

**STATUS REPORT ON THE LICENSING ACTIVITIES
AND REGULATORY DUTIES OF THE
U.S. NUCLEAR REGULATORY COMMISSION**

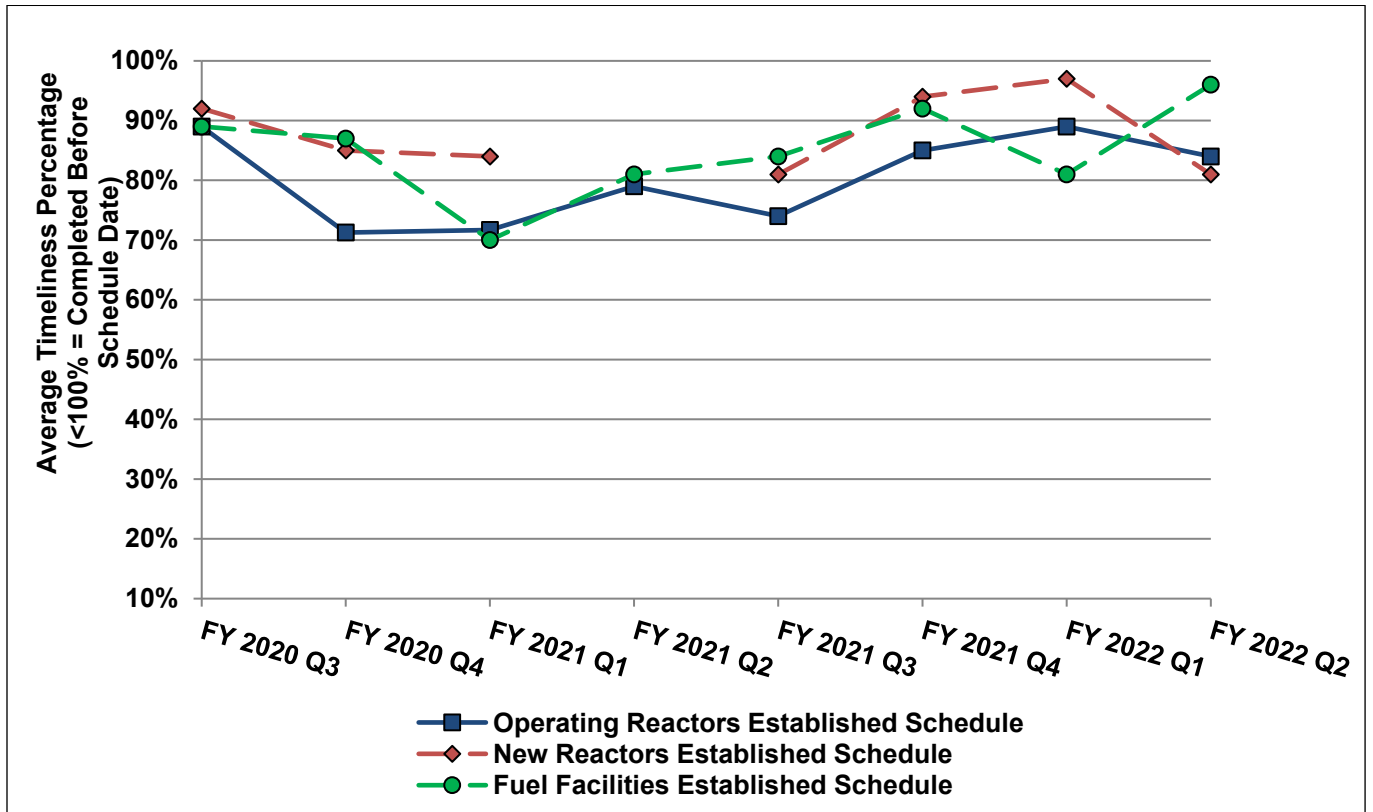
For the Reporting Period of January 1, 2022 through March 31, 2022

