

SAFEGUARDS INFORMATION



P.O. Box 14000, Juno Beach, FL 33408-0420

OCT 13 1993

L-93-248

10 CFR 73.5

10 CFR 73.55

Thomas E. Murley
Director, Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: St. Lucie Units 1 and 2
Docket Nos. 50-335 and 50-389
Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
Additional Information - Biometrics Access Control

Dear Dr. Murley:

By letter L-93-178, dated August 18, 1993, Florida Power & Light Company (FPL) requested an exemption from certain requirements of 10 CFR 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage." The purpose of this letter is to provide clarifications regarding FPL's request for exemption. These clarifications are a result of discussions held with members of the NRC's staff, and do not alter the intent of FPL's request.

For your convenience, Attachment 1 supersedes in its entirety the Attachment to FPL's Letter L-93-178, dated August 18, 1993. Attachment 2 provides details regarding changes to the St. Lucie and Turkey Point Physical Security Plans.

If you have any questions regarding this information, please contact us.

Very truly yours

W. H. Bohlke by W. N. Paduano

W. H. Bohlke
Vice President
Nuclear Engineering and Licensing

Attachments

WHB/msd

cc: Document Control Desk, USNRC
Stewart D. Ebnetter, Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, Turkey Point Plant
Senior Resident Inspector, USNRC, St. Lucie Plant

9310260301-931013
PDR ADOCK 05000250
F PDR

When separated from enclosure(s) Two
_____, HANDLE THIS DOCUMENT AS

SAFEGUARDS INFORMATION
Unauthorized disclosure subject to
Administrative and Criminal sanctions.

260006

decontrolled
(insert proper classification)

an FPL Group company

SAFEGUARDS INFORMATION



SAFEGUARDS INFORMATION

ATTACHMENT 1

INTRODUCTION

Florida Power & Light Company (FPL) requests, in accordance with the provisions of Title 10 CFR Part 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 St. Lucie Units 1 and 2 and Turkey Point Units 3 and 4. Specifically, FPL requests an exemption from part of 10 CFR 73.55 (d)(5). This part states that, "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 CFR 73.55 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." Title 10 CFR 73.55 specifies that the Commission may authorize an applicant or licensee to provide measures for protection against 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 and meets the general performance requirements of 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 the St. Lucie and Turkey Point nuclear plants, in conjunction with taking the photograph identification badges offsite.

CURRENT SITUATION

Currently, unescorted access into St. Lucie and Turkey Point is controlled through the use of a photograph on a badge/keycard (during the remaining discussion, the term "badge" will be used to mean the combination of a picture badge and keycard). 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 offsite and are issued, stored and retrieved at each entrance/exit location.

When separated from enclosure(s) Two
_____, HANDLE THIS DOCUMENT AS

decontrolled
(insert proper classification)

SAFEGUARDS INFORMATION

SAFEGUARDS INFORMATION

L-93-248
Attachment 1
Page 2 of 5

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 system. Since no one can use a badge to gain access except the individual whose hand geometry has been registered to that badge, individuals (this also includes individuals not employed by the licensee i.e., contractors) will be allowed to keep their badge with them when they depart the site. All 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 security officer 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 the 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.

On June 2, 1993, FPL met with members of the NRC staff to discuss the use of a hand geometry system at its sites and provided at that meeting a copy of 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 regarding biometrics systems and on experience gained at our sites under the current photo-identification system, the false-accept rate for the hand geometry system is at least equal to the current system.

Questions posed to FPL at the June 2, 1993 meeting were either resolved with no further follow-up necessary or have been responded to in this Attachment (Attachment 1 - Description and Basis for Exemption), or Attachment 2 (Proposed Physical Security Plan Revisions) of this submittal.

When separated from enclosure(s) Two
_____, HANDLE THIS DOCUMENT AS

decontrolled
(insert proper classification)

SAFEGUARDS INFORMATION



1

2

3

4

5

6

7

SAFEGUARDS INFORMATION

L-93-248
Attachment 1
Page 3 of 5

Basis for Exemption

Florida Power & Light Company (FPL) 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 against radiological sabotage" for St. Lucie Units 1 and 2 and Turkey Points Units 3 and 4.

Currently, positive identification of personnel authorized and requesting access to the protected area is established by security personnel making a visual comparison of a picture badge and the individual requesting access. Under the current system, badges are not taken offsite and are issued, stored and retrieved at each entrance/exit location. FPL proposes to use a hand geometry biometric system, in conjunction with the existing card reader system, to control unescorted access into the protected area of the St. Lucie and Turkey Point nuclear plants. This system would eliminate the need to issue and retrieve badges at each entrance/exit location and would allow individuals to keep their badge with them when departing the site.

In order to implement this system, exemption is needed from just that part of 10 CFR 73.55 (d)(5) which states that, "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 in the protected area which must be returned upon exit from the protected area..."

Title 10 CFR 73.5 states that, "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." Additionally, 10 CFR 73.55 (a) specifies that the Commission 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 and meets the general performance requirements of 10 CFR 73.55.

