Standardization Recommendations for License Renewal Applications - DRAFT

Office of Nuclear Reactor Regulation
Division of New and Renewed Licenses
License Renewal Projects Branch

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1.   Background

To improve the efficiency of the license renewal review process, the U.S. Nuclear Regulatory Commission (NRC) staff developed the License Renewal Roadmap in SECY-24-0026, "Achieving Timely Completion of License Renewal Safety and Environmental Reviews (License Renewal Roadmap)" (Agencywide Documents Access and Management System (ADAMS Accession No. ML24059A131) and SECY-24-0026A (ML24001A364).

The License Renewal Roadmap describes the staff's goal to conduct timely and predictable initial and subsequent license renewal reviews within 18 months, while reducing resources and providing reasonable assurance of adequate protection of public health and safety.

As described in SECY-24-0026, Appendix D, "Historical and Current Efforts to Streamline License Renewal Safety Reviews," the staff is implementing a 3-phase approach to improve the efficiency and timeliness. Phase 1, "Process Improvements," and Phase 3, "Additional Process Improvements," features the modernization efforts related to the NRC's internal tool, the Technical Review Package (TRP) Tool. As indicated on Figure 1, the TRP Tool processes license renewal applications and bundles the items into numerous work assignments for the safety review.

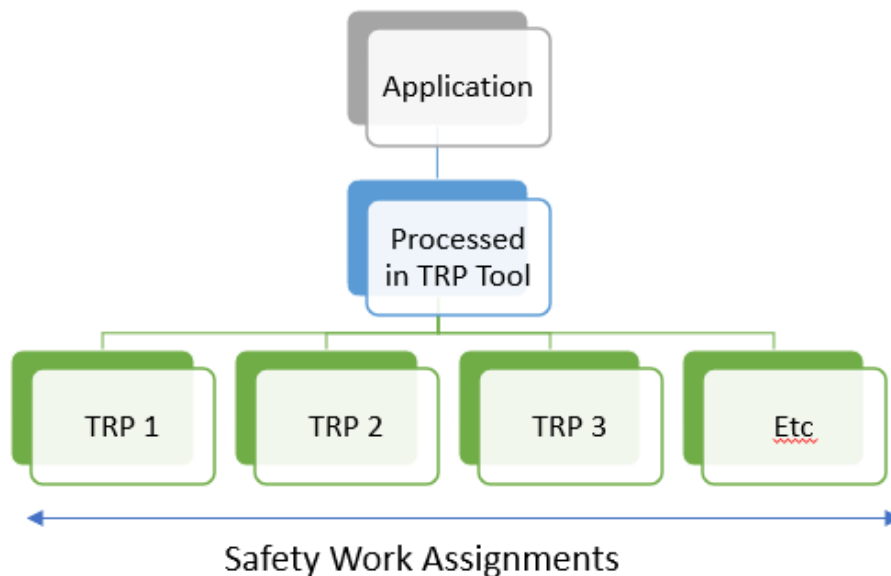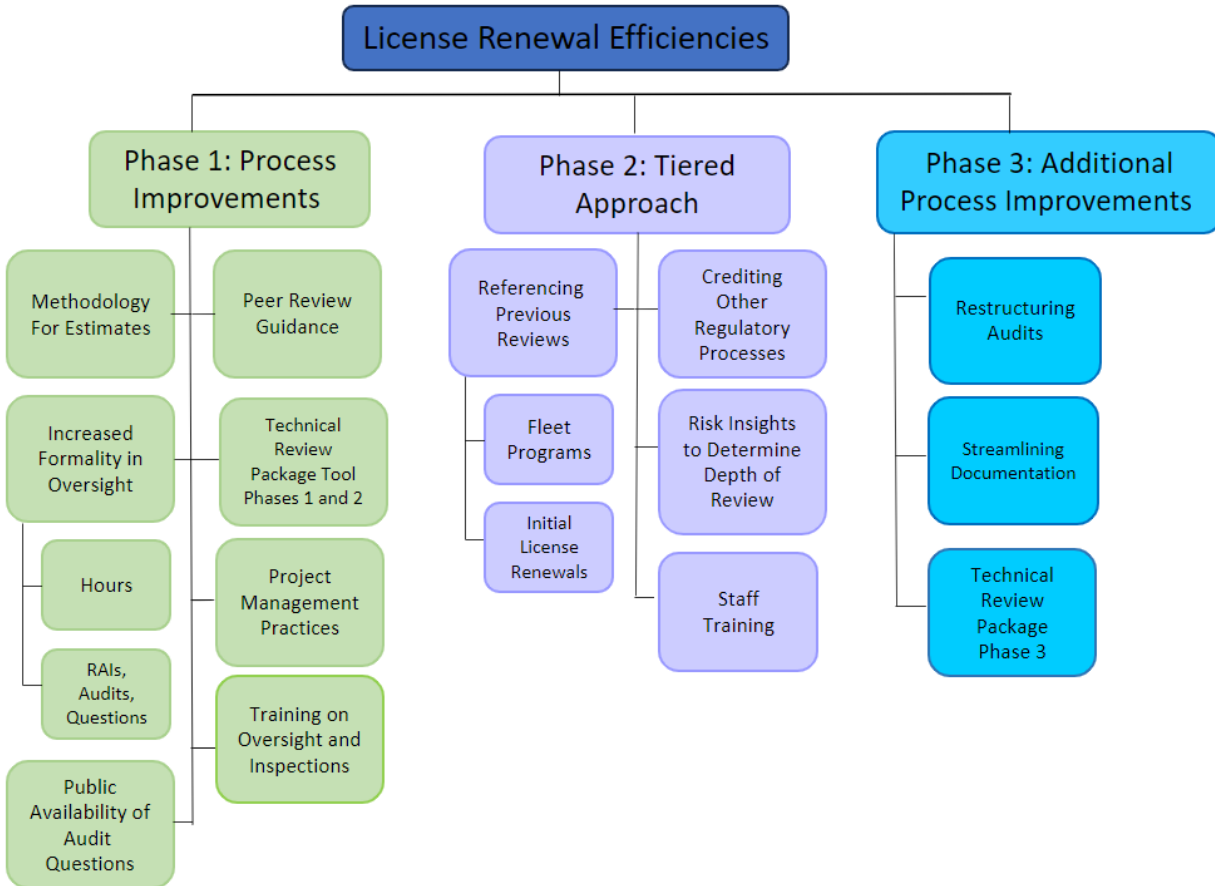**Figure 1: Purpose of the TRP Tool**

