

November 7, 2007

MEMORANDUM TO: Michael R. Gartman, Chief
ESBWR/ABWR Projects Branch 2
Division of New Reactor Licensing
Office of New Reactors

FROM: Michael R. Snodderly, Chief **/RA/**
Containment and Ventilation Branch 2
Division of Safety Systems and Risk Assessment
Office of New Reactors

SUBJECT: ACCEPTANCE REVIEW RESULTS FOR THE SOUTH TEXAS
PROJECT COMBINED LICENSE APPLICATION

The Containment and Ventilation Branch 2 (SBCV) has completed its acceptance review of the South Texas Project (STP) Combined License application (COLA) submitted by NRG Energy. This review covered the following COLA FSAR Sections for which SBCV has primary review responsibilities and, in addition, applicable interface documentation referenced in the FSAR:

- FSAR Appendix 3B
- FSAR Section 6.2
- FSAR Section 6.4
- FSAR Section 6.5
- FSAR Appendix 6C
- FSAR Section 9.4
- FSAR Section 14.3.11

Enclosure: 1. Table 1: Safety Analysis Report Acceptance Review Results for STP COLA
2. Table 2: SBCV Resource Plan Revisions for NRG Energy STP COLA

CONTACT: Michael Snodderly, NRO/DSRA/SBCV
301-415-2241

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MEMORANDUM TO: Michael R. Gartman, Chief
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Division of New Reactor Licensing
Office of New Reactors

FROM: Michael R. Snodderly, Chief /**RA**/
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- FSAR Appendix 3B
- FSAR Section 6.2
- FSAR Section 6.4
- FSAR Section 6.5
- FSAR Appendix 6C
- FSAR Section 9.4
- FSAR Section 14.3.11

Enclosure: 1. Table 1: Safety Analysis Report Acceptance Review Results for STP COLA
2. Table 2: SBCV Resource Plan Revisions for NRG Energy STP COLA

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OFFICE	NRO/DSRA/SBCV	NRO/DSRA/SBCV
NAME	/ama	Michael Snodderly, BC
DATE	11/07/2007	11/07/2007

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Completeness and Adequacy

Based on this review, I conclude that the application contains the information required by regulations and that the submitted information is technically adequate for SBCV to commence the STP COLA detailed technical review.

Schedule

The estimated effort for the detailed technical review of the STP COLA sections by SBCV is generally consistent with the current pre-baseline EPM model. Therefore, the resource plan that currently exist in EPM may be retained, except for those sections noted below.

The estimated effort for the detailed technical review of the following STP COLA FSAR/SRP Sections by SBCV varies materially from the pre-baseline model in EPM. For each section, I have provided an updated resource plan for these tasks in Enclosure 2. The resource plan includes the new estimated level of effort, the resource(s) assigned, and the expected start date (or predecessor task that controls the start date e.g., application accepted milestone). New resource plans have been submitted for the following SRP sections:

- FSAR Appendix 3B
- FSAR Section 6.2.1.2
- FSAR Section 6.2.2
- FSAR Section 6.2.3
- FSAR Section 6.5.1
- FSAR Appendix 6C
- SRP Section 9.4.2
- FSAR Section 9.4.4
- FSAR Section 9.4.8
- FSAR Section 9.4.10
- FSAR Section 14.3.11

Review Dependencies.

SBCV's detailed technical review of the STP COL Section 6.2 is dependent on the staff's review of NEDO- 33372 and NEDO-33330P, Rev. 1, September 2007.

Attachment C: Safety Analysis Report Acceptance Review Guide - For a Combined License Application (COLA) Referencing a Certified Design

Table 1: Safety Analysis Report Acceptance Review Results for South Texas ABWR COL

SER Section: _6.2_____

Technical Branch: __SBCV_(Primary/Secondary)

Technical Reviewer: Andrzej Drozd

Branch Chief: _M. Snodderly_____

SRP Section: 6.2.1 & 6.5.3_

Date: _10/31/07_____

Does the section address the applicable regulations: Yes/No

Are there any technical deficiencies, changes in planning assumptions, or dependencies on concurrent reviews? Yes/No, Identify specific review area/topic in table below.

1. Review Area/Topic*	Completeness and Technical Sufficiency Which Form Basis for Acceptability for Docketing					Changes to Planning Assumptions to be Considered in Development of Baseline Review Schedule			Review Dependencies Among Concurrent Reviews	
	2. Does COL section address the items required by regulation (refer to RG 1.206, Section C.IV.1)? (Yes/No)	3. Is COL section technically sufficient for this review area/topic? (yes/no)*	4. Can the technical deficiency be resolved through the RAI process? (yes/no)***	5. If no, for either completeness or technical sufficiency, identify deficiency(ies). This information will be needed for technical review.	6. Is the identified technical deficiency related to a risk-significant SSC)? (yes/no)**	7. Are the pre-baseline review schedule and estimated staff-hours appropriate? (yes/no)	8. For each no, identify the change (or basis for change).	9. Identify the total review time in staff-hours*****	10. Can the review of the area/topic be completed without the completion of a concurrent review? (yes/no)	11. For each no, identify which application (DCD or COLA) and section
SRP 6.2.1	Containment Functional Design					DCD 6.2 Containment System			180 h	
LTR NEDO-33372	yes	yes	yes	n/a	yes	yes	n/a		yes	n/a
STD DEP T1 2.4-2	yes	yes	yes	n/a	yes	yes	n/a		yes	n/a
STD DEP T1 3.4-1	yes	yes	yes	n/a	yes	yes	n/a		yes	n/a
SRP 6.5.3	Fission Product Control Systems and Structures					DCD 6.5 Fission Products Removal and Control Systems			25 h	

