the Beaver Valley Power Station, Unit Nos. 1 and 2. The operating licenses provide, among other things, that the licensee is subject to all rules, regulations, and orders of the Commission now and hereafter in effect.

The facility comprises two pressurized-water reactors at the licensee's site in Beaver County, Pennsylvania.

II

The Code of Federal Regulations at 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." Paragraph (1), "Access

Requirements," of 10 CFR 73.55(d), specifies that "The licensee shall control all points of personnel and vehicle access into a protected area." 10 CFR 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." 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 * * *

The licensee proposed to implement an alternative unescorted access control system which 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 badge with them when departing the site.

An exemption from 10 CFR 73.55(d)(5) is required to allow contractors who have unescorted access to take their badges offsite instead of returning them when exiting the site. By letter dated February 8, 1995, as supplemented May 12, 1995, the licensee requested an exemption from certain 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 from the requirements of the regulations 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, employee and contractor identification badges/keycards are issued and retrieved on the occasion of each entry to and exit from the protected areas of the Beaver Valley Power Station site. Station security personnel are required to maintain control of the badges/keycards while the individuals are offsite. This practice has been in effect at Beaver Valley Power Station, Unit Nos. 1 and 2 since the operating licenses were issued. Security personnel retain each identification badge/keycard when not in use by the authorized individual, within appropriately designed storage receptacles. An individual who meets the access authorization requirements is issued an individual picture badge/ keycard 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 and by the issuing security officer. Having received the picture badge/keycard, the individual proceeds to the access portal, inserts the picture badge/keycard into the card reader, and passes through the turnstile which unlocks if the present criteria are met.

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

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/ keycard. Since the hand geometry is unique to each individual and its application in the entry screening function would preclude unauthorized use of a badge/keycard, the requested exemption would allow employees and contractors to keep their badges/ keycards at the time of exiting the protected area. The process of verifying badge/keycard issuance, ensuring badge/keycard retrieval, and maintaining badges/keycards 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/ keycard, 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 picture badges/keycards into the card reader and the biometrics system records an image of the hand geometry. The unique features of the newly recorded image are than 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 badges/keycards 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/keycard by an individual, as a result of taking the badge/keycard 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 badges/keycards will continue to be used for all individuals who are authorized access to protected areas without escorts. Badges/keycards 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