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Enclosure 1 – High Level Summary

1-1 Average Timeliness Percentage for Licensing Actions Categorized Under the Nuclear Energy Innovation and Modernization Act

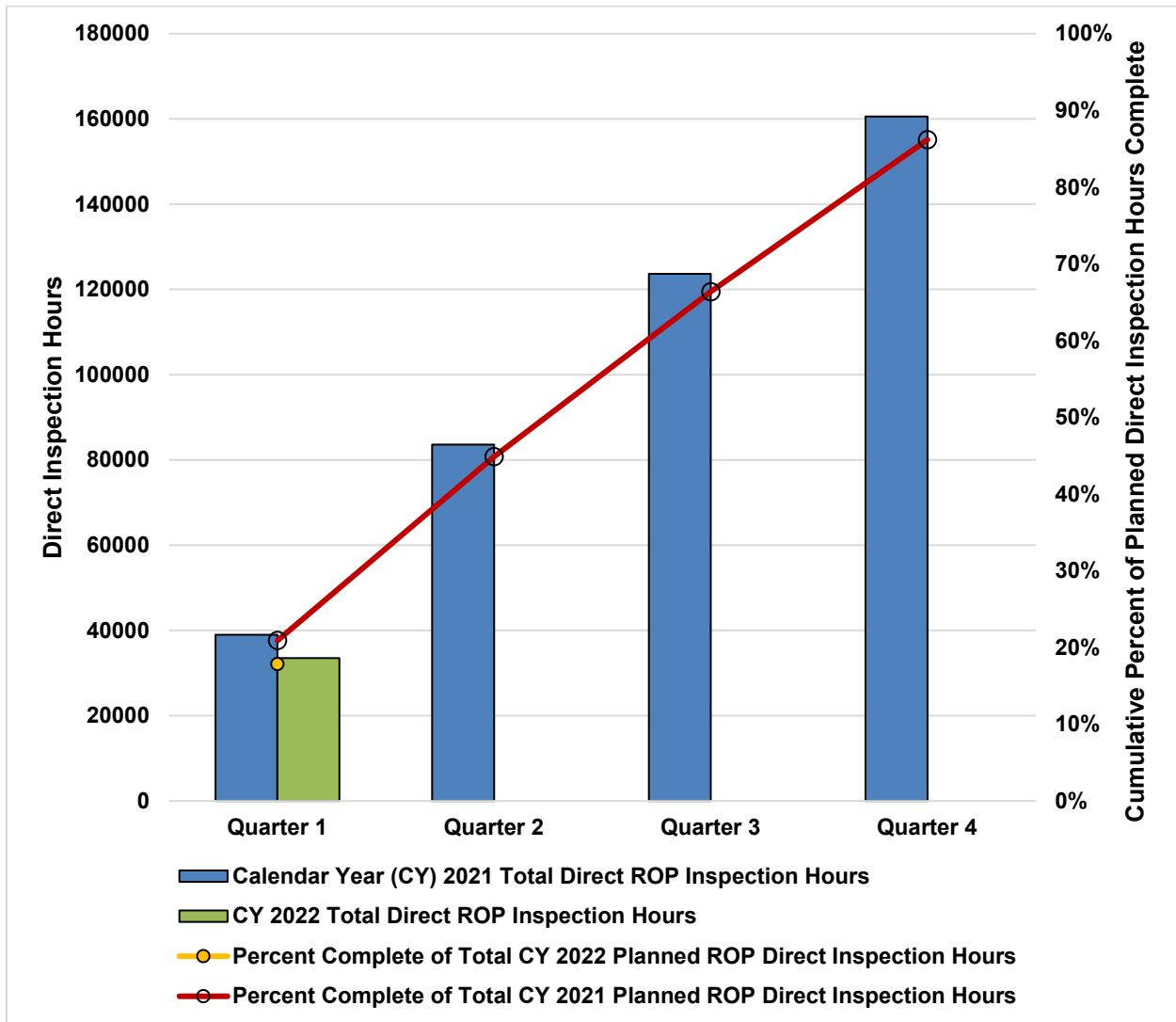


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¹ No licensing actions categorized under the Nuclear Energy Innovation and Modernization Act were completed in Quarter (Q) 2 fiscal year (FY) 2021 for the new reactor business line.

