



South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

September 20, 2007
ABR-AE-07000004
10 CFR 52

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

South Texas Project
Units 3 and 4
Docket No. PROJ0749
Combined License Application

The STP Nuclear Operating Company (STPNOC) submits the enclosed combined license application (COLA) pursuant to 10 CFR Part 52. In addition, we are requesting special nuclear material licenses, by-product licenses, and source material licenses as required under 10 CFR Parts 30, 40, and 70.

The South Texas Project Units 3 and 4 COLA is for two Advanced Boiling Water Reactors (ABWRs) at our existing site in Matagorda County, Texas. The new units will be designated as STP Units 3 and 4 (STP 3 & 4).

This application is being submitted by STPNOC on behalf of itself and the owners of STP 3 & 4: NRG South Texas 3 LLC; NRG South Texas 4 LLC; and the City of San Antonio, Texas, acting by and through the City Public Service Board (CPS Energy).

Application

This application incorporates by reference the ABWR design certification rule in Appendix A to 10 CFR Part 52. Once approved, this application will constitute the reference COL (R-COL) application for the ABWR, in accordance with NRC Regulatory Issue Summary (RIS) 2006-06. As such, the applicable parts of this COLA identify "standard" provisions that are appropriate for use by any future COLA that references the ABWR design certification.

The STP 3 & 4 COLA is based on the standard ABWR design approved in 1997 by the NRC in Appendix A to 10 CFR Part 52. The application references Revision 4 of the ABWR Design Control Document (DCD), which is the revision incorporated in Appendix A to 10 CFR Part 52.

The reference ABWR DCD commonly refers to the General Electric Company, General Electric, GE, GE Nuclear Energy, and GE Energy as the owner of the certified ABWR design. Subsequent to the ABWR design certification, in July of 2007, General Electric Nuclear Energy and Hitachi formed a strategic alliance to consolidate their nuclear engineering divisions. This new entity is titled General Electric-Hitachi and is represented by the acronym GEH. The COLA does not reflect the updated General Electric-Hitachi (GEH) nomenclature. Any use of the above designations for General Electric Nuclear Energy within this COLA implies the new General Electric-Hitachi.

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To the extent practical, STPNOC has used NRC guidance in Regulatory Guide (RG) 1.206, NUREG-1555, and NUREG-0800 to prepare the application. In a number of sections, we have used Nuclear Energy Institute (NEI) templates to address issues such as Quality Assurance, Security, and Radiation Protection. Recognizing that some of these NEI templates are still undergoing NRC review and approval, STPNOC commits to adopt the final NRC-approved versions and include them in subsequent revisions of the COLA.

Please note that GEH has submitted several Licensing Topical Reports (LTRs) over the past year that support our request for exemption and departures from the ABWR DCD and that address COL License Information Items in the DCD. We have incorporated by reference from these LTRs. As NRC Requests for Additional Information (RAIs) are evaluated, GEH may revise some of these LTRs. We intend to update the COLA, as appropriate, in subsequent revisions to reference future LTR revisions. We also understand that GEH will submit a request to amend the ABWR design certification. It is anticipated that the substance of the design certification amendment request will be based upon the GEH LTRs and the DCD standard departures identified in COLA Part 2.

We have made every effort to minimize departures from Tier 1 and Tier 2* material in the DCD, only making changes to those items necessary to address either obsolescence or errors, necessary to address site-specific issues, appropriate to improve safety and reliability, or that represent significant advances in the design that are important to achieving a viable reference plant.

The STP 3 & 4 COLA is organized as follows:

- Part 1 is General and Financial Information.
- Part 2 is the plant-specific DCD, which (1) identifies exemptions from Tier 1 of the ABWR DCD, and (2) contains the Final Safety Analysis Report (FSAR), which identifies departures from Tier 2 of the DCD and provides site-specific information. Section 1.1, Introduction, of the FSAR explains the COLA format in detail.
- Part 3 is the Environmental Report.
- Part 4 is a complete version of the Technical Specifications.
- Part 5 is the Emergency Plan.
- Part 6 is a placeholder for the Site Redress Plan in the event that STPNOC decides to request a limited work authorization in accordance with 10 CFR 50.10.
- Part 7 is a summary of the exemptions to and departures from the ABWR DCD.
- Part 8 references the Physical Security Plan, the Training and Qualification Plan, and the Safeguards Contingency Plan, all of which are being submitted under a separate cover.
- Part 9 is the Inspections, Tests, Analyses and Acceptance Criteria (ITAAC).
- Part 10 is Revision 4 of the ABWR DCD.

This letter contains the following provided electronically:

- Attachment 1 provides the affidavits in support of the requests for withholding proprietary information on behalf of NRG and GEH. These affidavits request that proprietary information be withheld from public disclosure in accordance with 10 CFR 2.390.