STD DEP T1 2.14.1	yes	yes	yes	n/a	yes	no	n/a		yes	Support for ST review
Non SRP DCD App. 3B containment Hydrodynamic Loads								40 h		
STD DEP T1 2.4-3	yes	yes	yes	n/a	yes	yes	Add 40hrs originally not included because of non-SRP issue		yes	Support to SRSB
STP DEP 3B-1	yes	yes	yes	n/a	yes	yes	n/a		yes	n/a
STD DEP 6.2-1 (Tables 6.2-1, 6.2-2, 6.2-2A)	yes	yes	yes	n/a	yes	no	n/a		yes	n/a
STD DEP Adm (Figures 3C-11, 3B-21, 3B-24, 3B-26)	yes	yes	yes	n/a	yes	yes	n/a		yes	n/a

*Review Area/Topic: Item identified in RG 1.206 or the regulations; for a COLA referencing a DC, this includes COL information items and departures from the design certification.

**Technical Sufficiency: The application is compared against the SRP acceptance criteria. Note: New safety features, alternate regulatory compliance approaches, and/or deviations from DCs, should not be treated as deficiencies and factored into the basis for rejecting the application, unless staff determines that there is insufficient technical information associated with the respective item. These items are factored into confirmation of planning assumptions.

***Significant deficiencies are those review area/topic which impact the staff's ability to begin the detailed technical review or complete its review within a predictable timeframe.

****DSRA will provide risk significance information at time of review, if available.

*****Identification of new review time is on a FSAR section basis and consistent with the review phases within the EPM. Changes from the pre-baseline review schedule and estimated hours should be on that basis.

**Table 2: SBCV Resource Plan Revisions for
STP 3&4 ABWR RCOL**

Task Changes						Resource Changes		
SER Section No.	SER Section Title	Task *	Concurrent Dependent Review Activity **	Revised Start Date	Revised Finish Date	Name of Resource	Change Type ***	Revised Hours
Non SRP App. 3B	n/a	Containment Hydrodynamic Loads				Andrzej Drozd	Added Hours	P1 -40 P2-8

This template is to be used to facilitate management of revised planning data resulting from application acceptance reviews. Changes in planning data resulting from acceptance reviews may include identifying dependencies to concurrent activities in other projects, new or deleted tasks, or revisions to task durations, staffing, labor estimates, or start/finish dates.

* Specify the task being revised: SER Phase 1 – PSER and RAIs Prepared
SER Phase 2 – Evaluation Completed
Other – Give task name
Indicate if this task or SER section is new (not yet in the schedule).

** Concurrent Dependent Review Activity: Identify, if any, the project and activity that precedes the affected task in this schedule (e.g., Task in a design certification review that precedes a COL review).

*** Change Type indicates how the resource is being Revised – For an existing task, if a currently assigned resource is staying the same, but the hours or dates are being changed.
changed: New – For an existing task or a new task, if a new resource is being added to the task.
Deleted – For an existing task and a currently assigned resource, if the resource is being removed from the task.

Attachment C: Safety Analysis Report Acceptance Review Guide - For a Combined License Application (COLA) Referencing a Certified Design

Table 1: Safety Analysis Report Acceptance Review Results for South Texas ABWR COL

SER Section: 9.4 Technical Branch: SBCV (Primary/Secondary) Technical Reviewer: Ed Forrest

Branch Chief: M. Snodderly SRP Section: 9.4 Date: 10/30/07

Does the section address the applicable regulations: Yes/No

Are there any technical deficiencies, changes in planning assumptions, or dependencies on concurrent reviews? Yes/No, Identify specific review area/topic in table below.

1. Review Area/Topic*	Completeness and Technical Sufficiency Which Form Basis for Acceptability for Docketing					Changes to Planning Assumptions to be Considered in Development of Baseline Review Schedule			Review Dependencies Among Concurrent Reviews		
	2. Does COL section address the items required by regulation (refer to RG 1.206, Section C.IV.1)? (Yes/No)	3. Is COL section technically sufficient for this review area/ topic? (yes/no)**	4. Can the technical deficiency be resolved through the RAI process? (yes/no)***	5. If no, for either completeness or technical sufficiency, identify deficiency(ies). This information will be needed for technical review.	6. Is the identified technical deficiency related to a risk-significant SSC)? (yes/no)****	7. Are the pre-baseline review schedule and estimated staff-hours appropriate? (yes/no)	8. For each no, identify the change (or basis for change).	9. Identify the total review time in staff-hours*****	10. Can the review of the area/topic be completed without the completion of a concurrent review? (yes/no)	11. For each no, identify which application (DCD or COLA) and section.	
SRP 9.4.1	Control Room Area Ventilation System					DCD 9.4.1 Control Building HVAC			30 h		
STD DEP 9.4-2 (Figure 9.4-1 Sheets 1-5)	yes	yes	yes	n/a	yes	yes	n/a		yes	n/a	
STD DEP 9.4-6 (Figure 9.4-1, Sheets 1 and 2)	yes	yes	yes	n/a	yes	yes	n/a		yes	n/a	