Assurance Objective

As discussed in American National Standard, ANSI/ANS-3.3, "Security for Nuclear Power Plants," identification of individuals authorized access without escort can be accomplished by the use of "...a device that reads fingerprints, handprints, or some other unique physical feature." Under the proposed system, each individual who

When separated from enclosure(s) *Two*
_____, HANDLE THIS DOCUMENT AS

SAFEGUARDS INFORMATION

decontrolled

SAFEGUARDS INFORMATION

L-93-248
Attachment 1
Page 4 of 5

is authorized unescorted access will have the physical characteristics of their hand registered with their badge. Visual verification of a picture badge will be replaced with a hand geometry system which provides for a nontransferable means of identifying people, coupled with the use of a badge reader. All 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 plant. The current FPL access control process for identifying individuals meets the ANSI/ANS-3.3 criteria. The proposed hand geometry access control process, as well, meets the ANSI/ANS-3.3 identification criteria.

The biometric access control system will provide the same high assurance objective regarding onsite physical protection, and is not inimical to the common defense and security and does not constitute an unreasonable risk to the public health and safety.

System Performance

FPL proposes that the hand geometry equipment selected will meet the detection probability of 90% with a 95 % confidence level. Testing conducted by Sandia National Laboratories (Sandia Report, "A PERFORMANCE EVALUATION OF BIOMETRIC IDENTIFICATION DEVICES," SAND91--0276 UC--906 Unlimited Release, Printed June 1991) demonstrated that the hand geometry equipment possesses strong performance characteristics and is capable of meeting the proposed detection probability and confidence level. Based on the results of the Sandia report and on experience gained at our sites under the current photo-identification system, the false-accept rate for the hand geometry system is at least equal to the current system. FPL will have a process for testing the system. The Physical Security Plans for both Sites will be revised accordingly to include testing of the hand geometry access control system.

Implementation of the hand geometry access control system will continue to provide the overall level of performance equivalent to that which is called for in 10 CFR 73.55.

General Performance Requirement

The performance requirement of 10 CFR 73.55 (d)(1) is to ensure that the licensee controls all points of personnel access into a protected area. Under the proposed system, FPL will continue to control all points of personnel access into a protected area. FPL believes that the basis for the wording in 10 CFR 73.55 (d)(5), regarding individuals not employed by the licensee having to receive and return their badges at the entrance/exit, was to ensure that the badges could not be compromised or stolen by being taken offsite, and as a result, unauthorized persons could potentially enter the protected area. Under the proposed system, individuals not employed by the licensee and requiring frequent and extended access would be allowed to take their badges offsite. However,

When separated from enclosure(s) TWO
_____, HANDLE THIS DOCUMENT AS

SAFEGUARDS INFORMATION

decontrolled

SAFEGUARDS INFORMATION

both the badge and hand geometry would be necessary for access into the protected area. FPL points out that even if a badge were to be compromised or stolen, access would not be provided without the hand geometry of the person registered to the badge. FPL maintains that the proposed system would continue to provide for a combination of identity verification processes.

The access process will continue to be under the observation of security personnel located within a hardened cubicle who have final control over the release of the entrance station turnstiles. A numbered picture badge identification system 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.

Implementation of the biometric access control system will continue to meet the general performance requirements of 10 CFR 73.55 (d) (5).

When separated from enclosure(s) Tub
_____, HANDLE THIS DOCUMENT AS

Declassified
(insert proper classification)

SAFEGUARDS INFORMATION



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

June 7, 1993

Distribution
Docket File
PDII-2 RF
E. Tana
L. Raghavan

DOCKET NO. 50-250, 50-251

MEMORANDUM FOR:

Regulatory Publications Branch
Division of Freedom of Information and Publications Services
Office of Administration and Resources Management

FROM:

Office of Nuclear Reactor Regulation

SUBJECT:

2.206 PETITION (TURKEY POINT)

One signed original of the *Federal Register* Notice identified below is enclosed for your transmittal to the Office of the Federal Register for publication. Additional conformed copies (5) of the Notice are enclosed for your use.

- ☐ Notice of Receipt of Application for Construction Permit(s) and Operating License(s).
- ☐ Notice of Receipt of Partial Application for Construction Permit(s) and Facility License(s); Time for Submission of Views on Antitrust Matters.
- ☐ Notice of Consideration of Issuance of Amendment to Facility Operating License. (Call with ____ -day insert date).
- ☐ Notice of Receipt of Application for Facility License(s); Notice of Availability of Applicant's Environmental Report; and Notice of Consideration of Issuance of Facility License(s) and Notice of Opportunity for Hearing.
- ☐ Notice of Availability of NRC Draft/Final Environmental Statement.
- ☐ Notice of Limited Work Authorization.
- ☐ Notice of Availability of Safety Evaluation Report.
- ☐ Notice of Issuance of Construction Permit(s).
- ☐ Notice of Issuance of Facility Operating License(s) or Amendment(s).
- ☐ Order.
- ☐ Exemption.
- ☐ Notice of Granting Exemption.
- ☐ Environmental Assessment.
- ☐ Notice of Preparation of Environmental Assessment.
- ☐ Receipt of Petition for Director's Decision Under 10 CFR 2.206.
- ☒ Issuance of Final Director's Decision Under 10 CFR 2.206.
- ☐ Other: _____

Division of Reactor Projects I/II

Enclosure:
As stated

Contact: E. Tana
Phone: X504-1486

OFFICE	LA:PDII-2						
SURNAME	ETana ET						
DATE	6/7/93						

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100



101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200