Figure 2: License Renewal Roadmap – Safety Review's 3-Phase Approach

Phases 1 and 2 of the TRP Tool Modernization Effort improved the stabilization, user experience, and timeliness of the process. In particular, Phase 1 involved stabilizing an antiquated system by remeding interruptions previously caused by system failures and unreliable networks. Phase 2 introduces automatically processing PDF submissions, which reduces the reliance of staff manual efforts to input data. This new feature is expected to contribute to the efficiency, accuracy, and timeliness of making work assignments.

Standardizing application tables, nomenclature, and changes allows for automatic processing of the submittal. While standardization is not a requirement, it contributes to a more efficient staff review.

In order to fully leverage the automation feature, this guide provides the staff's recommendations for the standardization of initial and subsequent license renewal applications (LRAs/SLRAs). Applications that do not meet the standardization recommendations will require additional manual processing.

2. Formatting of the Application

2.1 Scoping and Screening Sections

a) Consistent numbering of the Section 2 subsections will allow the TRP Tool to automatically generate Scoping and Screening (S/S) packages.

b) The TRP tool will make S/S assignments based the following section numbering in the Table of Contents:
   i. 2.1
   ii. 2.2
   iii. 2.3.X.Y-2.3.X.Z (All mechanical subheadings)
   iv. 2.4.X.Y-2.4.X.Z (All structural subheadings)
   v. 2.5.X.Y-2.5.X.Z (All electrical subheadings)
   vi. 2.X (All subheadings following 2.5 (If applicable))

c) Figure 3 is an example of the Table of Contents for Section 2, "Scoping and Screening."

Figure 3: Table of Contents, Section 2, "Scoping and Screening"

2.2   Table 1s: Formatting

a) Format item numbers with dashes "X.X.X-XX" (rather than "X.X.X.XX" or "X.X.X, XX").

b) For automatic identification by the TRP Tool, ensure consistent titling of table 1s.

c) For fewer errors, maintain consistency in column headings and column order.

d) Figure 4 is an example for Table 1s.

