

**From:** "BELL, Russ" <rjb@nei.org>  
**To:** "Michael Scott" <MLS3@nrc.gov>  
**Date:** 9/7/04 10:41AM  
**Subject:** Revised Pt. 21 Letter

This version corrects errors but contains no substantive changes. Sorry to cycle you again on this. Thanks.

My original forwarding message:

As basis for discussion at our meeting set for 9/9, attached is a letter dated today that provides our comments on the ESP template related to Item 7 on Part 21 applicability. The template comments we provided on July 30 are provided again as an enclosure.

Also related to Part 21, we plan to seek clarification of this NRC staff statement in its June 22 letter on Part 21 applicability:

[Therefore,] "unless, an ESP applicant can demonstrate in its application that there is reasonable assurance that the Section 50.55(e) and Part 21 obligations - both retrospective and prospective - will be met, either through a Part 21 reporting program or an equivalent alternative..., the NRC could not find that the requirements of these regulations will be satisfied."

What is it you expect to see in ESP applications?

If you have any questions, please give me call.

---

From: FUNDERBURK, Tonya  
Sent: Tuesday, September 07, 2004 10:20 AM  
To: BELL, Russ  
Subject: Revised Letter to Dr. William D. Beckner

September 3, 2004

Dr. William D. Beckner  
New, Research and Test Reactor Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation  
US Nuclear Regulatory Commission  
Washington DC 20555-0001

Project 689

Dear Dr. Beckner:

This letter provides our comments on the NRC's June 22, 2004, letter to NEI that proposed an Early Site Permit (ESP) template and are in addition to the comments we provided during a July 30, 2004, public meeting (enclosed). We recommend that the template be modified to be consistent with the staff's view that 10 CFR Part 21 is applicable to ESP holders upon issuance of the ESP as stated in a June 22 NRC letter on Part 21 applicability and in our July 30 public meeting.

Adrian P. Heymer

Director, Special Projects

Nuclear Generation Division

Phone: 202-8094

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aph@nei.org

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CC: "HEYMER, Adrian" <aph@nei.org>, "FUNDERBURK, Tonya" <tvf@nei.org>

**Mail Envelope Properties (413DC85A.0F0 : 7 : 61680)**

**Subject:** Revised Pt. 21 Letter  
**Creation Date:** 9/7/04 10:35AM  
**From:** "BELL, Russ" <rjb@nei.org>

**Created By:** rjb@nei.org

**Recipients**

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<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	2645	09/07/04 10:35AM
TEXT.htm	7419	
NEI Letter to Dr. William D. Beckner-NRC.pdf		66121
ESP template comments.pdf	889470	
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NUCLEAR ENERGY INSTITUTE

**Adrian P Heymer**  
DIRECTOR, SPECIAL PROJECTS  
NUCLEAR GENERATION DIVISION

September 3, 2004

Dr. William D. Beckner  
New, Research and Test Reactor Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation  
US Nuclear Regulatory Commission  
Washington DC 20555-0001

**Project 689**

Dear Dr. Beckner:

This letter provides our comments on the NRC's June 22, 2004, letter to NEI that proposed an Early Site Permit (ESP) template and are in addition to the comments we provided during a July 30, 2004, public meeting (enclosed). We recommend that the template be modified to be consistent with the staff's view that 10 CFR Part 21 is applicable to ESP holders upon issuance of the ESP as stated in a June 22 NRC letter on Part 21 applicability and in our July 30 public meeting.

In particular, we have the following comments on Item 7 of the proposed ESP template concerning Part 21 applicability:

- Based on the staff's June 22 letter to NEI on Part 21, it is our understanding that Part 21 reporting requirements would be applied to the ESP holder upon issuance of the ESP. Item 7 should be modified to be consistent with that letter.
- Part 21 specifies the circumstances and the timing for required reports to the Commission. An ESP need not and should not require "immediate" notification of the Commission of Part 21 reportable compliance or safety issues.

Dr. William D. Beckner  
September 3, 2004  
Page 2

- Part 21 requires a report to NRC when thorough evaluation reasonably indicates a reportable compliance or safety issue. Part 21 does not require reporting of "any information that may indicate" an ESP noncompliance issue.

Accordingly, we recommend Item 7 be replaced with the following:

7. In accordance with 10 CFR 52.37, 10 CFR Part 21 is an applicable regulation for this ESP.

We look forward to discussing this proposed modification with the staff during our public meeting scheduled for September 9, 2004. The enclosure provides additional comments of an administrative nature and emphasizes a topic for the September 9, 2004, meeting: the need for, and scope of design parameters that the staff is proposing to list in the ESP (Table 2).

