

June 28, 1996

NOTE TO: John F. Stolz, Director  
Project Directorate I-2  
Division of Reactor Projects - I/II

FROM: Eugene V. Imbro, Director  
Project Directorate I-2  
Division of Reactor Projects - I/II

SUBJECT: SPENT FUEL POOL SURVEY - HARRIS UNIT 1

In response to your revised guidance memorandum on the subject of "Follow-up Action Regarding Spent Fuel Pool Licensing Basis Review," dated June 21, 1996; I have attached a copy of the PM Survey on Spent Fuel Pool Practices and Current Licensing Basis for the Shearon Harris Nuclear Power Plant, Unit 1, plant.

Enclosure:  
As stated

cc: Joe Shea

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Docket No. 50-400

RII

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**SHEARON HARRIS - UNIT 1, NUCLEAR POWER PLANT  
SPENT FUEL POOL PRACTICES AND CURRENT LICENSING BASIS**

**A. SYSTEM DESIGN:** (ref- plant's Design & Basis Document DBD # 110, and FSAR Section 9.1)

The spent fuel storage facility is located in the Fuel Handling building. FSAR Section 9.1.2.2 states that there are one new fuel pool and three spent fuel pools, interconnected by mean of a main transfer canal with runs the length of the fuel handling building (FHB). The FHB is split in two storage facilities: the North-end storage facility consisting of pools A & B, and the South-end facility consisting of pools C & D. A bridge crane is used to transport the spent fuel to spent fuel racks and later to the cask. This procedure is carried out with spent fuel totally submerged. Currently, spent fuel is stored in fuel pools A & B (South-end) and are cooled by the two independent trains of spent fuel pool cooling system. Pools C & D (North-end) have not been used for spent or new fuel storage and their cooling systems are not yet piped in.

The staff SER dated Nov/83 stated that fuel may be stored in combination of 6x10, 6x8, and 7x7 PWR rack modules and that the maximum storage capacity of the two spent fuel pools is 3024 PWR assemblies, which is more than 19 PWR cores. Each spent fuel facilities (North-end and South-end) is designed to be cooled by two 100 percent independent trains, cooling and clean up systems (FPCCS) with equipment to remove the particulate and dissolved fission and corrosion products resulting from the spent fuel.

By design, each FPCCS is comprised of two fuel pools, a transfer canal, two fuel pool heat exchangers, two cooling pumps, with strainers, demineralizer, demineralizer filter, purification filter, two water purification pumps, skimmers with one skimmer pump and associated fuel pool strainer & skimmer filter.

**Cooling pump:** Two existing horizontal centrifugal pumps are non-1E, installed in separate lines to assure that pumping capacity is only partially lost should one pump become inoperative. This also allows maintenance on one pump while the other is in operation. Each of the fuel pool pump is powered from separated power sources (with capability to connect to emergency diesel generator on loss of offsite power.)

**Heat exchanger:** shell and straight tube type, are cooled by a non-essential loop of Component Water Cooling system.

**Normal makeup water** to the fuel pool is supplied by the Seismic Cat I RWST and Demineralized Water system (see FSAR 9.2.3.2). A backup system for filling the fuel pool is available thru flexible hoses, ESW, and RWST lines and their existing vent lines for emergency connection to the Seismic Cat I emergency service water system, the source for emergency makeup water.

**B. SUMMARY OF CLB REQUIREMENTS RE: SPENT FUEL POOL DECAY HEAT  
REMOVAL/REFUELING OFFLOAD PRACTICES**

1. Technical Specification limits are provided for:

TS 3.9.3: A minimum decay time of 100 hours before moving fuel.

TS 3.9.11: At least 23 feet of water shall be maintained above the irradiated fuel.

TS 3.9.12: Two independent Fuel Handling Building Emergency Exhaust System Trains shall be operable.

2. The maximum heat load in the pool under refueling conditions is limited to  $44.4 \times 10^6$  Btu/hr for the full core offload case - all pools. [FSAR Table 9.1.3-1A]

3. Fuel pool temperature is limited to 142 °F for end-of-cycle refuelings with one fuel pool cooling pump operating. This temperature applies to core offloads up to and including full core refuelings and is less than the pool concrete design temperature of 150 °F. [FSAR Table 9.1.3-2 and FSAR section 9.1.3.1]

Under true emergency conditions, such as a complete loss of spent fuel pool cooling with a full core in the SFP, fuel temperature rise from 150 °F to boiling (approximately 4.5 hours) has been reviewed and found acceptable. [Calculated from FSAR Table 9.1.3-2]

4. Decay time is controlled by Technical specifications.

5. No other implicit or explicit prohibitions exist within the CLB against performing a full core offload for any given refueling outage. (See discrepancies below)

#### Discrepancies:

1. Table 9.1.3-1A (and other paragraphs - see 9.1.3.3) calls the full core offload case "abnormal" even though it may be a regular practice at Harris to offload the full core. The licensee should review the FSAR against their operating practice and make editorial changes to the appropriate FSAR sections to avoid confusion.