SRP 9.4.2 Spent Fuel Pool Area Ventilation System DCD 9.4.5.1 Reactor Building Secondary Containment								30 h	Delete hours. No task.	
SRP 9.4.3 Auxiliary and Radwaste Area Ventilation System DCD 9.4.6 Radwaste								30 h		
STD DEP 9.4-5 (Figure 9.4-10, Sheets 1,2, and 3)	yes	yes	yes	n/a	yes	yes	n/a		yes	n/a
STP DEP 5.0-1	yes	yes	yes	n/a	yes	yes	n/a		yes	n/a
SRP 9.4.4 Turbine Building Ventilation DCD 9.4.4 Turbine Island HVAC System								30 h		
STD DEP 9.4-4 (Tables 9.4-3, 9.4-5, 9.4-5a, 9.4-5b, 9.4-5c, and 9.4-5d), (Figures 9.4-2a, 9.4-2b Sheet 2, and 9.4-2c)	yes	yes	yes	n/a	yes	no	Add 80 hours	.	yes	Heat loads, cooling adequacy, equipment qualification in TB environment, impact of radiation in TB, structural design, protection of SR equipment. Need to ascertain equivalency between certified design and proposed change.
SRP 9.4.5 Engineered Safety Feature Ventilation System DCD 9.4.5 Reactor Building HVAC								30 h		
STD DEP T1 2.14-1 (Figure 9.4-3)	yes	yes	yes	n/a	yes	yes	n/a		yes	n/a
Non SRP DCD 9.4.8 Service Building HVAC System								0 h		
STP DEP 9.4-1	Yes	yes	yes	n/a	yes	no	Add 20 hours		yes	n/a
STD DEP 9.4-3	Yes	no	yes	Building and TSC isolation and air supply evaluation	yes	no	Add 20 hours		yes	DCD/COLA TSC features
Non SRP DCD 9.4.10 COL License Information								0 h		
9.4.10.1 Service Building HVAC	yes	yes	yes	n/a	yes	no	Add 15 hours		yes	n/a
9.4.10.2 Radwaste	yes	yes	yes	n/a	yes	no	Add 15 hours		yes	n/a

Building HVAC										

*Review Area/Topic: Item identified in RG 1.206 or the regulations; for a COLA referencing a DC, this includes COL information items and departures from the design certification.

**Technical Sufficiency: The application is compared against the SRP acceptance criteria. Note: New safety features, alternate regulatory compliance approaches, and/or deviations from DCs, should not be treated as deficiencies and factored into the basis for rejecting the application, unless staff determines that there is insufficient technical information associated with the respective item. These items are factored into confirmation of planning assumptions.

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Table 2: SBCV Resource Plan Revisions for NRG Energy ABWR RCOL

Task Changes						Resource Changes		
SER Section No.	SER Section Title	Task *	Concurrent Dependent Review Activity **	Revised Start Date	Revised Finish Date	Name of Resource	Change Type ***	Revised Hours
SRP 9.4.2	Spent Fuel Pool Area Ventilation System	No identified change from certified design				Ed Forrest	Hours reduction	0
9.4.4	Turbine island HVAC	SER P1 Incorporate electrical building into and expansion of the turbine building. Some other identified equipment changes				Ed Forrest Syed Haider	Hours addition	50 60
9.4.8	Service Building HVAC System	SER P1 Minor changes and review of isolation of TSC and air supply				Ed Forrest	Hours addition	40
9.4.10	COL license Information	SER P1 Review changes to tables for acceptability				Ed Forrest	Hours addition	30

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* Specify the task being revised: SER Phase 1 – PSER and RAIs Prepared
SER Phase 2 – Evaluation Completed
Other – Give task name
Indicate if this task or SER section is new (not yet in the schedule).

** Concurrent Dependent Review Activity: Identify, if any, the project and activity that precedes the affected task in this schedule (e.g., Task in a design certification

review that precedes a COL review).

*** Change Type indicates how the resource is being changed:

Revised – For an existing task, if a currently assigned resource is staying the same, but the hours or dates are being changed.

New – For an existing task or a new task, if a new resource is being added to the task.

Deleted – For an existing task and a currently assigned resource, if the resource is being removed from the task.

**Table 2: SBCV Resource Plan Revisions for
NRG Energy STP ABWR COLA**

Task Changes						Resource Changes		
SER Section No.	SER Section Title	Task *	Concurrent Dependent Review Activity **	Revised Start Date	Revised Finish Date	Name of Resource	Change Type ***	Revised Hours
6.2.2	Containment Heat Removal	1. Task assigned to other reviewer (A. Drozd)	n/a	n/a	n/a	Andrzej Drozd	Hours reduction	0

This template is to be used to facilitate management of revised planning data resulting from application acceptance reviews. Changes in planning data resulting from acceptance reviews may include identifying dependencies to concurrent activities in other projects, new or deleted tasks, or revisions to task durations, staffing, labor estimates, or start/finish dates.