Figure 4: Formatting Table 1s

Table X.X.XX – Summary Table – (Description)					
Item Number	Component	Aging Effect/Mechanism	AMPs	FE Recommended	Discussion
X.X.X-XX					

2.3   Table 2s: Formatting

a) For simple identification by the TRP Tool, ensure consistent titling of table 2s.

b) For fewer errors, maintain consistency in column headings and order.

c) AMR ID column will be a numeric ID to individually designate lines in the Table 2s (an AMR ID will be unique to the corresponding line within the application).

    i.   This allows the TRP Tool to identify and make correct edits when processing Supplements/RAI Responses.

    ii.   Supplements/RAI Responses that include a new AMR will have a new AMR ID, and the Tool will be able to distinguish that line as new to the application.

    iii.   AMR IDs cannot be reused in an application even if the corresponding line has been previously deleted via Supplement/RAI Responses.

    iv.   The AMR ID allows for automatic RAI Responses/Supplement processing.

d) Each different combination of component/function/material/aging effect will be split out into an individual line. Multiple AMPs to manage one aging effect on one line are acceptable (i.e.: Water Chemistry and One-Time Inspection). Lack of aggregation will help the TRP Tool to read lines accurately and consistently.

e) If any rows have lines that split 2 pages in the application, the portion of the row on each page must have the same AMR ID number in the AMR ID column followed by "(cont)". For example, if AMR ID 12345 splits 2 pages, "12345 (cont)" would be present in the AMR ID column on the second page.

f) Table title cell and Column headers should be present on every applicable page (i.e.: if continued from the previous page, the table title and column headers will appear again)

g) Text below the Table 2 (if the table is continued to the next page) should be limited to the page number. This prevents the tool from reading extra text as part of the Table 2.

h) Figure 5 is an example for Table 2s. In this example, data for AMR ID 12345 exists on this page as well as the previous page.

Figure 5: Formatting Table 2s

AMR ID	Component	Function	Material	Environment	AERM	AMP	NUREG-2191 Item	NUREG-2192 Item	Notes
12345 (cont)									
12346									
12347									

2.4　Appendix A Summary Table

a) To aid the assignment of AMPs and TLAAs, a new table is recommended for Appendix A.

b) Use of the NUREG-2191 Number Column:

    i. If there is a corresponding GALL-SLR AMP, the designator (i.e.: XI.M20) would appear in this column.

    ii. If there is no corresponding GALL-SLR AMP, "Plant Specific" would appear in this column.

    iii. If it is a TLAA, "TLAA" would appear in this column.

c) Figure 6 is an example an Appendix A Summary Table.

Figure 6: Appendix A Summary Table

AMP/TLAA Summary Table			
NUREG-2191 Number	(Plant Name) Program/TLAA	Appendix A Section	Appendix B Section
XX.XX	XXXX	A.X.X	B.X.X
Plant Specific	XXXX	A.X.X	B.X.X
TLAA	XXXX	A.X.X	N/A

2.5　FSAR Commitments Table

a) The header (including title cell) and column names should appear on each page of the Commitments Table.

b) If a commitment spans multiple pages, the item number followed by "(cont)" should appear on each of the following pages (i.e.: If Commitment No. 12 spans two pages, the Item No. Column on the 2nd page should read "12 (cont)").

c) If possible, embedded images/tables should be avoided in the Commitments Table.

d) Numbering should be used in the implementation schedule block to indicate different implementation times for different portions of the AMP.

e) Figure 7 is an example for a FSAR Commitments Table. Text levels shown in the "Commitment" column in Figure 7 should be utilized.

Figure 7: FSAR Commitments Table

		Commitments Table – (Plant Name)	
Item No.	Aging Management Program or Topic (Section)	Commitment	Implementation Schedule
1	AMP Title (A.X.X.X)	(First level of text): 1. (Second level of text) a. (Third level of text)	(Use numbering here to separate different implementation schedule commitments for different parts of the AMP)

3. RAI Responses and Supplements: Formatting

3.1 General

a) The TRP Tool cannot distinguish between text colors.
b) Lines starting with "Difference –" show the changes the applicant makes (as is typically done). This is for readability for the staff and is not read by the TRP tool.
c) "Changed –" preceding the AMR ID (or the Table 1 item number) will show the result of the changes made in the Supplement/RAI response. This indicates to the TRP tool to replace all data associated with that AMR ID with what is in this line of the supplement. That means that this line must show a complete version of what should be associated with the line after the changes that have been made (all data in all columns are complete).
d) Lines starting with "New –" should be associated with an AMR ID that was not previously in the application.
e) Deletions are detected by the tool using the "Deleted –" format, with all following cells left blank.
f) Deleted AMR IDs should not be reused in future Supplements/RAI responses.
g) Table titles and column heading cells should appear in Supplements/RAI responses.
h) If tables are deleted, table numbers should not be reused. Tables should be deleted by applying the "Deleted –" format for each line in the table.