## SPENT FUEL POOLS CLB REVIEW - Continued

### C. SUMMARY OF COMPLIANCE WITH CLB REQUIREMENTS AND COMMITMENTS

- (1) Offload Practice: The FSAR did not address the use of full-core offloads as routine evolution, however, the FSAR provides heatload tables to document spent fuel pool (sfp) heatloads for different anticipated refueling strategies, currently referred to as normal (1/3 core offload) and abnormal (full-core offload). The resident inspectors observed (IR 95-17, pg 22), from previous refueling outages, that the fuel pool cooling system was adequately designed to remove the residual heat generated from a freshly removed full-core. In addition, the licensee has in place plant procedure OMP-003, Outage Shutdown Risk Management, which contains sections that assure that adequate cooling and support systems are available during various refueling outage activities where maximum sfp heatloads are encountered. These assessments are outage specific and include time-to-boil calculations assuming loss of all cooling capabilities, and the current process for "controlling" heatloads is to perform the sfp heatload analysis with adequate conservatism to bound all expected scenarios. The fuel pool heatload assessments are included in the scope of this procedure. The maximum total sfp heatload calculated for the October 1995 refueling outage 6 was 26.5 MBTU/hr and the FSAR maximum abnormal heatload (full-core offload plus existing inventory) value was 44.4 MBTU/hr.

The resident inspectors observed (IR 50-400/95-15 dated November 3, 1995, page 7) during refueling No. 6 activities, that fuel offload and reload activities in accordance with fuel handling procedure FHP-014, Rev 6, Fuel and Insert Shuffle Sequence.

- (2) Fuel Pool Level: Control room and local alarms are provided to alert the operator of high and low pool water level, and high temperature in the fuel pools. The licensee has in place procedures OST-1021 (Modes 1&2), OST-1022 (Modes 3&4), and OST-1033 (Modes 5&6) to require verification of sfp level once per shift. This is more frequent than the 7 day frequency required by TS 4.9.11. The inspectors had observed (IR 50-400/95-15 date November 3, 1995, page 7) that during refueling No. 6, the licensee's fuel offload and reload activities were in accordance with fuel handling procedure FHP-014, Rev 6, Fuel and Insert Shuffle Sequence, and FHP-020, Refueling Operations [e.g., fuel handling equipment, including refueling bridge crane, hoist, and load cell had been properly tested, inspected, and calibrated, prior to fuel movement, as required by plant procedures,] and that operators maintained the refueling cavity water level at 23 feet above the reactor vessel flange during fuel movement.
- (3) Water Temperature: The licensee monitors sfp temperatures every 4 hours and records them on Operations BOP logs. This monitoring provides guidance for operating sfp cooling pumps and these cooling pumps are run intermittently to keep sfp temperature between 85°F and 105°F. The resident inspectors has witnessed (IR 95-17, pg 22, dated 12/11/95) two refueling outages and at

various point has verified that pool temperatures were below the pool design temperature of 150 °F)

- (4) Decay Time: The licensee has in place procedure GP-009, Refueling Cavity Fill, Refueling and Drain of Refueling Cavity (Modes 5-6-5), step 5.3.1.19.a verifies that the reactor has been subcritical for at least 100 hours prior to fuel movement. This was a TS requirement and has been relocated to the Plant Procedure PLP-114, Relocated TS and Design Basis Requirements.
- (5) Controlling of specific activity in the spent fuel pools: The specific activity imposed by the FSAR was calculated assuming the fuel pools were filled to capacity (7298 bundles) and the crud attached to each bundle was homogeneously mixed throughout the pools and canals. As of 3/96 the licensee has 1695 fuel bundles (1195 BWR-Brunswick, 276 PWR-Robinson, and 224 PWR-Harris) stored in the A and B spent fuel pools. The licensee stated that they routinely perform radiological surveys of the FHB operating floor and continuous airborne activity devices and general area radiation devices are in place to monitor these areas.

