

May 16, 2008

Mr. James Scarola  
Senior Vice President  
and Chief Nuclear Officer  
Progress Energy, Inc.  
P.O. Box 1551  
Raleigh, NC 27602

SUBJECT: SHEARON HARRIS NUCLEAR STATION UNITS 2 AND 3 COMBINED  
LICENSE APPLICATION REVIEW SCHEDULE

Dear Mr. Scarola:

This letter transmits the Shearon Harris Units 2 and 3 Combined License (COL) application review schedule. The environmental review supports the issuance of a Final Environmental Impact Statement (FEIS) in May 2010. Milestones for the four phases of this review are provided in Table 1 of this letter. The safety review supports the issuance of a Final Safety Evaluation Report (FSER) in April 2011. Milestones for the six phases of this review are also provided in Table 1. The primary drivers and risks to this schedule are described below.

By letter dated February 18, 2008, Progress Energy submitted its application to the U.S. Nuclear Regulatory Commission (NRC) for a COL for two AP1000 advanced passive pressurized water reactors in accordance with the requirements contained in 10 CFR Part 52, "Licenses, Certifications and Approvals for Nuclear Power Plants." The staff informed you in an April 17, 2008, letter that we had completed our acceptance review and docketed your application in the Agencywide Document Access and Management System (ADAMS) Accession No. ML081070226.

In the letter dated April 17, 2008, the staff discussed three areas that introduced uncertainty into the review schedule. These areas are 1) incomplete recirculation screen design in the referenced design; 2) transportation impact analysis needed to support the evaluation of construction and operational road impacts of reconstructed roads, and 3) environmental impacts at the proposed intake location of the water makeup source cannot be assessed due to the lack of sampling for aquatic species. These issues were discussed with you during a phone call on April 22, 2008. The incomplete recirculation screen design is being addressed in the AP1000 design certification amendment (DCA) review.

### Highlights of the Safety Review Schedule

The review of the AP1000 Design Certification Amendment will proceed in accordance with the review schedule provided to Westinghouse in a separate letter dated February 15, 2008 (ML080370179). The Harris COL application incorporates by reference both Appendix D to 10 CFR Part 52 and the AP1000 Design Control Document submitted by Westinghouse as Revision 16. Thus, a substantial portion of the Harris COL review schedule is dependent on the AP1000 DCA. In addition, as a subsequent combined license (S-COL) applicant utilizing the standard content contained and designated as such in the Tennessee Valley Authority's Bellefonte Unit 2 and 3 application, your schedule is also dependent on the Bellefonte referenced combined license (R-COL) schedule.

I would also want to take this opportunity to bring to your attention significant details of the review schedules issued on February 15, 2008, for the AP1000 DCA, and February 15, 2008, (ML080430572) and March 25, 2008, (ML080720558) for the Bellefonte R-COL. The SER with open items for chapters 6, 15, and 16 are scheduled to be completed for both the DCA and the Bellefonte R-COL on essentially the same date. As an S-COL, the Harris review will not be completed until after the R-COL review has been completed for the standard sections. Therefore, any delay in the Westinghouse DCA schedule will delay the Bellefonte schedule, and thereby delay the Harris S-COL schedule.

By letter dated March 25, 2008, the Tennessee Valley Authority was informed that the NRC staff will be reevaluating the Bellefonte Units 3 and 4 R-COL review schedule in the July 2008 time frame. The reevaluation of the Bellefonte R-COL schedule may also impact the Harris S-COL schedule.

### Highlights of both the Environmental and Safety Reviews

Our review schedules assume that responses to request for additional information (RAIs) will be complete and provide sufficient information to address the staff's concerns. We assumed in our schedules that RAI responses will be submitted within 30 days of receipt of RAIs related to areas that involve Harris specific information and within 45 days of receipt of RAIs related to areas that involve standard content for all AP1000 COL applications.

