16.0 TECHNICAL SPECIFICATIONS

This chapter discusses the plant-specific technical specifications (PTS), as well as the design reliability assurance program (D-RAP) and the controls for systems, structures, and components (SSCs) required for defense in depth in accordance with the program for regulatory treatment of non-safety systems (RTNSS).

16.1 Technical Specifications

16.1.1 Introduction

Section 16.1, "Technical Specifications," of the Vogtle Electric Generating Plant (VEGP) combined license (COL) Final Safety Analysis Report (FSAR), and the VEGP COL Part 4, "Technical Specifications," provide the PTS for VEGP Units 3 and 4 in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.36, "Technical specifications," 10 CFR 52.47(a)(11), and 10 CFR 52.79(a)(30). Technical Specifications (TS) impose limits, operating conditions, and other requirements upon reactor facility operation for the public health and safety. The TS are derived from the analyses and evaluations in the safety analysis report. In general, TS must include: (1) safety limits and limiting safety system settings; (2) limiting conditions for operation (LCO); (3) surveillance requirements (SRs); (4) design features; and (5) administrative controls. The PTS are derived from the analyses and evaluations in the AP1000 Design Control Document (DCD) and the VEGP COL FSAR, Revision 5.

As part of the regulatory standardization effort, the U.S. Nuclear Regulatory Commission (NRC) staff has prepared standard technical specifications (STS) for each of the light-water reactor nuclear steam supply systems and associated balance-of-plant equipment systems. In 1992, the NRC issued the STS to clarify the content and format of requirements necessary to ensure safe operation of nuclear power plants. The STS for Westinghouse pressurized water reactors are included in NUREG-1431, "Standard Technical Specifications Westinghouse Plants." Volume 1 addresses the STS, and Volume 2 addresses the associated STS Bases. The STS include bases for safety limits, limiting safety system settings, LCO, and associated action and surveillance requirements. Major revisions to the STS were published in 1995 (Revision 1), 2001 (Revision 2), and 2004 (Revision 3).

The format and content of the PTS and Bases for a COL referencing a certified design should be based on the generic TS (GTS) and Bases for that design. For a COL application that references a certified design, the proposed PTS and Bases may include appropriate plant-specific deviations from the referenced GTS and Bases when warranted. These deviations, if included with the COL application, need to be justified.

16.1.2 Summary of Application

Section 16.1 of the VEGP COL FSAR, Revision 5, incorporates by reference Sections 16.1.1 and 16.1.2 of the AP1000 DCD, Revision 19. Part 4 of the VEGP COL incorporates by reference the AP1000 GTS and Bases in Section 16.1 of the DCD. In accordance with Section IV(A)(2)(c) of Appendix D, "Design Certification Rule for the AP1000 Design" to 10 CFR Part 52, "Licenses, certifications, and approvals for nuclear power plants," the applicant's PTS consist of the AP1000 GTS and site-specific information. No departures from the AP1000 GTS were proposed by the applicant.

The AP1000 GTS include items that a COL applicant must satisfy in order to complete a particular GTS provision. Detailed design information, equipment selection, instrumentation settings, and other information not available at the time of design certification (DC), are needed to establish the values or information to be included in the PTS. Locations for the addition of this information are signified in the GTS by square brackets [ ] or reviewer's notes to indicate that the COL applicant must provide plant-specific values or alternate text.

In VEGP COL Part 4, the applicant provided the following:

AP1000 COL Information Item

- VEGP COL 16.1-1

The applicant provided additional information in VEGP COL 16.1-1 to resolve COL Information Item 16.1-1 (COL Action Item 16.2-1). The applicant provided additional information to address each of the remaining brackets [ ] and reviewer's notes in the AP1000 GTS.

The following sections of the VEGP PTS and Bases include information that the applicant addressed as part of COL Information Item 16.1-1:

- PTS 3.3.1, 3.3.2, and 3.6.4
- PTS 4.1, 4.1.1, and 4.1.2
- PTS 5.1.1, 5.1.2, 5.2.1.a, 5.2.1.b, 5.2.2, 5.3, 5.3.1, 5.6.1, and 5.6.2

16.1.3 Regulatory Basis

The regulatory basis of the information incorporated by reference is addressed in NUREG-1793, "Final Safety Evaluation Report Related to Certification of the AP1000 Standard Design," and its supplements.

