

CP&L

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H. W. Habermeyer Jr.
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JUL 29 1994

SERIAL: NL&RAS-94-065
10 CFR 73.5

Director, Office of Nuclear Reactor Regulation
ATTENTION: Document Control Desk
United States Nuclear Regulatory Commission
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 AND 50-324/LICENSE NOS. DPR-71 AND DPR-62

SHEARON HARRIS NUCLEAR POWER PLANT
DOCKET NO. 50-400/LICENSE NO. NPF-63

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261/LICENSE NO. DPR-23

REQUEST FOR EXEMPTION FROM 10 CFR 73.55(d)(5)

Gentlemen:

In accordance with the provisions of 10 CFR 73.5, Carolina Power & Light (CP&L) Company requests an exemption from certain requirements of 10 CFR 73.55(d)(5) relating to the issuance, storage, and retrieval of picture badges for contractors who have been granted unescorted access to the protected areas of Brunswick Steam Electric Plant (BSEP), Units 1 and 2, Shearon Harris Nuclear Power Plant (SHNPP), Unit 1, and H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2.

This exemption will allow the use of a hand geometry biometric system to control unescorted access into the protected areas of BSEP, SHNPP, and HBRSEP. Enclosure 1 provides a description of the relevant aspects of the current and proposed systems and provides the basis for this exemption request. This same exemption has previously been approved for Florida Power and Light Company by NRC letter dated November 29, 1993.

The proposed wording changes to the Physical Security Plans for BSEP, SHNPP, and HBRSEP to implement the hand geometry biometric system are also enclosed for information as Enclosures 2, 3, and 4, respectively. Upon issuance of the requested exemption and implementation of biometrics access control at each site, the respective revised Physical Security Plans will be submitted in accordance with 10 CFR 50.54(p). Additional information will be provided under a separate letter (Serial: BSEP 94-0286)

Corporate Security

WHEN SEPARATED FROM ENCLOSURES 2, 3, & 4

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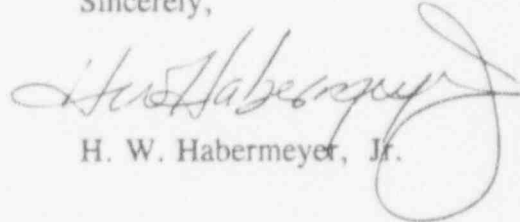
regarding the acceptability of certain aspects of the ongoing security computer system upgrade project specific to BSEP.

This submittal meets the criteria of a Cost Beneficial Licensing Action. Implementation of biometrics access control at all the CP&L nuclear plants will result in a savings of approximately \$520,000 per year, while maintaining the effectiveness of our security programs. CP&L expects to begin implementation of biometrics access control at SHNPP by December 15, 1994, at BSEP by March 31, 1995, and at HBRSEP by September 30, 1995. Based on these schedules, CP&L requests that this exemption be issued by December 1, 1994.

Enclosures 2, 3, and 4 have been designated as Safeguards Information and require protection in accordance with the provisions of 10 CFR 73.21.

Please refer any questions regarding this submittal to Ms. C. L. Tully at (919) 546-7924.

Sincerely,



H. W. Habermeyer, Jr.

CLT/clt

Enclosures

pc (w/o):

Mr. S. D. Ebnetter

Mr. N. B. Le

Mr. P. D. Milano

Ms. B. L. Mozafari

Mr. W. T. Orders

Mr. R. L. Prevatte

Mr. J. E. Tedrow

The Honorable H. Wells, Chairman - North Carolina Utilities Commission

DESCRIPTION AND BASIS FOR EXEMPTION FROM 10 CFR 73.55(d)(5)

INTRODUCTION

Carolina Power & Light (CP&L) Company requests, in accordance with the provisions of 10 CFR 73.5, "Specific exemptions," an exemption from certain requirements of 10 CFR 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage" for the Brunswick Steam Electric Plant (BSEP), Units 1 and 2, the Shearon Harris Nuclear Power Plant (SHNPP), Unit 1, and the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2. Specifically, CP&L requests an exemption from the provisions of 10 CFR 73.55(d)(5) which require that, in part, an individual not employed by the licensee but who requires frequent and extended access to protected and vital areas may be authorized access to such areas without escort provided that he receives a picture badge upon entrance into the protected area which must be returned upon exit from the protected area.

