

# Official Transcript of Proceedings

## NUCLEAR REGULATORY COMMISSION

Title: Shearon Harris Nuclear Power Plant

Docket Number: 50-400-LR; 07-855-02-LR-BD01

Location: Raleigh, North Carolina

Date: Tuesday, July 17, 2007

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USNRC

July 20, 2007 (11:12am)

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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ATOMIC SAFETY AND LICENSING BOARD  
(ASLB)

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LIMITED APPEARANCE SESSION

In the Matter of: : Docket No.  
: 50-400-LR  
CAROLINA POWER & LIGHT COMPANY :  
(Shearon Harris Nuclear Power : ALSBP No.  
Plant, Unit. 1) : 07-855-02-LR-BD01

\_\_\_\_\_:

Tuesday

July 17, 2007

1707 Hillsborough Street,  
Raleigh, North Carolina

The above-entitled matter began,  
pursuant to notice, at 5:30 p.m.

BEFORE:

ANN MARSHALL YOUNG Chair  
PETER S. LAM Administrative Judge  
ALICE MIGNEREY Administrative Judge

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C-O-N-T-E-N-T-S

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P-R-O-C-E-E-D-I-N-G-S

5:25 p.m.

1  
2  
3 CHAIR YOUNG: Hello, everyone, thank you  
4 for coming. My name is Ann Marshall Young. I'm the  
5 Chair of this Licensing Board and the attorney member  
6 and that is the Licensing Board assigned to consider  
7 the -- regarding the license renewal application for  
8 the Shearon Harris Plant. And we are here to hear  
9 limited appearance statements from the public. We  
10 welcome you. We have four people who have signed up  
11 to speak. I see more people than that in the  
12 audience, so even if you have not signed up, you are  
13 free to speak. We have set a time limit of five  
14 minutes per person, so that everyone can speak.

15 We can give a little leeway on that if  
16 there's extra time and you won't cut into anyone  
17 else's speaking time. To help us keep track of the  
18 time, our law clerk Zachary Kahn will be holding up  
19 these signs and then we'll try to gently remind you if  
20 you start to go over.

21 Before we begin, are there any questions?  
22 All right, then I'm going to call on the first person  
23 whose name we have and that is Martin Criscoe, the  
24 Director of the Wake County Emergency Management.

25 MR. CRISCOE: Yes, good evening. I'd like

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1 to offer some supporting comments. I've been  
2 associated with Wake County Emergency Management since  
3 1990 and have been intimately involved with the  
4 preparedness activities in support of the Shearon  
5 Harris Nuclear Power Plant. I've worked with the  
6 staff of --

7 CHAIR YOUNG: I'm getting a signal from  
8 the back that people in the back might not hear you.

9 MR. CRISCOE: Yes, I was probably not  
10 close enough.

11 CHAIR YOUNG: Okay, thank you.

12 MR. CRISCOE: All right, I've worked with  
13 many members of the Harris staff over the years and we  
14 have an excellent working relationship with the plant  
15 in a number of ways. We're mainly involved in the  
16 off-site emergency preparedness activities. We have  
17 a Shearon Harris Preparedness Task Force that we  
18 participate in on a regular basis with the other  
19 counties that touch the EPZ, the Emergency Planning  
20 Zone and we meet on a regular basis. And we discuss  
21 preparedness planning, training, exercise, activities  
22 with -- amongst ourselves and the members of the  
23 utility.

24 We also organize and plan our exercise  
25 activities at that forum as well. We also are

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1 responsible for making sure that the plans and  
2 procedures are trained -- provide training to our  
3 public safety agencies, municipal agencies that  
4 support our response to an incident at the Harris  
5 Nuclear Power Plant.

6 That group has always been very supportive  
7 in anything that we brought to them that we need to  
8 change in our activities or add to those activities.  
9 They've always been very supportive over the years and  
10 I have an idea that they will continue to support  
11 those activities in the future. That's all I have to  
12 say. Thank you.

13 CHAIR YOUNG: Thank you, sir. The next  
14 person is Mr. Joseph Mangano.

15 MR. MANGANO: Good afternoon and thank you  
16 for this opportunity. I'm Joseph Mangano. I'm the  
17 Executive Director of the Radiation and Public Health  
18 Project. We're a non-profit research group based in  
19 New York. Our work is to do studies on the health  
20 risks posed by nuclear reactors and nuclear weapons.  
21 We've publish 22 journals -- articles in medical  
22 journals and six books on the topic.

