



Serial: NPD-NRC-2009-210  
September 25, 2009

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555-0001

**SHEARON HARRIS NUCLEAR POWER PLANT UNITS 2 AND 3  
DOCKET NOS. 52-022 AND 52-023  
RESPONSE TO SUMMARY OF TELEPHONE CONFERENCE CALLS FOR THE MONTH OF  
JULY 2009 CONCERNING THE ENVIRONMENTAL REVIEW**

Reference: Letter from Donald Palmrose (NRC) to Robert Kitchen (PEC), dated September 3, 2009, "Summary of Telephone Conference Calls for the Month of July 2009 Concerning the Environmental Review of the Shearon Harris Nuclear Power Plant Units 2 and 3 Combined License Application"

Ladies and Gentlemen:

In the referenced letter, which summarized telephone conference calls held during July, 2009, the NRC requested that PEC provide the following under oath and affirmation:

- 1) An explanation of PEC's intentions regarding dewatering of the fire pond that minimizes impacts to terrestrial and aquatic resources.
- 2) Clarification of the site selection process and the applied exclusionary criteria.
- 3) Corrections to Table 2.7-75 of the Environmental Report.

The purpose of this letter is to comply with this request. Please see Attachment 1 which discusses each of these three items.

If you have questions, please contact Bob Kitchen at (919) 546-6992 or me at (919) 546-6107.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on September 25, 2009.

Sincerely,

Garry D. Miller  
General Manager  
Nuclear Plant Development

Attachment

cc: U.S. NRC Region II, Regional Administrator  
U.S. NRC Resident Inspector, SNHPP Unit 1  
Mr. Brian Hughes, U.S. NRC Project Manager  
Dr. Donald Palmrose, U.S. NRC Environmental Project Manager

## Response to July 2009 Telephone Conference Call Requests

### 1) An explanation of PEC's intentions regarding dewatering of the fire pond that minimizes impacts to terrestrial and aquatic resources.

The July 1, 2009 Teleconference discussed aquatic ecology of the Fire Pond. The following provides a description of PEC's intentions regarding fish removal and dewatering of the Harris Plant Fire Control Pond:

PEC will conduct the pond dewatering activities in accordance with applicable rules, regulations and regulatory agency guidance. Before the dewatering is conducted, PEC will consult with appropriate regulatory agencies, including NC DENR Division of Land Resources (DLR), NC Wildlife Resources Commission and US Fish & Wildlife Service. A procedure will be developed for the dewatering process, reflecting actions and best practices to minimize impacts on aquatic resources in the pond. The activity will also be conducted in accordance with the Erosion and Sedimentation Control (E&SC) Plan for the site to minimize the potential for sediment to be discharged to the lake. Generally, it is expected that the dewatering process will include removal and transfer of fish and other aquatic organisms, controlled drawdown of the water in the pond, and discharge of pond water to the lake through sediment traps and/or other E&SC measures. The procedure will be prepared and reviewed with appropriate regulatory agency representatives before the dewatering activity is planned to occur.

Safe removal of fish remaining in the Harris Plant fire control pond will best be accomplished by use of a repetitive electrofishing depletion technique. Aquatic community sampling efforts conducted on May 22, 2009 indicated that the soft, muddy bottom sediments will most likely make seining an impractical and unsafe option. A small boat electrofisher may be launched from the bank. Repetitive electrofishing will be conducted until relatively few fish remain to be sampled by the electrofisher. Emphasis will be placed on capturing the larger sexually mature specimens since these individuals have the greatest reproductive potential and natural mortality rates of younger, smaller individuals is relatively high.

General guidelines are listed below. However, biologists will have the flexibility to modify these procedures in the field to increase efficiency and successful removal of fish.