* Specify the task being revised: SER Phase 1 – PSER and RAIs Prepared
SER Phase 2 – Evaluation Completed
Other – Give task name
Indicate if this task or SER section is new (not yet in the schedule).

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*** Change Type indicates how the resource is being changed: Revised – For an existing task, if a currently assigned resource is staying the same, but the hours or dates are being changed.
New – For an existing task or a new task, if a new resource is being added to the task.
Deleted – For an existing task and a currently assigned resource, if the resource is being removed from the task.

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Table 1: Safety Analysis Report Acceptance Review Results for South Texas ABWR COL

FSER Section: 6.2.4_____ Technical Branch: _SBCV_____(Primary/Secondary) Technical Reviewer: __R. Goel_____

Branch Chief: _M. Snodderly_____ SRP Section: __6.2.4_____ Date: __11/05/07_____

Does the section address the applicable regulations: Yes/No

Are there any technical deficiencies, changes in planning assumptions, or dependencies on concurrent reviews? Yes/No, Identify specific review area/topic in table below.

1. Review Area/Topic*	Completeness and Technical Adequacy Which Form Basis for Acceptability for Docketing					Changes to Planning Assumptions to be Considered in Development of Baseline Review Schedule			Review Dependencies Among Concurrent Reviews	
	2. Does the section address the applicable regulations (refer to RG 1.206, Section C.IV.1)? (Yes/No)	3. Is COL section technically sufficient for this review area/ topic? (yes/no)**	4. Can the technically deficiency be resolved through the RAI process? (yes/no)**	5. If no, for either completeness or technical adequacy, identify deficiency(ies). This information will be needed for technical review.	6. Is the identified technical deficiency related to a risk-significant SSC)? (yes/no)***	7. Are the pre-baseline review schedule and estimated staff-hours appropriate? (yes/no)	8. For each no, identify the change (or basis for change).	9. Identify the total review time in staff-hours*****	10. Can the review of the area/topic be completed without the completion of a concurrent review? (yes/no)	11. For each no, identify which application (DCD or COLA) and section.
SRP 6.2.4 Containment Isolation System								84h		
STD DEP T1 2.4-3, and T1 2.14-1 (Tables	yes	yes	yes	n/a	yes	yes	n/a		yes	n/a

6.2-7, 6.2-8 and 6.2-10).									
STD DEP 6.2-1, 6.2-3, and 9.3-2 (Tables 6.2-7, 6.2.8 and 6.2-10 and Figures 6.2-38, 6.2-39 and 6.2-40)	yes	yes	yes	n/a	yes	yes	n/a	yes	n/a

*Review Area/Topic: Item identified in RG 1.206 or the regulations; for a COLA referencing a DC, this includes COL information items and departures from the design certification.

**Technical Adequacy: The application is compared against the SRP acceptance criteria. Note: New safety features, alternate regulatory compliance approaches, and/or deviations from DCs, should not be treated as deficiencies and factored into the basis for rejecting the application, unless staff determines that there is insufficient technical information associated with the respective item. These items are factored into confirmation of planning assumptions.

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Table 1: Safety Analysis Report Acceptance Review Results for South Texas ABWR COL

FSER Section: 6.2.5_____ Technical Branch: _SBCV_____(Primary/Secondary) Technical Reviewer: __R. Goel_____

Branch Chief: _M. Snodderly_____ SRP Section: __6.2.5_____ Date: __11/05/07_____

Does the section address the applicable regulations: Yes/No

Are there any technical deficiencies, changes in planning assumptions, or dependencies on concurrent reviews? Yes/No, Identify specific review area/topic in table below.

1. Review Area/Topic *	Completeness and Technical Adequacy Which Form Basis for Acceptability for Docketing					Changes to Planning Assumptions to be Considered in Development of Baseline Review Schedule			Review Dependencies Among Concurrent Reviews	
	2. Does COL section address the items required by regulation (refer to RG 1.206, Section C.IV.1)? (Yes/No)	3. Is COL section technically sufficient for this review area/ topic? (yes/no)**	4. Can the technically deficiency be resolved through the RAI process? (yes/no)**	5. If no, for either completeness or technical adequacy, identify deficiency(ies). This information will be needed for technical review.	6. Is the identified technical deficiency related to a risk-significant SSC)? (yes/no)***	7. Are the pre-baseline review schedule and estimated staff-hours appropriate? (yes/no)	8. For each no, identify the change (or basis for change).	9. Identify the total review time in staff-hours****	10. Can the review of the area/topic be completed without the completion of a concurrent review? (yes/no)	11. For each no, identify which application (DCD or COLA) and section.
SRP 6.2.5 Combustible Gas Control in Containment								125 h		
STD DEP T1 2.14- 1 (Tables 6.2-7 , 6.2-8 and 6.2.10 ; and	yes	yes	yes	n/a	yes	yes	n/a		yes	n/a

Fig. 6.2-40 sht.1 and 2)									
Elimination of H2 Recombine rs NEDO- 33330	yes	yes	yes	n/a	yes	yes	n/a	yes	n/a

*Review Area/Topic: Item identified in RG 1.206 or the regulations; for a COLA referencing a DC, this includes COL information items and departures from the design certification.