23 My comments today may be a little bit  
24 different than what was heard earlier today and after  
25 me. A lot of the discussion of today have been on

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1 potential health risks from the Shearon Harris  
2 Reactor. My comments will be focused on the actual  
3 health risks from the actual releases from the reactor  
4 in the 20 years it's been operating.

5 I'd like to -- before I get into my  
6 comments, I'd like to note that there's never been any  
7 sort of a study on -- that analyzes the emissions from  
8 the reactor and the potential risks of disease in the  
9 local area. There was on study by the National Cancer  
10 Institute but it only included reactors opened before  
11 1982 and left out Shearon Harris.

12 Today I'm actually releasing a report that  
13 doesn't end this dialogue but certainly begins to put  
14 forth information in this area. The first part of the  
15 report discusses actual releases from the plant. As  
16 I think most of you know, that in a nuclear power  
17 reactor most of the radioactivity that's created is  
18 contained as high level waste but in order to operate  
19 there must be some routine emissions into the local  
20 environment.

21 These chemicals are actually over 100  
22 radioactive chemicals, none of which are found in  
23 nature. They're only found when an atomic bomb  
24 explodes or when a nuclear reactor operates. They are  
25 emitted into the air and the water and they enter the

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1 human body through breathing and through the food  
2 chain. They are, of course, radioactive and  
3 carcinogenic and especially toxic to the developing  
4 fetus and the infant and the child.

5 The policy that the NRC has set is that  
6 every year each utility running a reactor must put out  
7 how much has been emitted and if the emissions are  
8 below this limit, then the reactor is safe to continue  
9 operating. Our group believes this is rather  
10 presumptive and that studies must be done to examine  
11 whether or not these low doses are, in fact, harmful.  
12 And in the report, you'll see that annual releases can  
13 vary from year to year by hundreds of times.

14 I also took a look at the levels in the  
15 environment, specifically in drinking water in three  
16 different locations, which is also reported by the  
17 utility to the Federal Government. For example, in  
18 2004, the levels of beta radiation in drinking water  
19 at two sites near the reactor more than doubled from  
20 the spring until the fall, which is quite -- you'll  
21 find that similar types of unusual patterns in other  
22 years.

23 Now, probably the most important part are  
24 the actual health trends. Probably the disease most  
25 studied when it comes to radiation exposure is

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1 childhood cancer because, as I've said, the infant,  
2 fetus and child are most susceptible. Since Shearon  
3 Harris opened in Wake and Durham Counties in the 17  
4 years of operation, the childhood cancer death rate to  
5 kids under 10 in these two counties has increased by  
6 51 percent from what it was in the early and mid-1980s  
7 and that compares to a decline of 29 percent in both  
8 the rest of the state and the country.

9 This shouldn't be in an area like this.  
10 This is a highly educated community. It's a low  
11 poverty community and of course, the people have  
12 access to world class medical care here. This is a  
13 pattern that is highly unexpected. Also I looked at  
14 cancer incidents. Unfortunately, the cancer registry  
15 in this state didn't get going until the 1990s so we  
16 cannot do a before and after comparison, but in recent  
17 years rates of certain radio-sensitive cancer such at  
18 thyroid cancer, bone cancer, non-Hodgkins lymphoma,  
19 and leukemia are significantly above the average for  
20 the rest of the state.

21 The conclusions here, as I've said before,  
22 this information is certainly not any sort of a  
23 definitive link between radiation and disease;  
24 however, it really should be seen as a first step.  
25 The local Health Department and the Environmental

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1 Protection Department should undertake further studies  
2 to investigate this further and no decision on  
3 extending the reactor's license should be made until  
4 this is fully considered. Thank you and if you'd like  
5 a copy of the report, I'll be glad to --

6 CHAIR YOUNG: Thank you. You're welcome  
7 to put that into the record. All right, Cecil Parker?

8 MR. PARKER: Good evening. My name is  
9 Cecil Parker. I currently serve as Fire Chief for the  
10 Town of Holly Springs. Prior to doing that, I served  
11 as the Police Chief for the Town of Holly Springs for  
12 14 years. I've had the opportunity to work with  
13 Progress Energy, more specifically the Harris Plant  
14 for better than 20 years now in my capacity as a  
15 public safety official for both the Town of Holly  
16 Springs and prior to that Wake County.

