DUCKEL HUMBER PROD. & UTHE, ERG. 50250, 251 SP CITIZENS AGAINST RADIOACTIVE POLLUTION MISS GERALDINE D. RASMUSSEN' FOUNDER-DIRECTOR-EDITOR-EMERITUS-

September 12, 1979

Secretary of the Commission, Nuclear Regulatory Commission Washington, D.C. 20555

ATTENTION: DOCKETING AND SERVICE

7911020 10,7 G

Sirs:

Though I will not be able to personally appear at the hearing on the Turkey Point Nuclear Generating Station and the proposed amend-, ment to Units 3 and 4, I submit the following for the record:

Due to the extreme dangers and likelihood of explosions of nuclear storage sites, and the dangers of the entire nuclear fuel cycle, I urge that nuclear energy be banned from the state of Florida, and other regions also.

With the explosion of the nuclear waste storage site in the Khystym region of the Soviet during 1957-1958, I wrge you to recommend that Florida Power and Light work towards reestablishing safe forms of energy for generating electricity within our state.

Radon, which is disbursed into the atmosphere by the nuclear industry (enclosed on nuclear industry practices from the International Agency for Atomic Energy at Vienna, Austria) turns into alpha, beta and gamma rays according to Marie Curie (Treasury of World Science, Dagobert Runes, Editor, Philisophical Library, N.Y.); gamma rays are extremely penetrating, and I can personally testify that for at least eight to ten years I have been able to detect the odor of radiation in the atmosphere at least once every two or three weeks, though lately less frequently (though the odor persisted today briefly), and enclose a photograph showing radiation burns suffered by me from two afternoons! outdoor work on September 30 and October 1, 1977. Photograph was taken about four days later:

The top burns show where the penetrating rays entered and exited my skin on the leg, and the lower burns are a large blotch from combined radiation. I realise the problems faced by utility companies, and know that there is not enough coal (itself with certain drawbacks) for using that form of energy; other forms of alternatives could be developed however, and I urge the Nuclear Regulatory Commission to work towards this goal. I conserve, and know that many cculd conserve more also, but they think that nuclear power is endless- that uranium will last forever and think it safe. Breeders, the only way that nuclear fuel could last long enough to be a solution to the energy problem, are too undafe to use even though foreign countries such as England and France have several. You witness their massive demonstrations where even officials in public office march with the opposition to nuclear power. In Sweden Prime Minister Thorbjorn Falldin resigned over the nuclear dispute; he knew that Sweden was sending spent nuclear fuel up the coast of Florida after entering the Miami port, yet their panel's majority wanted to continue with nuclear power. I hope that our officials have more comprehension as to future dangers. Thank-you. Sundaine of i lacon

Sincerely

Geraldine D. Rasmussen, Firector-Emeritus







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Photograph of radiation burns suffered by Geraldirs I. Funmussen during two afterneone of outdoor work on September 30, and October 1, 1977 in Fort Lauderdale, Florida. Reported first to Dr. Frederick Rowe of UCLA at Irvine, California; his reply on sunburn ultraviolet increasing in danger to health printed in CARP newsletter.

Upper burns show where rays entered skin and exited; lower large area burn a blotched section. Treated with blomegneitos and special vitamins for healing.