In addition, the acceptance criteria associated with the relevant requirements of the Commission regulations for TS and Bases reviews are given in Section 16 of NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants." Areas of review that interface with other sections of the SRP can also be found in Section 16 of NUREG-0800.

The applicable regulatory requirements for the information being reviewed in this section are:

- 10 CFR 50.36
- 10 CFR 52.47(a)(11)
- 10 CFR 52.79(a)(30)

16.1.4 Technical Evaluation

The NRC staff reviewed Section 16.1 of the VEGP COL FSAR and Part 4 of the VEGP COL application, and checked the referenced DCD to ensure that the combination of the DCD and the COL application represents the complete scope of information relating to this review topic[1]. The NRC staff's review confirmed that the information in the application and incorporated by

[1] See Section 1.2.2 for a discussion of the staff's review related to verification of the scope of information to be included in a COL application that references a design certification (DC).

reference addresses the required information relating to the TS. The results of the NRC staff's evaluation of the information incorporated by reference in the VEGP COL application are documented in NUREG-1793 and its supplements.

Section 1.2.3 of this safety evaluation report (SER) provides a discussion of the strategy used by the NRC to perform one technical review for each standard issue outside the scope of the DC and use this review in evaluating subsequent COL applications. To ensure that the staff's findings on standard content that were documented in the SER with open items issued for the Bellefonte Nuclear Plant (BLN) Units 3 and 4 COL application were equally applicable to the VEGP Units 3 and 4 COL application, the staff undertook the following reviews:

- The staff compared the BLN COL FSAR, Revision 1 to the VEGP COL FSAR. In performing this comparison, the staff considered changes made to the VEGP COL FSAR (and other parts of the COL application, as applicable) resulting from requests for additional information (RAIs) and open and confirmatory items identified in the BLN SER with open items.

- The staff confirmed that all responses to RAIs identified in the corresponding standard content (the BLN SER) evaluation were endorsed.

- The staff verified that the site-specific differences were not relevant.

The staff has completed its review and found the evaluation performed for the standard content to be directly applicable to the VEGP COL application. This standard content material is identified in this SER by use of italicized, double-indented formatting. There was one open item (Open Item 16.1-1) to resolve related to the standard content in the BLN SER. Its resolution is addressed in this SER.

Many VEGP SER section numbers in this evaluation were changed from those used in the BLN SER to more closely follow the PTS numbering. The corresponding BLN SER section numbers are identified prior to quoting standard content material.

The staff reviewed the information in the VEGP COL FSAR and the VEGP COL application, Part 4:

AP1000 COL Information Item

- VEGP COL 16.1-1

The following portion of this technical evaluation section is reproduced from Section 16.1.4 of the BLN SER:

- *BLN COL 16.1-1*

In Section 16.1.1 of the BLN COL FSAR, the applicant provided additional information in BLN COL 16.1-1 to resolve COL Information Item 16.1-1 (COL Action Item 16.2-1) listed under the Section 16.1.1 header, "Combined License Information," of the AP1000 DCD, Revision 17, which states:

This set of technical specifications is intended to be used as a guide in the development of the plant-specific technical specifications. The preliminary information originally provided in brackets [ ] has been revised with the updated information APP-GW-GLR-064 and APP-GW-GLN-075. Combined License applicants referencing the AP1000 will be required to provide the final information for the remaining brackets [ ] with final plant-specific information.

In Section 16.1 of the BLN COL FSAR, the applicant noted that the GTS and Bases provided with Chapter 16 of the AP1000 DCD are incorporated by reference into the PTS provided in Part 4 of the BLN COL application.

The staff evaluated the applicant's disposition of each of the remaining bracketed information items in the respective TS sections listed below.

The staff did not review portions of the BLN PTS and Bases that were identical to the AP1000 GTS and Bases. The technical evaluation for those portions that are identical to the AP1000 GTS and Bases can be found in the NRC staff's FSER for the AP1000 DCD.