² The FY 2022 Q1 average timeliness percentage for the new reactor business line was erroneously reported as 97% in the last report. The data has been adjusted to reflect the correct percentage of 91% for FY 2022 Q1.

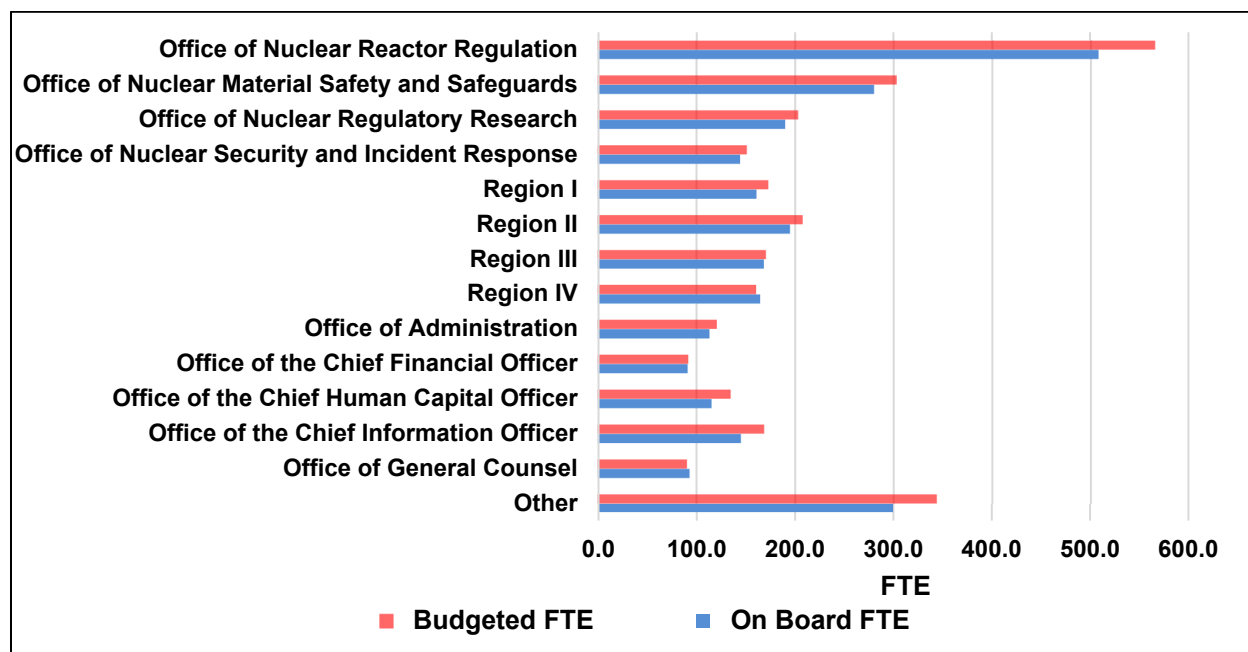
1-2 Reactor Oversight Inspection Hours and Percent Complete



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³ "Planned direct inspection hours" refers to the number of hours associated with completion of the U.S. Nuclear Regulatory Commission's (NRC's) "nominal" number of inspection samples established for the baseline inspection program, which is a conservative target. This contrasts with the "minimum" number of hours that would be necessary to complete the set of inspection activities that constitutes completion of the Reactor Oversight Process (ROP) baseline inspection program for the calendar year.