## SPENT FUEL STORAGE DATA TABLE

Facility	Name: SHEARON HARRIS	Unit: 1
Licensee's SFF Contact	Name: David Baksa, System Engineer	Phone: C/o Donna Alexander 919-362-3190
SFF Related Tech. Specs.	Parameter(s): Licensed Thermal Power SFF Level SFF Boron Concentration Decay time in Reactor Vessel	Limiting Value or Condition: 2775 MWt (100% rated core pwr) 23 ft above top of stored fuel 2000 ppm minimum (currently 2304) 100 hrs (TS 3.9.3)
SFF Structure	Location: in Fuel Handling Building	Seismic Classification of SFF Structure and Building: Seismic Cat 1, Quality Group C Standards
	Volume of SFF(s): (FSAR Table 9.1.3-2) Pool A: 403,200 gals Pool B: 403,920 gals Pool C: 191,480 gals Pool D: 147,804 gals	SFF Temperature for Stress Analysis: 150 °F
Leakage Collection	Liner Type: Stainless steel	Leakage Monitoring: Floor & Equipment drain sumps and pumping systems to collect & transfer FPCCS leakage to waste management system. Alarms: Hi sump level in C/R, two alarms for low level (1st alarm at 24 ft) A low flow alarm (flow to the pool) is provided to warn of interruption cooling flow.
Drainage Prevention	Location of Bottom Drains: There is no built-in drain connection. Draining and syphoning of the spent and new fuel pools via piping or hose connection to these pools or transfer canals is precluded by the locations of penetrations, limitation on hose length, or administrative controls on hose usage, and termination of piping penetrations flush with the liner.	Elevation of Gate Bottom Relative to Stored Fuel: (see FSAR pg 9.1.3-6a): Cooling water return piping terminate at 279'-6", spent fuel pools suction piping exits at 278'-6", new fuel pool exits at 277'-6", skimmer suction piping exits the pool at 285'-3". The normal pool water level is 284'-6" (top of spent fuel is 260") TS 5.6.2 requires pools to be maintained to prevent inadvertent drainage of the pools below 277'
Siphon Prevention	Lowest Elevation of Connected Piping Relative to Fuel: 277'-6" for new fuel cooling piping exit.	Anti-Siphon Devices: by limiting the skimmer hose to 5', the skimmer system return piping enters the pool at 5' below normal water level. (FSAR page 91.3-6a)
Make-up Capability	Safety-Related Source: Backup to RWST for filling the fuel pool is normally available from demineralized water system; and through flexible hoses, ESW and RWST lines and their existing vent lines for emergency connection to ESW system, the source for emergency makeup water.	Seismic Classification and Quality Group: RWST: Seismic Category I. ESW: Seismic Category I.
	Normal Source: from seismic Cat 1 RWST. also from Demineralized water system which passes ~ 6% of the cooling flow thru the demineralizer.	
Reactivity	Limits on $K_{eff}$ and Enrichment: (9.1.2.3) $K_{eff} < 0.95$ under all conditions when flooded with unborated water (TS 5.6.1a)	Soluble Boron Credit for Accidents: Neutron absorbing material is encapsulated into the stainless steel walls of each stage cell (9.1.2.1).

Facility	Name: SHEARON HARRIS	Unit: 1
Reactivity Control	Solid Neutron Poisons: (Table 9.1.2-1) FWR Poison: 0.020 EWR Poison: 0.0103	No. of Fuel Storage Zones: (Ref: FSAR Section 9.1.2.1): The max storage capacity of the three spent fuel pools (A, B, C) is 3704 FWR assemblies, and the total for both spent and new fuel pools (A, B, C, and D) is 4184 assemblies. The spent fuel pools are designed for the storage of both FWR and EWR fuel from other CP&L nuclear plants. The 7x7 FWR rack modules are interchangeable with 11x11 EWR rack modules as these rack cover the same floor space. The actual number and types of assemblies stored will vary.
Shared or Split SFPs	No. of SFP(s): Pool A: (Ref: FSAR Section 9.1.2.1): The max storage capacity of the three spent fuel pools (A, B, C) is 3704 FWR assemblies, and the total for both spent and new fuel pools (A, B, C, and D) is 4184 assemblies. The spent fuel pools are designed for the storage of both FWR and EWR fuel from other CP&L nuclear plants.	No. of SFPs Receiving Discharge from a Single Unit: Since Refuel Outage No. 6 (10/95), the number of spent fuel assemblies stored in SFPs are: (/Ed Wills of CP&L 3/4/96) 1365 EWR from Brunswick 224 FWR from Robinson 336 FWR from Harris (was 224 as of 5/95) (plus 1 basket for 2 Harris damaged rods) TS 5.3.6 states that the new and spent fuel pools are designed for a storage capacity of 1832 FWR fuel assemblies and a variable number of FWR and EWR storage spaces in 48 interchangeable 7x7 FWR (10.5" center to center) and 11x11 EWR (6.25" center to center) racks.
SFP Design Inventory Cases	Normal: Table 9.1.3-2: (= 2/3 core plus fuel from other plants)	Emergency/Abnormal: (=1-2/3 core plus fuel from other plants)
SFP Design Heat Load (MBTU/Hr) and Temperature (°F)	Normal: <u>North-end pools</u> <u>South-end pools</u> 13.35 MBTU/hr      5.417 MBTU/hr 137 °F*      126 °F* * with one cooling loop operating Maximum:	Emergency/Abnormal: <u>North-end pools</u> <u>South-end pools</u> 39.02 MBTU/hr      5.417 MBTU/hr 142 °F*      110 °F* * w/ one cooling loop operating
SFP Cooling System	No. of Trains: 2, 100 percent	Licensed to Withstand Single Active Component Failure: Yes
	No. of SFPs Served by Each Train: 2 pools	Qualification: Seismic Cat 1, Quality Group
Electrical Supply to SFP Cooling System Pumps	Qualification and Independence of Power Supply: Independent class 1E	Load Shed Initiators: Undervoltage or SI to start Emergency Diesel Generator
Backup SFP Cooling:	System Name: N/A There are two independent, 100% capacity, cooling systems to each spent fuel storage facility	Qualification: N/A
SFP Heat Exchanger Cooling Water	System Name: Components Cooling Water System (FSAR Section 9.2.2)	Qualification: Seismic Cat 1.
Secondary Cooling Water Loop	System Name: Service Water System (9.2.2)	Qualification: Seismic Cat 1.
Ultimate Heat Sink	Type: Auxiliary Reservoir (preferred source). Main Reservoir is back up source.	UHS Design Temperature: 95 °F (pg 9.2.2-1)
SFP Cooling System Heat Exchanger Performance	Design Heat Capacity: 2.11 MBTU/hr	Type: Shell & Tube
	SFP Side Flow (lb/hr or GPM): 2.256 MBTU/hr	Cooling Water Flow (lb/hr or GPM): 2.68 MBTU/hr
	SFP Temperature: 120 °F (Table 9.1.3-2)	Cooling Water Inlet Temp: 105 °F (Table 9.1.3-2)

