



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
Washington, D.C. 20555-0001

**ERRATA**  
**September 3, 2008**

**Report Number:** NUREG-1872, Volumes 1 and 2

**Report Title:** Final Environmental Impact Statement for an Early Site Permit  
(ESP) at the Vogtle Electric Generating Plant Site  
Final Report

**Prepared by:** Division of Site and Environmental Reviews  
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Washington, DC 20555-0001

**Date Published:** August 2008

**Instructions:** Please append the enclosed corrections to the text of NUREG-1872, Volumes 1 and 2. Please also note the specified revisions to change bars in those Volumes. The corrections and change bar revisions are indicated in the enclosed table.

**Rulemaking, Directives and Editing Branch**  
**Office of Administration**



On August 21, 2008, the U.S. Nuclear Regulatory Commission's (NRC) notice of availability of NUREG-1872, *Final Environmental Impact Statement for an Early Site Permit (ESP) at the Vogtle Electric Generating Plant Site* (FEIS) was published in the *Federal Register* (73 FR 49496). Following publication of NUREG-1872, the NRC staff (Staff) identified certain errors and omissions in the FEIS. The Staff determined that the version of NUREG-1872 that it sent for publication failed to include some additions and corrections the Staff had developed for the final document. Relatedly, the Staff identified several instances where change bars do not appear in the page margins to indicate textual additions or deletions made to the FEIS since the publication of the Draft Environmental Impact Statement (DEIS).

To address these matters, the Staff prepared these Errata to the FEIS. Section I identifies corrections to the FEIS text. Section II specifies portions of the FEIS where the Staff determined that change bars were omitted. Both Sections are organized by FEIS chapter.

**Rulemaking, Directives and Editing Branch  
Office of Administration**



## Section I: Corrections

| FEIS Chapter                         | Page  | Correction   |
|--------------------------------------|-------|--|
| Abstract<br>(vols. 1 and 2)          | iii   | <p>First paragraph, replace first sentence:</p> <p>This environmental impact statement (EIS) has been prepared pursuant to the review by the U.S. Nuclear Regulatory Commission (NRC) of an application submitted by Southern Nuclear Operating Company, Inc. (Southern), also on behalf of Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and the City of Dalton, Georgia, for an early site permit (ESP).</p>   |
| Abstract<br>(vols. 1 and 2)          | iii   | <ul style="list-style-type: none"> <li>• Second paragraph, line 3, replace the words “may be sought” with “it seeks”</li> <li>• Third paragraph, line 6, insert after the word “action”:<br/> , including the request for approval of limited work authorization activities pursuant to 10 CFR 52.24(c),</li> <li>• Third paragraph, line 8, delete the words “and supporting documentation”</li> <li>• Third paragraph, line 9, insert the words “and supporting documentation” after the word “application”</li> </ul> |
| Contents<br>(vols. 1 and 2)          | xv    | <p>In Title of Appendix J, replace the words “in the Early Site Permit Environmental Report” with “by the Applicant”</p>   |
| Executive Summary<br>(vols. 1 and 2) | xxiii | <p>First paragraph, replace first sentence:</p> <p>On August 14, 2006, Southern Nuclear Operating Company, Inc. (Southern), also on behalf of Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and the City of Dalton, Georgia, submitted to the U.S. Nuclear Regulatory Commission (NRC) an application for an early site permit (ESP) for a site within the Vogtle Electric Generating Plant (VEGP) site, adjacent to the existing VEGP Units 1 and 2.</p>                |
| One                                  | 1-2   | <p>First paragraph, revise sentence beginning with “In addition”:</p> <p>In addition, because the Vogtle ESP applicant proposes complete and integrated emergency plans, the SER will document whether the complete and integrated emergency plans provide reasonable assurance that adequate protective measures</p>  |