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Table 1: Safety Analysis Report Acceptance Review Results for South Texas ABWR COL

FSER Section: 6.2.6_____ Technical Branch: _SBCV_____(Primary/Secondary) Technical Reviewer: __R. Goel_____

Branch Chief: _M. Snodderly_____ SRP Section: __6.2.6_____ Date: __10/31/07_____

Does the section address the applicable regulations: Yes/No

Are there any technical deficiencies, changes in planning assumptions, or dependencies on concurrent reviews? Yes/No, Identify specific review area/topic in table below.

1. Review Area/Topic*	Completeness and Technical Adequacy Which Form Basis for Acceptability for Docketing					Changes to Planning Assumptions to be Considered in Development of Baseline Review Schedule			Review Dependencies Among Concurrent Reviews	
	2. Does COL section address the items required by regulation (refer to RG 1.206, Section C.IV.1)? (Yes/No)	3. Is COL section technically sufficient for this review area/ topic? (yes/no)**	4. Can the technically deficiency be resolved through the RAI process? (yes/no)**	5. If no, for either completeness or technical adequacy, identify deficiency(ies). This information will be needed for technical review.	6. Is the identified technical deficiency related to a risk-significant SSC)? (yes/no)***	7. Are the pre-baseline review schedule and estimated staff-hours appropriate? (yes/no)	8. For each no, identify the change (or basis for change).	9. Identify the total review time in staff-hours****	10. Can the review of the area/topic be completed without the completion of a concurrent review? (yes/no)	11. For each no, identify which application (DCD or COLA) and section.
SRP 6.2.6 Containment Leakage Testing								84 h		
STD DEP Admin and COL License Information Item 6.3 (Admin. Control maintain	yes	yes	yes	n/a	yes	yes	n/a		yes	n/a

Containment Isolation)									
COL License Information Item 6.5a (Containment Leakage Rate Test ,Type B)	yes	yes	yes	n/a	yes	yes	n/a	yes	n/a

*Review Area/Topic: Item identified in RG 1.206 or the regulations; for a COLA referencing a DC, this includes COL information items and departures from the design certification.

**Technical Adequacy: The application is compared against the SRP acceptance criteria. Note: New safety features, alternate regulatory compliance approaches, and/or deviations from DCs, should not be treated as deficiencies and factored into the basis for rejecting the application, unless staff determines that there is insufficient technical information associated with the respective item. These items are factored into confirmation of planning assumptions.

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Attachment C: Safety Analysis Report Acceptance Review Guide – For a combined License Application (COLA) Referencing a Certified Design

Table 1: Safety Analysis Report Acceptance Review Results for South Texas ABWR COL

FSER Section: 14.3.11_____ Technical Branch: _SBCV_____(Primary/Secondary) Technical Reviewer: __R. Goel_____

Branch Chief: _M. Snodderly_____ SRP Section: __14.3.11_____ Date: __10/31/07_____

Does the section address the applicable regulations: Yes/No

Are there any technical deficiencies, changes in planning assumptions, or dependencies on concurrent reviews? Yes/No, Identify specific review area/topic in table below.

1. Review Area/Topic*	Completeness and Technical Adequacy Which Form Basis for Acceptability for Docketing					Changes to Planning Assumptions to be Considered in Development of Baseline Review Schedule			Review Dependencies Among Concurrent Reviews	
	2. Does the section address the applicable regulation (refer to RG 1.206, Section C.IV.1)? (Yes/No)	3. Is COL section technically sufficient for this review area/ topic? (yes/no)**	4. Can the technically deficiency be resolved through the RAI process? (yes/no)**	5. If no, for either completeness or technical adequacy, identify deficiency(ies). This information will be needed for technical review.	6. Is the identified technical deficiency related to a risk-significant SSC)? (yes/no)***	7. Are the pre-baseline review schedule and estimated staff-hours appropriate? (yes/no)	8. For each no, identify the change (or basis for change).	9. Identify the total review time in staff-hours****	10. Can the review of the area/topic be completed without the completion of a concurrent review? (yes/no)	11. For each no, identify which application (DCD or COLA) and section.
SRP 14.3.11 Containment ITAAC								15 h		
14.3S Inspection, Tests, Analyses and Acceptance Criteria (ITAAC)	yes	yes	yes	n/a	yes	yes	n/a		yes	n/a

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Safety Analysis Report Acceptance Review Results Table

FSER Section: 6.2.3

Technical Branch: SBCV (Primary/Secondary)

Technical Reviewer: Syed I. Haider

Branch Chief: Michael Snodderly SRP Section: 6.2.3

Date: 10/30/2007

Does the section address the applicable regulations: Yes/No

Are there any technical deficiencies, changes in planning assumptions, or dependencies on concurrent reviews? Yes/No, Identify specific review area/topic in table below.