16.1.4.1 Use and Application

Section 1.0 of the BLN PTS includes definitions of terms used in the context of plant TS, and examples to illustrate the applications of logical connectors, completion times for required actions, and frequencies for surveillance requirements (SRs). Section 1.0 of the BLN PTS is identical to the AP1000 GTS. There is no site-specific information that the applicant needed to provide to complete this section.

16.1.4.2 Safety Limits

Section 2.0 of the BLN PTS and Bases include[s] *requirements for safety limits to ensure that the fuel design limits are not exceeded during steady state conditions, normal operational transients, and anticipated operational occurrence. Section 2.0 of the BLN PTS and Bases are* [is] *identical to the AP1000 GTS and Bases. There is no site-specific information that the applicant needed to provide to complete this section.*

16.1.4.3.0 Limiting Condition for Operation and Surveillance Requirement Applicability

The following portion of this technical evaluation section is reproduced from Section 16.1.4.3 of the BLN SER:

Section 3.0 of the BLN PTS and Bases include[s] *general provisions regarding determination of equipment operability and performance of SRs in specific TS sections (i.e., TS 3.1 through TS 3.9). Section 3.0 of the BLN PTS and Bases are* [is] *identical to the AP1000 GTS and Bases. There is no site-specific information that the applicant needed to provide to complete this section.*

16.1.4.3.1 Reactivity Control Systems

The following portion of this technical evaluation section is reproduced from Section 16.1.4.4 of the BLN SER:

> *Section 3.1 of the BLN PTS and Bases include*[s] *requirements for the reactivity control systems, which are designed to reliably control reactivity changes, and under postulated accident conditions, ensure that the capability to cool the core is maintained. Section 3.1 of the BLN PTS and Bases are* [is] *identical to the AP1000 GTS and Bases. There is no site-specific information that the applicant needed to provide to complete this section.*

16.1.4.3.2 Power Distribution Limits

The following portion of this technical evaluation section is reproduced from Section 16.1.4.5 of the BLN SER:

> *Section 3.2 of the BLN PTS and Bases include*[s] *requirements for the reactor core power distribution limits, which are designed to reliably control core thermal limits and core power distribution consistent with the design safety analysis. Section 3.2 of the BLN PTS and Bases are* [is] *identical to the AP1000 GTS and Bases. There is no site-specific information that the applicant needed to provide to complete this section.*

16.1.4.3.3 Instrumentation

The following portion of this technical evaluation section is reproduced from Section 16.1.4.6 of the BLN SER:

> *Section 3.3 of the BLN PTS and Bases include*[s] *requirements for the instrumentation systems that display information required to protect against violating core fuel design limits and reactor coolant system (RCS) integrity, and to mitigate accidents.*
>
> *The BLN instrumentation will be selected after COL issuance, and therefore, in accordance with COL/DC-ISG-8, "Necessary Content of Plant-Specific Technical Specifications When a Combined License is Issued," all trip setpoints and allowable values must be established through a staff-approved administrative control TS that specifies use of an NRC-approved methodology for determining the trip setpoints and allowable values, and a document controlled by 10 CFR 50.59 for recording this information. The trip setpoints and allowable values, referred to in Tables 3.3.1-1 and 3.3.2-1, will be determined after selection of specific instrumentation.*
>
> *Request for additional information (RAI) 16-1 was issued in accordance with COL/DC-ISG-8, and requested that the applicant identify the method of determining the trip setpoints and allowable values, as well as establish an associated document in which to record the site-specific values and other restrictions necessary to satisfy 10 CFR 50.36. The applicant should clarify that after selection of specific instrumentation, the trip setpoints and allowable values, referred to in Tables 3.3.1-1 and 3.3.2-1, will be calculated using the setpoint*

control program that specifies the approved methodology (i.e., WCAP-16361, APP-PMS-JEP-001, Revision 0, May 2006, "Westinghouse Setpoint Methodology for Protection Systems – AP1000"). In addition, the applicant should propose a setpoint control program to be added in the Administrative Control section of the TS, as stated in COL/DC-ISG-8. ***This is identified as Open Item 16.1-1****.*

Resolution of Standard Content Open Item 16.1-1

Resolution of this issue was brought forward at a public meeting on September 3, 2009, attended by the staff, Westinghouse, and the AP1000 COL applicants. Westinghouse committed to provide an acceptable setpoint control program in the AP1000 DC amendment application, which would then be adoptable by any COL applicants. This program was submitted to the staff in a letter dated February 19, 2010, and revised on May 6, 2010. The review of this program is documented in a supplement to NUREG-1793.