- Attachment 2 provides a request for exemption from 10 CFR Part 52 as discussed below.
- Attachment 3 provides a complete listing of commitments that STPNOC is making as part of the COLA.
- Attachment 4 is a summary of the preflight evaluation performed for each PDF file submitted in COLA Parts 1 through 9.
- Attachment 5 is the STP 3 & 4 Quality Assurance Program Description, Rev. 1.
- Attachment 6 provides draft language intended to facilitate NRC preparation of the Environmental Protection Plan (Nonradiological).
- Attachment 7 provides three years of STP site meteorological data as specified by RG 1.206, Section 2.3.3.
- Attachment 8 is the STP Units 1 and 2 Radioactive Waste Process Control Program, as committed to in FSAR Subsection 11.4.3 of the COLA.
- Two DVDs which contain the electronic application:
 - The first DVD, "Public Version," contains a complete non-proprietary/non-security-sensitive version of the STP 3 & 4 COLA suitable for public disclosure. The non-proprietary (public) version of the ABWR DCD was previously submitted and is docketed on ADAMS. COLA Part 10 contains a small file referencing the Accession number of the public version of this document.
 - The second DVD, "Proprietary Version," contains a complete STP 3 & 4 COLA with proprietary and security-sensitive information included. Please note that COLA Part 8 is the Physical Security Plan, the Training and Qualification Plan, and the Safeguards Contingency Plan. These Safeguards Information documents are being submitted under separate cover. Similarly, note that COLA Part 10 is a proprietary/security-sensitive version of the verified certified ABWR DCD. This electronic version of the DCD was recently provided to the NRC by GEH.
 - Both DVDs have been prepared in compliance with the NRC Guidance for Electronic Submissions to the NRC (June 6, 2007). The DVDs contain the COLA and DCD in PDF format. All preflight checks have been successfully performed on the PDF files for COLA Parts 1 through 9 and the evaluations are summarized in Attachment 4. Each DVD contains a packing slip explaining the contents.

STPNOC will periodically revise the COLA, as appropriate, to incorporate changes to account for feedback from NRC review. STPNOC anticipates that these revisions will occur at least once per year, beginning in January 2008.

Exemption

STPNOC is requesting an exemption from Appendix A.IV.A.2.a to 10 CFR Part 52, which requires that the plant-specific DCD contain the same organization and numbering as the generic ABWR DCD. The generic ABWR DCD included a Question and Response Guide in Tier 2 Chapter 20. We do not believe there is value in incorporating and updating this historical information as part of this application. This exemption request is described in more detail and justified in Attachment 2 to this letter.

Limited Work Authorization

STPNOC is not requesting a Limited Work Authorization (LWA) at this time and consequently has not included COLA Part 6, "Site Redress Plan," as part of this application. However, depending on the NRC COLA review project-schedule, STPNOC may at a later date seek an LWA pursuant to 10 CFR 50.10(d) to perform construction activities defined under 10 CFR 50.10(a)(1).

Conclusion

Our goal is to ensure that the NRC has all the information it needs to approve this application. We are scheduled to meet with the NRC staff in October to explain in more detail how our application is organized and to answer any initial questions.

If you require any additional information, please contact our Manager of Regulatory Affairs for STP Units 3 and 4, Gregory T. Gibson, at (361) 972-4626, who will continue to be the point of contact for licensing matters.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on Sept 20, 2007



M. A. McBurnett
Vice-President,
Oversight & Regulatory Affairs
STP Units 3 & 4

Attachments: As Stated

cc: w/o attachments except *
(hard copy)

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ATTACHMENT 1

**AFFIDAVITS FOR WITHHOLDING PROPRIETARY INFORMATION
UNDER 10 CFR 2.390**

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

In the Matter of

STP Nuclear Operating Company

South Texas Project Units 3 and 4

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Docket Nos. PROJ0749

AFFIDAVIT

I, Joseph Savage, state as follows:

1. I am Manager, ABWR Regulatory Services, GE-Hitachi Nuclear Energy Americas LLC ("GEH") and have been delegated the function of reviewing the information described in paragraph (2) which is sought to be withheld, and have been authorized to apply for its withholding.
2. The information sought to be withheld is contained in various sections of Part 2 of the Combined License Application (COLA), Revision 0, for South Texas Project Units 3 and 4. The proprietary information in the COLA is marked with the beginning designation [s#] and the ending designation [e#]. The # is a number between 1 and 7 corresponding to the NRC's guidance on categories of proprietary information defined in 10 CFR 2.390 and clarified by RIS-2004-11.
3. In making this application for withholding of proprietary information of which it is the owner, GEH relies upon the exemption from disclosure set forth in the Freedom of Information Act ("FOIA"), 5 USC Sec. 552(b) (4), and the Trade Secrets Act, 18 USC Sec. 1905, and NRC regulations 10 CFR 9.17(a)(4), and 2.390(a)(4) for "trade secrets" (Exemption 4). The material for which exemption from disclosure is here sought also qualify under the narrower definition of "trade secret", within the meanings assigned to those terms for purposes of FOIA Exemption 4 in, respectively, Critical Mass Energy Project v. Nuclear Regulatory Commission, 975F2d871 (DC Cir. 1992), and Public Citizen Health Research Group v. FDA, 704F2d1280 (DC Cir. 1983).
4. Some examples of categories of information which fit into the definition of proprietary information are:
 - a. Information that discloses a process, method, or apparatus, including supporting data and analyses, where prevention of its use by GEH's competitors without license from GEH constitutes a competitive economic advantage over other companies;
 - b. Information which, if used by a competitor, would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing of a similar product;

- c. Information which reveals aspects of past, present, or future GEH customer-funded development plans and programs, resulting in potential products to GEH;
- d. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection.

The information sought to be withheld is considered to be proprietary for the reasons set forth in paragraphs (4) a., and (4) b, above.