1. Review Area/Topic*	Completeness and Technical Adequacy Which Form Basis for Acceptability for Docketing					Changes to Planning Assumptions to be Considered in Development of Baseline Review Schedule			Review Dependencies Among Concurrent Reviews	
	2. Does the section address the applicable regulations (refer to RG 1.206, Section C.IV.1)? (Yes/No)	3. Is COL section technically sufficient for this review area/ topic? (yes/no)**	4. Can the technically deficiency be resolved through the RAI process? (yes/no)**	5. If no, for either completeness or technical adequacy, identify deficiency(ies). This information will be needed for technical review.	6. Is the identified technical deficiency related to a risk-significant SSC)? (yes/no)***	7. Are the pre-baseline review schedule and estimated staff-hours appropriate? (yes/no)	8. For each no, identify the change (or basis for change).	9. Identify the total review time in staff-hours****	10. Can the review of the area/topic be completed without the completion of a concurrent review? (yes/no)	11. For each no, identify which application (DCD or COLA) and section.
Secondary Containment Functional Design								8		
No departure report exists for DCD Section 6.2.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	

*Review Area/Topic: Item identified in RG 1.206 or the regulations; for a COLA referencing a DC, this includes COL information items and departures from the design certification.

**Technical Adequacy: The application is compared against the SRP acceptance criteria. Note: New safety features, alternate regulatory compliance approaches, and/or deviations from DCs, should not be treated as deficiencies and factored into the basis for rejecting the application, unless staff determines that there is insufficient technical information associated with the respective item. These items are factored into confirmation of planning assumptions.

***DSRA will provide risk significance information at time of review, if available.

****Identification of new review time is on a FSAR section basis and consistent with the review phases within the EPM. Changes from the pre-baseline review schedule and estimated hours should be on that basis.

**Table 2: SBCV Resource Plan Revisions for
NRG Energy STP ABWR COLA**

Task Changes						Resource Changes		
SER Section No.	SER Section Title	Task *	Concurrent Dependent Review Activity **	Revised Start Date	Revised Finish Date	Name of Resource	Change Type ***	Revised Hours
6.2.3	Secondary Containment Functional Design	SER P1 No departure report exists for DCD Section 6.2.3. A conclusory reference will be made to the input.		1/7/2008	4/15/2008	Syed Haider	Hours reduction	8
6.2.3	Secondary Containment Functional Design	SER P2 No identified change from the certified design.		6/13/2008	7/25/2008	Syed Haider	Hours reduction	0

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* Specify the task being revised: SER Phase 1 – PSER and RAIs Prepared
SER Phase 2 – Evaluation Completed
Other – Give task name
Indicate if this task or SER section is new (not yet in the schedule).

** Concurrent Dependent Review Activity: Identify, if any, the project and activity that precedes the affected task in this schedule (e.g., Task in a design certification review that precedes a COL review).

*** Change Type indicates how the resource is being changed:

- Revised – For an existing task, if a currently assigned resource is staying the same, but the hours or dates are being changed.
- New – For an existing task or a new task, if a new resource is being added to the task.
- Deleted – For an existing task and a currently assigned resource, if the resource is being removed from the task.

Safety Analysis Report Acceptance Review Results Table

FSER Section: 6.4

Technical Branch: SBCV (Primary/Secondary)

Technical Reviewer: Syed I. Haider

Branch Chief: Michael Snodderly SRP Section: 6.4

Date: 10/30/2007

Does the section address the applicable regulations: Yes/No

Are there any technical deficiencies, changes in planning assumptions, or dependencies on concurrent reviews? Yes/No, Identify specific review area/topic in table below.

1. Review Area/Topic*	Completeness and Technical Adequacy Which Form Basis for Acceptability for Docketing					Changes to Planning Assumptions to be Considered in Development of Baseline Review Schedule			Review Dependencies Among Concurrent Reviews	
	2. Is regulation (refer to RG 1.206, Section C.IV.1)? (Yes/No)	3. Is COL section technically sufficient for this review area/topic? (yes/no)**	4. Can the technically deficiency be resolved through the RAI process? (yes/no)**	5. If no, for either completeness or technical adequacy, identify deficiency(ies). This information will be needed for technical review.	6. Is the identified technical deficiency related to a risk-significant SSC? (yes/no)***	7. Are the pre-baseline review schedule and estimated staff-hours appropriate? (yes/no)	8. For each no, identify the change (or basis for change).	9. Identify the total review time in staff-hours****	10. Can the review of the area/topic be completed without the completion of a concurrent review? (yes/no)	11. For each no, identify which application (DCD or COLA) and section.
Habitability Systems								60		
STD DEP 9.4-2	Yes	Yes	Yes	NA	Yes	Yes	NA		No	COLA 9.5.1.1.6 (Smoke Control System)
COL License Information Item 6.8	Yes	Yes	Yes	NA	Yes	Yes	NA		Yes	

*Review Area/Topic: Item identified in RG 1.206 or the regulations; for a COLA referencing a DC, this includes COL information items and departures from the design certification.

**Technical Adequacy: The application is compared against the SRP acceptance criteria. Note: New safety features, alternate regulatory compliance approaches, and/or deviations from DCs, should not be treated as deficiencies and factored into the basis for rejecting the application, unless staff determines that there is insufficient technical information associated with the respective item. These items are factored into confirmation of planning assumptions.

***DSRA will provide risk significance information at time of review, if available.

****Identification of new review time is on a FSAR section basis and consistent with the review phases within the EPM. Changes from the pre-baseline review schedule and estimated hours should be on that basis.

