



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

December 28, 1989

Docket 50-395

Mr. O. S. Bradham
Vice President, Nuclear Operations
South Carolina Electric & Gas Company
P.O. Box 88
Jenkinsville, South Carolina 29065

Dear Mr. Bradham:

SUBJECT: AMENDMENT REQUESTS FOR THE V. C. SUMMER NUCLEAR STATION,
UNIT NO. 1 (SUMMER) (TAC NOS. 69066, 74577, 74821, 74823-74826,
74839, AND 75049)

The NRC staff's review of your amendment request involving the feedwater isolation valves (TAC 72893) determined that your submittal was missing a Safety Analysis (SA). As a result of this finding, the staff reviewed other recent amendment requests and found that some of these submittals were also missing a SA or the SA was in a format which was inconsistent with that expected for licensing amendments. A review of these submittals also revealed some instances where the no significant hazards consideration (NSHC) was deficient in content and format. The deficiencies which were identified can best be summarized as taking the form of one of the following:

- 1) The NSHC included no description of the amendment request and/or no safety assessment.
- 2) The proposed amendment request does not contain a separate and distinct SA document which stands alone and contains a description of the plant specific request and the basis for its acceptability. This occurs frequently when the amendment request involves a generic application of an item to Summer and topical reports are utilized in the submittal.

While I was at your plant during the week of August 7, 1989 and again on November 17, 1989, I discussed the content and the format of your amendment requests with members of your staff. During the time between these two meetings, numerous telephone conversations were held to discuss your submittals. As a result of these conversations, on December 11, 1989 you submitted reformatted submittals for all of the recent amendment requests noted in Enclosure 1 except L and the diesel generator fuel oil sampling (TACs 69066 and 74823, respectively). Your resubmittals addressed the deficiencies noted in Enclosure 1. As a result of these submittals those requests which have not been noticed in the Federal Register can now be noticed.

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Mr. O. S. Bradham

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December 28, 1989

To assist your staff we are providing a copy of Generic Letter 86-03 which addresses the necessary information to be included in a NSHC. This is included as Enclosure 2. We are also providing a copy of a letter which was transmitted to Arizona Nuclear Power Project which provides additional details on the information which should be included in amendment request. This letter is included as Enclosure 3.

The information presented in this letter has been discussed with your staff.

Sincerely,

Original Signed By:

John J. Hayes, Jr. Project Manager
Project Directorate 11-1
Division of Reactor Projects
Office Of Nuclear Reactor Regulation

Enclosures:

1. Status of Recent amendment requests
2. Generic Letter 86-03
3. Letter to Arizona Nuclear Power Project

cc w/encls:
See next page

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OFC	: PD11-1	: PD11-1	: OGC	: PD11-1	:	:	:
NAME	: PAnderson	: JHayes: sw	: OGC	: EAdams	:	:	:
DATE	: 12/28/89	: 12/28/89	: 1/89	: 12/28/89	:	:	:

OFFICIAL RECORD COPY
Document Name: RESUBMITTALS

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South Carolina Electric & Gas Company

Virgil C. Summer Nuclear Station

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ENCLOSURE 1

STATUS OF RECENT AMENDMENT REQUESTS FOR V. C. SUMMER NUCLEAR STATION

TAC	AMENDMENT REQUEST	STATUS OF NSHC	STATUS OF SA
69066	L* (8/1/88 & 6/12/89)	1	3
74577	F* Extension (7/24/89)	1	
74821 [#]	Renumbering TS 3/4.7.11 (8/10/89)	1	2
74823 [#]	DG Fuel Oil Sampling (7/27/89 & 9/21/89)		2
74824	RHR Autoclosure (7/21/89)		3
74825 [#]	DG Fuel Oil Storage Vol. (7/21/89 & 9/21/89)		2
74826	RTD Bypass Manifold (7/21/89)		3
74839 [#]	B & W SG Sleeves (9/19/89)	1	
74549 [#]	Deletion of Cycle Specific Parameters (9/19/89)	4	2

- 1 NSHC is missing description of the amendment request and/or missing safety assessment.
- 2 Submittal does not contain a distinct and separate SA document which contains the plant specific SA covering the request and the basis for its acceptability.
- 3 Submittal includes a WCAP but no plant specific SA covering the request and the basis for the acceptability of the request.
- 4 Example of a good NSHC.
- # Requests which have not been noticed.

