RAS 2566

DOCKETED USNOC

100 DEC 29 P2:31

PROD. & UTIL FAC 50-250/251-1R

Mark P. Oncavage 12200 SW 110th Avenue Miami, FL 33176

December 22, 2000

OFFICE OF SECRETARY
Thomas S. Moore, Chairmad Elevatings AND
Dr. Richard F. Cole ADJUDICATIONS STAFF
Dr. Charles N. Kelber
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Atomic Safety and Licensing Board Members:

Please find enclosed the amended contentions of Mark P. Oncavage.

Respectfully submitted,

Mark P. Oncavage

December 22,2000

Amended Contentions of Mark P. Oncavage, December 22, 2000

Contention No. 1. The aquatic resources of Biscayne National Park will become contaminated with radioactive material, chemical wastes, and herbicides during the license renewal term which will endanger the health and safety of the members of the public who consume aquatic food products that originate in the waters of Biscayne National Park and Card Sound. The licensee's Final Environmental Statement, July 1973 (p. V-27) states:

"After the first two years of reactor operation, cooling water from the plant is planned to be recirculated through a system of cooling canals to dissipate the heat (see Section III.D.1.). Liquid radioactive wastes will also be routed into this channel system."

The Generic Environmental Impact Statement for License Renewal of Nuclear Plants, NUREG-1437 (GEIS) concludes that public radiation doses are within design basis but makes one exception by warning of a health problem that may require reexamination, § 4.6.1.1 Radionuclide Deposition:

"One remaining topic about buildup warrants discussion. Buildup is not explicitly accounted for in the aquatic food pathway (i.e., fish, shellfish, etc.) This pathway relies on the use of bioconcentration factors. A bioconcentration factor for a nuclide is the ratio of the concentration in biota to the radionuclide concentration in water. In certain cases, the bioaccumulation factors may require reexamination. These principally involve fish (in the human food chain) that are bottom feeders. Bottom feeders may ingest worms and other biota that may remobilize radioactive materials accumulated in the sediment."

The GEIS, referring to the cooling canals as a closed system, is misleading. The licensee's Final Environmental Statement, July 1972 (p. V-3) states:

"No provisions for control of groundwater flows to the east are planned at this time. Estimates of seepage losses in this direction range from 50 to as high as 200 cfs depending on the relative head of the channel-canal system and the water levels in Biscayne Bay and Card Sound."

The licensee's License Renewal Application also avoids any mention of massive seepage, up to 89,000 gallons per minute, into Biscayne Bay and Card Sound. The GEIS and the licensee's application also fail to mention the flow of the tidal water through the underground passages that

connect the cooling canals to Biscayne Bay and Card Sound. Additionally, there can be accidental spills of radioactive materials on the land portion of Turkey Point that will migrate down gradient into the bay. The recipients of the of the groundwater flow contaminated with radioactivity are the waters of Biscayne National Park and Card Sound. A groundwater conflict, category 2, exists.

With the high costs and uncertain future availability of solid low level radioactive dump sites, it is of concern that the licensee will find numerous ways of reducing the volume of radioactive solid waste and increasing the amount of radioactive liquid waste which would be dumped into the cooling canals. Resins, solvents, and wash water containing radioactivity at much higher levels than in the past are likely during the license renewal term. This would place the members of the public who consume fish, lobsters, crabs, shrimp, shellfish, squid, anemones, seaweed, and other aquatic products from the waters of Biscayne National Park and Card Sound at an unacceptable health risk. The Supplemental Environmental Impact Statement (SEIS), the GEIS, the Safety Evaluation Report (SER), and the Licensee's Renewal Application are defective since there is no study of the problem, no risk assessment, no mitigation strategy, and no unacceptable finding.

Contention No. 2. The location of Turkey point incurs severe and unusual challenges to the safe storage of high level radioactive spent fuel whether in spent fuel pools or in dry cask storage. There may be up to 60 years of spent fuel, per unit, stored at the Turkey Point site.

NUREG/CR-6451, "A Safety and Regulatory Assessment of Generic BWR and PWR Permanently Shutdown Nuclear Power Plants" describes the risk of a catastrophic accident and fire at a spent fuel pool of a shut down nuclear reactor. Variations of the configurations of a spent fuel pool accident in this study can produce a generic risk of permanent contamination of land up to 2,000 square miles. The study appears to be based on a single unit after 40 years and having the hot core recently off loaded. The licensee is seeking license renewal for 2 units which could

possibly bring the spent fuel inventory in storage at Turkey Point to almost 60 years per unit. A catastrophic radiological accident at a spent fuel facility would be a severe accident which is a category 2 issue (GEIS Table 9.1, P. 9-13.) and would produce public exposures in excess of 10 CFR Part 100 guidelines.

- 2 A. Hurricanes as accident initiators were excluded from the GEIS. Hurricane Andrew, only a category 4 hurricane on the Saffir- Simpson Scale, damaged Homestead Air Force Base so badly, it never reopened. If a category 5 hurricane were to hit Turkey Point, it would produce catastrophic damage with winds over 155 mph, a storm surge over 18 feet, and complete roof destruction on many residence and commercial buildings. The spent fuel facilities, wet or dry, would be particularly vulnerable to a category 5 hurricane due to inadequate construction practices and having no "defense in depth." The SEIS, the GEIS, the SER, and the licensee's Renewal Application are defective since there is no study of hurricane damage to spent fuel facilities, no risk assessment, no mitigation strategy, and no unacceptable finding.
- 2 B. The Safety Evaluation Report for the Turkey Point license renewal is fatally flawed since it relies on the NRC Staff's Safety Assessment of June 19, 2000 as it relates to the development of the former Homestead Air Force Base into an international, commercial airport. The U.S. Air Force and the Federal Aviation Administration requested the NRC Staff to examine the safety implications of developing an airport 4. 9 miles from the Turkey Point plant site. The NRC Staff produced a Safety Assessment containing so many mistakes as to make the assessment worthless.