Safety Analysis Report Acceptance Review Results Table

FSER Section: 6.5.1 Technical Branch: SBCV (Primary/Secondary) Technical Reviewer: Syed I. Haider
 Branch Chief: Michael Snodderly SRP Section: 6.5.1 Date: 10/30/2007

Does the section address the applicable regulations: Yes/No

Are there any technical deficiencies, changes in planning assumptions, or dependencies on concurrent reviews? Yes/No, Identify specific review area/topic in table below.

1. Review Area/Topic*	Completeness and Technical Adequacy Which Form Basis for Acceptability for Docketing					Changes to Planning Assumptions to be Considered in Development of Baseline Review Schedule			Review Dependencies Among Concurrent Reviews	
	2. Is regulation (refer to RG 1.206, Section C.IV.1)? (Yes/No)	3. Is COL section technically sufficient for this review area/ topic? (yes/no)**	4. Can the technically deficiency be resolved through the RAI process? (yes/no)**	5. If no, for either completeness or technical adequacy, identify deficiency(ies). This information will be needed for technical review.	6. Is the identified technical deficiency related to a risk-significant SSC)? (yes/no)***	7. Are the pre-baseline review schedule and estimated staff-hours appropriate? (yes/no)	8. For each no, identify the change (or basis for change).	9. Identify the total review time in staff-hours****	10. Can the review of the area/topic be completed without the completion of a concurrent review? (yes/no)	11. For each no, identify which application (DCD or COLA) and section.
Engineered Safety Features Filter Systems								8		
No departure report exists for DCD Section 6.5.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	

*Review Area/Topic: Item identified in RG 1.206 or the regulations; for a COLA referencing a DC, this includes COL information items and departures from the design certification.

**Technical Adequacy: The application is compared against the SRP acceptance criteria. Note: New safety features, alternate regulatory compliance approaches, and/or deviations from DCs, should not be treated as deficiencies and factored into the basis for rejecting the application, unless staff determines that there is insufficient technical information associated with the respective item. These items are factored into confirmation of planning assumptions.

***DSRA will provide risk significance information at time of review, if available.

****Identification of new review time is on a FSAR section basis and consistent with the review phases within the EPM. Changes from the pre-baseline review schedule and estimated hours should be on that basis.

**Table 2: SBCV Resource Plan Revisions for
NRG Energy STP ABWR COLA**

Task Changes						Resource Changes		
SER Section No.	SER Section Title	Task *	Concurrent Dependent Review Activity **	Revised Start Date	Revised Finish Date	Name of Resource	Change Type ***	Revised Hours
6.5.1	Engineered Safety Features Filter Systems	SER P1 No departure report exists for DCD Section 6.5.1. A conclusory reference will be made to the input.		1/7/2008	4/15/2008	Syed Haider	Hours reduction	8
6.5.1	Engineered Safety Features Filter Systems	SER P2 No identified change from the certified design.		6/13/2008	7/25/2008	Syed Haider	Hours reduction	0

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* Specify the task being revised: SER Phase 1 – PSER and RAIs Prepared
SER Phase 2 – Evaluation Completed
Other – Give task name
Indicate if this task or SER section is new (not yet in the schedule).

** Concurrent Dependent Review Activity: Identify, if any, the project and activity that precedes the affected task in this schedule (e.g., Task in a design certification

review that precedes a COL review).

*** Change Type indicates how the resource is being changed:

Revised – For an existing task, if a currently assigned resource is staying the same, but the hours or dates are being changed.

New – For an existing task or a new task, if a new resource is being added to the task.

Deleted – For an existing task and a currently assigned resource, if the resource is being removed from the task.

Safety Analysis Report Acceptance Review Results Table

FSER Section: 6.2Technical Branch: SBCV (Primary/~~Secondary~~)

Technical Reviewers: Henry A. Wagage and

Nathan Hudson (DCD

6.C only)

Branch Chief: Michael Snodderly SRP Sections: 6.C (Non SRP), 6.2.1.2, 6.2.1.3

Date: 10/31/07

Does the section address the applicable regulations: Yes/No

Are there any technical deficiencies, changes in planning assumptions, or dependencies on concurrent reviews? Yes/No, Identify specific review area/topic in table below.

1. Review Area/Topic*	Completeness and Technical Adequacy Which Form Basis for Acceptability for Docketing					Changes to Planning Assumptions to be Considered in Development of Baseline Review Schedule			Review Dependencies Among Concurrent Reviews	
	regulation (refer to RG 1.206, Section C.IV.1)? (Yes/No)	3. Is COL section technically sufficient for this review area/ topic? (yes/no)**	4. Can the technically deficiency be resolved through the RAI process? (yes/no)**	5. If no, for either completeness or technical adequacy, identify deficiency(ies). This information will be needed for technical review.	6. Is the identified technical deficiency related to a risk-significant SSC)? (yes/no)***	7. Are the pre-baseline review schedule and estimated staff-hours appropriate? (yes/no)	8. For each no, identify the change (or basis for change).	9. Identify the total review time in staff-hours****	10. Can the review of the area/topic be completed without the completion of a concurrent review? (yes/no)	11. For each no, identify which application (DCD or COLA) and section.
Non SRP DCD 6.C Containment Debris Protection for ECCS Strainers								0 h		
Containment Debris Protection	yes	yes	yes	NA	NA	yes		150 h	no	New addition of DCD Section 6.C as recommended in RG 1.206 Section C.I.6.2.2; hours for both Wagage and Hudson
SRP 6.2.1.2 Subcompartment Analysis DCD 6.2.1.2 Containment Subcompartments								30 h		
No DEPs, No COL LIIs	NA	NA	NA	NA	NA	no	Reduce hours	8 h		
SRP 6.2.1.3 Mass and Energy Release Analyses for Postulated LOCAs								30 h		

