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

Background Information

This Review Guide is intended to be used by the technical branches to document the results of their acceptance reviews of an application and use those results as a reference to inform later acceptance reviews. Additionally, the results of the acceptance review through the use of this Review Guide will be communicated to the lead and NPLS project managers (PMs) so they can evaluate the impacts of the technical issues identified during this review on the pre-baseline schedule. This review guide contains two tables: Table 1, "Safety Analysis Report Acceptance Review Results Table," and Table 2, "[Branch Name] Resource Plan Revisions for [Applicant Name] [Design Center Name] [Application Type]." Table 1 is organized by review area(s)/topic(s) within assigned safety evaluation report (SER) sections, while, Table 2 is aligned to planning and schedule needs at the SER section level.

Prior to the acceptance review, the project managers and technical reviewers should be familiar with:

- the anticipated scope of review of the combined license application (COLA) including the following:
    - Assigned COLA section(s) and relevant supplemental information (e.g., AP1000 or ABWR Technical Reports), departures from the DCD, DAC and/or ITAAC.
    - Design-specific finality matrices (compilation of COL information items and other COL issues) have been prepared for reference by staff reviewing COLAs referencing the AP1000 or ABWR. This information is available within the project specific integrated workspace.
    - RG 1.206, Section C.III contains the expected information for a COLA referencing a DCD.
    - Corresponding section(s) of the standard review plan (SRP).
    - A List of SAR Review Areas Potentially Involving More Detailed Review has been developed and is in ADAMS (ML072430683). This list does not replace the SRP, rather represents a list of review areas contained within the SRP that may potentially involve more detailed technical review (e.g., involve computer code evaluation, detailed data analysis, new safety feature, or emerging operating experience).
    - Familiarity with the design-centered-review approach (DCRA)[1], such that staff decisions made on the "reference COL" would apply to all "subsequent COLs".
    - Concurrent reviews (e.g., DC application review, DC amendment review, For a subsequent COLA review the reference COLA, and/or related topical report reviews).
- the EPM pre-baseline review schedule and estimated man-hours.

The following directions should be used by PMs and technical staff in performing the acceptance review. Table 1 is used to document the results. The information in this table will be used to evaluate the acceptability of the COLA for docketing as discussed in Section 3.2.1 of the Office Instruction. The documentation of the acceptance review in this table is not intended

[1]Additional information on DCRA is provided in SECY-06-0019, dated January 31, 2006.

to replace the technical review, issuance of requests for additional information and/or the safety evaluation that are part of the staff's technical review.

I. Completeness Review: Verify that the COLA contains all of the information required by the applicable regulations for your assigned review(s) as discussed in Section 3.2.1 of the Office Instruction. If the COL applicant uses the statement that a review topic is incorporated by reference to the DC, this statement constitutes a complete response relative to that COLA section.

A. Document the review area(s)/topic(s) in Column 1

B. Determine whether the applicant has addressed the regulations for the assigned review area. ***See RG 1.206, Section C.IV.1, "Combined License Application Acceptance Review Checklist."*** [yes/no in Column 2]

10 CFR 52.79 identifies prescriptive requirements for the contents of a COLA. These requirements are captured in the RG 1.206 checklist. However, 52.79 also contains cross-cutting requirements. For the following cross-cutting requirements, determine the applicability to your review section(s). The applicant's responses to these requirements are contained in Chapter 1 of the FSAR:

1. TMI requirements [10 CFR 52.79(a)(17)];
2. Proposed technical resolutions of unresolved safety issues and medium- and high-priority generic safety issues [10 CFR 52.79(a)(20)];
3. Introduction of new safety features [10 CFR 52.79(a)(24)];
4. Operating experience insights incorporated into the plant design [10 CFR 52.79(a)(37)];
5. Conformance with SRP [10 CFR 52.79(a)(41)];

Additional cross-cutting requirements specifically related to information required for a COLA referencing a DC include:

6. Demonstration that the site characteristics fall within the site parameters specified in the design certification [10 CFR 52.79(d)(1)] (summarized in Chapter 2 of the FSAR)
7. Demonstration that interface requirements have been met [10 CFR 52.79(d)(2)];
8. Demonstration of all requirements and restrictions set forth in the referenced design certification rule, other than those imposed under §50.36b, must be satisfied by the date of issuance of the COL [10 CFR 52.79(d)(3)] - (***this includes addressing COL information items, COL action items, and Departures from the certified design***).

C. For each review area/topic not addressed, summarize deficiency in Column 5.

D. For each review area/topic not addressed, notify management and communicate to projects branch.

II. Technical Sufficiency Review: Identify significant technical deficiencies in the COLA associated with your assigned review using the attached table and the following

guidelines. The information contained in the various parts of the COLA that are discussed above in the Background Information should also be considered. A technical deficiency is missing technical information that is needed by the NRC staff (e.g., SRP, RG 1.206) to complete the assigned review of the application. A significant technical deficiency is missing information for which the staff is unable to begin its review of the application against the acceptance criteria in the SRP or complete its review within a predictable timeframe. To clarify, a technical deficiency should be able to be addressed through an RAI without notably impacting the length of the review, i.e., the applicant indicated that the information is available, but was not included as part of the application. While a significant technical deficiency could be addressed successfully through the RAI process, if done so, it could become a significant risk to meeting the overall schedule for the COLA.