<b>Facility</b>	<b>Name:</b> SHEARON HARRIS	<b>Unit:</b> 1
	<b>SFP Cooling Loop Return Temp:</b> 113 °F	<b>Cooling Water Outlet Temp:</b> 110 °F
<b>SFP Related Control Room Alarms</b>	<b>Parameter(s):</b> high level/ low level/ lo-lo level	<b>Setpoint:</b> 284.75' / 284' / 282'
<b>Location of Indications</b>	<b>SFP Level:</b> Annunciators mounted on SFP alarm panels in FHB.  <b>hi level alarm for floor/equip drain is in Control Room (see page 9.1.3-6b)</b>	<b>SFP Temperature:</b> Panel F-P9 in FHB, and in C/R: pool A on ALB-23, pool B on ALB-23,
<b>SFP Cooling System Automatic Pump Trips</b>	<b>Parameter(s):</b> None	<b>Independence:</b> Yes- Two 100% independence systems
<b>SFP Boiling</b>	<b>Staff Acceptance of non-Seismic SFP Cooling System Based on Seismic Category I SFP Ventilation System:</b> N/A	<b>Off-site Consequences of SFP Boiling Evaluated:</b> None found  <b>If Yes, Was Filtration Credited:</b>
<b>SFP/Reactor System Separation</b>	<b>Separation of SFP Operating Floor from Portion of Aux. or Reactor Bldg. that Contains Reactor Safety Systems:</b>  <b>Yes- SFPs are located in a separate fuel handling building that does not house Rx safety system components.</b>	<b>Separation of Units at Multi-Unit Sites:</b> Separate pools interconnected by means of a main transfer canal with runs the length of the Fuel building.
<b>Heavy Load Handling</b>	<b>SFP Area Crane Qualified to Single Failure Proof Standard IAW NUREG-0612 and/or NUREG-0554:</b> <b>Yes- NUREG-0612 (see SER-10/86)</b>	<b>Routine Spent Fuel Assembly Transfer to ISFSI or Alternate Wet Storage Location:</b>  <b>Received spent fuel assemblies from Brunswick and Robinson plants</b>
<b>Operating Practices</b>	<b>Administrative Control Limit(s) for SFP Temperature during Refueling:</b> 142 °F (w/maximum abnormal heatload)	<b>Administrative Control Limits for SFP Cooling System Redundancy and SFP Make-up System Redundancy:</b> w/ minimum of one SFP cooling loop.
	<b>Frequency of Full-Core Off-loads:</b> All prior outages	<b>Administrative Controls on Irradiated Fuel Decay Time prior to Transfer from Reactor Vessel to SFP:</b> 100 hours by TS 3.9.3, also plant procedure GP-009, Refueling Cavity fill, refill, and cleaning (Mode 5-6-5.)
	<b>Type of Off-load Performed during Most Recent Refueling:</b> full-core offload	<b>For Units with Planned Refueling Outages Scheduled to Begin before April 30, 1996, Type of Off-load Planned for Next Refueling and Planned Shutdown Date:</b>  full-core offload

A Special Alert  
from NC WARN

# Nuclear Safety Nuclear Profits

## Will CP&L reject public concerns about its massive high-level waste build-up?

A 1999 national public opinion poll found that over 66% of U.S. residents believe another serious accident is likely at a nuclear reactor in this country. However, until recently, few people realized that major nuclear accidents could also result from "spent" reactor fuel - high-level waste - now being stored in pools of water at scores of nuclear power plants.

A 1996 TIME magazine cover story cast new light on the potential for accidents from spent fuel storage, and on the Nuclear Regulatory Commission's decades-long inability to adequately safeguard the public.

Spent nuclear fuel is so highly radioactive it must be stored for up to five years in pools of cooling water 40 feet deep. The water must be constantly circulated to dissipate the intense heat. After five years, the waste must be isolated and cooled by either water or air for another 10,000 years or more to protect people and the environment.