Management Practices in the Nuclear Industry

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Radioactive Waste Stream	Contaminants	Typical Waste Management Practice
Uranium Mining and Milling Air from mines Process/ventilation air from mills	Radon Radon, ore dust	Diluted and discharged to atmosphere Filtered/scrubbed, discharged to atmosphere
Mine and runoff waters Process waste solutions	Radium, uranium, heavy metals Radium, uranium, acid, inorganic salts, heavy metals, sulphate, etc.	Can be used in mill, excess diluted and discharged Neutralised with lime; precipitated solids stored in tailings retention system, clear liquor recycled to plant, excess lost by natural evaporation
Solid waste tailings	Radium, uranium, radon, thorlum	 Neutralised with lime; stored permanently in tailings retention system, eventually vegetated and stabilised
Uranium Hexafluoride Production		
Process gases/ventilation air Process waste solutions	Uranium, fluorides, nitrogen oxides Uranium, acid, inorganic salts, fluorides, nitrates, etc.	Filtered/scrubbed, discharged to atmosphere Neutralised with lime; precipitated solids retained in dams or buried, clear liquor held in dams or discharged and diluted
Low level solid waster		Packaged for ground burial
Isotope Enrichment Process gases/ventilation air Low level liquid effluents	Uranium, fluorides, fluorine Traces of uranium, fluorides, nitrates, etc.	Discharged to atmosphere Neutralised with lime; precipitated solids retained in dams or buried, clear liquor held in dams or discharged and diluted
Low level solid waste		Ground burial
Fuel Fabrication Process gases/ventilation air Low level liquid effluents	Uranium, nitrogen oxides, ammonia Uranium, nitrates, ammonia	Filtered/scrubbed, discharged to atmosphere Neutralised with lime; precipitated solids retained in dams or buried, clear liquor held in dams or discharged and diluted
Low level solid waste	ũ	Ground burial
Reactor Operation - Offgases	Fission product noble gases (e.g. krypton, xenon), iodine isotopes, esctivated nitrogen, etc.	Filtered (absolute), adsorbed on charcoal beds, diluted and discharged to atmosphere
Blowdown water, coolant Jeakage	Fission products, corrosion and activation products, tritium	Filtered, purified by ion exchange, recycled/ diluted and discharced
General chemical liquid	Fission products, activation products, inorganic salts	Evaporated, treated by flocculation-precipitation or ion exchange
Medium level solid waste	Spent ion exchange resins, sludges from waste treatment	Incorporated in bitumen/cement prior to storage/ ground burial
Low level solid waste		Ground burial
Reprocessing of Irradiated		
Offgeses. High level liquid weste	Fission product noble gases (e.g. krypton, xenon) radioiodine, tritium Fission products uranium olutonium	Treated to remove lodine isotopes, filtered (absolute), diluted and discharged
Madium Invel Liquid waste	other actinides, nitrates	solidified
Medium level liquid waste	carbonates, organics	Evaporated, concentrate to high level liquid waste treatment, condensate to low level liquid waste treatment
Low level liquid wasts	Fission products, inorganic salts, organics	Treated by ion exchange or flocculation-pre- cipitation; sludges, resins, etc. to solid weste treatment: ourified water recycled/discharged.
High level solid wasta (e.g. solidified high level liquid wasta, chopped fuel dadding)/	Fission products, actinides, activated cladding materials	Interim storage in engineered facilities, ultimate storage/disposal to be determined
Medium level solid waste Low level solid waste	Similar to reactor operations	Incorporated in cement/bitumen for ground burial Ground burial
2 . The fill and	- Part of OAn In	Warn

FR. THE MANAGEMENT OF PROVACTIVE WASTES INTERNATIONAL ATOMIC KNERGY ALENCY : MARCH, 1977 VIONNO- AUSTRIAL

CITIZENS AGAINST' RADIOACTIVE POLLUTION MISS GERALDINE D. RASMUSSEN

FOUNDER-DIRECTOR-EDITOR-EMERITUS



Who is Doing What with High-level Waste and Where?