If you have any questions on this matter, please contact Russ Bell (202-739-8087 or [rjb@nei.org](mailto:rjb@nei.org)) or me (202-739-8094 or [aph@nei.org](mailto:aph@nei.org)).

Sincerely,

Adrian Heymer

Enclosure

c: Mike Scott, NRC/NRR



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 22, 2004

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

SUBJECT: EARLY SITE PERMIT TEMPLATE

Dear Mr. Heymer:

The U.S. Nuclear Regulatory Commission (NRC) staff has developed a draft early site permit (ESP) template. This template is intended to enhance the efficiency, consistency, and effectiveness of the staff's review of ESP applications and to ensure that information needed for an ESP, should one be issued, is available. It also allows other interested parties the opportunity to view the general form of an ESP. The NRC has made no decision on issuance of an ESP to any applicant. Should ESPs be issued in the future, each will vary from any others issued (and from the template), depending on site- and application-specific considerations. The generic ESP template therefore only provides a starting point for the possible development of future ESPs.

This letter provides the draft permit template for your information and feedback. We are also sending the draft template to the three current ESP applicants. We would welcome a discussion of the template in a future technical exchange.

Should you have questions regarding this letter or development of an ESP template, please contact Mr. Mike Scott of my staff at (301) 415-1421.

Sincerely,

A handwritten signature in black ink, appearing to read "James E. Lyons".

James E. Lyons, Program Director  
New, Research and Test Reactors Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

Project No. 689

Enclosure: As stated

cc: See next page

ESP-Generic

cc:

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NEI enclosure on ESP template  
September 3, 2004

**DRAFT**

Mr. [Ms.] Utility POC  
Title  
Applicant Company  
Address

Applicant may not be a utility.

**ISSUANCE OF EARLY SITE PERMIT NO. ESP-XXX FOR THE SPECIFIED SITE**

Pursuant to 10 CFR 52.24, "Issuance of early site permit," and with consideration of the Initial Decision, dated XXX XX, 20XX, by the Atomic Safety and Licensing Board and the report of the Advisory Committee on Reactor Safeguards dated XXX XX, 20XX, the Nuclear Regulatory Commission has issued Early Site Permit (ESP) No. ESP-XXX to (Applicant Company). This permit expires on XXX XX, 2XXX.

During the period ESP-XXX remains valid, pursuant to 10 CFR Part 52, an application for a construction permit under 10 CFR Part 50 or an application for a combined license under 10 CFR Part 52 may reference ESP-XXX, subject to the terms and conditions specified in the ESP. The ESP does not authorize construction activities except as specified in the permit.

A copy of ESP-XXX is enclosed, along with a copy of a related notice that has been forwarded to the Office of the *Federal Register* for publication. If you have questions on ESP-XXX, please contact [name] at 301-415-XXXX.

Sincerely,

James E. Dyer, Director  
Office of Nuclear Reactor Regulation

**DRAFT**

**APPLICANT COMPANY**

**SPECIFIED SITE**

**DOCKET NO. 52-XXX**

**EARLY SITE PERMIT**

**Early Site Permit No. ESP-XXX**

1. The Nuclear Regulatory Commission (the NRC or the Commission) has found that:
  - a. The application for an early site permit filed by Applicant Company (the applicant) complies with the applicable requirements of the Atomic Energy Act of 1954, as amended, and the applicable rules and regulations of the Commission;
  - b. All required notifications to other agencies or bodies have been duly made;
  - c. The applicant has provided a description and safety assessment of the site, including an analysis and evaluation of the site under the radiological consequence evaluation factors identified in 10 CFR 50.34(a)(1) [using a plant parameter approach as a surrogate for actual facility design information];
  - d. The applicant has demonstrated that there are no physical characteristics unique to the proposed site that could pose a significant impediment to the development of emergency plans and has provided an acceptable description of contacts and arrangements made with local, state, and federal government agencies with emergency planning responsibilities;  
  
[Either or neither of the following statements will be added, depending on whether the applicant has chosen to address these subjects.] In addition, the applicant has provided the major features of emergency plans, which are acceptable as described in Table 1 of this ESP;  
[or]  
In addition, the applicant has provided complete and integrated emergency plans that provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency, as described in Table 1 of this ESP;
  - e. The applicant has demonstrated that the site complies with the siting evaluation factors in Subpart B of 10 CFR Part 100;
  - f. The applicant has provided an environmental report that addresses the requirements of 10 CFR 52.17(a)(2);