CONTRIBUTION

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PDR

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Lainas

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Anderson

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GC (For inform. Only)

Jordan

CRS (10)

Summer File

14-E-4

14-H-3

14-B-20

14-B-20

14-B-20

15-B-18

MNBB-3302

P-315

ENCLOSURE 1

STATUS OF RECENT AMENDMENT REQUESTS FOR V. C. SUMMER NUCLEAR STATION

TAC	AMENDMENT REQUEST	STATUS OF NSHC	STATUS OF SA
69066	L* (8/1/88 & 6/12/89)	1	3
74577	F* Extension (7/24/89)	1	
74821 [#]	Renumbering TS 3/4.7.11 (8/10/89)	1	2
74823 [#]	DG Fuel Oil Sampling (7/27/89 & 9/21/89)		2
74824	PHR Autoclosure (7/21/89)		3
74825 [#]	DG Fuel Oil Storage Vol. (7/21/89 & 9/21/89)		2
74826	RTD Bypass Manifold (7/21/89)		3
74839 [#]	B & W SG Sleeves (9/19/89)	1	
74549 [#]	Deletion of Cycle Specific Parameters (9/19/89)	4	2

- 1 NSHC is missing description of the amendment request and/or missing safety assessment.
- 2 Submittal does not contain a distinct and separate SA document which contains the plant specific SA covering the request and the basis for its acceptability.
- 3 Submittal includes a WCAP but no plant specific SA covering the request and the basis for the acceptability of the request.
- 4 Example of a good NSHC.
- # Requests which have not been noticed.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

February 10, 1986

TO ALL LICENSEES OF OPERATING REACTORS AND APPLICANTS FOR AN OPERATING
LICENSE

Gentlemen:

SUBJECT: APPLICATIONS FOR LICENSE AMENDMENTS
(Generic Letter 86-03)

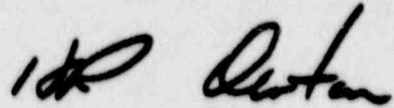
During the past year, I have evaluated the difficulties in providing timely notices in the Federal Register regarding license amendments proposed for issuance. One of the reasons for these difficulties is that too often the information called for by 10 CFR 50.91(a)(1) regarding an analysis of no significant hazards consideration using the standards of 10 CFR 50.92 is not provided with the amendment request.

The enclosed discussion is for your information and guidance. Its purpose is to reduce delays in processing Federal Register Notices regarding license amendment requests. Included with the discussion is an example of a submittal which the staff found to contain an adequate analysis of the no significant hazards consideration.

You are requested to ensure that all future amendment requests contain sufficient documentation to specifically address each factor under 10 CFR 50.92(c). An adequate submittal would include a detailed basis sufficiently comprehensive on the issue of no significant hazards consideration to permit the staff to file a timely Federal Register Notice. The staff's objective is to have most routine Federal Register Notices published within 20 working days of receipt of a license amendment request.

In the event that the staff is unable to find that an adequate basis to support a finding regarding no significant hazards consideration has been provided, I have directed the Project Director to return the application so that the necessary information can be included. This will also highlight to utility management any significant problem the staff is experiencing with your amendment requests. Any such determination will be made by the staff within six working days of receipt. Your Project Manager will promptly notify you and return the amendment request accordingly.

No specific response to this letter is required. Please contact your Project Manager if you have any questions.


Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosure:
As stated

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ENCLOSURE

RECENT PROBLEMS WITH LICENSE AMENDMENT REQUESTS

10 CFR 50.91(a)(1) requires that licensees requesting an amendment provide an analysis "using the standards in 50.92" (the 3 factor test) about the issue of no significant hazards considerations (NSHC). Staff final determinations must also use the 3 factor test of 50.92. Proposed staff determinations may use the examples of actions which are "likely" or "not likely" to involve significant hazards considerations. These examples were provided in Enclosure 1 to Generic Letter 83-19.

The basic problem with many recent license amendment requests is that the licensee does not provide an analysis using the 3 factor test. Often, all the licensee provides is a simple bottom line assertion, copying the 3 factors, but offering no analysis. In many cases the safety assessment is brief or lacking in content such that the reader cannot conclude that the basis for the NSHC determination is in fact adequately provided in the description or in the safety assessment section. In other cases the safety assessment is written so that the reader cannot determine which part of the assessment applies to which of the three factors. A simple assertion that references an entire, fairly complex safety assessment as justification for satisfying the three factor test is not considered satisfactory. To expedite processing of your application, each of the three factors should be addressed separately for each part of the license amendment request. An assertion without appropriate analysis does not satisfy 10 CFR 50.91(a)(1).

