station, the access card allows entry only to preauthorized areas and the individual's PIN is no longer required.

This present procedure is labor intensive since security personnel are required to verify badge issuance, ensure badge retrieval, and maintain the badge in orderly storage until the next entry into the protected area. The regulations permit employees to remove their badge from the site, but an exemption from 10 CFR 73.55(d)(5) is required to permit contractors to take their badge offsite instead of returning them when exiting the site.

Environmental Impacts of the Proposed Action

The Commission has completed its evaluation of the licensee's application. Under the proposed system, all individuals authorized to gain unescorted access will have the physical characteristics of their hand (hand geometry) recorded with their badge number. Since the hand geometry is unique to each individual and its application in the entry screening function would preclude unauthorized use of a badge, the requested exemption would allow employees and contractors to keep their badges at the time of exiting the protected area. The process of verifying badge issuance, ensuring badge retrieval, and maintaining badges could be eliminated while the balance of the access procedure would remain intact. Firearm, explosive, and metal detection equipment and provisions for conducting searches will remain as well. The security officer responsible for the last access control function (controlling admission to the protected area) will also remain isolated within a bullet-resistant structure in order to

assure his or her ability to respond or to summon assistance.

Use of a hand geometry biometrics system exceeds the present verification methodology's capability to discern an individual's identity. Unlike the photograph identification badge, hand geometry is nontransferable. During the initial access authorization or registration process, hand measurements are recorded and the template is stored for subsequent use in the identity verification process required for entry into the protected area. Authorized individuals insert their access authorization card into the card reader and the biometrics system records an image of the hand geometry. The unique features of the newly recorded image are then compared to the template previously stored in the database. Access is ultimately granted based on the degree to which the characteristics of the image match those of the "signature" template.

Since both the badge and hand geometry would be necessary for access into the protected area, the proposed system would provide for a positive verification process. Potential loss of a badge by an individual, as a result of taking the badge offsite, would not enable an unauthorized entry into protected areas.

The access process will continue to be under the observation of security personnel. The system of identification/ access control badges will continue to be used for all individuals who are authorized access to protected areas without escorts. Badges will continue to be displayed by all individuals while inside the protected area. Addition of a hand geometry biometrics system will provide a significant contribution to effective implementation of the security plan at each site.

The change will not increase the probability or consequences of accidents, no changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in the allowable individual or cumulative occupational radiation exposure. Accordingly, the Commission concludes that there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential nonradiological impacts, the proposed action does involve features located entirely within the restricted area as defined in 10 CFR Part 20. It does not affect nonradiological plant effluents and has no other environmental impact. Accordingly, the Commission concludes that there are no significant