- g. [If the applicant has sought authorization to perform limited work in accordance with 10 CFR 52.25:] The applicant has provided an adequate site redress plan in accordance with 10 CFR 52.25(b); Reference should be to 52.17(c)
- h. On the basis of the foregoing, there is reasonable assurance that the site and identified existing and potential hazards in the site vicinity will pose no undue risk for up to [specify limit on number of reactors as supported by SER and/or EIS] nuclear power plants whose design characteristics are specified in Table 2 of this ESP [or] to one or more nuclear power plants falling within the plant design parameters specified in Table 2 of this ESP that might be constructed and operated on the site in the future under a license issued under 10 CFR Part 50 or 10 CFR Part 52 [Limitations on numbers and/or sizes of reactors as applicable, and as supported by the SER and/or EIS, will be specified in Table 2];
- i. The issuance of an ESP will not be inimical to the common defense and security or to the health and safety of the public; and
- j. The issuance of an ESP, subject to the conditions for protection of the environment set forth herein, is in accordance with the National Environmental Policy Act of 1969, as amended, and with applicable sections of 10 CFR Part 51 as invoked by Subpart A of 10 CFR Part 52, and all applicable requirements therein.
2. The results of the NRC staff's review of the safety and emergency planning aspects of the application are documented in a safety evaluation report, NUREG-XXXX, dated XXXX. The results of the staff's review of the environmental aspects of the application are documented in an environmental impact statement, NUREG-XXXX, dated XXXX.
3. Pursuant to Section 103 of the Atomic Energy Act of 1954, as amended (the Act), and 10 CFR Part 52, "Early Site Permits; Standard Design Certifications; and Combined Licenses for Nuclear Power Plants," and with consideration of the Initial Decision of the Atomic Safety and Licensing Board, dated XXX XX, 200X, and the report of the Advisory Committee on Reactor Safeguards dated XXX XX, 200X, the Nuclear Regulatory Commission hereby issues Early Site Permit No. ESP-XXX to the applicant for an area on Specified Site as described in the application and amendments thereto (the application) filed in this matter by the applicant and as described in the evidence received at the public hearing upon that application. As described in the application, Specified Site is located about XX miles [direction] of Major Landmark, State.
4. This ESP is subject to all applicable provisions of the Act and rules, regulations, and orders of the Commission now or hereafter in effect; and it shall ~~be deemed to contain~~ and be subject to the conditions specified or incorporated below. Insert before the semicolon:  
"(consistent with 10 CFR 50.39)"
- a. [If the applicant has sought authorization to perform limited work in accordance with 10 CFR 52.25 and has provided an adequate site redress plan] The applicant is authorized to perform the following activities at the site as described in its application: [list approved activities]

[or] No authority is granted to perform activities at the site in accordance with 10 CFR 50.10(e)(1);

- b. [Specify terms and limitations documented in the SER and/or EIS appropriate for inclusion in the ESP]
  - c. This ESP is subject to the following conditions for the protection of the environment: [list]
5. In accordance with 10 CFR 52.39, the Commission will, in proceedings for a combined license (COL) under 10 CFR Part 52 or a construction permit under 10 CFR Part 50 that references this ESP, treat as resolved matters resolved in the ESP proceeding, subject to certain conditions described in 10 CFR 52.39(a)(2). In accordance with 10 CFR 52.79, a COL application that references this ESP need not contain information or analyses submitted to the Commission in connection with this ESP, except information sufficient to demonstrate that the proposed facility design falls within the site and plant characteristics [or, if plant design is not specified in the ESP application] within the site characteristics and plant design parameters specified in Table 2 of this ESP. In addition, the following items must be addressed in a COL application that references this ESP. These items, which are not required to be addressed in insert "or CP" after "in a COL" but are applicable to the interface between the site and plant design
  6. [Provide limits on the number of times that the ESP may be referenced, citing technical and/or policy bases as explained in the SER and/or EIS, if any, or in other documents such as a SECY paper.]
  7. ~~In accordance with 10 CFR Part 21 and 10 CFR 52.37, the applicant is required to immediately notify the Commission of any information (1) that may indicate the site does not comply with the Atomic Energy Act or applicable Commission regulations or (2) that indicates that future construction of one or more nuclear power reactors at the ESP site could pose a substantial safety hazard.~~ Replace Item 7 with: In accordance with 10 CFR 52.37, 10 CFR Part 21 is an applicable regulation for this ESP.
  8. Until this ESP is referenced in a combined license or construction permit application, the site safety analysis report, the environmental report, the emergency planning information, and the site redress plan, submitted as part of the ESP application and as amended through [dates of most recent revisions reviewed by NRC], may not be modified except in accordance with the provisions of 10 CFR 52.39.
  9. This ESP is effective as of its date of issuance and shall expire on XXX XX, 2XXX. At any time before the expiration date, the ESP may be referenced in one or more applications for a COL under 10 CFR Part 52 or a construction permit under

10 CFR Part 50. This ESP continues to be valid beyond the above specified expiration date in accordance with 10 CFR 52.27(b)(1) under certain circumstances specified therein.