- 5. To address 10 CFR 2.390 (b) (4), the information sought to be withheld is being submitted to NRC in confidence. The information is of a sort customarily held in confidence by GEH, and is in fact so held. The information sought to be withheld has, to the best of my knowledge and belief, consistently been held in confidence by GEH, no public disclosure has been made, and it is not available in public sources. All disclosures to third parties including any required transmittals to NRC, have been made, or must be made, pursuant to regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence. Its initial designation as proprietary information, and the subsequent steps taken to prevent its unauthorized disclosure, are as set forth in paragraphs (6) and (7) following.
- 6. Initial approval of proprietary treatment of a document is made by the manager of the originating component, the person most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge, or subject to the terms under which it was licensed to GEH. Access to such documents within GEH is limited on a "need to know" basis.
- 7. The procedure for approval of external release of such a document typically requires review by the staff manager, project manager, principal scientist or other equivalent authority, for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside GEH are limited to regulatory bodies, customers, and potential customers, and their agents, suppliers, and licensees, and others with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or proprietary agreements.
- 8. The information identified in paragraph (2), above, is classified as proprietary because it contains detailed information about the results of analytical models, methods and processes, including computer codes, which GEH has developed, obtained NRC approval of, and applied to perform evaluations of loss-of-coolant accident events in the GEH Boiling Water Reactor ("BWR").

The development and approval of the BWR loss-of-coolant accident analysis computer codes was achieved at a significant cost to GEH, on the order of several million dollars.

The development of the evaluation process along with the interpretation and application of the analytical results is derived from the extensive experience database that constitutes a major GEH asset.

- 9. Public disclosure of the information sought to be withheld is likely to cause substantial harm to GEH's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of GEH's comprehensive BWR safety and technology base, and its commercial value extends beyond the original development cost. The value of the technology base goes beyond the extensive physical database and analytical methodology

and includes development of the expertise to determine and apply the appropriate evaluation process. In addition, the technology base includes the value derived from providing analyses done with NRC-approved methods.

The research, development, engineering, analytical and NRC review costs comprise a substantial investment of time and money by GEH.

The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

GEH's competitive advantage will be lost if its competitors are able to use the results of the GEH experience to normalize or verify their own process or if they are able to claim an equivalent understanding by demonstrating that they can arrive at the same or similar conclusions.

The value of this information to GEH would be lost if the information were disclosed to the public. Making such information available to competitors without their having been required to undertake a similar expenditure of resources would unfairly provide competitors with a windfall, and deprive GEH of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing these very valuable analytical tools.

I declare under penalty of perjury that the foregoing affidavit and the matters stated therein are true and correct to the best of my knowledge, information, and belief.

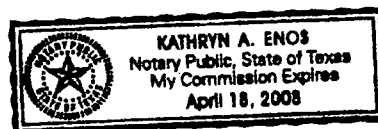
Executed on this 15th day of September 2007.



Joe Savage
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Project Manager, ABWR Licensing

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Kathryn A Enos

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
 STP Nuclear Operating Company) Docket Nos. PROJ0749
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 South Texas Project Units 3 and 4)

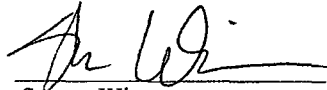
AFFIDAVIT

I, Steven Winn, Vice President of Texas Genco GP, LLC (the General Partner of NRG South Texas LP), and Executive Vice President of NRG Energy, Inc. hereby affirm and state:

1. I am authorized to execute this affidavit on behalf of NRG South Texas LP and NRG Energy, Inc.
2. NRG South Texas LP is providing information to support its application for a Combined License for STP Units 3 & 4. The information being provided is located in Part 1 of the application and contains financial projections related to its ownership of the South Texas Project Electric Generating Station. It also contains proprietary commercial and financial information that should be held in confidence by the NRC pursuant to the policy reflected in 10 CFR2.390(a)(4), because:
 - i. This information is and has been withheld in confidence by NRG South Texas LP and its affiliates.
 - ii. This information is of a type that is customarily held in confidence by NRG South Texas LP and its affiliates, and there is a rational basis for doing so because the information contains sensitive financial information concerning projected revenues and operating expenses of NRG South Texas LP.
 - iii. This information is being transmitted to the NRC voluntarily and in confidence.
 - iv. This information is not available in public sources and could not be gathered readily from other publicly available information.
 - v. Public disclosure of this information would create substantial harm to the competitive position of NRG South Texas LP and its affiliates by disclosing its internal financial projections.
3. The proprietary information in the COLA is marked with the beginning designation "COLA Part 1 #" and the ending designation "COLA Part 1 #". The # is a number between 1 and 7

corresponding to the NRC's guidance on categories of proprietary information defined in 10 CFR 2.390 and clarified by RIS-2004-11.

4. Accordingly, NRG South Texas LP requests that the designated portions of the COLA be withheld from public disclosure pursuant to 10 CFR 2.390(a) (4).

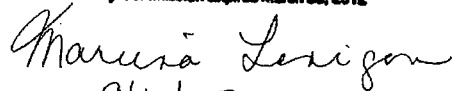


Steven Winn
EVP, NRG Energy, Inc.
VP, Texas Genco GP, LLC

STATE OF NEW JERSEY)
)
COUNTY OF MERCER)

Subscribed and sworn to me, a Notary Public, in and for the state of New Jersey, this 14th day of September, 2007.

Marcia Lantigan
Notary Public of New Jersey
My Commission Expires March 23, 2012



9/14/07

ATTACHMENT 2

JUSTIFICATION FOR EXEMPTION FROM 10 CFR 52

JUSTIFICATION FOR EXEMPTION FROM 10 CFR 52

10 CFR 52 Appendix A. IV.A.2.a requires that the plant-specific DCD follow the same organization and numbering system as was used in the U.S. ABWR DCD.

