



South Texas Project Electric Generating Station 4000 Avenue F - Suite A Bay City, Texas 77414

September 24, 2008  
ABR-AE-08000073  
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. 52-012 and 52-013  
Submittal of Combined License Application Revision 2

- References: (1) Letter, M. A. McBurnett to NRC, "Combined License Application," dated September 20, 2007 (ABR-AE-07000004)
- (2) Letter, G. T. Gibson to Document Control Desk, "Supplement to Combined License Application," dated October 15, 2007 (ABR-AE-07000007)
- (3) Letter, G. T. Gibson to Document Control Desk, "Supplement to Combined License Application," dated October 18, 2007 (ABR-AE-07000008)
- (4) Letter, M. A. McBurnett to Document Control Desk, "Supplement to Combined License Application," dated November 13, 2007 (ABR-AE-07000011)
- (5) Letter, M. A. McBurnett to Document Control Desk, "Supplement to Combined License Application," dated November 21, 2007 (ABR-AE-07000013)
- (6) Letter, M. A. McBurnett to Document Control Desk, "Submittal of Combined License Application Revision 1," dated January 31, 2008 (ABR-AE-08000024)

STP Nuclear Operating Company (STPNOC) submits Revision 2 to the South Texas Project Units 3 & 4 (STP 3 & 4) Combined License Application (References 1 through 6) as an enclosure to this letter, and a Safeguards Information submittal that is submitted under separate cover.

Revision 2 includes the following changes to the Application:

- Changes reflecting the revised ownership structure with respect to Nuclear Innovation North America (NINA) LLC (a joint venture of NRG Energy and Toshiba America Nuclear Energy Corporation)
- Changes reflecting the shift to Toshiba as leader of the Engineering, Procurement, and Construction (EPC) team
- Revised location and design of the Ultimate Heat Sinks
- Revised Design Basis Flood Level due to relocation of the Ultimate Heat Sinks
- Changes related to the Minimum Shear Wave Velocities and Soil-Structure Interactions
- Revised design for Instrumentation and Controls
- Removal of references to Licensing Topical Reports prepared specifically for STP 3&4
- Incorporation of a Toshiba turbine generator
- Designation of the Radioactive Waste Building as non-seismic
- Editorial changes throughout the document

This letter contains the following:

- Attachment 1 provides affidavits on behalf of Nuclear Innovation North America and CPS Energy in support of requests for withholding proprietary information. These affidavits request that proprietary information be withheld from public disclosure in accordance with 10 CFR 2.390. Information that is unchanged from COLA Revision 0 is still covered by the affidavit that was submitted with Revision 0 on behalf of GEH to request withholding of that information. A copy of that affidavit is included in Attachment 1 for your convenience.
- Attachment 2 provides a request for exemption from 10 CFR Part 52. 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.
- Attachment 3 is a summary of the preflight evaluation performed for each PDF file submitted in COLA Parts 1 through 9.
- Attachment 4 provides a summary of new and revised commitments made in Revision 2.
- 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 available on ADAMS.
  - 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 consists of the Physical Security Plan, the Training and Qualification Plan, and the Safeguards Contingency Plan. These Safeguards Information documents are being submitted under separate cover.

- Both DVDs have been prepared in compliance with the Guidance for Electronic Submissions to the NRC (June 6, 2007). The DVDs contain the COLA in PDF format. All preflight checks have been performed on the PDF files for COLA Parts 1 through 9 and the evaluations are summarized in Attachment 3. Each DVD contains a packing slip explaining the contents.

If there are any questions regarding the submittal of Revision 2 to the Combined License Application, please contact Mr. Scott Head at (361) 972-7136 or me at (361) 972-7206.

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

Executed on Sept 24, 2008



Mark McBurnett  
Vice President,  
Oversight & Regulatory Affairs

Attachments: As stated

cc: w/o attachment except\*  
(paper copy)

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NRG South Texas 3/4 LLC

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M. Kotara  
J. J. Nesrsta  
R. K. Temple  
Kevin Pollo  
L. D. Blaylock  
CPS Energy

**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 ) Docket Nos. 52-012  
 ) & 52-013  
 South Texas Project Units 3 and 4 )

AFFIDAVIT

I, Steven Winn, President of NRG South Texas 3 LLC, NRG South Texas 4 LLC, STP 3 & 4 Investments LLC, and Nuclear Innovation North America LLC, 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 3 LLC, NRG South Texas 4 LLC, STP 3 & 4 Investments LLC, Nuclear Innovation North America LLC, and NRG Energy, Inc.