1-3 FTE at the End of Q2 FY 2022 vs. Budgeted FTE



1-4 Budget Authority, FTE Utilization, and Fees

NRC FY 2022 Budget Authority March 31, 2022 (Dollars in Thousands)

Fund Sources	FY 2022 Budget ⁴	Percent Obligated	Percent Expended
Advanced Reactors	\$17,709	43%	36%
Commission Funds	\$12,843	20%	20%
Fee-Based Funds	\$789,314	43%	37%
General Funds ⁵	\$1,158	27%	27%
International Activities	\$13,449	45%	38%
University Nuclear Leadership Program / Integrated University Program	\$13,153	33%	0%
Official Representation	\$27	13%	13%
Total	\$847,653	43%	36%
NRC Control Points	FY 2022 Budget	Percent Obligated	Percent Expended
Nuclear Reactor Safety	\$435,261	44%	40%
Nuclear Materials and Waste Safety	\$101,898	46%	42%

⁴ The agency was operating under the Further Continuing Appropriations Act, 2022 (as amended) during the reporting period; therefore, this table reflects the FY 2021 total annualized rate (i.e., the FY 2021 enacted levels). This table also includes the carryover allocated during Q2 FY 2022. The next report will reflect the enactment of the Consolidated Appropriations Act, 2022.

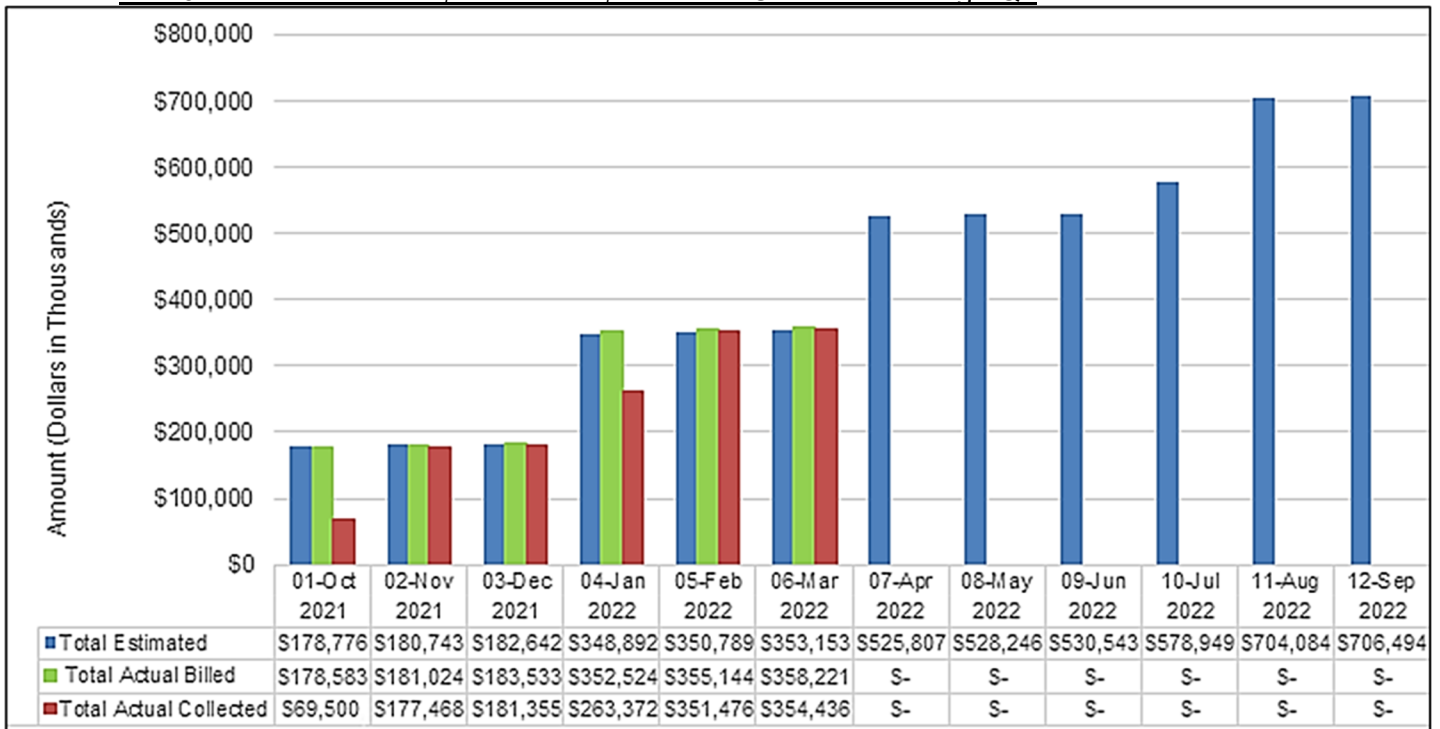
⁵ Consistent with previous reports, this row represents waste incidental to reprocessing activities excluded from the fee-recovery requirement.