STPNOC is requesting an exemption from the 10 CFR 52 Appendix A.IV.A.2.a requirement to follow the U. S. ABWR DCD organization and numbering system. Tier 2 of the U.S. ABWR DCD includes Chapter 20 titled "Question and Response Guide." This chapter contains the NRC questions and General Electric responses that were developed during the ABWR certification. STPNOC has not included this chapter as part of the STP 3 & 4 COLA.

Chapter 20 was not required by the Standard Review Plan. Furthermore, this chapter contains historical information which is no longer relevant to the COLA. The Chapter 20 Questions and Responses were asked and answered during the certification process for the ABWR design. These questions and responses have been reviewed to identify any design-related information that is not contained in the other sections of the DCD. In two cases there are Tier 2* commitments made in the Question and Response Guide. The following table identifies the provisions in Chapter 20 that have been relocated to other parts of the FSAR.

Chapter 20 Provision	Relocated to FSAR
Section 20.3.8 – Response 420.69	Subsection 7.2.1.1.4
Section 20.3.8 – Response 420.92	Subsection 7.8.3

In accordance with 10 CFR 52.7 and 50.12 (a), an exemption is justified because:

- The exemption is authorized by law. The Atomic Energy Act does not specify whether the FSAR must use the same organization and numbering as the generic DCD.
- The exemption does not present an undue risk to the public. These changes to the generic DCD format do not present an undue risk to the public, since the information is not a required part of the COLA, it represents historical information, or it is addressed in other sections of the FSAR or DCD.
- The exemption is consistent with the common defense and security. The information in question does not pertain to security. Furthermore, the exemption pertains to a formatting issue and does not delete any substantive design information not included in other sections of the FSAR or DCD.
- Special circumstances are present in accordance with 10 CFR 50.12(a)(2)(ii). Specifically, application of the regulation in these particular instances would not serve the underlying purpose of the rule. The underlying purpose of the rule is to ensure that the information in the generic DCD is included in the plant-specific DCD. STPNOC has reviewed the information in Chapter 20 and has moved information from this section to other sections of the FSAR as necessary to ensure that the FSAR completely addresses the design-related information in Chapter 20.

ATTACHMENT 3

COMMITMENTS

COMMITMENTS

The following table presents a complete list of the commitments made in the COLA. They are listed in sequential order by their commitment number. The commitment number contains the chapter and subsection in which the commitment can be found, for example COM 4.2-1 is the first commitment in Chapter 4 Section 2. The listing provides a brief summary of the commitment statement, a milestone date for completion, and a reference to the COL License Information Item number. The COL License Information Items are numbered according to Table 1.9-1 of the reference ABWR DCD. The detailed commitment statement can be found in the section. In some cases COL License Information Items numbers were not provided in the DCD and in these cases the DCD section containing the COL License Information Item is listed.

<u>COMMITMENTS</u>			
Commitment Number	Commitment Summary	Milestone	COL Item
CHAPTER 1			
COM 1A-1	Emergency Procedures will be developed	Prior to Fuel Load	1.5
COM 1A-2	Administrative Procedures to remove safety-related systems from service will be developed	Prior to Fuel Load	1.6
COM 1A-3	Procedures and training to perform in-plant radiation monitoring post accident will be developed	Prior to Fuel Load	1.7
COM 1A-4	Administrative procedures to report failures of Safety/Relief Valves to the NRC will be in place	Prior to Fuel Load	1.8
COM 1A-5	Administrative procedure to provide annual report on ECCS outages to the NRC will be developed	Prior to Fuel Load	1.9
COM 1A-6	Emergency procedures for Reactor Coolant System venting will be developed	Prior to Fuel Load	1.10
COM 1C-1	Station Blackout procedure will be developed	Per Procedures Topical Report Schedule	1.13
CHAPTER 2			
COM 2.3-1	Foundation stability analysis assumptions will be confirmed and the FSAR updated	Prior to Fuel Load	2.38
COM 2.4S-1	Emergency Operating Procedures will include measures for a loss of Main Coolant Reservoir level	Prior to Fuel Load	NA
COM 2.4S-2	Monthly groundwater levels will be collected through December 2007 from STP 3 & 4 observation wells and updated in the FSAR	Future COLA update	NA
COM 2.5S-1	Resonant Column Torsional Testing results will be added to the FSAR	3 rd Quarter of 2008	NA
COM 2.5S-2	Confirmatory subsurface investigation to accommodate addition of a Radwaste Building in the STP 4 area will be updated in FSAR	Future COLA Update	NA

