

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
DUKE POWER COMPANY, ET AL.	)	Docket Nos. 50-269, 50-270
	)	and 50-287
(Oconee Nuclear Station,	)	
Units 1, 2, and 3)	)	Docket Nos. 50-413 and 50-414
	)	
(Catawba Nuclear Station	)	
Units 1 and 2)	)	Docket Nos. 50-369 and 50-370
	)	
(McGuire Nuclear Station	)	
Units 1 and 2)	)	

EXEMPTION

I.

Duke Power Company, et al. (DPC or the licensee) is the holder of Facility Operating License Nos. DPR-38, DPR-47 and DPR-55 for the Oconee Nuclear Station, Units 1, 2, and 3; License Nos. NPF-35 and NPF-52 for the Catawba Nuclear Station, Units 1 and 2; and License Nos. NPF-9 and NPF-17 for the McGuire Nuclear Station, Units 1 and 2. The licenses provide, among other things, that the licensee is subject to all rules, regulations, and orders of the Commission in effect now and hereafter.

The Oconee Nuclear Station consists of three pressurized water reactors near Greenville in Oconee County, South Carolina. The Catawba Nuclear Station consists of two pressurized reactors near Rock Hill in York County, South Carolina. The McGuire Nuclear Station consists of two pressurized reactors near Charlotte in Mecklenburg County, North Carolina.

II.

Section 73.55 of Title 10 of the Code of Federal Regulations (10 CFR 73.55), "Requirements for Physical Protection of Licensed Activities in Nuclear Power Reactors Against Radiological Sabotage," paragraph (a), in part, states that "The licensee shall establish and maintain an onsite physical protection system and security organization which will have as its objective to provide high assurance that activities involving special nuclear material are not inimical to the common defense and security and do not constitute an unreasonable risk to the public health and safety."

Section 73.55(d), "Access Requirements," paragraph (1), specifies that "The licensee shall control all points of personnel and vehicle access into a protected area." Section 73.55(d)(5) requires that "A numbered picture badge identification system shall be used for all individuals who are authorized access to protected areas without escort." Section 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...."

The licensee has proposed to implement an alternative unescorted access control system that would eliminate the need to issue and retrieve badges at each entrance/exit location and would allow all individuals with unescorted access to keep their badges when departing the site.

An exemption from 10 CFR 73.55(d)(5) is required to allow such individuals who have unescorted access to take their badges offsite instead of returning them when exiting the site. By letter dated August 23, 1996, the licensee requested an exemption from the requirements of 10 CFR 73.55(d)(5) for this purpose.

### III.

Pursuant to 10 CFR 73.5, "Specific exemptions," the Commission may, upon application of any interested person or upon its own initiative, grant such exemptions in this part as it determines are authorized by law and will not endanger life or property or the common defense and security, and are otherwise in the public interest. Pursuant to 10 CFR 73.55, the Commission may authorize a licensee to provide alternative measures for protection against radiological sabotage provided the licensee demonstrates that the alternative measures have "the same high assurance objective" and meet "the general performance requirements" of the regulation, and "the overall level of system performance provides protection against radiological sabotage equivalent" to that which would be provided by the regulation.

Currently, unescorted access into the protected areas at the Oconee, Catawba, and McGuire units is controlled through the use of a photograph on a badge/keycard (hereafter, referred to as "badge"). The security officers at each entrance station use the photograph on the badge to visually identify the individual requesting access. The licensee's employees and contractor personnel who have been granted unescorted access are issued badges upon entrance at each entrance/exit location and the badges are returned upon exit. The badges are stored and are retrievable at each entrance/exit location. In

accordance with 10 CFR 73.55(d)(5), contractors are not allowed to take these badges offsite.

Under the proposed biometric system, each individual who is authorized unescorted entry into protected areas would have the physical characteristics of his/her hand (i.e., hand geometry) registered, along with his/her badge number, in the access control system. When a registered user enters his/her badge into the card reader and places his/her hand onto the measuring surface, the system detects that the hand is properly positioned, and records the image. The unique characteristics of the hand image are then compared with the previously stored template in the access control computer system corresponding to the badge to verify authorization for entry.

Individuals, including plant employees and contractors, would be allowed to keep their badges when they depart the site and, thus, eliminate the need to issue, retrieve, and store badges at the entrance stations to the plant. Badges do not carry any information other than a unique identification number. All other access processes, including search function capability, would remain the same. This system would not be used for persons requiring escorted access (i.e., visitors).

A Sandia report, "A Performance Evaluation of Biometrics Identification Devices," SAND91-0276-UC-906, Unlimited Release, June 1991, concluded that hand geometry equipment possesses strong performance and high detection characteristics. Also, based on its own experience with the current photo identification system, the licensee determined that the proposed hand geometry system would provide the same high level of assurance as the current system that access is only granted to authorized individuals. The biometric system

has been in use for a number of years at several sensitive Department of Energy facilities and, recently, at other nuclear power plants.

The licensee will implement a process for testing the proposed system to ensure continued overall level of performance equivalent to that specified in the regulation. When the changes are implemented, the respective Physical Security Plans will be revised to include implementation and testing of the hand geometry access control system and to allow plant employees and contractors to take their badges offsite.

When implemented, the licensee will control all points of personnel access into a protected area under the observation of security personnel through the use of both badge and a hand geometry verification system. The numbered picture badge identification system will continue to be used for all individuals who are authorized unescorted access to protected areas. Badges will continue to be displayed by all individuals while inside the protected areas.

Since both the badge and hand geometry would be necessary for access into the protected areas, the proposed system would provide a positive verification process. The 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.

#### IV.

For the foregoing reasons, pursuant to 10 CFR 73.55, the NRC staff has determined that the proposed alternative measures for protection against radiological sabotage meet "the same high assurance objective," and "the general performance requirements" of the regulation and that "the overall

level of system performance provides protection against radiological sabotage equivalent" to that which would be provided by the regulation.

Accordingly, the Commission has determined that, pursuant to 10 CFR 73.5, this exemption is authorized by law and will not endanger life or property or common defense and security, and is otherwise in the public interest. Therefore, the Commission hereby grants the requested exemption from the requirements of 10 CFR 73.55(d)(5) to allow individuals not employed by the licensee (e.g., contractors) to take their photo identification badges offsite, provided that the proposed hand geometry biometrics system is in effect to control access into protected areas at the Oconee, Catawba, and McGuire nuclear stations.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will not result in any significant adverse environmental impact (62 FR 17221).

For further details with respect to this action, see the request for exemption dated August 23, 1996, which is available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW, Washington, DC, and at the local public document rooms located at the Oconee County Library, 501 West South Broad Street, Walhalla, South Carolina, for the Oconee Nuclear Station; the York County Library, 138 East Black Street, Rock Hill, South Carolina, for the Catawba Nuclear Station; and the J. Murrey Atkins Library, University of North Carolina at Charlotte, 9201 University City Boulevard, North Carolina, for the McGuire Nuclear Station.

This exemption is granted for the Oconee, Catawba, and McGuire nuclear stations with the condition that the corresponding modifications, procedures, training, and revisions to the Physical Security Plans necessary for implementation of the hand geometry biometrics system at the facilities will be submitted to the NRC staff for review and approval.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by  
Samuel J. Collins

Samuel J. Collins, Director  
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland,  
this 9th day of April 1997

*19-4/10/97*

\* see previous concurrence  
\*\* see ltr for concurrence

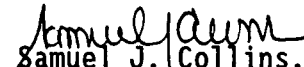
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