

NOV-1 1976

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Florida Power and Light Company  
ATTN: Dr. Robert E. Uhrig  
Vice President  
P. O. Box 013100  
Miami, Florida 33101

Gentlemen:

In your letter dated May 20, 1976, you proposed Technical Specification changes relating to the containment building tendon surveillance program at Turkey Point Nuclear Generating Station Units No. 3 and No. 4. We have reviewed your proposed Technical Specification changes and find them not acceptable as presented.

Enclosed is our evaluation of your proposed Technical Specification changes. In our evaluation we have provided guidance on how your submittal of May 20, 1976, can be modified to make it acceptable. If you wish to modify your proposed Technical Specification changes we will be glad to consider them following resubmittal.

If you have any questions regarding our evaluation of your proposed containment building tendon surveillance program, please contact us.

Sincerely,

Original signed by

George Lear, Chief  
Operating Reactors Branch No. 3  
Division of Operating Reactors

Enclosure:  
As stated

cc: See next page

OFFICE >	ORB #3 <i>DL</i>	ORB #3				
SURNAME >	DElliott:mjf	GLear <i>GL</i>				
DATE >	10/29/76	10/1/76				

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Florida Power & Light Company

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cc:

Mr. Jack R. Newman, Esquire  
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1025 Connecticut Avenue, N. W.  
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Environmental & Urban Affairs Library  
Florida International University  
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## EVALUATION

### TURKEY POINT UNITS NO. 3 AND NO. 4

#### PROPOSED TECHNICAL SPECIFICATION CHANGES

#### CONTAINMENT TENDON SURVEILLANCE TEST PROGRAM

##### Discussion

By letter dated May 20, 1976, Florida Power and Light Company (FPL) proposed Technical Specification changes relating to the tendon surveillance program for the prestressed concrete containment buildings at Turkey Point Nuclear Generating Station, Units No. 3 and No. 4.

The Technical Specifications presently require that lift-off readings be taken on nine (9) specified tendons (3 vertical, 3 hoop, and 3 dome) for both Units 3 and 4. Wire inspections are also required on one horizontal, one vertical and one dome tendon for each unit. The lift-off readings and wire inspections are required at the end of the first, third and every fifth year thereafter from the date of the structural integrity test (SIT). In addition to the specified surveillance program for each unit, the Technical Specifications require additional surveillance on Unit No. 3 dome tendons at 6, 12, 24 and 36 months after the SIT.

The proposed Technical Specification changes would require that lift-off readings be taken on nineteen (19) tendons (3-vertical, 10 hoop, and 6 dome) for the fifth year inspection of the Unit No. 3 containment. Wire inspections would be similar to that previously required. The tendons in the selected sample for Unit No. 4 would be visually examined to the extent practical without dismantling load bearing components of the anchorage. If the results of the fifth year inspection are acceptable, the sample for subsequent five year inspections would be reduced to nine (9) tendons (3 vertical, 3 hoops, and 3 dome). Different dome and hoop tendons would be chosen for each inspection and would be randomly distributed.

##### Evaluation

Regulatory Guide (RG) 1.35 (Rev. 2, Jan. 1976) states that "if it can be shown by the applicant that identical containment structures are located on one site, that no environmental or other differences are apparent, and that they were constructed by the same contractor in the same manner at the same time (continuous construction), every second containment structure need only be visually inspected as described in regulatory position C.3". The containments for Turkey Point Units No. 3 and No. 4 satisfy the above conditions. However, in order to use RG 1.35 as a justification for reducing the surveillance requirements on Unit No. 4, the proposed Technical Specification changes should be revised to incorporate other surveillance requirements presented in RG 1.35 and Section 4.6.1.7 of the Standard Technical Specifications (STS).

Listed below are suggested ways in which the proposed Technical Specifications could be modified so that they would satisfy the guidance provided by RG 1.35 and Section 4.6.1.7 of the STS.

1. Section 4.4.6.2(a) of the proposed Technical Specifications does not provide any visual inspection of the concrete surrounding the tendon anchorages. Regulatory position C.2 in RG 1.35 and Section 4.6.1.7.2 of the STS provide guidance on this matter.
2. Section 4.4.6.2(b) of the proposed Technical Specifications should also include provisions for an unloading cycle as described in regulatory position C.4.2 of RG 1.35,
3. Section 4.4.6.2 of the proposed Technical Specifications does not provide any acceptance criteria or provisions for reporting to the Commission as described in regulatory positions C.7 and C.8 of RG 1.35 and Sections 4.6.1.7.1 and 4.6.1.7.4 of the STS.
4. Section 4.4.6.4(a) (2) of the proposed Technical Specifications requires that only three (3) vertical tendons be selected for inspection. Regulatory position C.2.1.1.2 of RG 1.35 and Section 4.6.1.7.1(a) of the STS state that five (5) vertical tendons should be inspected.
5. Sections 4.4.6.2(c) and 4.4.6.4 of the proposed Technical Specifications indicate that during subsequent inspections, only the dome and hoop tendons will be varied. Regulatory position C.2.3 of RG 1.35 indicates that only one tendon from each group (vertical, hoop and dome) may be kept unchanged after the initial selection.
6. There are no provisions for periodic liner surveillance as described in Section 4.6.1.7.3 of the STS.

Turkey Point Units No. 3 and No. 4 have both completed their second tendon inspection (three years after SIT). Between the two units a sufficient number of tendons have been inspected to justify the use of the surveillance program recommended by RG 1.35 starting with the inspection 5 years after SIT. The use of the surveillance program recommended by RG 1.35 would eventually result in fewer tests than presently required. However, since the sample group would change each time an inspection is performed, a thorough inspection of the entire containment would be achieved during the life of the facility.

### Conclusion

The proposed Technical Specification changes for the tendon surveillance program for the prestressed concrete containment buildings at Turkey Point Units No. 3 and No. 4 are not acceptable. A reduction of the tendon

surveillance requirements for Unit No. 4 can be justified by Regulatory Guide 1.35 provided the Technical Specifications are modified to incorporate the tendon surveillance test program presented in Regulatory Guide 1.35 and Section 4.6.1.7 of the Standard Technical Specifications.