<u>COMMITMENTS (CONTINUED)</u>			
Commitment Number	Commitment Summary	Milestone	COL Item
COM 2.5S-3	Final earth pressure calculations (including surcharge loads, structural fill properties, and final configuration of structures) will be updated in FSAR	Following completion of project detailed design	NA
CHAPTER 3			
COM 3.5-1	Turbine system maintenance program that includes probability calculation of turbine missile generation to be made available for NRC review. Volumetric inspection of low pressure rotors will be performed at the 2 nd refueling outage and every other outage thereafter	Prior to Fuel Load	3.13
COM 3.7-1	Procedures for pre-earthquake planning and post-earthquake actions will be developed	Prior to Fuel Load	3.20
COM 3.7-2	Procedure to be developed to confirm that all II / I interactions are identified and dispositioned	Prior to Fuel Load	3.22
COM 3.9-1	Plant-specific assessment results for the Vibration Assessment Program will be available for review	Following initial startup testing	3.27
COM 3.9-2	Analysis demonstrating components can withstand cyclic loads will be available	Prior to Fuel Load	3.28
COM 3.9-3	Pump and Valve IST Program will be completed and available for review	Prior to Fuel Load	3.29
COM 3.9-4	Design, qualification and preoperational testing of Motor-Operated Valves	Prior to Fuel Load	3.29
COM 3.10-1	Equipment Qualification records for seismic and hydrodynamic loads are available for review	Prior to Fuel Load	3.37
COM 3.10-2	Dynamic Qualification Report is available for NRC review	Prior to Fuel Load	3.38
COM 3H-1	Structural design and analysis report for the Radwaste Building to be available for the NRC review	Prior to Fuel Load	NA
COM 3H-2	Final seismic analysis of site-specific Category I structures to be updated in the FSAR	Third quarter of 2008	NA

<u>COMMITMENTS (CONTINUED)</u>			
Commitment Number	Commitment Summary	Milestone	COL Item
CHAPTER 4			
COM 4.4-1	Power/Flow operating map for initial fuel load will be added to the FSAR	12 months prior to fuel load	4.2
COM 4.4-2	Thermal Limit Curves for initial fuel load will be added to the FSAR	12 months prior to fuel load	4.3
CHAPTER 5			
COM 6.6-1	Site-specific Inservice/Preservice Inspection Program for Class 1 Components will be provided to the NRC	12 months prior to commercial power operation	5.2
COM 5.3-1	Fracture toughness for actual materials in pressure vessel will be added to the FSAR	Prior to Fuel Receipt	5.4
COM 5.3-2	Specific materials in each vessel surveillance capsule and pressure-temperature limit curves will be added to the FSAR	Prior to Fuel Receipt	5.5
COM 5.3-3	Plant-specific RT-NDT, stress intensity factors, and pressure-temperature curves will be added to the FSAR	Prior to Fuel Receipt	5.6
COM 5.4-1	Analysis demonstrating 8-hour Station Blackout (SBO) capability will be available for NRC review	End of pre-operational testing	5.8
COM 5.4-2	Battery analysis for 8-hour SBO is completed and available for NRC review	Prior to preoperational test program	5.8
COM 5.4-3	The need for a flow reduction device in the AC Independent Water Addition System inlet will be determined and the analysis available for NRC review	Prior to Pre-operational Test Program	5.9
CHAPTER 6			
COM 6.1-1	Materials used in the Reactor Building Cooling Water System heat exchanger, pump and valves will be provided as an FSAR update	Prior to the initiation of the respective unit pre-operational testing	DCD Table 6.1-1

<u>COMMITMENTS (CONTINUED)</u>			
Commitment Number	Commitment Summary	Milestone	COL Item
COM 6.1-2	Analysis of the amount and acceptability of containment coatings not meeting RG 1.54 and ANSI N101.2 will be available for NRC review	Prior to completion of preoperational testing	6.1
COM 6.3-1	Exposure dependent MAPLHGR, peak clad temperature, and oxidation fraction for initial fuel load will be provided as an FSAR update	12 months prior to fuel load	6.6
COM 6.3-2	A procedure that tests the ECCS through its full operating sequence will be developed	Prior to Fuel Receipt	6.7
COM 6.3-3	Analysis for the limiting LOCA for initial core fuel bundle design	12 months prior to fuel load	6.7a
COM 6.5-1	Secondary containment drawdown analysis based on as-built containment design will be completed and available for NRC review	Prior to preoperational testing	6.9
COM 6.6-1	Plant-specific preservice and inservice inspection program for Class 2, 3 components will be provided to the NRC	12 months prior to commercial power operation	6.10
CHAPTER 7			
COM 7.8-1	Control Room temperature rise analysis for station blackout will be available for review	Prior to Fuel Load	7.3
COM 7.8-2	Purchase specifications for suppliers of Safety System Logic and Control System semiconductor devices will include provisions to prevent overheating	Time of purchase	7.5
CHAPTER 8			
COM 8.1-1	Procedures and training to ensure diesel generator reliability and performance to be developed	Prior to Fuel Load	8.1
COM 8.2-1	Procedures to be developed to periodically test offsite power equipment	Prior to Fuel Load	8.2
COM 8.2-2	Procedures to be developed to assure that forced air/ forced oil ratings of the unit auxiliary or reserve transformers are not exceeded	Prior to Fuel Load	8.6

COMMITMENTS (CONTINUED)