The schedule does not currently model the hearing process. Should contentions be admitted, the review schedules in Table 1 may be impacted. Also, the mandatory hearing schedule will be developed by the Commission and the Atomic Safety and Licensing Board and thus is not included in Table 1 of this letter. Both the FEIS and FSER will be used to support this hearing. As you know, the Commission will not make a determination on whether or not to issue the COL until this hearing is concluded.

The staff will review and re-baseline, if necessary, the Harris Safety Review Schedule around the time the SER with open items is issued. At this point, the staff will have a better idea of what target milestones are achievable given the number and complexity of the open items. Similarly, the staff will review and re-baseline, if necessary, the Harris environmental review schedule soon after the public comment period ends. At this point, the staff will have a better idea if there are any issues that have been identified that could impact the schedule for the issuance of the FEIS. Additionally, the environmental review schedule is also predicated on the

satisfactory and timely resolution of the previously discussed environmental issues that introduced uncertainty into the review schedule. The staff will have a better idea if these issues could impact the schedule at the conclusion of the request for additional information, or RAI, process. Should any major revisions to the AP1000 DCA, the Bellefonte R-COL, or the Harris S-COL occur, we will review and re-baseline schedules in response to those revisions, as necessary. At any time that you would like to discuss this schedule or future proposed schedules, contact me at your convenience.

Should you have any questions regarding the safety review, please contact Ms. Serita Sanders the lead project manager for the safety review for the Harris COL application, at (301) 415-2956 or [Serita.Sanders@nrc.gov](mailto:Serita.Sanders@nrc.gov). Effective May 27, 2008, Manny Comar will become the lead project manager for the safety review of the Harris COL application and may be reached at (301) 415-3863 or [Manny.Comar@nrc.gov](mailto:Manny.Comar@nrc.gov). If you have questions regarding the environmental review please contact Mr. Donald Palmrose, the lead environmental project manager, at (301) 415-3803 or e-mail at [Donald.Palmrose@nrc.gov](mailto:Donald.Palmrose@nrc.gov).

Sincerely,

**/RA/**

Serita Sanders, Lead Project Manager  
AP1000 Projects Branch 2  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-022  
52-023

cc w/encl: See next page

satisfactory and timely resolution of the previously discussed environmental issues that introduced uncertainty into the review schedule. The staff will have a better idea if these issues could impact the schedule at the conclusion of the request for additional information, or RAI, process. Should any major revisions to the AP1000 DCA, the Bellefonte R-COL, or the Harris S-COL occur, we will review and re-baseline schedules in response to those revisions, as necessary. At any time that you would like to discuss this schedule or future proposed schedules, contact me at your convenience.

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Sincerely,

**/RA/**

Serita Sanders, Lead Project Manager  
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Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-022  
52-023

cc w/encl: See next page

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**ADAMS Accession No.: ML081370104**

OFFICE	DNRL:NWE2	DNRL:NWE2	DNRL:NWE1	DSER:RAP1	DSER:RAP1	OGC
NAME	RCarmon	SSanders	SCoffin	DPalmrose	WBurton	SBrock
DATE	05/16/2008	05/16/2008	05/16/2008	05/16/2008	05/16/2008	05/16/2008

**OFFICIAL RECORD COPY**

Table 1: COL Review Schedule

<u>Phase of Safety Review</u>	<u>Target Completion Date</u>
P1 RAI for all SER chapters	November 26, 2008
P2 SER with open items (OIs)	July 22, 2009
P3 Response to ACRS regarding SER With OIs Issued	January 7, 2010
P4 Advanced SER with no OIs Issued	October 2010
P5 Response to ACRS regarding SER with no OIs with no OIs issued	February 2011
P6 Final SER issued	April 2011
<u>Phase of Environmental Review</u>	
P1 Scoping	November 20, 2008
P2 Draft Environmental Impact Statement (DEIS)	June 26, 2009
P3 Draft Environmental Impact Statement Comment Period	November 30, 2009
P4 Final Environmental Impact Statement (FEIS)	May 2010

**ENCLOSURE**

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(Revised 04/14/2008)

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