

August 2, 2007

Mr. Russell Bell, Director
New Plant Licensing
Nuclear Generation Division
Nuclear Energy Institute
1776 I Street, NW, Suite 400
Washington, DC 20006-3707

SUBJECT: CLARIFICATION OF NRC GUIDANCE ON VARIANCES AND DEPARTURES IN
COL APPLICATIONS

Dear Mr. Bell:

Thank you for your letter dated April 27, 2007, in which the Nuclear Energy Institute (NEI) proposes, on the behalf of potential applicants for combined licenses, clarifications of the NRC guidance regarding variances from early site permits (ESPs) and departures from design certification documents (DCDs). The U.S. Nuclear Regulatory Commission (NRC) staff's response to your specific questions and proposals are attached. We encourage continued discussions and appropriate documentation of such clarifications to minimize problems upon the actual submittal of combined license (COL) applications.

Enclosure:
As Stated

cc/encl: See next page

Sincerely,

/RA/

William D. Reckley, Branch Chief
Guidance, Infrastructure & Financial Review Branch
Division of New Reactor Licensing
Office of New Reactors

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|--------|---------------|----------|---------------|
| OFFICE | NRO/DSER/RENV | OGC | NRO/DNRL/NGIF |
| NAME | BClayton | RWeisman | WReckley |
| DATE | 06/05/07 | 06/19/07 | 08/02/2007 |

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NRC RESPONSE TO NEI PROPOSALS/QUESTIONS IN APRIL 27, 2007, LETTER REGARDING VARIANCES AND DEPARTURES

The U.S. Nuclear Regulatory Commission (NRC) staff response to the specific proposals and questions included in the letter dated April 27, 2007, from Russell Bell, Nuclear Energy Institute (NEI) to William Reckley of the NRC staff are provided below:

NEI Understanding 1:

Requests for variance from an early site permit (ESP): Placement in combined license (COL) application and format.

- Specific variances will be identified in the appropriate text of the application.
- The requests for variances may be presented in the same portion (or "part") of the COL application that contains the "departure report" required by the design certification rule Section X.B.1.
- In that a request for variance from the ESP is generally analogous to an intended departure from the generic design control document (DCD), the format of a request for variance would generally follow that suggested in Section X.B.1. The request for variance would contain a brief description of the variance from the ESP, including a summary of the analysis and justification for the variance.

NRC Staff Response:

The proposed location and description of the variances included in a COL application is acceptable. As with departures, the affected section of the final safety analysis report (FSAR) should identify that the applicant is proposing a variance from the ESP or site safety analysis report (SSAR) to refer the reader to the departure/variance report for additional information. A description of the format and structure of the application, including the approach for proposing variances from an ESP or SSAR, should be described in a logical location within the application (e.g., Part 1 (cover letter and administrative descriptions) of the application).

NEI Understanding 2:

Combined license applications (COLA) referencing an ESP will generally incorporate the ESP site SSAR into the COLA FSAR by reference. Applicants have noted in preparing draft COLA FSAR material that certain administrative and editorial changes to the ESP SSAR may be appropriate and helpful to: (1) facilitate staff review, (2) support clarity of the COLA FSAR to the public, and (3) facilitate the long term use of the COLA FSAR following licensing and construction when incorporated documents would likely be integrated.

- Administrative and editorial changes would not be material in nature. Therefore, such changes would not be considered variances from the ESP.
- The editorial changes would be identified in the appropriate locations within the

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COLA FSAR. It is proposed that a summary of these changes would be provided in an appropriate location within the COLA in a separate section from the variances.

NRC Staff Response:

Administrative and editorial revisions of the ESP SSAR do not affect the substance of the SSAR, and do not constitute changes to the SSAR. Accordingly, an applicant referencing an ESP may make such revision to the SSAR to facilitate SSAR use in a COL application and such revisions need not be identified as variances. A summary of such revisions should be provided and may be listed separately from the evaluated variances. A description of the format and structure of the application, including the use of and location of the summary of administrative and editorial revisions to the SSAR, should be described in a logical location within the application (e.g., Part 1 (cover letter and administrative descriptions) of the application). Although in agreement with the general approach described above, the NRC staff may identify issues during the review that would warrant additional discussions with an applicant regarding such changes to the SSAR. These discussions could lead to the applicant submitting a revision to the application to request a variance regarding an SSAR change originally identified as being administrative or editorial.

