

Advanced Reactor Content of Application
Project (ARCAP) Interim Staff Guidance
(ISG) Documents and Technology Inclusive
Content of Application Project (TICAP)
Draft Guide



Purpose

- Provide an opportunity for stakeholders to discuss their comments submitted on the nine Advanced Reactor Content of Applications/Technology Inclusive Content of Applications Interim Staff Guidance (ISG) documents and the Draft Regulatory Guide (DG-1404)
- Comment period closed August 10, 2023
 - Comment period was extended from July 10, 2023, based on stakeholder requests
- Only comments that were submitted in response to the May 25, 2023, Federal Register Notices will be discussed in the meeting

Background – How to Access Documents and Comments

- All ten documents were reissued in May of 2023 (ADAMS Package No. [ML23044A038](#)).
- Table Below provides links to the May 25, 2023, *Federal Register* Notices and the Regulations.gov Docket IDs

ARCAP ISG Title	ADAMS Accession #	<i>Federal Register</i> #	Regulations.gov Docket ID No.
DANU-ISG-2022-01, Review of Risk-Informed, Technology-Inclusive Advanced Reactor Applications - Roadmap	ML22048B546	88 FR 33924	NRC-2022-0074
DANU-ISG-2022-02, Chapter 2, “Site Information”	ML22048B541	88 FR 33940	NRC-2022-0075
DANU-ISG-2022-03, Chapter 9, “Control of Routine Plant Radioactive Effluents, Plant Contamination and Solid Waste	ML22048B543	88 FR 33930	NRC-2022-0076
DANU-ISG-2022-04, Chapter 10, “Control of Occupational Doses”	ML22048B544	88 FR 33936	NRC-2022-0077
DANU-ISG-2022-05, Chapter 11, “Organization and Human-System Consideration”	ML22048B542	88 FR 33928	NRC-2022-0078
DANU-ISG-2022-06, Chapter 12, “Post Construction Inspection, Testing and Analysis Program”	ML22048B545	88 FR 33920	NRC-2022-0079
DANU-ISG-2022-07, “Risk-Informed ISI/IST Programs”	ML22048B549	88 FR 33938	NRC-2022-0080
DANU-ISG-2022-08, “Licensing Modernization Project-based Approach for Developing Technical Specifications”	ML22048B548	88 FR 33926	NRC-2022-0081
DANU-ISG-2022-09, “Risk-Informed, Performance-Based Fire Protection Program (for Operations)”	ML22048B547	88 FR 33922	NRC-2022-0082
Draft Regulatory Guide 1404, “Guidance for a Technology Inclusive Content of Application Methodology to Inform the Licensing Basis and Content of Applications for Licenses, Certifications, and Approvals for Advanced Reactors”	ML22076A003	88 FR 33846	NRC-2022-0073

ARCAP/TICAP Background

- Guidance for developing and reviewing technology-inclusive, risk-informed, and performance-based non-light water (non-LWR) applications
- Being developed to support 10 CFR Part 50 and 10 CFR Part 52 applications
 - Needed to support expected near-term non-LWR Part 50/52 applications using the licensing modernization project (LMP) process in NEI 18-04, Revision 1
- The NRC staff intends to revise the guidance per the final Part 53 rulemaking language