The applicant, in its May 21, 2010, supplemental response to this open item, committed to calculate trip setpoints and allowable values using the approved methodology cited above and to incorporate the AP1000 DCD setpoint control program in the Administrative Controls section of its PTS. The staff finds this response acceptable, since it ensures the applicant will use approved methodologies and a comprehensive administrative program to calculate setpoint values. The incorporation of this program into the VEGP TS in a later revision is **Confirmatory Item 16.1-1**.

Resolution of Standard Content Confirmatory Item 16.1-1

Confirmatory Item 16.1-1 is an applicant commitment to revise its PTS to incorporate the AP1000 DCD setpoint control program in the Administrative Controls section of its PTS. The staff verified that the PTS was appropriately revised. As a result, Confirmatory Item 16.1-1 is now closed.

16.1.4.3.4 Reactor Coolant System

The following portion of this technical evaluation section is reproduced from Section 16.1.4.7 of the BLN SER:

> *Section 3.4 of the BLN PTS and Bases include*[s] *requirements for various RCS parameters (i.e., pressure, temperature, flow, etc.) and subsystems (i.e., RCS loops, pressurizer, low-temperature overpressure protection, etc.) to ensure the fuel integrity and the RCPB* [reactor coolant pressure boundary] *integrity are preserved during all modes of plant operation. Section 3.4 of the BLN PTS and Bases are* [is] *identical to the AP1000 GTS and Bases. There is no site-specific information that the applicant needed to provide to complete this section.*

16.1.4.3.5 Emergency Core Cooling Systems

The following portion of this technical evaluation section is reproduced from Section 16.1.4.8 of the BLN SER:

> *Section 3.5 of the BLN PTS and Bases include*[s] *requirements for the safety-related passive core cooling system, which is designed to perform*

emergency core decay heat removal, RCS emergency makeup and boration, and safety injection. Section 3.5 of the BLN PTS and Bases are [is] *identical to the AP1000 GTS and Bases. There is no site-specific information that the applicant needed to provide to complete this section.*

16.1.4.3.6 Containment Systems

The following portion of this technical evaluation section is reproduced from Section 16.1.4.9 of the BLN SER:

> *Section 3.6 of the BLN PTS and Bases include*[s] *requirements for the containment systems, which are designed to shield* [contain] *fission products that may be in the containment atmosphere following accident conditions. Section 3.6 of the BLN PTS and Bases are* [is] *identical to the AP1000 GTS and Bases, except for the deletion of a reviewer's note. For TS 3.6.4, the reviewer's note is not applicable to the PTS, and the applicant has appropriately removed the information. This is acceptable to the staff. There is no site-specific information that the applicant needed to provide to complete this section.*

16.1.4.3.7 Plant Systems

The following portion of this technical evaluation section is reproduced from Section 16.1.4.10 of the BLN SER:

> *Section 3.7 of the BLN PTS and Bases include*[s] *requirements for various systems in the secondary side of the steam generators (i.e., the main steam safety valves, the main steam isolation valves, the main feedwater isolation valves, etc.), the spent fuel pool water level and makeup systems, and the main control room habitability system. Section 3.7 of the BLN PTS and Bases are* [is] *identical to the AP1000 GTS and Bases. There is no site-specific information that the applicant needed to provide to complete this section.*

16.1.4.3.8 Electrical Power Systems

The following portion of this technical evaluation section is reproduced from Section 16.1.4.11 of the BLN SER:

> *Section 3.8 of the BLN PTS and Bases include*[s] *requirements for the plant electrical systems that provide redundant, diverse and dependable power sources for all plant operating conditions. In the event of a total loss of off-site power, batteries and back-up on-site diesel generators are provided to supply electrical power equipment necessary for the safe shutdown of the plant. Section 3.8 of the BLN PTS and Bases are* [is] *identical to the AP1000 GTS and Bases. There is no site-specific information that the applicant needed to provide to complete this section.*