While a licensee may offer an opinion to be helpful to the staff on which example is appropriate, that is not sufficient to satisfy 50.91(a)(1) -- a licensee is not merely to suggest that it is "likely" or "unlikely" that a proposed amendment involves a significant hazards consideration -- the licensee is required to give an analysis in terms of the 3 factors. The licensee should not need examples of what is "likely" or "unlikely"; the licensee must complete a safety evaluation before submitting the proposed amendment. Thus, the licensee should know on the basis of the completed technical evaluation whether the proposed amendment increases the probability or consequences of an accident previously evaluated, creates the possibility of a new accident or reduces a safety margin. On this basis, the licensee should be able to articulate clearly the specific reasons as to whether the change is significant.

Attached is an example of a submittal which the staff found to meet the above criteria.

ATTACHMENT 1

Description of amendment request:

The proposed amendment would modify Technical Specification 2.2.2, "Core Protection Calculator Addressable Constants"; Table 2.2-2, which provides a listing of the Type I and Type II Addressable Constants; and the associated Bases. The proposed amendment would also revise the appropriate page of the Index, delete the reference to Table 2.2-2 from Notation (9) and delete Notation (10) of Table 4.3-1, and delete the note in Administrative Control 6.8.1 (g).

The addressable constants of the Core Protection Calculators (CPC) provide a mechanism to incorporate reload dependent parameters and calibration constants to the CPC software so that the CPC core model is maintained current with changing core configurations and operating characteristics. As a method to avoid gross errors upon operator entry of an addressable constant, a reasonability check requirement was imposed by the original NRC CPC Review Task Force. The CPC software has been designed with automatic acceptable input checks against limits that are specified by the CPC functional design specifications. Therefore, inclusion of the addressable constants and the software limit values in the Technical Specifications (2.2.2 and Table 2.2-2) is redundant, and serves only to enforce prior approval of changes to these limits. Proper administrative control procedures are available to assure that appropriate values of addressable constants are entered by the operator. Any CPC software changes involving addressable constants or software limit values are made and tested under NRC approved software change procedures and are available for NRC review.

BASIS FOR NO SIGNIFICANT HAZARDS DETERMINATION:

The proposed change does not involve a significant hazards consideration because operation of Arkansas Nuclear One Unit 2 in accordance with this change would not:

- (1) involve a significant increase in the probability or consequences of an accident previously evaluated. This change merely eliminates redundant administrative requirements concerning the CPC addressable constants. The function of these requirements is already implemented by the allowable value checks in the CPC software. Changes to the addressable constants are accomplished through strict administrative procedures. Therefore, this change cannot increase the probability or consequences of an accident.
- (2) create the possibility of a new or different kind of accident from any previously analyzed. It has been determined that a new or different kind of accident will not be possible due to this change. This elimination of redundant administrative requirements does not create the possibility of a new or different kind of accident.
- (3) involve a significant reduction in a margin of safety. Administrative procedures involving the CPC addressable constants ensure that the CPC core model is calibrated to current plant conditions and therefore preserve the margin of safety. Elimination of redundant administrative requirements will not reduce the margin of safety.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve significant hazards consideration. Example (i) relates to a purely administrative change to Technical Specifications: for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature. Example (iv) relates to a relief granted upon demonstration of acceptable operation from an operating restriction that was imposed because acceptable operation was not yet demonstrated. This assumes that the operating restriction and the criteria to be applied to a request for relief have been established in a prior review and that it is justified in a satisfactory way that the criteria have been met.

In this case, the proposed change described above is similar to both Example (i) and Example (iv) in that deletion of Technical Specification 2.2.2, Table 2.2-2 and modifications to the related pages are purely administrative changes, and are also relief granted upon demonstration of acceptable operation from an operating restriction that was imposed because acceptable operation was not yet demonstrated.