- Launch boat electrofisher taking care to minimize potential for damage to equipment or injury to personnel. Safety is the top priority of the field crews.
- Conduct shoreline electrofishing around the perimeter of the pond. Additional effort may be expended in the vicinity of structures such as snags or beaver lodges. After the crew has sampled the complete perimeter of the pond the position of the boat will be moved offshore approximately 2-3 boat widths and the process will be repeated. This process should continue in a systematic fashion until the entire pond has been sampled. The entire process starts over along the shoreline once the overall surface area of pond has been sampled. The process is repeated until relatively few fish are sampled by the boat electrofisher.
- The crew should attempt to net most of the fish turned up by the electrofisher with emphasis being placed on the larger specimens of each species. Notable aquatic reptiles and amphibians may be netted as well.
- Netted individuals will be placed in a holding tank with recirculating water. The water in the holding tank will be replaced as needed. Organisms in the holding tank will be

transferred to a vehicle mounted holding tank and released into Harris Lake as needed to avoid overcrowded conditions. Any aquatic reptiles likely to prey upon captured fish will be held in a separate container until released.

- Although no rare, threatened, and endangered (RTE) species are expected to be present, sampling crews will take additional measures to ensure the successful live release should any be collected. The appropriate State and Federal resource agencies will be notified should any RTE species be captured. Length, weight, and photographic records will be maintained for any notable species captured during the process.
- Detailed counts of specimens collected will not be maintained (other than for species deemed notable by the field biologists) in an effort to minimize handling and holding time.
- Any individuals exhibiting external signs of disease will be euthanized and properly disposed of.

## **2) Clarification of the site selection process and the applied exclusionary criteria.**

The July 9, 2009 Teleconference discussed the site selection process. PEC affirms that the teleconference summary provided in Enclosure 2 of the reference letter correctly describes the site selection process and the applied exclusionary criteria.

## **3) Corrections to Table 2.7-75 of the Environmental Report.**

The July 16, 2009 Teleconference discussed airborne dispersion and air quality emissions. PEC confirmed during the call that the X/Q values in Environmental Report (ER) Table 7.1-3 were correct, but that the values in ER Table 2.7-75 were not consistent with these and would be revised in a future revision to the ER.

Associated HAR COL Application Revisions:

Section 2.7.6.3, X/Q Estimates for Short-Term Diffusion Calculations will be revised to read:

The 50th-percentile EAB and LPZ X/Q values were determined from the PAVAN output and by logarithmic interpolation. The conservative reported 0-2 hour 50<sup>th</sup> percentile values at the EAB and LPZ without building wake are 5.64E-05 sec/m<sup>3</sup> and 1.14E-05 sec/m<sup>3</sup>, respectively. The remaining values for the longer time periods for the LPZ are determined using the 0-2 hour 50<sup>th</sup> percentile LPZ value and the LPZ average annual value of 2.23E-06 sec/m<sup>3</sup> from the PAVAN output by logarithmic interpolation at the intermediate time periods of 8 hours, 16 hours, 72 hours, and 624 hours. The values are shown in Table 2.7-75.

Table 2.7-75, 0-2 Hour 50<sup>th</sup> Percentile EAB X/Q Values for HAR 2 and HAR 3 will be revised to read:

**Table 2.7-75**  
**0 – 2 Hour 50th Percentile EAB X/Q Values for HAR 2 and HAR 3**

Time Period	X/Q (sec/m <sup>3</sup> )	Source
0 - 2 hr.	5.64E-05	PAVAN Model

**0 – 30 day 50th Percentile LPZ X/Q Values for HAR 2 and HAR 3**

Time Period	X/Q (sec/m <sup>3</sup> )	Source
0 - 2 hr.	1.14E-05	PAVAN Model
0 - 8 hr.	8.80E-06	Interpolation
8 - 24 hr.	7.70E-06	Interpolation
1 - 4 days	5.84E-06	Interpolation
4 - 30 days	3.84E-06	Interpolation
Annual Average	2.23E-06	PAVAN Model

Source: Information based on NRC's Regulatory Guide 1.145, Revision 1