Additional consideration should be given to any review areas/topics contained in the Safety Analysis Report Acceptance Review List as they could require more extensive review time than is reflected in the EPM pre-baseline review schedule.

As noted in Section 3.2.1, risk insights may be available during the acceptance review. If so, these insights should be used to help determine the scope of the technical sufficiency review. If a review area/topic is associated with to a risk-significant SSC, indicate a yes in Column 6, in the attached table.

For the determined scope of technical sufficiency review:

A. Document additional review areas/topics in Column 1, as needed
B. Determine whether the COLA section(s) is(are) sufficient to begin the detailed technical review for the review areas/topics identified in Column 1 [yes/no in Column 3]
C. Determine whether the review areas/topics identified in Column 1 can be resolved through the RAI process. Discuss with management whether to categorize the deficiency as “significant.” [yes/no in Column 4]
D. Document the technical deficiency(ies) that could prevent you from beginning your detailed technical review in Column 5. Describe the basis(es) for the deficiencies. These review area/topics may involve a significant amount of time to address (e.g., development of computer codes or first-of-a-kind testing) and estimate how this could impact the overall review schedule for your COLA section.
E. Notify the lead PM of significant deficiencies as soon as they are identified.
F. Determine whether the identified technical deficiency is related to a risk-significant SSC [yes/no in Column 6].

III. Changes to Planning Assumptions: Re-evaluate the total review time needed to conduct a technical review which accounts for the significant technical deficiencies that are documented in the attached table. The acceptance review allows the reviewer to identify potential changes from the EPM pre-baseline review schedule and estimated staff-hours which needs to be captured so that NPLS can develop an application-specific baseline review schedule and adjust the staff-hours. The following characteristics of a COLA may require additional review time:

A. Departures from the DCD;

B. Inclusion or reference to new safety features;

C. Alternative approaches to SRP acceptance criteria (including alternatives to regulatory guides);

D. Instances of a site characteristic falling outside of design parameters;

E. For a subsequent COL, deviations from the reference COL; or

F. Other miscellaneous review topics that have not been adequately represented within the baseline model.

To determine the potential impact of the review area/topic on the overall section staff-hours in the pre-baseline schedule, the technical staff considers the following guidelines. For each item identified above, determine whether the review effort is reflected within the pre-baseline model (e.g., the estimated staff-hours are sufficient to to perform the review of the departure?) [yes/no in Column 7]. For each "no" in table, identify the change to the EPM staff-hour planning assumptions and provide a basis (e.g., "departure not addressed in pre-baseline review schedule") in Column 8. Identify the projected review time in staff-hours needed to address all of the applicable items above for your COLA section.

Following completion of Table 1, the review area/topic information is translated into planning and scheduling information by completion of Table 2. A completed table is provided for reference. Notify management of these changes as soon as they are identified.

IV. Identification of Dependencies between Concurrent Reviews: Identify any known dependencies between concurrent reviews. These dependencies could be between a DC review and a concurrent COL review (e.g., EPR DCD review concurrent with the EPR RCOL review), or there could be dependencies between reference COLs and subsequent COLs. These dependencies could potentially result in changes to planning assumptions. For example, the staff-hours associated with the review of a topical or technical report may be captured separate from the baseline review schedule. Those hours should not be double counted in related reviews. However, this does not change the duration of the task.

A. Identify and document review dependencies in the table (Columns 10 and 11).
B. This information is then translated to Table 2 for the SER Section.

V. Completion of Table 2: As previously stated, Table 2 translates the acceptance review from specific review area/topics within an assigned review area into planning and scheduling information on SER section level. Note, this table can also be used to change personnel assignments. The assigned NPLS representative is available to support completion of this table.

Table 1: Safety Analysis Report Acceptance Review Results for [Applicant Name] [Design Center Name] [Application Type]

SER Section: _____ Technical Branch:_____(Primary/Secondary) Technical Reviewer: _____
Branch Chief:_____ SRP Section: _____ Date:_____

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.

	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	
1. Review Area/Topic*	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.

*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-basline review schedule and estimated hours should be on that basis.

Table 2: [Branch Name] Resource Plan Revisions for [Applicant Name] [Design Center Name] [Application Type]

(Suggested Format)

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**

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 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: RGS1 Resource Plan Revisions for TVA - Bellefonte AP1000 R-COL Review

(EXAMPLE)

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**
2.5.1	Geologic and Seismic Info	Site Visit (new task)	NA	1/7/08	1/11/08	Jane Doe	New	40
2.5.1	Geologic and Seismic Info	PSER and RAIs prepared	NA	NA	2/22/08	Joe Smith	Revised	30
2.5.5	Stability of Slopes	PSER and RAIs prepared	NA	NA	NA	Joe Smith	New	40
2.5.5	Stability of Slopes	PSER and RAIs prepared	NA	NA	NA	John Doe	Deleted	NA

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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.