Conceptually, the addressable constants reasonability checks are the equivalent of the limits of an adjustable potentiometer in the conventional analog hard-wired type protection system. The limits of these potentiometers are not specified in the Technical Specifications, as this would be unrealistic and would make no contribution to plant safety. The addressable constants are basically calibration constants which are used to assure that the CPC calculations of core parameters accurately reflect actual plant conditions. The proposed change may therefore be considered to achieve consistency throughout the Technical Specifications in that it removes a listing of calibration constants which is redundant in purpose and is not provided for any other system.

Removal of the listing of the addressable constants (and the allowable ranges of the Type I constants) may be considered a relief from an operating restriction that was imposed by the NRC CPC Review Task Force because acceptable operation was not yet demonstrated. ANO-2 was the first CE plant equipped with the CPC system; the addressable constants Technical Specification was imposed because this system was the first application of a digital computer based portion of a reactor protection system. Subsequent operational experience with the CPC system, both at ANO-2 and the other CPC equipped plants, has demonstrated acceptable operation. Relief from this administrative restriction has been allowed after several meetings between the utilities with CPC equipped plants and the NRC Core Performance Branch, which included members of the CPC Review Task Force. The criteria applied to the relief from this operating restriction have been established and there is satisfactory justification that they have been met. The NRC Core Performance Branch have issued a draft Safety Evaluation Report (concerning the removal of the addressable constants Technical Specification) which provides this justification.

Therefore, based on the above considerations, AP&L has determined that this change does not involve a significant hazards consideration.

SEP 1 1987

Docket Nos.: 50-528, 50-529
and 50-530

Mr. E. E. Van Brunt, Jr.
Executive Vice President
Arizona Nuclear Power Project
Post Office Box 52034
Phoenix, Arizona 85072-2034

Dear Mr. Van Brunt:

DISTRIBUTION
Docket File
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GMHolahan
JLee
EALicitra/MJDavis
OGC-Bethesda
EJordan/JPartlow
ACRS (10)
PDV Plant File

SUBJECT: GUIDANCE ON FILING LICENSE AMENDMENT REQUESTS FOR PALO VERDE

The purpose of this letter is to summarize the guidance we have been providing to your staff over the past 19 months concerning the filing of license amendment requests. Initial guidance was provided in a January 1986 meeting held in Phoenix, Arizona, and was followed by the guidance in Generic Letter 86-03, dated February 10, 1986. Additional guidance has been provided verbally on several occasions since then during the processing of a number of license amendment requests on Palo Verde.

We note that the content of your recent submittals on amendment requests shows an improving trend when compared to earlier submittals. In order that this trend may continue, we are repeating the guidance given so that it could be available to all ANPP personnel involved in processing license amendment requests.

The regulations applicable to filing the technical portion of a license amendment request are 10 CFR 50.90, 50.91 and 50.92, where 10 CFR 50.92 provides the standards for determining whether a proposed amendment involves a no significant hazards consideration. Examples of amendments that are considered likely, or not likely, to involve a significant hazards consideration are provided in 51 FR 7750 and 51 FR 7751, respectively.

Specific guidance on the preparation of license amendment requests is contained in four enclosures to this letter. Enclosure 1 summarizes what the content should be for amendment requests; Enclosure 2 discusses the information that should be included in the safety evaluation; Enclosure 3 provides more detail on how to address the standards for determining whether a no significant hazards consideration exists; and Enclosure 4 summarizes what additional information is required for an amendment involving exigent or emergency circumstances.

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If you have any questions regarding this letter, please let me know.

Sincerely,

Original signed by
E. A. Licitra

E. A. Licitra, Senior Project Manager
Project Directorate V
Division of Reactor Projects - III,
IV, V and Special Projects

Enclosures:
As stated

cc: See next page

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[Handwritten initials]

DRSP/PDV
Lee
8/1/87

EAL
DRSP/PDV
EALicitra:cd
8/11/87

For review
OGE
8/14/87
DRSP/PDV
GKN
9/01/87

CONTENT FOR LICENSE AMENDMENT REQUESTS

Each amendment request should include the following information:

- A description of the content of the current license condition or technical specification, including specific identification of the condition or specification (e.g., Paragraph 2.C(8), "Emergency Preparedness," or Technical Specification 3/4.2.4, "DNBR Margin").
- A description of the proposed change.
- A discussion of the purpose or function of the subject area for which a change is being requested (e.g., if a technical specification is involved, the purpose of the specification).
- A discussion of why the change is being requested.
- A safety evaluation demonstrating the adequacy of the level of safety provided in support of the requested change (see Enclosure 2 for more detail).
- A discussion of whether a no significant hazards consideration is involved and the basis for the determination, using the standards in 10 CFR 50.92 (see Enclosure 3 for more detail).
- An environmental impact consideration determination (see 10 CFR 51.21 and 10 CFR 51.22).
- Marked-up pages reflecting the requested change.
- Application fee (see 10 CFR 170).