2. NRG South Texas 3 LLC & NRG South Texas 4 LLC are providing information to support its application for a Combined License for STP Units 3 & 4. The information being provided is located in Part I of the application and contains financial projections related to its ownership of the South Texas Project Electric Generating Station. The application also contains proprietary commercial and financial information that should be held in confidence by the NRC pursuant to the policy reflected in 10 CFR 2.390(a)(4), because:

- i. This information is and has been withheld in confidence by NRG South Texas 3 LLC, NRG South Texas 4 LLC and their affiliates.
- ii. This information is of a type that is customarily held in confidence by NRG South Texas 3 LLC, NRG South Texas 4 LLC and their 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 3 LLC and NRG South Texas 4 LLC.
- 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 3 LLC, NRG South Texas 4 LLC and their affiliates by disclosing its internal financial projections.

3. The proprietary information in the COLA is marked with the beginning designation "[s5]" and the ending designation "[e5]." The "5" corresponds to the numbering system used in the NRC's guidance on categories of proprietary information defined in 10 CFR 2.390 and clarified by RIS-2004-11.



NUCLEAR REGULATORY COMMISSION

In the Matter of )  
 )  
 STP Nuclear Operating Company ) Docket Nos. 52-012 and 52-013  
 )  
 South Texas Project Units 3 and 4 )

AFFIDAVIT

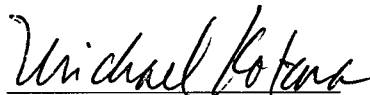
I, Michael K. Kotara, state as follows:

1. I am Executive Vice President, for the City of San Antonio acting by and through the City Public Service Board ("CPS Energy") and I 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. CPS Energy 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 CFR 2.390(a)(4), because:
  - i. This information is and has been withheld in confidence by CPS Energy and its affiliates.
  - ii. This information is of a type that is customarily held in confidence by CPS Energy 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 CPS Energy.
  - 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 CPS Energy and its affiliates by disclosing its internal financial projections.
3. The proprietary information in the COLA is marked with the beginning designation "[s5]" and the ending designation "[e5]." The "5" corresponds to the numbering system used in the NRC's guidance on categories of proprietary information defined in 10 CFR 2.390 and clarified by RIS-2004-11.
4. Accordingly, CPS Energy requests that the designated portions of the COLA be withheld from public disclosure pursuant to 10 CFR 2.390(a)(4).



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 19 day of September 2008.



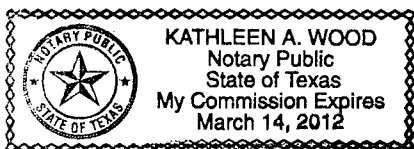
Michael K. Kotara  
Executive Vice President,  
Energy Development  
CPS Energy

STATE OF TEXAS

COUNTY OF BEXAR

)  
}  
)

The signature above was subscribed and sworn before and to me, a Notary Public, in and for the State of Texas, this 19th day of September, 2008.



Notary  
Texas Notary No.:

(SEAL)

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

In the Matter of )

STP Nuclear Operating Company )

South Texas Project Units 3 and 4 )

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.

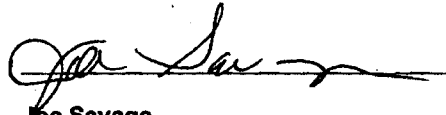
The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

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.

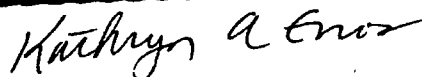
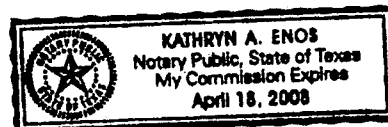
Executed on this 15th day of September 2007.



**Joe Savage**  
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**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.

<b>Chapter 20 Provision</b>	<b>Relocated to FSAR</b>
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**

**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.



**ATTACHMENT 4**

**SUMMARY OF COMMITMENTS**

## SUMMARY OF COMMITMENTS

The following table lists the new commitments made in Revision 2 to the COLA as well as changes or clarifications to commitments made in References 1 through 6 to this letter.