The NRC Staff abandoned their own aircrash probability model, Standard Review Plan NUREG-0800 (SRP), in favor of a weaker probability model used by the Department of Energy (DOE).

- \bullet The SRP uses a value of $\mathbf{C}_{\!_{j}}$ for distance between the plant and the end of the runway.
- The DOE formula relies on a crash rate per mile without apparently accounting for

the fact that most air crashes occur during takeoffs and landings.

• The DSEIS for the Homestead base disposal states:

"The ROI (region of influence) for flight safety includes the terminal airspace within about 5 minutes flying time of the Homestead ARS airfield. This is when the aircraft are at the lowest altitude and most vulnerable to mishaps. Statistics show that the vast majority of aircraft mishaps occur relatively close to airports, generally during takeoff and landing. The ROI for ground safety includes former Homestead AFB, safety zones extending from each end of the runway, and the Turkey Point Nuclear Power Plant."

The NRC Staff understated the crash factor for bird aircraft strike hazard (BASH). The NRC Staff utilized an average of a national BASH rate and a State of Florida BASH rate. Both national and state rates ignore the site specific parameters.

- The air base lies between Biscayne National Park and Everglades National Park. Both provide protection, roosting, and nesting areas.
- Biscayne National Park hosts 81 species of wintering water birds and raptors.
- Everglades National Park hosts 121 species of wintering water birds and raptors.
- The nearby South Miami-Dade Landfill provides unlimited food for the profuse bird population.
- Removing roosting or nesting flora from the airport area would be illegal and politically impossible.
- Killing or traumatizing birds through mechanical or chemical means would be illegal and politically impossible.

The DOE formula requires a height of target as a value in computing aircrash probability. The data on the twin 400 foot chimneys located at the Turkey Point Fossil Units were intentionally removed from the formula apparently in an attempt to have the result appear acceptable. The SEIS, the GEIS, the SER, and the licensee's Renewal Application are defective since there is no study of the problem, no risk assessment, no mitigation issues, and no unacceptable finding.

2 C. The Turkey Point plant is the closest commercial reactor to the Republic of Cuba. It has been long rumored in the Cuban exile community that the Cuban Air Force will target Turkey Point for war or terrorist attack. The United States has placed an embargo on Cuba for forty years that has contributed to the ruination of the Cuban economy. The Cuban exile community is vehemently anti-Castro. On February 24, 1996, Cuban Air Force MiGS executed a missile attack on 2 unarmed planes from Opa Locka Airport in Miami killing the 4 pilots on board.

There appears to be great animosity towards the U.S. Government by Fidel Castro. In the waning days of Castro's regime or during an unstable regime attempting to replace Castro, an armed attack on Turkey Point needs to be taken as a serious threat. The attack could come as an air strike or as a demolition strike. The spent fuel storage facilities would be inviting and vulnerable targets. The SEIS, the GEIS, the SER and ther licensee's Renewal Application are defective since there is no study of the problem, no risk assessment, no mitigation issues, and no unacceptable finding.

Mark P. Oncavage

December 22, 2000

Florida Power & Light Company Turkey Point Units 3 and 4 50-250-LR

Docket Nos.

50-251-LR

ASLBP No.

01-786-03-LR

Certificate of Service

*Thomas S. Moore, Esq., Chairman Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, D.C. 20555 tsm2@nrc.gov

*Dr. Charles N. Kelber Atomic Safety and Licensing Board **U.S. Nuclear Regulatory Commission** Washington, D.C. 20555 cnk@nrc.gov

*Secretary Att'n: Rulemakings and Adjudications Staff Mail Stop O-16 C1 **U.S. Nuclear Regulatory Commission** Washington, D.C. 20555-0001 E-mail: secy@nrc.gov E-mail: hearingdocket@nrc.gov

Office of Commission Appellate Adjudication *David R. Lewis, Esq. Mail Stop O-16 C1 **U.S. Nuclear Regulatory Commission** Washington, D.C. 20555-0001

Thomas F Plunkett President, Nuclear Division Florida Power and Light Company P.O. Box 14000 Juno Beach, FL 33408-0420

*Joette Lorion 13015 SW 90 Court Miami, FL 33176 JL3353@aol.com

*Dr. Richard F. Cole Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, D.C. 20555 rfc1@nrc.gov

Atomic Safety and Licensing Board Panel Administrative File Mail Stop T 3-F-23 U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

* Janice E. Moore, Esq. *Steven R. Hom, Esq. Office of the General Counsel Mail Stop O-15 D21 U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001 E-mail: jem@nrc.gov E-mail: srh@nrc.gov

Shaw Pittman 2300 N Street, N.W. Washington, D.C. 20037 E-mail: david_lewis@shawpittman.com

*Mitchell S. Ross, Esq. Florida Power & Light Company Law Department 700 Universe Boulevard P.O. Box 14000 Juno Beach, FL 33408-0420 E-mail: Mitch_Ross@fpl.com

David P. Reiner, II, Esq. Lehtinen, Vargas & Reiner, P.A. 7700 North Kendall Drive, Suite 303 Miami, FL 33156-7559

I certify that copies of the Amended Contentions for Mark P. Oncavage were deposited in the U.S. Mail by first class on December 22, 2000. Also, persons indicated with an asterisk (*) were sent copies by E-mail, December 22, 2000.

Mark P. Oncavage