CONTENT OF SAFETY EVALUATIONS FOR LICENSE AMENDMENT REQUESTS

The safety evaluations provided for staff review and approval should include the following information:

- ° A description of the areas being evaluated.
- ° A discussion of the analytical methods used, including the input parameters, in support of the proposed changes. The discussion should also state whether the methods are different than those previously used and whether the methods have been previously reviewed and approved by the staff. An evaluation should also be provided for administrative changes to determine whether the changes have an adverse safety impact.
- ° The results of the evaluation which demonstrate the adequacy of the level of safety provided by the proposed changes.
- ° The level of detail provided by the safety evaluation should be such that the staff can make an independent assessment of the evaluation based on the information provided by the licensee.

ADDRESSING THE STANDARDS IN 10 CFR 50.92

In addressing the standards for determining whether a no significant hazards consideration exists, the discussions should include the following information and should have sufficient detail for the staff to draw the same conclusions as the licensee, based on the information presented.

Standard 1 - Involve a Significant Increase in the Probability or Consequences of an Accident Previously Evaluated

The discussion should identify what accidents were previously evaluated (i.e., those that had been submitted on the docket and evaluated by the staff) that involve the areas of proposed change. The discussion should also focus on how these accidents are affected by the proposed changes and whether the changes involve a significant increase in probability or consequences of those previously evaluated accidents. If the proposed changes do not affect any previously evaluated accidents, the reasons for this conclusion should be stated.

Standard 2 - Create the Possibility of a New or Different Kind of Accident From Any Accident Previously Evaluated

The information provided in the discussion of this standard should make it clear whether a new or different accident is involved. Amendment requests involving changes in equipment, plant operations, etc. might create the possibility of a different kind of accident. The evaluation of an accident which has not been submitted on the docket and reviewed by the staff is considered new or different. There should be a careful focus on this issue, especially if the discussion of the first Standard asserts that the changes do not involve any previously evaluated accidents.

Standard 3 - Involve a Significant Reduction in a Margin of Safety

The discussion of this standard should consider whether any margin of safety, based on the analyses of record and/or the existing limits of the technical specifications, will be significantly reduced. Such a consideration should be based upon the margin of safety established in the FSAR, SRP, SER and SER Supplements, and Technical Specification Bases of record. A significant reduction in margin can be involved even if the results of revised analyses are within acceptance criteria.

JUSTIFICATION REQUIRED FOR ESTABLISHING AN EXIGENT OR EMERGENCY

CLASSIFICATION FOR A LICENSE AMENDMENT REQUEST

The Commission expects licensees to apply for license amendments on a timely basis. Although the Commission recognizes that emergency situations may arise, licensees are not to create an emergency in order to take advantage of the emergency provisions. When a request is made for emergency action on a license amendment submittal, other information is required in addition to that identified in Enclosures 1, 2, and 3. The required additional information for justifying an emergency classification, which is identified below, should be submitted in a timely manner and in sufficient detail for the staff to draw the same conclusions as the licensee, based on the information presented.

- (1) Establish that immediate action is required to prevent derating or shutting down of the plant, or to prevent resumption of operation or an increase in power output.
- (2) Establish that the need for the requested action could not reasonably have been identified sooner.
- (3) Establish that there is no other alternative available.
- (4) Describe interim compensatory measures to be imposed.
- (5) If temporary relief is being requested, state the scheduled date for when the relief period would end, e.g., the scheduled date for returning inoperable components or systems to an operable condition, or the scheduled date for accomplishing required surveillances.
- (6) Advise the appropriate State personnel.

When a request is made for exigent action on a license amendment submittal, the additional information should include Items (2) and (6) above as well as the following information.

- ° Establish that quick action is desirable (1) to avoid the loss of a net safety benefit or (2) to provide a net increase in safety or reliability, or a significant environmental benefit.