<b>COLA Section / Commitment Number</b>	<b>Commitment</b>	<b>Milestone</b>	<b>Commitment Type</b>
Part 2, Section 1.13 (COM 1C-1)	Station Blackout procedures will be developed.	Per Plant Operating Procedures Development Plan	Revised
Part 2, Section 2.4S.6 (Letter ABR-AE-07000014 Commitment 5)	Review "The Current State of Knowledge Regarding Potential Tsunami Sources Affecting U.S. Atlantic and Gulf Coasts," and update FSAR Subsection 2.4S.6 if required.	12/04/2008	Revised
Part 2, Section 3H (COM 3H-1)	Structural design and analysis report for the Radwaste Building to be available for the NRC review  (Due to the re-classification of the Radwaste Building from Seismic Category 1 to non-seismic (see departure STD DEP T1 2.15-1), Subsection 3H.3 of the COLA has been deleted, including Commitment 3H-1 to prepare a structural design and analysis report for the building.)	Prior to Fuel Load	Deleted
Part 2, Section 3H (COM 3H-2)	Additional borings taken under relocated UHS, RSW pump house and RSW tunnels. The data evaluations related to these additional investigations are currently being compiled. Final seismic analysis of site-specific Category I structures to be updated in the FSAR	First COLA revision to be submitted in 2009	Revised

<b>COLA Section / Commitment Number</b>	<b>Commitment</b>	<b>Milestone</b>	<b>Commitment Type</b>
Part 2 , Section 4.4 (COM 4.4-3)	STPNOC will provide an updated Stability Option III analysis once fuel is procured and the associated safety analysis is performed. This information will be available no later than 1 year prior to fuel load.	No later than 1 year prior to fuel load.	New
Part 2 , Section 9.1 (COM 9.1-3)	<p>The COL applicant shall provide a list of all cranes, hoists, and elevators and their lifting capacities, including any limit and safety devices required for automatic and manual operation...</p> <p>The information above is either vendor specific and will be established following equipment procurement, or involves associated programs that will be developed as the equipment is procured. Appropriate descriptions will be added with an FSAR amendment in accordance with 10 CFR 50.71(e) prior to receipt of fuel.</p>	Prior to Fuel Receipt	Revised
Part 2, Section 15.4 (COM 15.4-1)	The analysis results of the fuel bundle mislocated event will be prepared based on NRC approved methods and provided as an amendment to the FSAR in accordance with 10 CFR 50.71(e) at least one year prior to fuel load. This analysis will reflect the final fuel design for the initial core loading.	At least one year prior to fuel load.	Revised
Part 2, Section 15.4 (COM 15.4-2)	The analysis results of the fuel bundle misoriented event will be prepared based on NRC approved methods and provided as an amendment to the FSAR in accordance with 10 CFR 50.71(e) at least one year prior to fuel load. This analysis will reflect the final fuel design for the initial core loading.	At least one year prior to fuel load.	Revised

<b>COLA Section / Commitment Number</b>	<b>Commitment</b>	<b>Milestone</b>	<b>Commitment Type</b>
Part 2, Section 19.9 (COM 19.9-3)	<p>Removed the guideline requirement for sandbagging the RSW pump house.</p> <p>Modified procedure requirement (3) as follows:</p> <p>(3) Procedures will be developed to ensure that flood barriers and external watertight doors are closed on notification of Colorado River dam failures upstream of the site or upon notification of severe storms with a potential for significant rainfall.</p>	Prior to Fuel Load	Revised
Part 2, Section 19.9 (COM 19.9-9)	<p>Added RSW pump house internal flood as a procedure to be developed. Modified procedure requirements to reflect UHS relocation and RSW pump house redesign, as follows:</p> <p>(8) Ensure that seals on radwaste tunnels between buildings are adequate to prevent interbuilding flooding.</p> <p>(9) Ensure that the RSW pump house is designed to prevent interdivisional flooding.</p> <p>(10) Ensure that the redundant RSW supply side isolation valves shut on receipt of a high-high level indication in the RCW heat exchanger room.</p>	Prior to Fuel Load	Revised
Part 2, Section 19.9 (COM 19.9-18)	Operating procedures to manual transfer the Combustion Turbine Generator (CTG) power to the condensate and condensate booster pumps and its support systems will be developed.	Prior to Fuel Load	Revised

<b>COLA Section / Commitment Number</b>	<b>Commitment</b>	<b>Milestone</b>	<b>Commitment Type</b>
Part 5 Section 5.7 (COM EP-1)	A Letter of Agreement from the NSSS Vendor will be obtained to support the Emergency Plan for an event at STP 3 & 4 on a 24/7 basis.	Prior to start of construction	Commitment Satisfied. A copy of the Letter of Agreement with Toshiba is included in Section 5.7.