Fund Sources	FY 2022 Budget ⁴	Percent Obligated	Percent Expended
Decommissioning and Low-Level Waste	\$22,580	43%	39%
Corporate Support	\$274,761	41%	28%
University Nuclear Leadership Program / Integrated University Program ⁶	\$13,153	33%	0%
Total	\$847,653	43%	36%

FTE Utilization, Hiring, and Attrition

Total Year to Date (YTD) FTE Utilization	Projected End of Year FTE Total Utilization	Quarter 2 Hiring	Quarter 2 Attrition	YTD Hiring	YTD Attrition
1347.4	2734.4	51	102	74	142

FY 2022 Fees Estimated, Fees Billed, and Fees Collected Through Q2



Total 10 CFR Part 170 Fees Billed (Dollars in Millions)

FY 2020	FY 2021	FY 2022 Q1-Q2
\$205.7	\$183.9	\$97.8

⁶ This row is labeled as "University Nuclear Leadership Program / Integrated University Program" because the FY 2021 Explanatory Statement identified this control point as the "Integrated University Program," but Division Z of the Consolidated Appropriations Act, 2021 replaced the Integrated University Program with the University Nuclear Leadership Program.

Enclosure 2 – Status of Specific Items of Interest

Enclosure 2 provides the status of specific items of interest including a summary of the item, the activities planned and accomplished under each item within the reporting period, and projected activities under each item for the next two reporting periods.

2-1 Transformation

The NRC is becoming a more modern, risk-informed regulator, open to new technologies and ways of implementing our safety and security mission. Over the past three years, the NRC has made significant progress in four focus areas: (1) recruiting, developing, and retaining a strong workforce; (2) improving decision-making through the acceptance of an appropriate level of risk without compromising the NRC’s mission; (3) establishing a culture that embraces innovation; and (4) adopting new and existing information technology resources. The agency has completed all but one of our initial agencywide initiatives associated with the four focus areas.

To sustain progress and meet the agency’s transformation goals, the NRC will use a variety of tools, including “objectives and key results” that relate to the current four focus areas (i.e., Our People, Be riskSMART, Using Technology, and Innovation). The NRC continues to leverage available technologies, increase opportunities for staff to gain new skills, attract talented new staff, and foster a culture of safety and innovation that accounts for differing viewpoints and risk insights in our decision-making. Planned future activities will focus on incorporating positive transformational changes into the agency’s culture and processes.