A 1997 study by Brookhaven National Laboratories concluded that a waste pool accident near a highly populated area could cause over 140,000 cancer deaths, \$500 billion in property damage and approximately 1.7 million acres of farmland beyond recovery.

**BEFORE OCTOBER OF 1998**, members of the general public knew nothing of Carolina Power & Light's proposal to create the nation's largest stockpile of highly radioactive waste fuel at the Shearon Harris Nuclear Plant in central North Carolina. Much of the waste would come from other CP&L reactors to Harris, which is located near Apex and Cary, on the southern edge of - and sprawling from - the Triangle area.

Two top nuclear safety experts warn that CP&L's waste expansion would substantially increase the chance of a severe nuclear accident which - due to the enormous concentration of radioactivity at Harris - could be far worse than the infamous Chernobyl disaster in 1986.

The good news is that a proven alternative storage plan would greatly reduce the risk of a nuclear accident, and would require less than a one percent reduction in net profit for CP&L. The bad news: So far, CP&L wants to save that extra money.

**"The industry does not have sufficient data to support the claim that a spent fuel accident is unlikely to occur."** - David Leachbaum, Union of Concerned Scientists

**"The potential consequences of a severe accident far outweigh any argument that such an accident has a low probability of occurring."** - Gordon Thompson Ph.D.

Nuclear facilities rely on highly complex systems which are susceptible to technical and human error; close-to-home evidence of this reality are the three emergency abductions of the Harris reactor in early 1999.

While the risk of a nuclear accident at Harris may seem unlikely, people within 10 miles of the plant are reminded daily, by the blue evacuation signs and large yellow sirens, that the industry and the government recognize the potential for an emergency. Due to the far greater mass of radioactivity in waste pools, the NRC has identified a 90 mile radius from the plant as the potential impact zone for a waste accident. But there are no blue signs or specified evacuation routes to designate this broader area, so if radio or television is interrupted by an alert about the nuclear plant, we're on our own.

Cooling pools for spent fuel were not designed for long-term use; the original plan was to ship the waste to a federal repository every two or three years. Now, with a federal waste site years or decades from approval, Harris could well be stockpiling high-level nuclear waste for decades. Certainly the probability of human or mechanical errors leading to a waste accident increases over time.

Citizens and organizations across the region responded to news of the waste expansion by contacting CP&L and local officials. The public flooded CP&L's Email line to the point where the company changed the CEO's address. Eleven local governments and several news editorial boards joined the call for a full and open review of the project. CP&L then repeatedly promised - in public - to openly address all safety and environmental concerns.

**"All concerns brought to CP&L will be addressed before CP&L moves ahead with the project. ... There will be no approval until all safety issues are resolved."**

- John Caves, Supervisor of Corporate Regulatory Affairs, CP&L, Chapel Hill Herald, Jan 2, 1999

But as soon as two independent nuclear safety experts began their analyses, CP&L reversed itself. Instead of justifying its plan in front of experts and the public, the company launched a major legal and public relations offensive, seeking to block a full airing of the safety issues. Even energy giant Duke Power joined rival CP&L's efforts to persuade elected officials across the region to "support CP&L." Some of the lobbying - through use of CP&L's multi-million dollar "charitable contributions" fund, may have crossed the line into bribery; a current investigation may reveal more on this.

A public hearing on the waste expansion plan would be required if CP&L merely asked for it; instead CP&L even challenged Orange County's right to raise concerns, and claims the NRC's closed-door examination is sufficient. An NRC licensing board broke tradition and agreed that certain issues raised by Orange would have to be further examined. But, with its long history of bias favoring the nuclear industry, it is unlikely the NRC will ultimately deny CP&L the license amendment unless ordered to by the courts.

However, CP&L now realizes its corporate image is at stake, and soon the company will have to compete for its customers in a deregulated electricity market. NC WARN, the Durham Nuclear Action Center, and citizens organizations in Apex and across the region are committed to

### 1999 Emergency Shutdowns at Harris

January 14

A worker error tripped a series of fail-safes, causing the plant to stop completely. Crews spent the day checking for damage that can occur from a sudden stop.

March 5 and 6

A steam valve that must open to let impurities and debris out of the steam generators failed to operate. The next day, a second such valve failed. Officials had to bring the plant down to

U/2

fixed the problem.