Reference should be to 52.27(b)

FOR THE NUCLEAR REGULATORY COMMISSION

James E. Dyer, Director  
Office of Nuclear Reactor Regulation

- Enclosures: (1) Acceptable Aspects of Proposed Major Features Emergency Plan [or] Complete and Integrated Emergency Plan
- (2) Site and Plant Design Characteristics [or, if design is not specified] Site Characteristics and Plant Design Parameters for the Early Site Permit

TABLE 1

EARLY SITE PERMIT NO. ESP-XXX

APPROVED ASPECTS OF PROPOSED MAJOR FEATURES EMERGENCY PLAN [or]  
COMPLETE AND INTEGRATED EMERGENCY PLAN

The following aspects of the applicant's proposed major features emergency plan [or] complete and integrated emergency plans as submitted in its ESP application are acceptable:

[List acceptable aspects of major features or of complete and integrated emergency plans, as applicable.]

TABLE 2

EARLY SITE PERMIT NO. ESP-XXX

SITE AND PLANT DESIGN CHARACTERISTICS [or, if design is not specified] SITE CHARACTERISTICS AND PLANT DESIGN PARAMETERS FOR THE EARLY SITE PERMIT

Site Characteristics

The following site characteristics are specified for this ESP. These characteristics are approved by the NRC, and any issues related to them are to be treated as resolved in a construction permit proceeding under 10 CFR Part 50 or a combined license proceeding under 10 CFR Part 52, subject to the provisions of 10 CFR 52.39.

[List site characteristics and their values from the ESP application that are important to the staff's findings in 10 CFR Parts 52 and 100 or are important in assessing the environmental impacts of constructing and operating nuclear power plants on the site. Technical staff will develop a list of such parameters during reviews in support of development of the SER and the EIS, and the characteristics and values chosen as bases for the site permit will be identified as such in the relevant SER or EIS sections. The following are examples that may or may not appear in any specific ESP.]

Maximum tornado wind speed	XXX m/s [or mph]
Maximum snow pack (100-year return period)	XXX kg/m <sup>2</sup> [or lb/ft <sup>2</sup> ]
Static and dynamic bearing capacities	XXX kg/m <sup>2</sup> [or lb/ft <sup>2</sup> ]
Shear wave velocity	XXX m/s [or ft/s]
Flood level	XXX m [or ft]
etc.	

[See Commission policy on conversion to the metric system (57 FR 46202); while the NRC supports and encourages use of the metric system, docketed material such as this ESP will use the system of units employed by the applicant.]

Plant design characteristics [if plant design specified in ESP application] [or] plant design parameters [if plant design not provided in ESP application]

The following design characteristics [parameters] are specified for this ESP. These characteristics [parameters] are assumptions about the design of nuclear plant[s] that might in the future be constructed on the ESP site. The staff's findings regarding the site characteristics are partially based, where applicable, on these parameters. Their applicability and use in a construction permit proceeding under 10 CFR Part 50 or a combined license proceeding under 10 CFR Part 52 are discussed in the permit of which this table is a part.

[List design characteristics/parameters and their values that are important to the staff's findings. Typically these would be input values for the ESP applicant's accident analysis or values important in the applicant's assessment of the environmental impacts of constructing

and operating nuclear power plants on the site. Technical staff will develop a list of such characteristics/parameters and their values during reviews in support of development of the SER and the EIS. Those chosen for inclusion in the ESP will be identified as such in the relevant SER or EIS sections. COL or CP applicants referencing the ESP would need to demonstrate that plant(s) submitted in their applications fall within the plant characteristic/parameter values specified herein. Alternatively, such applicants would need to demonstrate that such plants comply with the Commission's regulations, although they do not fall within the plant characteristic/parameter values specified in the ESP. The following are examples that may or may not appear in any specific ESP.]

Maximum thermal power	XXXX Mw(th)
Maximum reactor building height	XXX m [or ft]
Embedment depth	XXX m [or ft]
Closest spacing between reactor modules	XXX m [or ft]

etc.

The need for and scope of design parameters that staff is proposing to list in ESPs will be the subject of further discussion during the public meeting scheduled for September 9.