Activities Planned and Completed for the Reporting Period (Q2 FY 2022)

Transformation Activities	Projected Completion Date	Completion Date
Launched the Mission Analytics Portal Event Reporting module. This module will provide NRC licensees an alternative electronic submission method for reports required under Title 10 of the <i>Code of Federal Regulations</i> (10 CFR) 50.72.	02/28/22	01/20/22
Conducted a series of first-line supervisor workshops to engage in dialogue on the agency’s progress on transformation and identify actions supervisors can take to encourage use of transformation tools, while mitigating the effects of change fatigue.	02/01/22	02/01/22
Established calendar year (CY) 2022 Objectives and Key Results (Agencywide Documents Access and Management System (ADAMS) Package No. ML22049A084).	02/28/22	04/01/22 ⁷

Projected Activities for the Next Two Reporting Periods (Q3 and Q4 FY 2022)

Projected Transformation Activities	Projected Completion Date
Conduct final assessment of survey of external stakeholder views on NRC transformation activities for CY 2021.	05/31/22

⁷ Completion of this activity was delayed from the projected date of February 28, 2022, to April 1, 2022.

Projected Transformation Activities	Projected Completion Date
Brief the Commission on the staff's transformation activities (public meeting).	06/30/22
Implement a staff-led effort to recognize NRC employees who make notable and innovative contributions towards attaining agency goals through business improvements, applying risk insights, using data in decision-making, realizing culture, enhancing the work environment, or advancing knowledge management practices.	07/31/22
Launch a follow-on survey of external stakeholder views on NRC transformation activities during CY 2022.	08/31/22

2-2 Workforce Development and Management

Each fiscal year, the NRC engages in a five-step Strategic Workforce Planning (SWP) process to improve workforce development to meet its near- and long-term work demands. The first step in this process is an Agency Environmental Scan that projects the amount and type of work anticipated in the next five years and identifies the workforce needs in order to perform that work. By analyzing the current workforce and comparing it to future needs, skill gaps can be identified. In the final step of the process, both short- and long-term strategies are developed to enable the agency to recruit, retain, and develop a skilled and diverse workforce with the competencies and agility to address both current and emerging needs and workload fluctuations.

During the reporting period, the agency began implementing a strategy to recruit approximately 300 new employees to conduct mission-critical work identified through the SWP process. This recruitment effort will position the agency to fulfill its important safety and security mission well into the future.

Activities Planned and Completed for the Reporting Period (Q2 FY 2022)

Workforce Development and Management Activities	Projected Completion Date	Completion Date
Completed Steps 2 (Workload Forecasting and Workforce Demand) and 3 (Workforce Supply Analysis) to support FY 2022 SWP activities.	03/31/22	03/31/22
Conducted pre-employment hiring activities (security clearance) for Nuclear Regulator Apprenticeship Network and Summer Student Intern program selectees to facilitate timely onboarding when student's complete the semester and are available to begin work.	03/31/22	03/31/22
Began implementing hiring strategy, onboarding 79 new employees by the end of the reporting period.	03/31/22	03/31/22

Projected Activities for the Next Two Reporting Periods (Q3 and Q4 FY 2022)

Projected Workforce Development and Management Activities	Projected Completion Date
Onboard Summer 2022 Student Interns.	06/30/22

Complete Steps 4 (Gap Analysis and Risk Assessment) and 5 (Strategies and Action Plans) to support FY 2022 SWP activities.	06/30/22
Continue implementation of the recruitment strategy to hire a total of approximately 300 new employees in FY 2022.	09/30/22

2-3 Accident Tolerant Fuel

While the NRC is ready to review and license Accident Tolerant Fuel (ATF), higher burnup, and increased enrichment submittals under the current regulatory framework, the NRC continues to take steps to make agency processes more efficient and effective. The NRC staff is executing the ATF project plan (Agencywide Documents Access and Management System (ADAMS) Accession No. [ML21243A298](#)), which was revised to include an increased focus on higher burnup and increased enrichment fuels. During this reporting period, the NRC accepted for review a submission with three additional ATF fuel vendor topical reports (ADAMS Accession No. [ML22042A679](#)). These topical reports are related to updating nuclear methods to support increased enrichment fuels (ADAMS Accession No. [ML21351A266](#)). In addition, the NRC staff continues to review five other ATF fuel vendor topical reports. The NRC staff is on track to complete review of these topical reports by FY 2025.