March 42

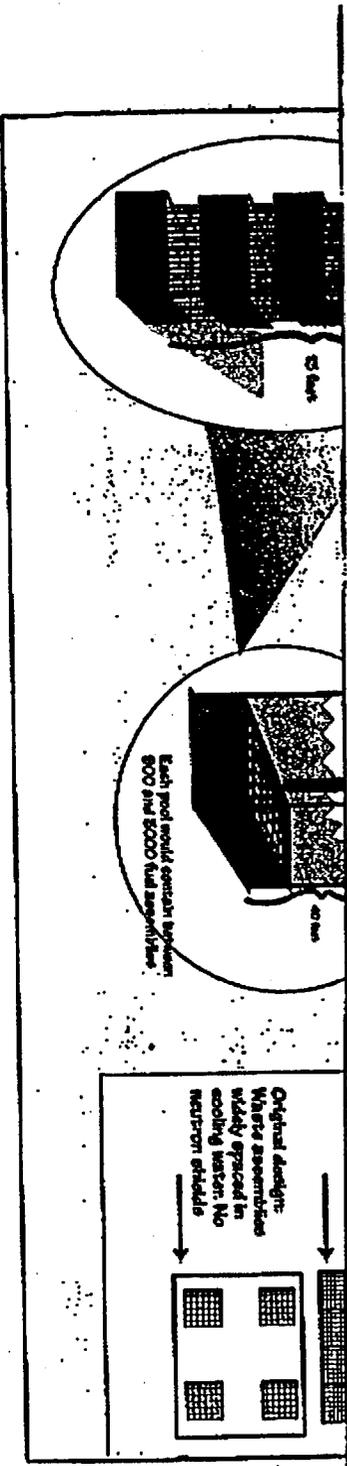
Crews discovered they were unable to regulate the water level that stocks the steam generator. The outage had the plant down for a full week.

plan with the safer one. Please add your voice to the growing call for CP&L to demonstrate good corporate citizenship by reducing the risk of a severe accident at the Harris Nuclear Plant, rather than greatly increasing that risk.

"We are already living with a threat from that reactor and the existing waste pool. CP&L should not expand the risk to the people of this area."

— Rev. Curtis Bohan, Pittsburgh

*Joe - the  
This was independent  
Fugary yesterday  
on paper*







# CP&L: We Won't Buy It!

## A Petition for Nuclear Democracy & Safety

Against the backdrop of nuclear safety experts, CP&L proposing to create the largest nuclear "yard" nuclear fuel in the nation of the Steam Heat Plant in Wake County.

Despite the protestations of many local governments and citizens, CP&L has refused to publicly address serious safety issues raised by world renowned nuclear experts.

A safer and proven design plan would greatly reduce the risk of a severe nuclear accident, and would cost CP&L less than a 1% reduction in its annual profit.

North Carolina residents will soon be able to choose their electricity provider from a range of competitive sources for service.

CP&L cannot forward with its dangerous and unnecessary waste expansion plan, I will discuss another electricity provider as soon as deregulation efforts — one which would compare citizenship and preferences public safety under their economic growth.

Byname \_\_\_\_\_  
City \_\_\_\_\_

Not to be used for any other CP&L or other utility plan. Petition sent to NC 27715-1001, Durham, NC 27715-1001. (Keep this petition, show it up and give it a good answer!)

### THE PUBLIC'S VOICE CAN MAKE THE DIFFERENCE.

Representing North Carolina residents concerned with the economic, health, and safety issues of the "new-look" nuclear waste plant at a politically-charged site on the Wake and Durham border. Now the challenge is to prevent a far larger amount of deadly radioactivity from being imported into the heart of North Carolina.

### TAKE ACTION

- 1) Help with the petition drive. Contact NC Utility for more forms or copies of this paper.
- 2) Send a SHORT message to CP&L for the information you're concerned about. Please address the petition to create another electricity provider. **Phone: 919-490-0747 Fax: 919-490-0747** Address: PO Box 1704, Durham, NC 27715-1001. E-mail: [yourvoice@cpandl.com](mailto:yourvoice@cpandl.com) [www.cpandl.com](http://www.cpandl.com)
- 3) Become a member of NC Utility with a low-fee membership. Contact: PO Box 61851, Durham, NC 27715-1001. Help contact CP&L's Big History at [www.bighistory.com](http://www.bighistory.com).
- 4) Attend a Vigil at the Waste plant, October 17 at 4pm. Contact NC Utility for details.

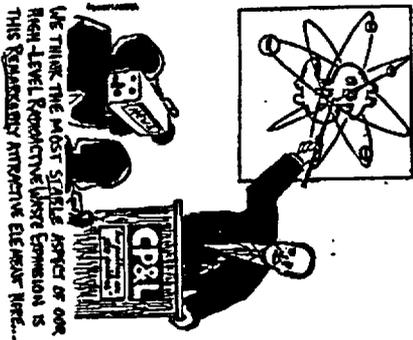
Over 4000 copies of this petition have been distributed in Durham. Please help by filling this, and other petitions, today.

NC WASTE (North Carolina) & Radiation Materials, is a non-profit organization working to protect consumers and the general public from the increasing health dangers associated with toxic and radioactive pollution.