Title 10, Part 73, Section 55 states that the licensee shall establish and maintain an on-site 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. 10 CFR 73.55(a) specifies that the NRC may authorize an applicant or licensee to provide measures for protection for radiological sabotage other than those required by 10 CFR 73.55. This can be accomplished if the applicant or licensee demonstrates that the measures have the same high assurance objective as specified in the regulation, and that the overall level of system performance provides protection against radiological sabotage equivalent to the regulation.

This exemption is requested to allow the use of a hand geometry biometric system to control unescorted access into the protected areas of BSEP, SHNPP, and HBRSEP, in conjunction with taking the photograph identification badges off-site.

CURRENT SYSTEM

Currently, unescorted access into BSEP, SHNPP, and HBRSEP is controlled through the use of a photograph on a badge/card reader card (during the remaining discussion, the term "badge" will be used to mean the combination of a picture badge and card reader card). The security officers at each entrance station use the photograph on the badge to identify the individual requesting access. Under the current system, badges are not taken off-site and are issued, stored, and retrieved at each entrance/exit location.

PROPOSED SYSTEM

Under the proposed system, each individual who is authorized unescorted access will have the physical characteristics of their hand (hand geometry) registered with their badge number in the access control computer. Since no one can use a badge to gain access except the individual whose hand geometry has been registered to that badge, individuals, including individuals not employed by the licensee (e.g., contractors), will be allowed to keep their badges with them when they depart the site. Other access processes, including search function capability, will remain the same except for elimination of the process to issue, retrieve, and store badges at the entrance stations to the plants. At least one member of the security force will continue to be positioned within a bullet-resisting structure to be responsible for the last act of access control.

The hand geometry system is superior to the current process because it provides a nontransferable means of identifying people, unlike photographs on a badge. During the registration process, hand measurements are made. This forms a template of the user's hand which is stored for later use in the actual verification process. A registered user enters his/her badge into the card reader and places a hand on the measuring surface. The system detects when the hand is properly positioned and then records an image. The unique characteristics are extracted from this image and then compared with the previously stored template.

CP&L has reviewed the Sandia Report entitled, "A Performance Evaluation Of Biometric Identification Devices" (SAND91-0276 UC-906, Unlimited Release, Printed June 1991). Based on the results of this report and on experience gained at our sites under the current photo-identification system, CP&L has concluded that the false-accept rate for the hand geometry system is at least as low as the current system. The hand geometry equipment selected will meet the detection probability of 90 percent with a 95 percent confidence level.

Regarding the implementation of a hand geometry system, CP&L will develop and implement a process for testing to ensure that the sensitivity of the system is maintained at an appropriate level. As stated above, all other access processes will remain the same except for elimination of the process to issue, retrieve, and store badges at the entrance/exit stations to the plants. Upon exemption approval and implementation of the hand geometry system, CP&L will update its physical security plans accordingly.

BASIS FOR EXEMPTION

Based on a review of the proposed hand geometry system described previously, CP&L has determined that the requested exemption to the regulations should be granted pursuant to 10 CFR 73.5, in that it is authorized by law and will not endanger life or property or the common defense and security.

Additionally, pursuant to 10 CFR 73.55(a), implementation of the hand geometry system in lieu of certain requirements of 10 CFR 73.55(d)(5) can be authorized in that the proposed system will provide the same high assurance objective regarding control of unescorted access and the overall level of system performance will continue to provide protection against radiological sabotage equivalent to the regulation.

The underlying purpose of 10 CFR 73.55(d) is to control all points of personnel access into a protected area. The wording in 10 CFR 73.55(d)(5) serves to prevent badges from being stolen or compromised by being taken off-site. Under the proposed system, taking badges off-site would be permitted. However, both the badge and hand geometry would be necessary for access into the protected area. Even if a badge could be stolen or compromised, access would not be provided without the hand geometry of the person registered to the badge. In conclusion, the proposed system would continue to provide for a combination of identity verification processes and, in fact, would improve the level of access control at its plants.

For these reasons, as well as because of the cost beneficial aspects of this requested exemption, CP&L believes it to be in the public interest to grant the requested exemption.