| FEIS Chapter | Page  | Correction   |
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|              |       | can and would be taken in the event of a radiological emergency.   |
| One          | 1-7   | In Title of Appendix J, replace the words “in the Early Site Permit Environmental Report” with “by the Applicant”  |
| Two          | 2-13  | Final paragraph, revise final two sentences as follows:<br>The staff concludes that the system provides adequate data to represent onsite meteorological conditions. The onsite data also provide an acceptable basis for making estimates of atmospheric dispersion for design-basis accident and routine releases from the plant.  |
| Two          | 2-69  | Fourth paragraph, line 9, delete the word “been”   |
| Two          | 2-77  | Second paragraph, line 4, delete the word “between”  |
| Two          | 2-123 | <ul style="list-style-type: none"> <li>• Fourth full paragraph, revise fourth sentence (beginning “Federal actions”) as follows:<br/>Federal actions related to this ESP application include permits and licenses that may be required in connection with any associated construction permit (CP) or combined license (COL) application.</li> <li>• Fourth full paragraph, revise seventh sentence (beginning “However, these activities”) as follows:<br/>However, these activities are not necessary for the ESP.</li> <li>• Fourth full paragraph, last line, delete the word “of”</li> </ul> |
| Two          | 2-131 | Revise last reference on page as follows:<br>Georgia Environmental Protection Division (Georgia EPD). 2008. <i>Draft Permit to Use Groundwater</i> . Permittee’s Name: Southern Nuclear Operating Company – Vogtle Electric Generating Plant. Permit Number: 017-0003. Environmental Protection Division, Department of Natural Resources, State of Georgia. Accessed June 10, 2008 at <a href="http://www.georgiaepd.org/notices/1127506607.htm">http://www.georgiaepd.org/notices/1127506607.htm</a> .   |
| Two          | 2-138 | Second to last reference, delete the words “Revised to Southern 2007h”   |
| Two          | 2-139 | Fifth full reference, delete the words “No callout”  |

| FEIS Chapter | Page | Correction   |
|--------------|------|--|
| Three        | 3-4  | First partial paragraph, line 3, replace the words “affects the environment different from the” with “effects on the environment different from those of the”  |
| Three        | 3-15 | First partial paragraph, line 2, replace “(Southern 2008a)” with “(Southern 2008)”   |
| Four         | 4-6  | First paragraph under Section 4.2.2, first line, delete the words “In the ER,”   |
| Four         | 4-30 | First full paragraph, line 6, replace the word “protective” with “protected”   |
| Four         | 4-48 | Third full paragraph, line 7, replace “should” with “could”  |
| Four         | 4-72 | Second paragraph under Section 4.11, first sentence, replace the words “site preparation” with “construction”  |
| Five         | 5-20 | <p>After final paragraph, insert the following two paragraphs:</p> <p style="padding-left: 40px;">As discussed previously in Section 5.3.2.1, the staff determined that it was still conservative to base its analysis in the EIS on Drought Level 3 values (3800 cfs). However, to provide additional context for its conclusions, the staff did consider the impacts to water quality in the Savannah River at river flow rates below the Drought Level 3 values analyzed above. While the velocity and depth of the river will decrease with lower flows, the fraction of the discharge of the blowdown to the streamflow will increase. The net impact will be a larger mixing zone (both thermal and chemical). At a streamflow of 2000 cfs, which is more than half of the Drought Level 3 baseline flow (3800 cfs), the mixing zone plume would approximately double in areal extent. However, given the small size of the plume in the baseline assessment discussed above, even a doubling in its area would not represent a significant impact to water quality in the river. Additionally, because the staff believes that such low flow conditions would be only temporary, the staff does not consider the impacts under these conditions to be significantly different from the impacts analyzed above.</p> <p style="padding-left: 40px;">Following publication of the draft EIS, Southern advised the NRC staff (Southern 2007f) of updates to its original analysis based on changes in flow rates between Revision 15 and Revision 16 of the AP1000 DCD. These changes</p> |

| FEIS Chapter | Page | Correction  |
|--------------|------|---|
|              |      | included a revised flow rate for the circulating water system and increased estimates of evaporative loss and make-up flow. However, the blowdown values of temperature and volume remained the same. Since these blowdown values determine the thermal and chemical plume extent, no further analyses were necessary. Therefore, the staff determined that neither the low flows of 2000 cfs, nor the changes associated with Revision 16 of the AP1000 DCD, would affect the staff's conclusion that impacts of the effluent plume on the Savannah River from operation of proposed Units 3 and 4 would be SMALL and localized. |
| Five         | 5-35 | Last paragraph, first sentence, replace "permit, which is granted by." with "permit."   |
| Six          | 6-30 | First full paragraph, line 3, delete "50" at end of line (value is 50,533 as stated on following line)  |
| Six          | 6-33 | Last paragraph before Section 6.2.2.3, line 3, delete "50" at end of line (value is 50,533 as stated on following line)   |
| Seven        | 7-6  | Delete final partial paragraph on page  |
| Seven        | 7-7  | Delete first three paragraphs   |
| Seven        | 7-10 | Third full paragraph, line 4, replace the word "if" with "of"   |
| Seven        | 7-22 | <ul style="list-style-type: none"> <li>• Replace references to "Savannah River site" with "Savannah River Site" [First full paragraph, lines 3 and 11; third full paragraph, line 5; also replace on page 7-23, first paragraph, line 6]</li> <li>• First partial paragraph, last line, delete the words "1 and 2"</li> <li>• Second full paragraph, line 1, replace the words "withdrawn from the Savannah River currently" with the words "that would be withdrawn from the Savannah River"</li> </ul>  |
| Seven        | 7-25 | <ul style="list-style-type: none"> <li>• First partial paragraph, line 9, replace the words "cumulative analysis of impact" with "analysis of cumulative impact"</li> <li>• Last paragraph, line 3, replace the word "affects" with "effects"</li> </ul>  |