Commitment Number	Commitment Summary	Milestone	COL Item
COM 8.3-1	Procurement documents and procedures are developed to ensure diesel generators can reach full speed and voltage in 20 seconds	Prior to Fuel Load	8.8
COM 8.3-2	Procedures and testing for electrical penetration protective devices are completed	Prior to Fuel Load	8.10
COM 8.3-3	Procedures to be developed to prevent simultaneous de-energization of all divisional buses on loss of offsite power	Prior to Fuel Load	8.15
COM 8.3-4	Procedures to be developed for load testing of Class 1E switchgear and motor control centers	Prior to Fuel Load	8.19
COM 8.3-5	Administrative controls to ensure manual bus grounding circuit devices are in place	Prior to Fuel Load	8.20
COM 8.3-6	Administrative controls to prevent paralleling Class 1E power supplies to plant loads	Prior to Fuel Load	8.21
COM 8.3-7	Administrative controls to be developed for isolating the 125 VDC standby charger	Prior to Fuel Load	8.24
COM 8.3-8	Administrative controls to be developed to control access to Class 1E power equipment	Prior to Fuel Load	8.25
COM 8.3-9	Procedures to be developed for periodic testing of voltage protection equipment	Prior to Fuel Load	8.26
COM 8.3-10	Procedure to be developed periodically test diesel generator loading in parallel with offsite power	Prior to Fuel Load	8.27
COM 8.3-11	Procedures to be developed to test diesel generator protective relaying	Prior to Fuel Load	8.28
COM 8.3-12	Procedures to be developed to periodically test diesel generator synchronizing interlocks	Prior to Fuel Load	8.29
COM 8.3-13	Procedures to be developed to periodically test thermal overloads and bypass circuitry	Prior to Fuel Load	8.30
COM 8.3-14	Procedures to be developed to periodically test lighting systems	Prior to Fuel Load	8.31
COM 8.3-15	Procedures to be developed to control potential hazards in cable chases	Prior to Fuel Load	8.32
COM 8.3-16	Procedures to be developed to periodically test Class 1E equipment protective relays and thermal overloads	Prior to Fuel Load	8.33

<u>COMMITMENTS (CONTINUED)</u>			
Commitment Number	Commitment Summary	Milestone	COL Item
COM 8.3-17	Procedures will be developed for periodic testing of constant voltage constant frequency power supplies and electrical protection assemblies	Prior to Fuel Load	8.34
COM 8.3-18	Procedures to be developed for periodic calibration and testing of fault interrupt capability and coordination for Class 1E circuit breakers	Prior to Fuel Load	8.35
COM 8.3-19	Procedures for periodic testing of Class 1E electrical systems and equipment per IEEE 308, Section 7 to be developed	Prior to Fuel Load	8.36
COM 8.3-20	Procedures for Class 1E battery installation and maintenance and testing to be developed	Prior to Fuel Load	8.38
COM 8.3-21	Procedures for periodic testing of Class 1E batteries per IEEE 308, Section 7 to be developed	Prior to Fuel Load	8.39
COM 8.3-22	Procedures for periodic testing of constant voltage constant frequency power supplies to be developed	Prior to Fuel Load	8.40
COM 8.3-23	Procedures for periodic testing of Class 1E battery chargers to be developed	Prior to Fuel Load	8.41
COM 8.3-24	Procedures for periodic testing of Class 1E diesel generators to ensure they can supply full design basis loads will be developed	Prior to Fuel Load	8.42
COM 8A-1	Ground resistance measurements per IEEE-81 will be met and updated in the FSAR	Prior to construction of buildings	App 8A
CHAPTER 9			
COM 9.1-1	Description of the dynamic and impact(load drop) analyses for the new fuel storage racks will be provided as FSAR update	Prior to Receipt of Fuel	9.2
COM 9.1-2	Description of load drop analyses for the spent fuel racks will be provided as FSAR update	Prior to Receipt of Fuel	9.4
COM 9.1-3	A list of all cranes, hoists, and elevators and their lifting capacities will be added to the FSAR	Prior to Receipt of Fuel	9.6

<u>COMMITMENTS (CONTINUED)</u>			
Commitment Number	Commitment Summary	Milestone	COL Item
COM 9.1-4	A structural analysis of the spent fuel racks is provided as an FSAR update	Prior to Receipt of Fuel	9.7
COM 9.1-5	Procedures and training for firewater makeup to the spent fuel pool will be in place	Prior to Fuel Load	9.9
COM 9.1-6	The Residual Heat Removal system will be adequately protected from internal hazards such as pipe whip, flooding etc.	Prior to Fuel Load	9.10
COM 9.2-1	Pressure drop for the Reactor Building Cooling Water heat exchanger and NPSH for the pumps will be determined	Prior to installation of equipment	Section 9.2.15.2.1
COM 9.2-2	HVAC Emergency Cooling Water System refrigerator technical requirements will be met	Prior to Fuel Load	9.11
COM 9.2-3	Reactor Service Water system biocide treatment requirements will be met	Prior to Fuel Load	9.12
COM 9.2-4	Emergency procedures will address operator manual actions in the event of a Reactor Service Water leak	Prior to Fuel Load	9.12
COM 9.5-1	Fire protection plan (including instructions, procedures, drawings) that prescribes inspections and tests of installed fire protections system is in place	Prior to construction	NA
COM 9.5-2	Fire protection tests will comply with Regulatory position C.2.4 in RG 1.189, Rev.1	Prior to Construction	NA
COM 9.5-3	Measures will be undertaken to prevent contamination of DG combustion air intakes	Prior to use of DGs	9.18
COM 9.5-4	Procedures for communication in an emergency due to a main control room fire will be developed	Prior to Fuel Load	9.19
COM 9.5-5	Procedures for maintenance and testing of the plant communication systems will be in place	Prior to preoperational testing	9.20
COM 9.5-6	As-built diesel generator auxiliaries will be reviewed against reference ABWR requirements	Prior to preoperational testing	9.22
COM 9.5-7	Diesel Generator Cooling Water System design flow and heat removal requirements will be added to the FSAR	Prior to preoperational testing	9.23