DCD 6.2.1.3 Mass and Energy Release Analyses for Postulated LOCAs									
Containment Analysis in LTR NEDO-33372, September 2007 (Figures 6.2-22 through 6.2-25)	yes	yes	yes	NA	NA	yes		no	Containment Analysis in LTR NEDO-33372

*Review Area/Topic: Item identified in RG 1.206 or the regulations; for a COLA referencing a DC, this includes COL information items and departures from the design certification.

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Safety Analysis Report Acceptance Review Results Table
Table 2: SBCV Resource Plan Revisions for
NRG Energy STP ABWR COLA

Task Changes						Resource Changes		
SER Section No.	SER Section Title	Task *	Concurrent Dependent Review Activity **	Revised Start Date	Revised Finish Date	Name of Resource	Change Type ***	Revised Hours
6.C	Containment Debris Protection for ECCS Strainers	SER P1 Containment Debris Protection for ECCS Strainers				Harry Wagage	Hours addition	60
6.C	Containment Debris Protection for ECCS Strainers	SER P2 Containment Debris Protection for ECCS Strainers				Harry Wagage	Hours addition	15
6.C	Containment Debris Protection for ECCS Strainers	SER P1 Containment Debris Protection for ECCS Strainers				Nathan Hudson	Hours addition	60
6.C	Containment Debris Protection for ECCS Strainers	SER P2 Containment Debris Protection for ECCS Strainers				Nathan Hudson	Hours addition	15
6.2.1.2	Containment Subcompartment Analysis	No identified change from certified design				Harry Wagage	Hours reduction	8

* Specify the task being revised: SER Phase 1 – PSER and RAIs Prepared
SER Phase 2 – Evaluation Completed
Other – Give task name

Indicate if this task or SER section is new (not yet in the schedule).

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Safety Analysis Report Acceptance Review Results Table

FSER Section: 14.3 Technical Branch: SBCV (Primary/Secondary) Technical Reviewer: Henry A. Wagage

Branch Chief: Michael Snodderly SRP Sections: 14.3.11 Date: 10/31/07

Does the section address the applicable regulations: Yes/No

Are there any technical deficiencies, changes in planning assumptions, or dependencies on concurrent reviews? Yes/No, Identify specific review area/topic in table below.

1. Review Area/Topic*	Completeness and Technical Adequacy Which Form Basis for Acceptability for Docketing					Changes to Planning Assumptions to be Considered in Development of Baseline Review Schedule			Review Dependencies Among Concurrent Reviews	
	2. Does the section address the applicable regulations (refer to RG 1.206, Section C.IV.1)? (Yes/No)	3. Is COL section technically sufficient for this review area/ topic? (yes/no)**	4. Can the technical deficiency be resolved through the RAI process? (yes/no)**	5. If no, for either completeness or technical adequacy, identify deficiency(ies). This information will be needed for technical review.	6. Is the identified technical deficiency related to a risk-significant SSC)? (yes/no)***	7. Are the pre-baseline review schedule and estimated staff-hours appropriate? (yes/no)	8. For each no, identify the change (or basis for change).	9. Identify the total review time in staff-hours****	10. Can the review of the area/topic be completed without the completion of a concurrent review? (yes/no)	11. For each no, identify which application (DCD or COLA) and section.
SRP 14.3.11 Containment Systems ITAAC DCD 14.3 Tier 1 Selection Criteria and Process								15 h		
STD DEP T1 2.4-2 Feedwater Line Break Mitigation	yes	yes	yes	NA	NA	no	Add 12 h		yes	
STD DEP 6.2- 2, Containment Analysis	yes	yes	yes	NA	NA	yes	Add 15 h		yes	
STD DEP 16.3-7, LCO 3.4.2,	yes	yes	yes	NA	NA	no	Add 8 h		yes	

Safety/Relief Valves (S/RVs)										

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**Table 2: SBCV Resource Plan Revisions for
NRG Energy STP ABWR COLA**

Task Changes						Resource Changes		
SER Section No.	SER Section Title	Task *	Concurrent Dependent Review Activity **	Revised Start Date	Revised Finish Date	Name of Resource	Change Type ***	Revised Hours
14.3.11	Containment Systems ITAAC	1. Changes reducing challenges to the containment pressure design value following a FWLB 2. Containment analysis changes and associated TS changes 3. Removes overpressurization reference				Harry Wagage	Hours addition	P1 – 35 h P2 – 15 h

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- * Specify the task being revised: SER Phase 1 – PSER and RAIs Prepared
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Other – Give task name
Indicate if this task or SER section is new (not yet in the schedule).
- ** Concurrent Dependent Review Activity: Identify, if any, the project and activity that precedes the affected task in this schedule (e.g., Task in a design certification review that precedes a COL review).
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