16.1.4.3.9 Refueling Operations

The following portion of this technical evaluation section is reproduced from Section 16.1.4.12 of the BLN SER:

> *Section 3.9 of the BLN PTS and Bases include*[s] *requirements for boron concentration, unborated water sources, nuclear instrumentation, containment penetrations, and water inventory in the refueling pool during Mode 6. Section 3.9 of the BLN PTS and Bases are* [is] *identical to the AP1000 GTS and Bases. There is no site-specific information that the applicant needed to provide to complete this section.*

16.1.4.4 *Design Features*

Section 4.0 of the VEGP PTS includes other design features not covered elsewhere in the PTS, such as the site location, the site maps, and other information related to core design and fuel storage design. Section 4.0 of the VEGP PTS is identical to the AP1000 GTS except for site-specific information provided by the applicant. In Section 4.1, the applicant provided the VEGP site location information to replace the bracketed information in the GTS. The staff found the added information acceptable since it is consistent with related information found in VEGP Early Site Permit (ESP) Application Site Safety Analysis Report (SSAR), Revision 5, Section 2.1.1.1, and in accordance with the guidance provided in the GTS. In Section 4.1.1, the applicant provided the site location description, which describes its site boundary, and its exclusion area boundary. The staff found the added information acceptable since it is consistent with related information found in VEGP ESP SSAR Section 2.1.1.1, and in accordance with the guidance provided in the GTS. In Section 4.1.2, the applicant also provided the site location description, which establishes its low population zone. The staff found the added information acceptable since it is consistent with related information found in VEGP ESP SSAR Section 2.1.3.4, and is in accordance with the guidance provided in the GTS.

16.1.4.5 *Administrative Controls*

The following portion of this technical evaluation section is reproduced from Section 16.1.4.14 of the BLN SER:

> *This section of the BLN PTS includes provisions, which address various administrative controls related to plant key personnel responsibilities, plant procedures, special programs and reports, etc., to ensure the plant is safely operated. As discussed in Section 16.1.4.6 above* [VEGP SER Section 16.1.4.3.3]*, the BLN instrumentation will be selected after COL issuance, and therefore, in accordance with COL/DC-ISG-8, all trip setpoints and allowable values must be established through a staff-approved administrative control TS that specifies use of an NRC-approved methodology for determining the trip setpoints and allowable values, and a document controlled by 10 CFR 50.59 for recording this information. The trip setpoints and allowable values, referred to in Tables 3.3.1-1 and 3.3.2-1, will be determined after selection of specific instrumentation.*
>
> *The staff issued RAI 16-1 and requested that the applicant identify the method of determining the trip setpoints and allowable values, as well as establish an associated document in which to record the site-specific values and other*

restrictions necessary to satisfy 10 CFR 50.36. The applicant should clarify that after selection of specific instrumentation, the trip setpoints and allowable values, referred to in Tables 3.3.1-1 and 3.3.2-1, will be calculated using the setpoint control program that specifies the approved methodology (i.e., WCAP-16361, APP-PMS-JEP-001, Revision 0, May 2006, "Westinghouse Setpoint Methodology for Protection Systems – AP1000"). In addition, the applicant should propose a setpoint control program to be added in the Administrative Control section of the TS, as stipulated in COL/DC-ISG-8. ***This is identified as Open Item 16.1-1****.*

Resolution of Standard Content Open Item 16.1-1

The resolution of this issue is discussed in the evaluation of Section 16.1.4.3.3, "Instrumentation," above. The applicant committed to adopting the setpoint control program approved in the AP1000 DC, which would be verified in a future revision of the VEGP TS. This is **Confirmatory Item 16.1-1**.

Resolution of Standard Content Confirmatory Item 16.1-1

Confirmatory Item 16.1-1 is an applicant commitment to revise its PTS to incorporate the AP1000 DCD setpoint control program in the Administrative Controls section of its PTS. The staff verified that the PTS was appropriately revised. As a result, Confirmatory Item 16.1-1 is now closed.