<u>COMMITMENTS (CONTINUED)</u>			
Commitment Number	Commitment Summary	Milestone	COL Item
COM 9.5-8	Diesel Generator procedures will require loading up to 40 % of full load following up to 8 hours of continuous diesel operation	Prior to preoperational testing	9.25
COM 9.5-9	Concrete or masonry type paint will be used on the floor of all diesel generator rooms	Prior to preoperational testing	9.25
COM 9.5-10	HVAC pressure calculations will be performed	Prior to preoperational testing	9.27
COM 9.5-11	Diesel fuel oil refueling procedures will be in place	Prior to Fuel Load	9.30
COM 9.5-12	Features will be provided to ensure fire areas containing liquid insulated transformers will not become a health hazard	Prior to Fuel Load	9.32
COM 9.5-13	No chemical storage areas will exist in the Reactor or Control Building – except small quantities in appropriate storage containers	Prior to Fuel Load	9.32
COM 9.5-14	Programs will be developed for training, preventive maintenance, and root cause analysis of diesel generator components and system failures	Prior to preoperational testing	9.33
COM 9.5-15	Sound-powered telephones will be provided	Prior to Fuel Load	9.34
COM 9.5-16	Plant communication coverage will, to the extent practical, include all areas between the nuclear island and the primary and secondary alarm stations	Prior to Fuel Load	9.28
COM 9.5-17	Preoperational testing of HVAC in the smoke removal mode is completed	Prior to Fuel Load	9.27
COM 9A-1	Fire Hazard Report will consider departures that could impact the ability to reach cold shutdown	Prior to Fuel Load	NA
CHAPTER 10			
COM 10.2-1	FSAR will be updated to identify turbine material property data	Prior to Fuel Load	10.1
CHAPTER 11			

<u>COMMITMENTS (CONTINUED)</u>			
Commitment Number	Commitment Summary	Milestone	COL Item
COM 11.5-1	Standby Gas Treatment System to comply with shielding requirements in NUREG-0737, Item II.F.1	Prior to Fuel Load	11.5
COM 11.5-2	Isokinetic sampling for radioactive iodine and particulates to meet NUREG-0737, Item II.F.1	Prior to Fuel Load	11.6
COM 11.5-3	Post-accident sampling of radioactive iodine and particulates to be done per NUREG-0737, Item II.F.1-2	Prior to Fuel Load	11.7
COM 11.5-4	Procedures will be developed for radiation sensors to specify calibration frequencies and techniques	Prior to Fuel Load	11.8
CHAPTER 12			
COM 12.3-1	Information demonstrating that STP 3 & 4 meets criticality monitoring requirements of 10 CFR 70.24 will be added to the FSAR	6 months prior to fuel load	12.8
CHAPTER 14			
COM 14.2-1	Schedule for each major phase of initial test program will be provided to the NRC	6 months prior to start of initial test program	Section 14.2.11
COM 14.2-2	Site-specific preoperational and startup test specifications will be provided to the NRC	6 months prior to start of initial test program	14.2
COM 14.2-3	Preoperational test procedures will be available for NRC review	60 days prior to fuel load	14.2
COM 14.2-4	Startup Test procedures available for NRC review	60 days prior to fuel load	14.2
CHAPTER 15			
COM 15.0-1	Anticipated operational occurrence analyses for initial core loading will be provided as an FSAR update	1 year prior to fuel load	15.1
COM 15.0-2	Operating limits will be provided for the initial core loading	1 year prior to fuel load	15.2

<u>COMMITMENTS (CONTINUED)</u>			
Commitment Number	Commitment Summary	Milestone	COL Item
COM 15.0-3	Design basis accident analyses for initial core loading are provided as an FSAR update	1 year prior to fuel load	15.3
COM 15.1-1	Feedwater controller failure analysis is performed and provided as an FSAR update	1 year prior to fuel load	Subsection 15.1.2.3.2.2
COM 15.2-1	Inadvertent Closure of Turbine Control Valve analysis is performed and updated in FSAR	1 year prior to fuel load	Subsection 15.2.1.3.1
COM 15.2-2	Generator Load Rejection analysis is completed and provided as FSAR update	1 year prior to fuel load	Subsection 15.2.2.3.2.3
COM 15.4-1	Analysis of a fuel bundle mislocation event based on initial fuel load will be performed and provided as an FSAR update	1 year prior to fuel load	15.5
COM 15.4-2	Analysis of a fuel bundle misorientation event based on initial fuel load is completed and provided as an FSAR update	1 year prior to fuel load	15.6
CHAPTER 19			
COM 19.4S-1	Procedures for controlling PRA model during construction phase are in place	Prior to construction	NA
COM 19.4S-2	Plant walk downs are performed to support PRA model development	During construction	NA
COM 19.4S-3	PRA model maintenance and update procedures are in place	Prior to operations	NA
COM 19.4S-4	Industry peer review of the PRA model is performed	6 months prior to fuel load	NA
COM 19.9-1	Operating procedure is developed for post-accident recovery from a Reactor Water Cleanup System break	Prior to Fuel Load	19.1
COM 19.9-2	Emergency Operating Procedures address operating Reactor Water Cleanup System in heat exchanger bypass mode	Prior to Fuel Load	19.2
COM 19.9-3	An Emergency Operating Procedure for severe external flooding is developed including: Observation of the main cooling reservoir; unobstructed views of the main cooling reservoir (MCR); flood barriers in place for dam failure upstream, and; periodic inspections of the MCR.	Prior to Fuel Load	19.3