| FEIS Chapter | Page | Correction   |
|--------------|------|--|
| Nine         | 9-24 | <p>In Table 9-3, the entry on the top of page 9-24 was partially cut off; the complete entry is as follows:</p> <p>The "Impact Category" field should be "Ecology"</p> <p>The "Impact" field should be "SMALL to MODERATE"</p> <p>The "Comment" field should read "Many of the impacts would occur in areas that were previously disturbed during the construction of VEGP Units 1 and 2. Thus, potential habitat loss and fragmentation and reduced productivity and biological diversity would likely be minimal. Impacts on terrestrial ecology from cooling tower drift could occur. Wind energy facilities could result in some avian mortality. Hydropower facilities would impact terrestrial and aquatic habitat."</p> |
| Nine         | 9-27 | Second full paragraph, lines 3-4, replace "Sections 5.3 and 5.4.2," with "Sections 5.3, 5.4.2, and 5.4.3, and Chapter 7,"  |
| Nine         | 9-67 | Second full paragraph, last line, delete the words "economic and"  |
| Ten          | 10-6 | <ul style="list-style-type: none"> <li>• Third paragraph, final sentence, insert the words "in Houston County" after "MODERATE"</li> <li>• Fourth paragraph, final sentence, delete the words "in Houston County"</li> </ul>   |
| Eleven       | 11-1 | <p>First paragraph, replace first sentence:</p> <p>On August 14, 2006, Southern Nuclear Operating Company, Inc. (Southern), also on behalf of Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and the City of Dalton, Georgia, submitted to the U.S. Nuclear Regulatory Commission (NRC) an application for an early site permit (ESP) for a site adjacent to the Vogtle Electric Generating Plant (VEGP), in Burke County, Georgia.</p>   |
| Eleven       | 11-1 | Second paragraph, line 13, replace the word "reducing" with "eliminating"  |
| Eleven       | 11-2 | First full paragraph, line 4, replace the words "restore the site" with "restore the portion of the site associated with construction activities"  |
| Eleven       | 11-8 | Section 11.2.2, line 10, replace the words "unit is" with "units are"  |

| <b>FEIS Chapter</b> | <b>Page</b> | <b>Correction</b>  |
|---------------------|-------------|--|
| Eleven              | 11-21       | In first paragraph, line 4, replace "November 2008" with "February 2009"   |
| Appendix J          | J-1         | On Appendix J title page and in title on page J-1, replace the words "in the Early Site Permit Environmental Report" with "by the Applicant" |

## **Section II: Change Bars**

| <b>FEIS Chapter</b> | <b>Page</b> | <b>Change Bar Description</b>  |
|---------------------|-------------|--|
| Two                 | 2-61        | First three lines of text after the table should have change bars                          |
| Two                 | 2-126       | The third, seventh and eighth reference citations should have change bars.                 |
| Two                 | 2-127       | The fourth reference citation should have change bars                                      |
| Two                 | 2-129       | The eighth reference citation should have change bars                                      |
| Two                 | 2-137       | The first reference citation should have change bars                                       |
| Two                 | 2-140       | The last reference citation should have change bars  |
| Two                 | 2-141       | The first and third reference citations should have change bars                            |
| Two                 | 2-144       | The sixth reference citation should have change bars                                       |
| Three               | 3-4         | Last five lines in first full paragraph should not have change bars                        |
| Three               | 3-4         | Last four lines on page should have change bars  |
| Three               | 3-7         | All lines from top of page to section title "Service Water System" should have change bars |
| Three               | 3-8         | All lines from top of page to section title "Ultimate Heat Sink" should have change bars   |
| Three               | 3-9         | The entire first full paragraph and last paragraph should have change bars                 |
| Three               | 3-18        | Last two reference citations on the page should have change bars                           |
| Three               | 3-19        | Third and sixth reference citations on the page should have change bars                    |
| Four                | 4-1         | The entire second paragraph should have change bars  |
| Four                | 4-20        | Fourth line from bottom of page should have changes bars due to deleted text               |
| Four                | 4-78        | Tenth reference citation should have change bars   |
| Five                | 5-4         | Change bars should be present after second full paragraph due to deleted text.             |