NEI Understanding 3:

It is understood that the addition of information in the COLA FSAR that supplements but does not conflict with the ESP SSAR is not a variance. Examples of such supplemental information include information added to address generic DCD COL information items and ESP COL action items.

NRC Staff Response:

Information that supplements but does not conflict with the ESP SSAR should not be identified as a variance. Likewise, information submitted to address a COL information item in a DCD would not be a departure provided the information only supplements and does not conflict with information in the DCD.

NEI Understanding 4:

It is understood that need for requests for variances have limited applicability to the environmental review aspects of the ESP.

- No request for variance in environmental areas would be required unless information in the COLA environmental report (ER) involves deviations from the ESP terms and conditions. It is recognized that ESP terms and conditions include characteristics and parameters that may have been used in support of environmental reviews.

- If the actual characteristics at the time of the COLA are different from but fall within the bounds of the ESP terms and conditions, there is no variance. If it is unclear whether an ESP term or condition is a bounding value rather than a specified number that must be met, any material difference would constitute a variance.
- Information representing changes to the ESP ER are reviewed and processed in accordance with the provisions of 10 CFR 51.50(c).

NRC Staff Response:

The staff agrees that a request for a variance in environmental areas would only be required if the information in the COLA ER involves deviations from ESP terms or conditions related to environmental matters, except that a variance is not required for a deviation from the environment site characteristics and design parameters specified in the ESP. With respect to such environmental site characteristics and design parameters, three requirements specified in § 51.50(c)(1) apply: First, pursuant to § 51.50(c)(i), a COL applicant referencing an ESP must demonstrate that the design of the facility proposed in the COL application falls within the environmental site characteristics and design parameters specified in the ESP. Second, pursuant to § 51.50(c)(1)(iv), any design characteristic proposed in the COL application that does not fall within the environmental site characteristics and design parameters specified in the ESP must be evaluated to determine whether this is significant or not. Third, pursuant to § 51.50(c)(1)(iii), if the matter is significant, it must be analyzed in the ER.

In many cases, postulated plant parameters are titled or described as minimum or maximum values and are therefore more easily understood to be bounding or conservative values. In such cases, the applicant may satisfy § 51.50(c)(1)(i) by simply identifying the actual plant values in the COLA and point out that the COLA value is conservative with respect to the ESP value.

In some cases, the ESP may refer to the SSAR, ER or other document to provide the basis for the value included in the postulated design parameters. In such cases, the applicant may identify the COLA and ESP values and describe the basis for the ESP value in terms of the source document, and demonstrate how the COLA value is bounded by or is conservative with respect to the ESP value and the related source document.

The staff does not agree that information representing changes to the ESP ER are reviewed and processed in accordance with the provisions of 10 CFR 51.50(c). Section 51.50(c) discusses how to treat issues that were either resolved or unresolved in the ESP proceeding. Such issues may or may not have a direct correlation to information in the ESP applicant's ER. Further, it is the NRC staff's environmental impact statement (EIS), and not the applicant's ER, that is the licensing document regarding environmental matters. Therefore, the COL applicant should refer to the NRC's EIS for the ESP when preparing the COL ER.

NEI Understanding 5:

It is recognized that the "pilot" ESP SSARs were developed considering the guidance of Regulatory Guide (RG) 1.70, RS-002, and NUREG-0800 in general. Thus, the ESP SSAR formats generally follow this NRC guidance. For these reasons, the ESP SSARs follow the format expectations of RG 1.206. Given this alignment of the ESP SSARs with RG 1.206, it is appropriate that COLA FSAR Chapter 2 be formatted according to the ESP SSAR, in general. Following such a format may present conflict of an administrative and editorial nature between a proposed COLA FSAR Chapter 2 and the applicable generic DCD. The design certification rule requires that the plant-specific DCD use "the same organization and numbering as the generic DCD" (Section IV.A2.a).

- It is understood that making administrative and editorial changes to the generic DCD to facilitate Staff review and public use and understanding of the COLA would not be considered departures from the generic DCD. If the NRC determines such changes would require an administrative exemption from Section IV.A.2. a of the design certification rule then it is our understanding that such administrative exemptions would be readily granted by the NRC.
- It is understood that making administrative and editorial changes to the ESP SSAR to facilitate Staff review and public use and understanding of the COLA would not be considered a variance.