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Country	Current practice	Future plans
USA	Wastes from Gove Hanford, Washington – Liquid wastes are made alkaline and stored in mild steel tanks. Caesium 137. and strontium 90 are chemically separated from high heat wastes, encapsulated and stored in water-cooled basins. Liquid wastes are gradually being solidified by eva- poration to a salt cake that is stored in existing tanks. Sevannah River; South Carolina – Liquid wastes are under way to evaporate and cool liquid wastes to form a salt cake. Saturated salt solutions are stored in existing tanks. National Reactor Testing Station, Idaho – Acidic waste solutions stored in stainless steel tanks prior to calcination in Waste Calcining Facility and interim storage in stainless steel bins. Wastes from Comm No commercial plants are currently operational. The Nuclear Fuel Services Plant in New York State operated 1966–1972 but is now shut down. Most high activity wastes from this plant were made- alvaling and stored in the plant were made-	All high activity westes are to be solidified as soon as practicable. Long-term options being evaluated include storage in existing tanks or vaults, storage on-site in underground caverns, or shipment to off-site federal-repository.
	quantities of special wastes are stored in a stainless steel tank,	and must be transferred to a national repository within its years. Filot plant demonstration of waste solidification processes from 1966–72 at Henford established the necessary technology. Currently, assessments of alternatives for both interim and ultimate storage are in progress.
USSR	Liquid wastes stored in stainless steel tanks. Solidific- ation processes to produce phosphate glasses have been investigated on a laboratory scale with radio- active wastes and on a pilot plant scale with inactive simulated wastes.	Industrial scale plant to glassify wastes is expected to begin operation in the 1980's. Liquid Injection into deep geological formations is also being considered.
UK	Liquid wastes are stored as acidic solutions at Windscale and Dounreay reprocessing plants in stainless steel tanks.	Storage of wastes as liquids is considered safe in the near term. The FINGAL process to solidify wastes into borosilicate glass was investigated from 1958-63. An improved glass making pro- cess (HARVEST) is being developed and there are plans to begin solidifying wastes in the mid- 1980s. Storage methods that allow solidified wastes to be retrieved are favoured.
France	Liquid wastes are stored as acid solutions at the Marcoule and La Hague reprocessing plants in stainless steel tanks. The PIVER pilot plant to solidify wastes into borosilicate glass has been operating since 1969.	A new solidification plant capable of vitrifying wastes from essentially an 800 ton reprocessing facility has been constructed at Marcoule.
Belgium	Liquid wastes from Eurochemic reprocessing plant are stored in stainless steel tanks.	Calcination and glassification processes are being considered for waste solidification.
Canada	Engineered storage of irradiated fuel assemblies,	Storage of fuel without reprocessing in water or air-cooled vaults is considered satisfactory for at least 75 years. If economically attractive, fuel will be reprocessed at a later date.
FR Germany	Liquid wastes from WAK reprocessing pilot plant are- stored in stainless steel tanks. Studies of solidifying wastes into borosilicate and phosphate glass are in progress	First radioactive glasses will be produced in the VERA pilot plant in 1978/79. High-level liquid wastes will be converted into glasses after a three- to five year cooling period. Salt formations similar to Asse are being studied for ultimate dis- posal.
India	Liquid wastes stored as acidic solutions in stainless steel tanks.	A waste immobilisation plant using a batch glass- making process is expected to be operating in 1977/78. Solidified wastes will be stored in air- cooled vaults.
Italy	EUROX pilot reprocessing plant began operation in 1970. Small quantities of liquid wastes are stored in stainless steel tanks.	Batch solidification to form borosilicate or phosphate glasses under consideration. Disposal of solid wastes in clay formations of low perme- ability is being investigated.
Japan	No significant quantities of high level wastes have been produced.	A reprocessing plant is presently under construc- tion. Acidic wastes will be stored in stainless steel tanks for periods of up to five years. It is pro- posed to construct a pilot solidification plant by 1981.

CITIZENS AGAINST RADIOACTIVE POLLUTION MISS GERALDINE D. RASMUSSEN FOUNDER-DIRECTOR-EDITOR-EMERITUS



ITIZENS AGAINST KADIOACTIVE FOLLUTION MISS GERALDINE D. RAYMUSSEN FOUNDER-DIRECTOR-EDITOR

GERALDINE D. RASMUSSEN, DIRECTOR-EDITOR-FOUNDER SUMMER, 1979 INTERNATIONAL MAY DAY DEDICATION

DEDICATED T.O

HAZEL C. RASMUSSEN, 1895-1979, Honorary Member, CARP Hazel C. Rasmussen Memorial Fund established by Edwin Oliver

KAREN SILKWOOD, Ferr-McSee plutonium lab technician killed in a mysterious auto accident on November 13, 1974 while she was en route to give facts on falsified company records to a New York Times reporter; parents suing Kerr-McGEE.

WILLIAM GARNER, Alabama Anti-Nuclear Attorney Seneral who died on January 17, 1979, will be greatly missed. DAVID COMEY, Widely known environmental leader who died in an automobile accident on January 5, 1979.

D A NUCLEAR REACTOR STORAGE SITE EXPLODED contaminating a thousand square MILES in the southern Ural region of the SOVIET UNION, a Α DISASTOR which "EXPERTS" said could NOT happen, during 1957-1958. Ν ø Reports were suppressed and location not given until revealed in Ξ ENGLAND by Zhores Medvedev, former Soviet scientist, who gives details in his book, SOVIET SCIENCE, (W.W. Norton, 1978), pages 94-98 and Appendix II, pages 232-244.) The nuclear disastor oc-R 0 U curred in a region where nuclear reactor WASTES had been stored S in shallow trench-like sites in the Ural region near Chiliabinsk. and Sverdlovsk, where thousands died immediately, many more later, as hospitals were not prepared and evacuation was delayed L because of lack of any plan. The zone is heavily contaminated, E. being a thousand times more so than test laboratories for test-Т ing radiation. The two above cities are approximately 200 miles Н apart, and winds carried and spread the severe contamination a A thousand aguare miles in a circular area; the public is not per-L mitted there even today though test stations are on the outskirts.