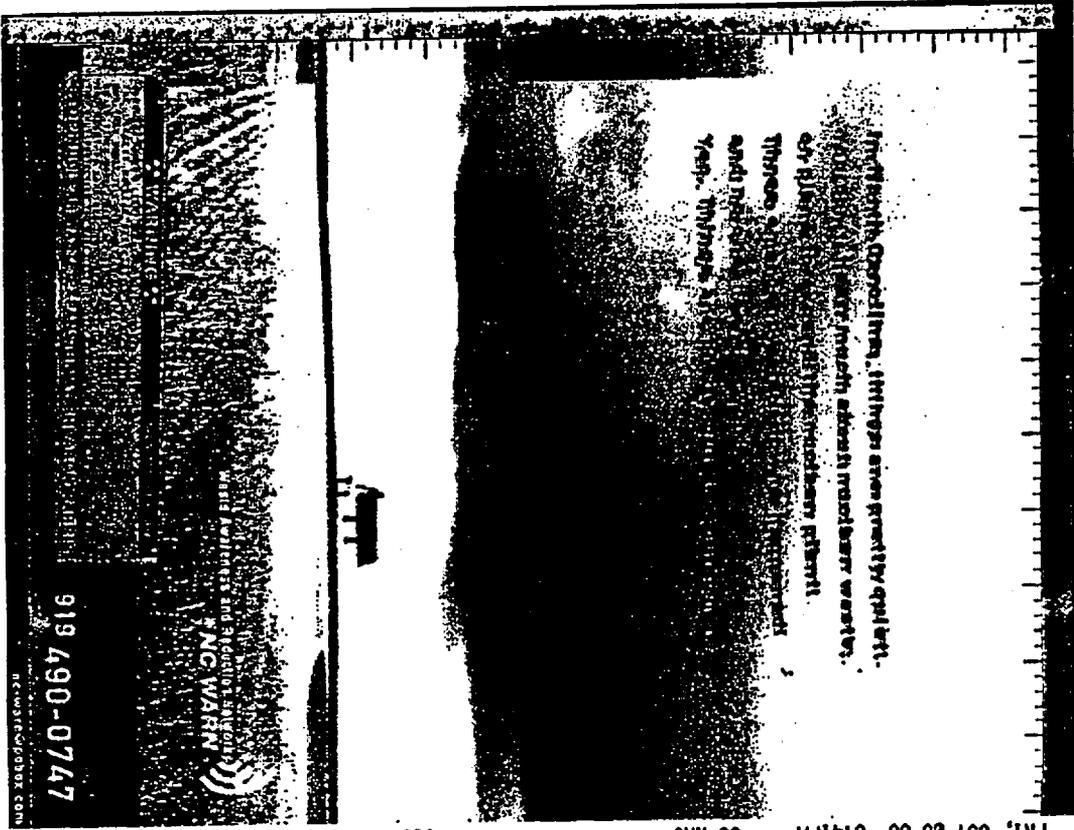
NC WASTE, PO Box 61851, Durham, NC 27715-1001  
919-490-0747 Fax: 919-490-6614  
E-mail: [NC\\_WASTE@DURHAM.COM](mailto:NC_WASTE@DURHAM.COM)  
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WE THINK THE MOST SILENT ASPECT OF OUR HIGH LEVEL RADIOACTIVE WASTE EMISSION IS THIS REMARKABLY ATTRACTIVE ELEMENTARY NUCLEAR REACTOR.



The North Carolina, (Waste) even greater by CP&L. All the... (The text is very dark and difficult to read due to the graininess of the image.)

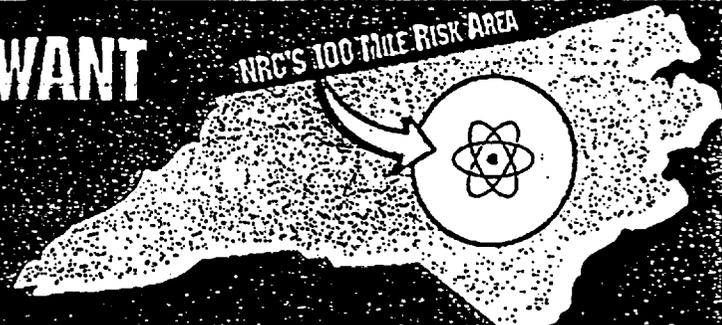
919 490-0747

NC WASTE

HARRIS

# CP&L DOESN'T WANT YOU TO KNOW...

NRC'S 100 MILE RISK AREA



## A CHERNOBYL-SCALE ACCIDENT IS POSSIBLE IF THE SHEARON HARRIS NUCLEAR PLANT BECOMES THE LARGEST U.S. HIGH-LEVEL NUCLEAR WASTE SITE

Doubling high-level waste pools at the Harris Plant would create a larger stockpile of long-lived radioactivity than released at Chernobyl. Importing waste from 2 other plants (the reason for the proposed expansion) increases the risk and severity of a major accident.

The Nuclear Regulatory Commission admits a major waste pool accident would threaten a 50-mile radius. Numerous "near miss" accidents have already occurred in the U.S. Waste pools were not designed for long-term storage; waste will be a threat for 10,000 years.