| <b>FEIS Chapter</b> | <b>Page</b> | <b>Change Bar Description</b>  |
|---------------------|-------------|--|
| Five                | 5-6         | First two lines of fourth paragraph should have change bars                |
| Five                | 5-17        | First full paragraph should have change bars                               |
| Five                | 5-27        | Third and fourth lines of last paragraph should have change bars           |
| Five                | 5-38        | Fourth full paragraph through end of page should have change bars          |
| Five                | 5-39        | Top of page through end of third full paragraph should have change bars    |
| Five                | 5-42        | Third full paragraph should have change bars                               |
| Five                | 5-72        | Fourth and fifth lines of first full paragraph should have change bars     |
| Five                | 5-100       | Eighth reference citation should have change bars                          |
| Five                | 5-103       | Sixth reference citation should have change bars                           |
| Five                | 5-104       | Third and sixth reference citations should have change bars                |
| Five                | 5-105       | Second, third, and fourth reference citations should have change bars      |
| Five                | 5-107       | First reference citation should have change bars                           |
| Five                | 5-108       | Ninth reference citation should have change bars                           |
| Five                | 5-111       | Fourth, fifth and seventh full reference citations should have change bars |
| Six                 | 6-30        | First full paragraph should have change bars                               |
| Six                 | 6-33        | Third full paragraph should have change bars                               |
| Six                 | 6-38        | First, third, and twelfth reference citations should have change bars      |
| Six                 | 6-39        | Fifth reference citation should have change bars                           |
| Seven               | 7-1         | Lines 7 through 9 of first paragraph should have change bars               |
| Seven               | 7-1         | All of third paragraph (to end of page) should have change bars            |
| Seven               | 7-2         | Continued paragraph at the top of the page should have change bars         |
| Seven               | 7-10        | Last three lines of third full paragraph should have change bars           |
| Seven               | 7-15        | Entire third full paragraph should have change bars                        |
| Seven               | 7-31        | Fifth and sixth reference citations should have change bars                |
| Eight               | 8-11        | First reference citation should have change bars                           |

| FEIS Chapter | Page        | Change Bar Description   |
|--------------|-------------|--|
| Nine         | Var.        | In Chapter 9, each line with a reference to the citation “(Southern 2008)” should have a change bar to reflect the updated reference to Revision 4 of the ESP application and the Environmental Report included therein. |
| Nine         | 9-3         | First four lines of last full paragraph should have change bars  |
| Nine         | 9-4         | First five lines of second full paragraph should have change bars  |
| Nine         | 9-53        | Fourth and fifth lines of second full paragraph should have change bars  |
| Nine         | 9-53        | Entire third full paragraph should have change bars  |
| Nine         | 9-98        | Last reference citation should have change bars  |
| Nine         | 9-99        | First, second, and last (continuing onto page 9-100) reference citations should have change bars   |
| Ten          | 10-3        | Lines of Table between “Terrestrial ecosystems” and “Socioeconomic Impacts” should have change bars  |
| Ten          | 10-6        | Last two lines of second paragraph should have change bars due to deletion of text   |
| Ten          | 10-6        | Second and third lines and last line of third paragraph should have change bars due to deletion of text  |
| Ten          | 10-8        | First, second, third, and seventh lines of first full paragraph should have change bars  |
| Appendix A   | A-1,<br>A-2 | On A-1, there should be a change bar for Christopher Cook<br>On A-2, there should be change bars for Jill Caverly, Tom Carlson, Lance Vail, Sharon Johnson, Meredith Willingham, and Stacy Larsen                        |
| Appendix C   | C-9         | Fifth citation should have change bars   |
| Appendix J   | J-16        | Second citation should not have change bars  |