The following portion of this technical evaluation section is reproduced from Section 16.1.4.14 of the BLN SER:

> *In Section 5.3.1 of the BLN PTS, the applicant replaced the GTS bracketed information, clarifying that each member of the unit staff shall meet or exceed minimum qualifications of RG* [Regulatory Guide] *1.8, Revision 3, except for during cold license operator training where portions of RG 1.8, Revision 2 will apply. The staff finds this acceptable because RG 1.8, Revision 3 does not address cold license operator training. In other respects, Sections 5.0, 5.1.1, 5.1.2, 5.2.1a, 5.2.1b, 5.2.2, 5.3, 5.6.1, and 5.6.2 of the BLN PTS are identical to the AP1000 GTS, except for site-specific information provided by the applicant to replace the bracketed information in the GTS. The site-specific information provided was administrative in nature and the staff found it acceptable.*

In Section 5.2.2 of the VEGP PTS, the applicant proposed to remove the brackets around the COL item related to unit staff organization, as well as removing work hour restrictions in TS 5.2.2.d. The applicant refers to 73 *Federal Register* (FR) 79923 which provides the NRC's model application for adopting TSTF-511, Revision 0, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26 ["Fitness for Duty Programs"]." The staff finds this deletion acceptable since it conforms to the guidance provided in the TSTF and working hour restrictions in 10 CFR Part 26, and therefore, is no longer required to be in the TS. This appropriately meets the intent of completing this bracketed information.

16.1.5 Post Combined License Activities

There are no post-COL activities related to this section.

16.1.6 Conclusion

The NRC staff reviewed the application and checked the referenced DCD. The NRC staff's review confirmed that the applicant addressed the required information relating to the VEGP PTS and Bases, and there is no outstanding information expected to be addressed in the VEGP COL FSAR related to this section. The results of the NRC staff's technical evaluation of the information incorporated by reference in the VEGP COL application are documented in NUREG-1793 and its supplements.

For the reasons set forth above, the staff finds that Section 16.1 of the VEGP COL FSAR and Part 4 of the VEGP COL application are acceptable and satisfy the requirements of 10 CFR 50.36; 10 CFR 50.36a, "Technical specifications on effluents from nuclear power reactors"; and 10 CFR 52.79(a)(30).

16.2 Design Reliability Assurance Program (Related to RG 1.206, Section C.III.1, Chapter 17, C.I.17.4, "Reliability Assurance Program Guidance")

The D-RAP comprises the reliability assurance activities that assure that the plant is consistent with the certified design when fuel is loaded for the first time.

Section 16.2 of the VEGP COL FSAR, Revision 5, incorporates by reference, with no departures or supplements, Section 16.2, "Design Reliability Assurance Program," of Revision 19 of the AP1000 DCD, which in turn refers to Section 17.4 for a description of the program. The results of the NRC staff's technical evaluation of the information incorporated by reference in the VEGP COL application are documented in NUREG-1793 and its supplements.

The NRC staff's review of the applicant's D-RAP is documented in Section 17.4 of this SER.

16.3 Investment Protection

16.3.1 Introduction

The AP1000 design includes active systems that provide defense in depth capabilities (identified as "investment protection" by the applicant) for RCS makeup and decay heat removal. These active systems are the first line of defense in reducing challenges to the passive systems in the event of transients or plant upsets. Most active systems in the AP1000 design are designated as non-safety-related. Because some active systems reduce challenges to safety-related systems to a significant degree, short-term availability controls are necessary to provide reasonable assurance that these SSCs are operable during anticipated events.

A detailed evaluation of the regulatory treatment of non-safety systems for the AP1000 design, and the concept of investment protection, is addressed in Chapter 22 of NUREG-1793.

16.3.2 Summary of Application

Section 16.3 of the VEGP COL FSAR, Revision 5, incorporates by reference Section 16.3 of the AP1000 DCD, Revision 19.

In addition, in VEGP COL FSAR Section 16.3, the applicant provided the following:

AP1000 COL Information Item

- STD COL 16.3-1

The applicant provided additional information in Standard (STD) COL 16.3-1 to address COL Information Item 16.3-1. This item is related to the development of a procedure to control the operability of investment protection SSCs.