**NC WARN is calling on CP&L to step beyond regulations which block public input to the decision.**

NC WARN has identified serious technical concerns about CP&L's unprecedented cooling system and safety plan: it appears that this would be the only 4-pool waste system in the U.S.

### NUCLEAR SAFETY IS NOT A PRIVATE MATTER:

1. Send this entire page to CP&L with a short handwritten note: Urge C.E.O. William Cavanaugh to commit to a genuine public process:  
PO Box 1551, Raleigh 27602-1551, 919-546-6111 Fax 546-3210 e-mail: bill.cavanaugh@cplc.com
2. Let the media and your county officials know this is important to you.
3. Help NC WARN press the technical and legal challenge with a tax-deductible contribution.

**NC WARN** Waste Awareness & Reduction Network  
PO Box 61051, Durham, NC 27715-1051  
(919) 490-0747 / Fax (919) 493-6614 e-mail: NC-WARN@POBOX.COM

*Clifford Richard*

*Joe and Bob, FYI  
not sure where his first appeared. probably a small local paper. I thought you might want a copy - Susan Crutcher*

# **10CFR50.55a Alternative Plan for Harris Spent Fuel Pool 'C' and 'D'**

**July 16, 1998**

**CP&L**

# **United States Nuclear Regulatory Commission**

**Office of Public Affairs, Region II**

**61 Forsyth Street, Suite 23T85, Atlanta, GA 30303**

**Tel. 404-562-4416 or 4417 Fax 404-562-4980**

**Internet: [kmc2@nrc.gov](mailto:kmc2@nrc.gov) or [rdh1@nrc.gov](mailto:rdh1@nrc.gov)**

No: II-99-50

Contact: Ken Clark or Roger Hannah

FOR IMMEDIATE RELEASE

(Tuesday, October 19, 1999)

## **ASLB TO HEAR LIMITED APPEARANCE STATEMENTS DECEMBER 7 & 8 ON CP&L REQUEST TO INCREASE SPENT FUEL STORAGE AT HARRIS**

An Atomic Safety and Licensing Board will hear limited appearance statements in Raleigh, North Carolina, on Tuesday, December 7, and in Chapel Hill on December 8 in connection with a proceeding involving Carolina Power & Light Company's request to the U. S. Nuclear Regulatory Commission to increase the spent fuel storage capacity of its Shearon Harris nuclear power plant near Raleigh.

On December 23, 1998, CP&L asked the NRC to amend the Harris plant's operating license to place two additional, unused spent fuel pools in service. The Board of Commissioners of Orange County, North Carolina, petitioned to intervene. A three-member ASLB granted the Commissioners' petition and is in the process of conducting a hearing on the merits of the request.

Persons not a party to the proceeding will be permitted to make an oral statement setting forth his or her position on matters of concern related to the proceeding. These statements do not constitute testimony or evidence, but may help the Board and/or the parties in their deliberations in connection with the issues.

Persons who have submitted a timely written request to make an oral limited appearance statement will be given priority over those who have not. In order to be considered timely, written requests to make an oral statement must be mailed, faxed or sent by e-mail so as to be received by the close of business (4:30 p.m. EST) on Monday, November 29. The request must specify the date (Tuesday, December 7, or Wednesday, December 8) and the session on that day (afternoon or evening) during which the requester wishes to speak.

Written requests to make an oral statement should be sent to:

MAIL - Office of Secretary

Rulemakings and Adjudications Staff

U.S. Nuclear Regulatory Commission

Washington, D.C. 20555-0001

FAX - (301) 415-1101

E-MAIL - [hearingdocket@nrc.gov](mailto:hearingdocket@nrc.gov)

(MORE)

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A copy of the written request to make a limited appearance statement should also, using the same method of service, be sent to the Chairman of the licensing board as follows:

MAIL - Administrative Judge G. Paul Bollwerk, III  
Atomic Safety & Licensing Board Panel  
Mail Stop T-3F23  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555 - 0001

FAX - (301) 415-5599

E-Mail: - [gpb@nrc.gov](mailto:gpb@nrc.gov)

The time allotted for each statement normally will be no more than five minutes, but may be further limited, depending on the number of written requests to speak and/or the number of persons present at the designated times.

The ASLB will hear oral limited appearance statements on the following dates at the specified locations and times:

**Tuesday, December 7 - Jane S. McKimmon Conference Center**  
**North Carolina State University**  
**Corner of Gorman Street and Western Avenue**  
**Raleigh, North Carolina**  
Afternoon - 1:00 p.m. - 4:00 p.m. (EST)  
Evening - 7:00 p.m. - 9:30 p.m. (EST)

**Wednesday, December 8 - Southern Human Resources Center**  
**Main Meeting Room**  
**2505 Homestead Road**  
**Chapel Hill, North Carolina**  
Afternoon - 1:00 p.m. - 4:00 p.m. (EST)  
Evening - 7:00 p.m. - 9:30 p.m. (EST)

Interested persons may also submit written limited appearance statements at any time by addressing them to those indicated for receipt of requests for time to make oral statements.

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