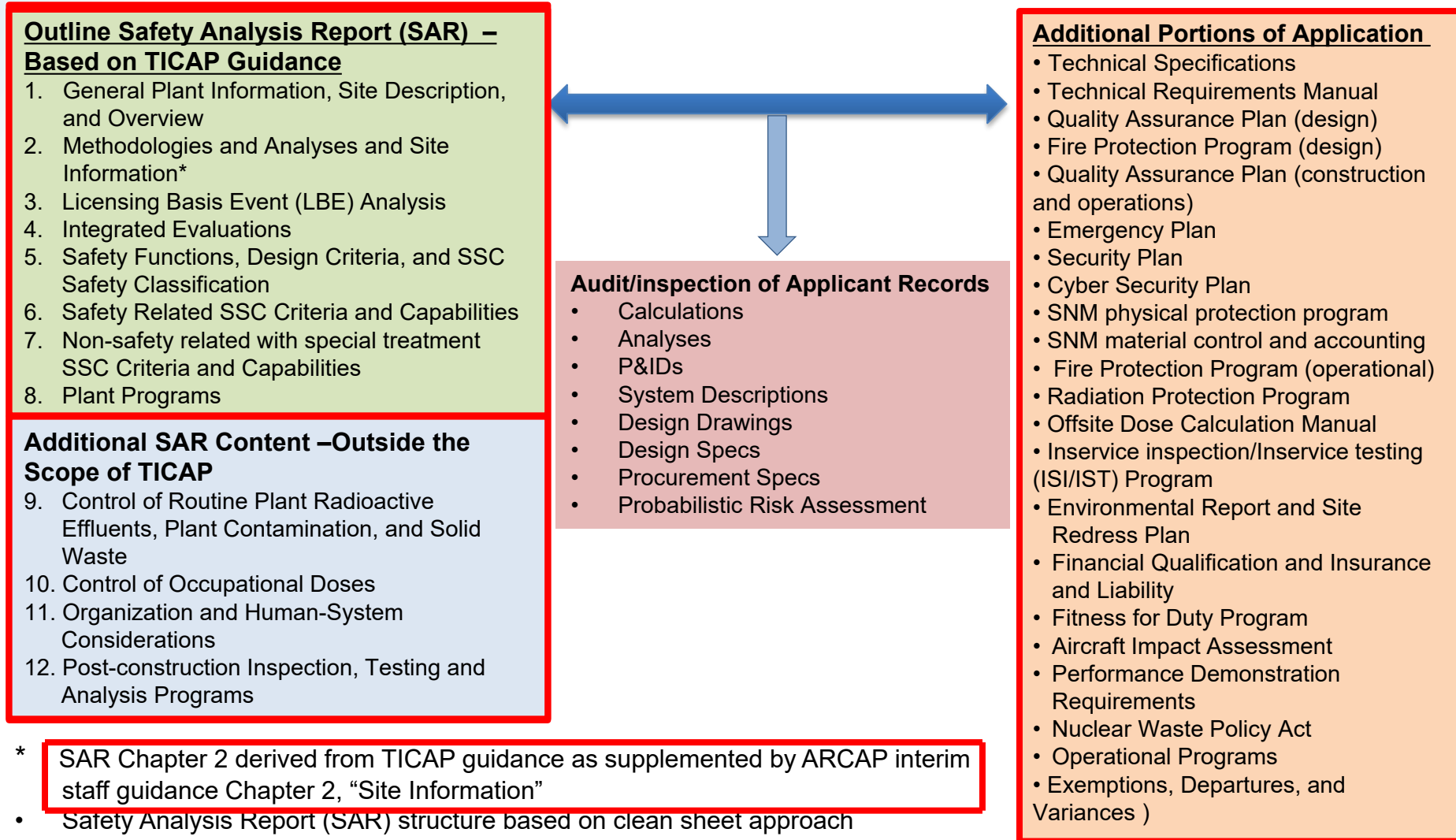
TICAP Background

- TICAP scope is governed by the LMP-based process
 - LMP uses risk-informed, performance-based approach to select licensing basis events, develop structures, systems, and components (SSC) categorization, and ensure that defense-in-depth is considered
- Industry developed key portions of TICAP guidance
 - See NEI 21-07, Revision 1, “Technology Inclusive Guidance for Non-Light Water Reactors Safety Analysis Report Content for Applicants Utilizing NEI 18-04 Methodology,” (ADAMS Accession No. [ML22060A190](#))
- DG 1404 proposes to endorse NEI 21-07, Revision 1, with clarifications and additions

ARCAP Background

- Broad in nature and intended to cover guidance for non-LWR applications for:
 - combined licenses
 - construction permits
 - operating licenses
 - design certifications
 - standard design approvals
 - manufacturing licenses
- Encompasses TICAP
 - TICAP is guidance for off-normal reactor states only. ARCAP encompasses everything needed for a license application.

ARCAP and TICAP - Nexus



* SAR Chapter 2 derived from TICAP guidance as supplemented by ARCAP interim staff guidance Chapter 2, "Site Information"

- Safety Analysis Report (SAR) structure based on clean sheet approach
- Additional contents of application may exist only in the SAR, may be in a separate document incorporated into the SAR, or may exist only outside the SAR.
- The above list is for illustration purposes only.

Discussion of Comments