NRC Staff Response:

The requirement for the COL FSAR to follow the same organization and numbering as the generic DCD is intended to assist the NRC staff and other readers locate information in both the plant specific FSAR and generic DCD and assist the users in going back and forth between the closely related documents. Where the DCD is the primary source of information for the FSAR, applicants should maintain the same organization and numbering system as close as practicable (usually down to the section level). In those sections of the FSAR where the DCD is not a primary reference and the content is aligned more closely to an ESP or is provided on a plant specific basis using guidance such as RG 1.206, the applicant should follow the most logical organization and numbering system to make the FSAR easy to follow and to align to that reference document most relevant to the content of the specific FSAR section(s). In these cases, the FSAR may follow the DCD format at the chapter level and sections would align to either the ESP or guidance such as RG 1.206. If the DCD includes a specific numbering system at the section level, an exemption from the DCR would be necessary. While the standards governing exemptions will need to be met in such circumstances, it appears to the staff that this should readily be done, in that following the DCD format would not be necessary to serve the underlying purpose of the rule. If the DCD does not include a specific numbering system below the chapter level, an exemption would not be required (e.g., Section 2.4 of the AP-1000 DCD, which includes a list of COL information items but does not provide a numbering system for the sub-sections). Another example of minor differences that can be included without an exemption is where sections within a chapter are added to accommodate new requirements provided the organization of the FSAR is clearly explained and the DCD organization is

reasonably maintained for those sections where the DCD is the primary reference document. In such instances, an exemption would not be required for aligning other sections to the ESP or RG 1.206.

NEI Understanding 6:

There may be errors (either editorial or substantive) in the ESP SSAR. The following process may be used to correct those errors:

- Correction of editorial errors (e.g., references to the wrong figure numbers) does not require a variance.
- Correction of substantive errors does not require a variance, provided that the error was identified and corrected during the ESP proceeding and is reflected in the hearing record.
- Correction of substantive errors that were not identified during the ESP proceeding would constitute a variance.

NRC Staff Response:

The staff generally agrees with the above description of the process for addressing errors discovered in an ESP SSAR except that SSAR errors identified before ESP issuance should be corrected before the ESP issues or should be addressed by a permit condition. In addition to the handling of errors within a COLA, applicants and ESP holders may be required by other NRC regulations to report errors or other information (e.g., 10 CFR 52.6, "Completeness and accuracy of information," requires reporting of information having for the regulated activity a significant implication for public health and safety or common defense and security).

NEI Understanding 7:

There may be errors (either editorial or substantive) in the ESP ER or EIS. The following process will be used to correct those errors:

- If correction of an error constitutes "new and significant information, the correction must be made in the COLA ER.
- If the correction of an error involves a change in an ESP term or condition, the correction must be made in the COLA ER and a variance must be requested.
- The COL applicant should notify the NRC of other errors known by the applicant. This notification could be included in the application or in a letter to the NRC during the preapplication review process. Such a correction would not constitute a variance.

NRC Staff Response:

The staff generally agrees with the above description of the process for addressing errors discovered in an ESP ER or EIS. In addition to the handling of errors within a COLA, applicants and ESP holders may be required by other NRC regulations to report errors or other information (e.g., 10 CFR 52.6, "Completeness and accuracy of information," requires reporting of information having for the regulated activity a significant implication for public health and safety or common defense and security). As previously discussed, changes to the ER could involve a variance if they affect the terms and conditions within the ESP. The implications of identifying and addressing errors in reference documents for a COLA would be determined on a case-by-case basis within the adjudicatory process.

Combination Mailing List:

cc: (page 1)

Mr. Laurence Parme
Manager, GT-MHR Safety & Licensing
General Atomics Company
P.O. Box 85608
San Diego, CA 92186-5608

Mr. David Lochbaum, Nuclear Safety Engineer
Union of Concerned Scientists
1707 H Street, NW, Suite 600
Washington, DC 20006-3919

Mr. Paul Gunter
Nuclear Information & Resource Service
1424 16th Street, NW, Suite 404
Washington, DC 20036

Mr. James Riccio
Greenpeace
702 H Street, NW, Suite 300
Washington, DC 20001

Mr. Adrian Heymer
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Mr. George Alan Zinke
Project Manager
Nuclear Business Development
Entergy Nuclear
M-ECH-683
1340 Echelon Parkway
Jackson, MS 39213

Ms. Marilyn Kray
Vice President, Special Projects
Exelon Generation
200 Exelon Way, KSA3-E
Kennett Square, PA 19348