The DIRECTOR of the PORT OF MIAMI has banned radioactive materials from the port following the Motorcade up Florida's east coast. It is sad that local Florida newspapers criticized the group, as they and we are preparing for a safer nation and world. These shipments travelled up the coast of Florida by truck and train to South Carolina for reprocessing. (Any wishing past CARP issues on this issue may obtain them by sending \$2.00). Last month personal friends driving south through Tennessee passed through an area near Monteagle north of Chattanooga where a truck containing radioactive materials overturned; all traffic was rerouted, and the Tennessee State Highway Patrol wrote me that there was no leakage. The truck was driving from Chicago.

It is such a small amount of the total need for energy and electricity which nuclear energy fills, that there is no need to RISK future life on our EARTH for this dangerous form of energy; alternative, safe forms exist, and are waiting for a subsidized industry to turn some attention and funds to development of solar, wind, hydro- and hydrogen energy.

Though DR. NORMAN RASMUSSEN'S 1974 Report greatly minimized the dangers (published by ERDA, condensed in the Reader's Digest), Dr. Rasmussen stated a year later: "Nuclear power plants have not performed with the



9/4/79 -

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY & LICENSING BOARD

In the Matter of FLORIDA POWER & LIGHT COMPANY) Docket Nos. 50-250-SP) , 50-251-SP)
(Turkey Point Nuclear Generating Units Nos. 3 and 4)) (Proposed Amendments to Facility) Operating License to Permit) Steam Generator Repair)

MOTION TO ADOPT PRE-HEARING SCHEDULE AND TO SCHEDULE FINAL HEARING

Pursuant to the provisions of 10 CFR Sections 2.703(a)(1), 2.730, and the "Notice of Hearing" issued by the Atomic Safety and Licensing Board August 9, 1979 (44 FR 47821), Licensee respectfully requests that the Board issue an Order adopting the proposed Pre-Hearing Schedule attached to this Motion and schedule the commencement of a Final Hearing for December 4, 1979, in Miami, Florida.

Both Licensee and Intervenor have agreed to the proposed December 4, 1979 hearing date, but the NRC Staff has indicated that it is premature to project dates to file testimony or for the commencement of a hearing. (See letter dated August 31, 1979 from the undersigned co-counsel for Licensee reporting to the Board on the meeting between all parties held August 30, 1979 in Miami, Florida, pursuant to the Board's Order of August 3, 1979.)

However, the NRC Staff Safety Evaluation for the proposed repairs was issued May 14, 1979, and copies served on the Board



and parties May 15, 1979. Similarly, the NRC Environmental Impact Appraisal was issued and served on the Board and all parties June 29, 1979. Adoption of the proposed Schedule and scheduling the Final Hearing, as requested, will assist the parties in pre-hearing preparation, including the conduct of discovery and the filing of prepared written testimony.

Respectfully submitted, NORMAN

STEEL HECTOR & DAVIS Co-Counsel for Licensee 1400 Southeast First National Bank Building Miami, Florida 33131

Telephone: (305) 355-2863

Dated: September 4, 1979



PROPOSED SCHEDULE - TURKEY POINT STEAM GENERATOR REPAIRS LICENSING HEARING

Thursday	August 30, 1979	Parties meet in Miami - to discuss contentions, possible stipulations, and set a schedule for discovery.
Friday	August 31, 1979	Parties report to Board (ASLB) on meeting of August 30. All parties commence discovery on contentions ruled admissible by Board in Order of August 3, 1979. (Contentions 2, 5, 6, 7, 12 and 18).
Friday	September 14, 1979	Parties simultaneously file and serve statements concerning admis- sibility of Intervenor's conten- tions filed with Board with report of August 31, 1979.
Tuesday-	October 30, 1979	Cut-off for discovery requests on contentions ruled admissible by the Board in Order of August 3, 1979.
Friday **/	November 16, 1979	File prepared testimony.
Tuesday	Decèmber 4, 1979	Commence hearing.

- */ All parties agree that discovery on any other contentions ruled admissible by the Board may commence upon issuance of the Board's order so ruling.
- **/ Assuming it is consistent with the Board's schedule, both Licensee and Intervenor agree to the proposed December 4 hearing date. The NRC Staff believes it is premature to project dates to file testimony or commence a hearing.



UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY & LICENSING BOARD

In the Matter of) Docket Nos. 50-250-SP) 50-251-SP
FLORIDA POWER & LIGHT COMPANY) (Proposed Amendments to Facilit
(Turkey Point Nuclear Generating Units Nos. 3 and 4)) Operating License to Permit) Steam Generator Repair)

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that copies of the attached

captioned in the above matter, together with attachment thereto, were served on the following by deposit in the United States mail, first class, properly stamped and addressed, on the date shown below.

Elizabeth S. Bowers, Esquire Chairman Atomic Safety & Licensing Board Panel U.S. Nuclear Regulatory Commission Washington, DC 20555

Dr. Oscar H. Paris Atomic Safety & Licensing Board Panel U.S. Nuclear Regulatory Commission Washington, DC 20555

Dr. David B. Hall 400 Circle Drive Santa Fe, NM 87501

Atomic Safety & Licensing Board Panel U.S. Nuclear Regulatory Commission Washington, DC 20555



Atomic Safety & Licensing Appeal Board Panel U.S. Nuclear Regulatory Commission Washington, DC 20555

Mr. Mark P. Oncavage 12200 S.W. 110 Avenue Miami, FL 33176

Docketing and Service Section Office of the Secretary U.S. Nuclear Regulatory Commission Washington, DC 20555

Steven C. Goldberg, Esquire U.S. Nuclear Regulatory Commission Office of the Executive Legal Director Washington, DC 20555

Bruce S. Rogow, Esquire Dean NOVA Law School 3301 College Avenue Fort Lauderdale, FL 33314

Harold F. Reis, Esquire Lowenstein, Newman, Reis, Axelrad & Toll 1025 Connecticut Avenue, NW Washington, DC 20036

NORMAN A. COLL

STEEL HECTOR & DAVIS 1400 Southeast First National Bank Building Miami, Florida 33131

Telephone: (305) 577-2863

Dated:

September 4, 1979





PROD. & UTIL, FAC. 50-350.251 SP

LAW OFFICES

RICHARD N. FRIEDMAN 100 BISCAYNE BOULEVARD, NORTH MIAMI, FLORIDA 33132

TELEPHONE (305) 377-0988

September 14, 1979



Secretary of the Commission Nuclear Regulatory Commission Washington, D.C. 20555

ATTN: DOCKETING AND SERVICE BRANCH

Dear Sir:

As a member of the public, I should like the opportunity to make an oral presentation for five (5) minutes before the Nuclear Regulatory Commission in connection with a hearing to be held on the petition of Mark P. Oncavage regarding the proposal to repair the steam generators at the Turkey Point Plant in Florida.

Thank you for your earliest advice as to the date, time and place when the public hearing will be held and your confirmation that I will be a speaker.

Acknewledged by card. 9:19

Thank you for your cooperation.

Very traly yours,

RNF/d



UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

In the Matter of
FLORIDA POWER AND LIGHT COMPANY
(Turkey Point, Units 3 and 4)

Docket No.(s) 50-250SP;

50-251SP

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document(s) upon each person designated on the official service list compiled by the Office of the Secretary of the Commission in this proceeding in accordance with the requirements of Section 2.712 of 100 CFR Part 2 -Rules of Practice, of the Nuclear Regulatory Commission's Rules and Regulations.

Dated at Washington, D.C. this _1979. 10B day of <u>SEPT</u>

Office of the Secretary of the Commission



UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

In the Matter of	Ś
FLORIDA POWER AND LIGHT COMPANY))
(Turkey Point, Units 3 and 4)) -) -)
•	Ś

Docket No.(s) 50-250SP 50-251SP

SERVICE LIST

Elizabeth S. Bowers, Esq., Chairman Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Dr. David B. Hall 400 Circle Drive Santa Fe, New Mexico 87501

Dr. Oscar H. Paris Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Counsel for NRC Staff Office of the Executive Legal Director Bruce S. Rogow, Esq. U.S. Nuclear Regulatory Commission Nova University Cent Washington, D.C. 20555 Study of Law

Florida Power and Light Company ATTN: Dr. Robert E. Uhrig Vice President P.O. Box 529100 Miami, Florida 33152 Michael A. Bauser, Esq. Lowenstein, Newman, Reis, Axelrad and Toll 1025 Connecticut Avenue, N.W. Washington, D.C. 20036

Mr. Mark P. Oncavage 12200 S.W. 110th Avenue Miami, Florida 33176

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