<u>COMMITMENTS (CONTINUED)</u>			
Commitment Number	Commitment Summary	Milestone	COL Item
COM 19.9-4	Seismic capacity analysis is completed	Prior to Fuel Load	19.4
COM 19.9-5	Procedures for walk downs to identify fire, seismic, and internal flooding vulnerabilities are developed	Prior to Fuel Load	19.5
COM 19.9-6	Procedures and training are in place for the AC independent water addition system	Prior to Fuel Load	19.6
COM 19.9-7	Procedures are developed to ensure common mode failures in the essential communications function cannot occur	Prior to Fuel Load	19.8
COM 19.9-8	Analyses and procedures to confirm PRA assumptions are in place	Prior to Fuel Load	19.9
COM 19.9-9	Training, design, site-specific PRA procedures to reduce internal flooding risk	Prior to Fuel Load	19.10
COM 19.9-10	Operating procedures to avoid loss of decay heat removal capability during shutdown	Prior to Fuel Load	19.11
COM 19.9-11	Operating procedures and training are in place for Reactor Core Isolation Cooling System operation outside the Main Control Room	Prior to Fuel Load	19.12
COM 19.9-12	Plans are developed to identify departures of test and surveillance intervals from assumptions in the PRA	Prior to Fuel Load	19.13
COM 19.9-13	Important operator actions are reflected in operating procedures and training	Prior to Fuel Load	19.14
COM 19.9-14	Procedure is available for manual operation of motor operated valves	Prior to Fuel Load	19.15
COM 19.9-15	Procedures to verify locked-open position of High Pressure Core Flooder System discharge valve	Prior to Fuel Load	19.16
COM 19.9-16	Demonstration that stresses of containment isolation valves do not exceed ASME Service Level C limits is completed and available for NRC review	Prior to Fuel Load	19.17
COM 19.9-17	Operating procedures will be in place to ensure drywell purge/sample valves are in the correct state and motive power to the purge valves is removed	Prior to Fuel Load	19.18
COM 19.9-18	Procedure will be developed for manual transfer of the combustion turbine generator power to the condensate pump and its support systems	Prior to Fuel Load	19.19

<u>COMMITMENTS (CONTINUED)</u>			
Commitment Number	Commitment Summary	Milestone	COL Item
COM 19.9-19	Procedure to swap Reactor Building Cooling Water and Reactor Service Water pumps and heat exchangers at least monthly is in place	Prior to Fuel Load	19.19a
COM 19.9-20	It will be confirmed that the building housing the AC independent water addition system can withstand site-specific external events	Prior to Fuel Load	19.19b
COM 19.9-21	Procedures to align nitrogen bottles for Safety Relief Valves are developed	Prior to Fuel Load	19.19c
COM 19.9-22	Procedure for administrative control of freeze seals is developed	Prior to Fuel Load	19.19d
COM 19.9-23	Administrative procedure to control combustibles and ignition sources is in place	Prior to Fuel Load	19.19e
COM 19.9-24	Outage planning and control program is consistent with NUMARC 91-06	Prior to Fuel Load	19.19f
COM 19.9-25	Vacuum breaker seating material will be demonstrated to meet EQ requirements	Prior to Fuel Load	19.19h
COM 19.9-26	Containment Atmospheric Monitoring System is demonstrated to meet equipment survivability requirements	Prior to Fuel Load	19.19i
COM 19.9-27	Plant procedures are in place to maintain important safety functions during shutdown including control rod drive and reactor internal pump maintenance activities	Prior to Fuel Load	19.19j
COM 19A-1	Administrative procedure is in place for evaluating design and construction experience	Prior to design and construction	19.25
COM 19 B-1	Inspection and Test Program for fiber optic type isolators will be developed	Prior to Fuel Load	19.28a
COM 19Q-1	Administrative procedure is in place to cope with impending hurricanes	Prior to Fuel Load	NA
Emergency Plan			
COM EP-1	A Letter of Agreement from the NSSF Vendor will be obtained to support Emergency Plan for an event at STP 3 & 4 on a 24/7 basis	Prior to start of construction	NA

ATTACHMENT 4

SUMMARY OF PREFLIGHT EVALUATIONS

SUMMARY OF PREFLIGHT EVALUATIONS

All submittal PDF files were prepared with Adobe Acrobat Version 8 using the current Job Options file provided by the NRC on its web site. All files passed the preflight check (using the latest NRC preflight profile provided on its web site) except a few files that contained scanned pages that were processed by the Acrobat Optical Character Recognition (OCR) process. In these cases, an error is generated for lack of embedded fonts in the files. This is due to the known and documented inability of Acrobat to embed the fonts in a scanned and OCR processed file.

Digital signatures were placed on final PDF files to clearly identify the official approved files. Preflight generates a "failure to embed fonts" error against the text in the actual digital signature. We understand from discussions with Mr. Bill Reckley, NRC Office of New Reactors, that such errors are not considered failures of preflight.

ATTACHMENT 5

STP 3 & 4 QUALITY ASSURANCE PROGRAM DESCRIPTION

REV. 1

(Provided Electronically)

ATTACHMENT 6

DRAFT LANGUAGE FOR THE ENVIRONMENTAL PROTECTION PLAN

(Provided Electronically)

ATTACHMENT 7

SITE METEOROLOGICAL DATA FOR 1997, 1999, AND 2000

(Provided Electronically)

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ATTACHMENT 8

STP 1 & 2 RADIOACTIVE WASTE PROCESS CONTROL PROGRAM

(Provided Electronically)