3.2 Changes to Table 2s

a) Figure 8 shows the recommended formatting for changes to Table 2s. The changes depicted are:
    i.   AMR 12345 is changed, adding new text and deleting old text from the "Component" field. The "Difference – 12345" line show the reader what has changed and the "Changed – 12345" shows the final line following the changes.

ii. AMR 12346 is a new AMR L/I. 12346 would not be an ID in the initial application previously. The "New –" designator would indicate creation of a new TRP L/I.

iii. AMR 12344 is deleted. The "Deleted – 12344" row with blank cells shows the TRP Tool to remove the data for that AMR L/I, while the corresponding "Difference – 12344" row shows the reader what was deleted.

Figure 8: Changes to Table 2s

Table X.X.X-XX – AMRs – (Description)									
AMR ID	**Component**	**Function(s)**	**Material**	**Environment**	**AERM**	**AMP**	**NUREG-2191 Item**	**NUREG-2192 Item**	**Notes**
Difference - 12345	Kept Text New Text ~~Deleted Text~~	Kept Text	Kept Text	Kept Text	Kept Text	Kept Text	Kept Text	Kept Text	Kept Text
Changed - 12345	Kept Text New Text	Kept Text	Kept Text	Kept Text	Kept Text	Kept Text	Kept Text	Kept Text	Kept Text
New - 12346	New Text	New Text	New Text	New Text	New Text	New Text	New Text	New Text	New Text
Difference - 12344	~~Deleted Text~~	~~Deleted Text~~	~~Deleted Text~~	~~Deleted Text~~	~~Deleted Text~~	~~Deleted Text~~	~~Deleted Text~~	~~Deleted Text~~	~~Deleted Text~~
Deleted - 12344									

3.3 Changes to Table 1s

a) Figure 9 shows a change to the "Component" column to a Table 1.
b) Changes should mimic the formatting of changes to Table 2s.

Figure 9: Changes to Table 1s

Table X.X.XX – Summary Table – (Description)					
Item Number	Component	Aging Effect/Mechanism	AMPs	FE Recommended	Discussion
Difference - X.X.X-XX	Kept Text New Text Deleted Text	Kept Text	Kept Text	Kept Text	Kept Text
Changed - X.X.X-XX	Kept Text New Text	Kept Text	Kept Text	Kept Text	Kept Text

3.4 Changes to the Appendix A Summary Table

a) Figure 10 shows the recommended formatting for example changes to the Appendix A Summary Table of an LRA/SLRA. This figure shows:
   i. The deletion of AMP XX.XX.
   ii. The addition of a plant specific AMP.
   iii. The addition of a TLAA.
b) In Figure 10, the line beginning with "Difference –" shows the reader what was deleted in the line starting in "Deleted –" The lines beginning with "New –" add a plant specific AMP and a TLAA to the application. The TRP Tool will keep track of items in this table via the Appendix A designation in this table.

Figure 10: Changes to the Summary Table

AMP/TLAA Summary			
NUREG-2191 Number	(Plant Name) Program/TLAA	Appendix A Section	Appendix B Section
Difference – XX.XX	XXXX	A.X.X	B.X.X
Deleted - XX.XX			
New - Plant Specific	XXXX	A.X.X	B.X.X
New - TLAA	XXXX	A.X.X	N/A

3.5 Changes to FSAR Commitments

a) Figure 11 shows the recommended formatting for changes to the FSAR Commitments Table. It shows additions and deletions to the wording of "Commitment 1".

b) The TRP Tool would replace the data for "Commitment 1" with what is in the row starting with "Changed - 1".

Figure 11: Changes to FSAR Commitments

		Commitments Table – (Plant Name)	
Item No.	Aging Management Program or Topic (Section)	Commitment	Implementation Schedule

Differ ence - 1	AMP Title (A.X.X.X)	Kept Text
		1. ~~Deleted Text~~ New Text Kept Text
		   a. ~~Deleted Text~~ Kept Text
		   b. New Text
			Kept Text

Chan ged - 1	AMP Title (A.X.X.X)	Kept Text
		1. New Text Kept Text
		   a. Kept Text
		   b. New Text
			Kept Text