Mr. Charles Brinkman
Westinghouse Electric Co.
Washington Operations
12300 Twinbrook Pkwy., Suite 330
Rockville, MD 20852

Mr. Joseph D. Hegner
Lead Engineer - Licensing
Dominion Generation
Early Site Permitting Project
5000 Dominion Boulevard
Glen Allen, VA 23060

Mr. Edward L. Quinn
Longenecker and Associates
Utility Operations Division
23292 Pompeii Drive
Dana Point, CA 92629

Mr. Paul Leventhal
Nuclear Control Institute
1000 Connecticut Avenue NW, Suite 410
Washington, DC 20036

Mr. Jay M. Gutierrez
Morgan, Lewis & Bockius, LLP
1111 Pennsylvania Avenue, NW
Washington, DC 20004

Mr. W. Edward Cummins
AP600 and AP1000 Projects
Westinghouse Electric Company
P.O. Box 355
Pittsburgh, PA 15230-0355

Mr. Gary Wright, Manager
Office of Nuclear Facility Safety
Illinois Department of Nuclear Safety
1035 Outer Park Drive
Springfield, IL 62704

Combination Mailing List:

cc: (page 2)

Mr. Brendan Hoffman
Research Associate on Nuclear Energy
Public Citizens Critical Mass Energy and
Environmental Program
215 Pennsylvania Avenue, SE
Washington, DC 20003

Mr. Lionel Batty
Nuclear Business Team
Graftech
12300 Snow Road
Parma, OH 44130

Mr. Ian M. Grant
Canadian Nuclear Safety Commission
280 Slater Street, Station B
P.O. Box 1046
Ottawa, Ontario
K1P 5S9

Mr. Glenn H. Archinoff
AECL Technologies
481 North Frederick Avenue
Suite 405
Gaithersburg, MD 20877

Mr. Ed Wallace, General Manager
Projects
PBMR Pty LTD
PO Box 9396
Centurion 0046
Republic of South Africa

Mr. Dobie McArthur
Director, Washington Operations
General Atomics
1899 Pennsylvania Avenue, NW, Suite 300
Washington, DC 20006

Mr. Russell Bell
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Ms. Vanessa E. Quinn, Chief
Radiological Emergency Preparedness
Branch
Nuclear and Chemical Preparedness and
Protection Division
Department of Homeland Security
1800 South Bell Street, Room 837
Crystal City-Arlington, VA 22202-3546

Mr. Ron Simard
6170 Masters Club Drive
Suwanee, GA 30024

Ms. Sandra Sloan
Areva NP, Inc.
3315 Old Forest Road
P.O. Box 10935
Lynchburg, VA 24506-0935

Ms. Anne W. Cottingham
Assistant General Counsel
Nuclear Energy Institute
1776 I Street, NW, Suite 400
Washington, DC 20006

Mr. David Repka
Winston & Strawn LLP
1700 K Street, NW
Washington, DC 20006-3817

Mr. Robert E. Sweeney
IBEX ESI
4641 Montgomery Avenue
Suite 350
Bethesda, MD 20814

Mr. Eugene S. Grecheck
Vice President, Nuclear Support Services
Dominion Energy, Inc.
5000 Dominion Blvd.
Glen Allen, VA 23060

Combination List:

cc: (page 3)

E-Mail:

tom.miller@hq.doe.gov
tom.miller@nuclear.energy.gov
mark.beaumont@wsms.com
sfrantz@morganlewis.com
ksutton@morganlewis.com
jgutierrez@morganlewis.com
sandra.sloan@areva.com
mwetterhahn@winston.com
gcesare@enercon.com
whorin@winston.com
erg-xl@cox.net
steven.hucik@ge.com
david.hinds@ge.com
chris.maslak@ge.com
mgiles@entergy.com
patriciaL.campbell@ge.com
bob.brown@ge.com
jim@ncwarn.org
pshastings@duke-energy.com
ronald.hagen@eia.doe.gov
murawski@newsobserver.com
Cary.Fleming@constellation.com
tansel.selekler@nuclear.energy.gov
tansel.selekler@hq.doe.gov
trsmith@winston.com
James.Beard@gene.ge.com
george.stramback@gene.ge.com
david.lewis@pillsburylaw.com
paul.gaukler@pillsburylaw.com
john.o'neill@pillsburylaw.com
matias.travieso-diaz@pillsburylaw.com
maria.webb@pillsburylaw.com
roberta.swain@ge.com