16.3.3 Regulatory Basis

The regulatory basis of the information incorporated by reference, and the additional information presented in this application, is addressed in the FSER related to the DCD.

16.3.4 Technical Evaluation

The NRC staff reviewed Section 16.3 of the VEGP COL FSAR and checked the referenced DCD to ensure that the combination of the DCD and the COL application represents the complete scope of information relating to this review topic.[1] The NRC staff's review confirmed that the information in the application and incorporated by reference addresses the required information relating to SSCs required for defense in depth. The results of the NRC staff's evaluation of the information incorporated by reference in the VEGP COL application are documented in NUREG-1793 and its supplements.

Section 1.2.3 of this SER provides a discussion of the strategy used by the NRC to perform one technical review for each standard issue outside the scope of the DC and use this review in evaluating subsequent COL applications. To ensure that the staff's findings on standard content that were documented in the SER with open items issued for the BLN Units 3 and 4 COL application were equally applicable to the VEGP Units 3 and 4 COL application, the staff undertook the following reviews:

- The staff compared the BLN COL FSAR, Revision 1 to the VEGP COL FSAR. In performing this comparison, the staff considered changes made to the VEGP COL FSAR (and other parts of the COL application, as applicable) resulting from RAIs and open and confirmatory items identified in the BLN SER with open items.

- The staff confirmed that all responses to RAIs identified in the corresponding standard content (the BLN SER) evaluation were endorsed.

- The staff verified that the site-specific differences were not relevant.

The staff has completed its review and found the evaluation performed for the standard content to be directly applicable to the VEGP COL application. This standard content material is identified in this SER by use of italicized, double-indented formatting. There were no confirmatory or open items to resolve.

The following portion of this technical evaluation section is reproduced from Section 16.3.4 of the BLN SER:

AP1000 COL Information Item

- *STD COL 16.3-1*

The applicant provided supplemental information by adding the following statement to DCD Section 16.3-1:

> *Station procedures govern and control the operability of investment protection systems, structures, and components in accordance with Table 16.3-2 of the DCD, and provide the operating staff with instruction for implementing required actions when operability requirements are not met. Procedure development is addressed in FSAR Section 13.5.*

Section 22.5.9 of the NRC staff's FSER related to the DCD (NUREG-1793) evaluated the short-term availability controls proposed by Westinghouse for important non-safety-related SSCs. The NRC staff concluded that the administrative controls for the SSCs required for defense in depth, listed in Table 16.3-2 of the AP1000 DCD, were acceptable. COL applicants referencing the AP1000 are responsible for developing a procedure to control the operability of these SSCs in accordance with DCD Table 16.3-2 (COL Information Item 16.3.2-1).

The applicant's response to STD COL 16.3-1 is acceptable because there were no exceptions taken to the list of SSCs required for defense in depth nor to the administrative procedures included in AP1000 DCD Table 16.3-2. The applicant also committed to place this information in station procedures. The information in DCD Table 16.3-2 also provides the operating staff with instruction for implementing required actions when operability requirements are not met.

16.3.5 Post Combined License Activities

There are no post-COL activities related to this section.

16.3.6 Conclusion

The NRC staff reviewed the application and checked the referenced DCD. The NRC staff's review confirmed that the applicant addressed the required information related to defense in depth using non-safety-related SSCs, and there is no outstanding information expected to be addressed in the VEGP COL FSAR related to this section. The results of the NRC staff's technical evaluation of the information incorporated by reference in the VEGP COL application are documented in NUREG-1793 and its supplements.

In addition, the staff concludes that the relevant information presented in the VEGP COL FSAR is acceptable based on the regulatory basis addressed in NUREG-1793. The staff based its conclusion on the following:

- STD COL 16.3-1, as related to SSCs required for defense in depth, is acceptable because it states that station procedures will govern and control the operability of these SSCs, in accordance with Table 16.3-2 of the AP1000 DCD, without exceptions. The information in DCD Table 16.3-2 also provides the operating staff with guidance for taking required actions when operability requirements are not met.