17 In all of those 20 years, we have only had  
18 a positive experience in working with the Harris plant  
19 and its staff. They have always been more than  
20 willing to provide any training that we may need.  
21 They have worked with us in providing us tours of the  
22 facility. We have annual training at the facility.  
23 We work with their fire brigade many, many times a  
24 year at the facility. They come to our fire station  
25 annually to provide training. We, every other year,

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1 have evacuation drills and again, Harris provides any  
2 support that we need for those drills. They have been  
3 very, very supportive to us. We appreciate what they  
4 do. We would like to continue to offer our support  
5 and hope that they continue to do a good job as they  
6 have in the past, and I trust that they will and I  
7 will conclude that by just saying that we're very  
8 thankful for them being there and the support that  
9 they've provided us and the excellent job that they've  
10 done. Thank you.

11 CHAIR YOUNG: Thank you. All right,  
12 Herman Jaffe?

13 MR. JAFFEE: I thank you for calling me.  
14 My name is Herman Jaffee and I have been involved in  
15 many work features of safety of nuclear power plants  
16 back in the '70s. I'm a little old, I'm 81. So I  
17 have some experience and I'd like to just give you a  
18 little advice, if I may. The Harris reactor is our  
19 nation's newest unit going on line January 1987. Of  
20 the approximately 128 units built, only 103 are still  
21 working. Twenty-four were closed early due to safety  
22 problems.

23 At this early point in the work cycle of  
24 Harris, who can predict how it will be working in 30,  
25 40 years from now. We do know that it's had several

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1 small fires due to faulty construction materials used  
2 and the new NRC reduced the safety requirements.  
3 Harris is a complex machine that has many moving parts  
4 designed for a 40-year work cycle from 1987. If you  
5 bought a car that has a useful life cycle of 100,000  
6 miles, would you try at its 50,000 mile work point to  
7 decide to work it for another 150,000 miles? I don't  
8 think so.

9 No prediction on the safety or work life  
10 of its parts can be made for 40 years from now. It's  
11 too early in the work cycle of the reactor. We should  
12 wait 15 years to try to make a prediction on the  
13 useful work cycle of the reactor for another 20 years  
14 use. Asking you to extend the license at this time is  
15 not fair to you and I request that you delay the  
16 request for about 15 years. Thank you.

17 CHAIR YOUNG: Thank you. Did you have  
18 something in writing that you'd like to give us?

19 JUDGE MIGNEREY: Thank you.

20 CHAIR YOUNG: Okay, thank you. You get  
21 better with age, huh? I have something to look  
22 forward to. There are no more names on the list;  
23 however, anyone who's here is welcome to give your  
24 comment. Is there anyone here who would like to speak  
25 who did not sign up? You're sure?

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1 (Off the microphone remarks)

2 CHAIR YOUNG: We'll stay here for maybe  
3 another half hour and see if anyone comes. And also  
4 anyone present can tell people that they can submit  
5 comments in writing and I think the notice, the press  
6 release and the notice that was in the Federal  
7 Register provided information on how to do that. So,  
8 all right, we'll just go off the record now and wait  
9 a little while to see if anyone else shows up who may  
10 get off work at 6:00.

11 (A brief recess was taken.)

12 CHAIR YOUNG: Okay, just on the record  
13 again. This is Judge Young. Let the record show that  
14 it is approximately 6:30 and we've come in a couple of  
15 times to check to see whether there was anyone else  
16 who had a comment to make and it looks like everyone  
17 has left except the staff counsel and one member of  
18 the staff and the people from our office and our  
19 security guard and so I think it's safe to close this  
20 hearing and go off the record. Thank you.

21 (Whereupon, at 6:25 p.m. the hearing in  
22 the above-entitled matter concluded.)  
23  
24  
25

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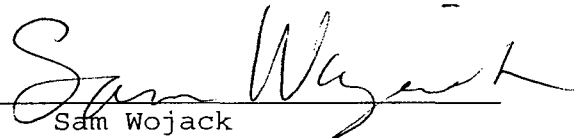
This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

Name of Proceeding: Shearon Harris Nuclear  
Power Plant

Docket Number: 50-400-LR; 07-855-02-LR-BD01

Location: Raleigh, North Carolina

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and, thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.



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