The NRC staff approved an amendment request from Framatome to amend the certificate of compliance for the MAP transportation package authorizing Framatome to ship 17x17 fuel assemblies with enrichments above 5 weight percent uranium-235 (ADAMS Package No. [ML21343A229](#)). The NRC staff is reviewing two additional transportation package amendments (ADAMS Accession Nos. [ML21216A322](#) and [ML21181A001](#)), that are seeking increased enrichment above 5 weight percent uranium-235; the NRC staff's review of these applications is expected to be completed between early- to mid- CY 2022. The NRC expects to receive a number of license amendment requests (LARs) in CY 2022 from enrichment facilities and fuel fabricators to directly support increased enrichment above 5 weight percent uranium-235.

Activities Planned and Completed for the Reporting Period (Q2 FY 2022)

ATF Activities	Projected Completion Date	Completion Date
Issued a letter to the Nuclear Energy Institute (NEI) and other industry stakeholders to provide a generic schedule for the NRC staff's review of topical reports and site-specific licensing actions for deployment of ATF concepts, higher burnup, and increased enrichment fuels. The letter provides the staff's planning assumptions to encourage further pre-application engagement with the staff on any intended specific topical report or site-specific licensing action targeted for deployment by the mid-2020s (ADAMS Accession No. ML22003A168).	N/A ⁸	01/11/22

⁸ This letter was not identified as a projected activity in the previous report. The NRC staff issued the letter in response to stakeholder feedback requesting clarity on staff expectations for the licensing of ATF-concept, higher burnup, and increased enrichment fuels.

ATF Activities	Projected Completion Date	Completion Date
Hosted an NRC Regulatory Information Conference (RIC) session on ATF. The session provided stakeholders an opportunity to learn about the progress of ATF, increased enrichment, and higher burnup licensing activities and technologies to date and the activities that support efficient licensing of ATF concepts, increased enrichment, and higher burnup fuels. The panel discussion focused on completed ATF readiness activities, plans for the remaining stakeholder activities as well as the NRC’s projected licensing timelines, and challenges to ATF deployment timelines.	03/09/22	03/09/22

Projected Activities for the Next Two Reporting Periods (Q3 and Q4 FY 2022)

Projected ATF Activities	Projected Completion Date
Issue the Regulatory Framework Applicability Assessment and associated Licensing Pathways. The Regulatory Framework Applicability Assessment contains the NRC staff’s analysis of the applicability of regulations and guidance for coated cladding, doped pellets, higher burnup, and increased enrichment fuels. The licensing pathway diagram shows a potential plan or path forward, given the current state of technical and regulatory process.	06/30/22 ⁹
Hold a third Higher Burnup workshop. This workshop will discuss the state of development of higher burnup and increased enrichment technical and regulatory issues. It will also provide a public forum for discussions between the NRC, industry, and other stakeholders.	06/30/22

2-4 Digital Instrumentation and Control

The NRC staff continues to complete digital instrumentation and control (I&C) infrastructure improvements to address commercial grade dedication of digital equipment and protection against common cause failure (CCF). Further, the NRC staff continues to review and prepare for anticipated digital modernization LARs. While some infrastructure improvement activities continue, the staff is transitioning to using the improved infrastructure to support the review of licensees’ digital I&C modernization LARs. These activities support the NRC’s vision to establish a modern, risk-informed regulatory structure with reduced uncertainty that will enable the expanded safe use of digital technologies.

During the reporting period, the NRC staff continued to review NEI 17-06, “Guidance on Using IEC 61508 SIL Certification to Support the Acceptance of Commercial Grade Digital Equipment for Nuclear Safety Related Applications.” The NRC staff also continued to consider the implications of new approaches to address digital I&C CCF (including the approach contained in NEI 20-07, “Guidance for Addressing Software Common Cause Failure in High Safety

⁹ The projected completion date was modified from February 28, 2022, to June 30, 2022, to leverage additional stakeholder interactions such as the RIC and the industry ATF and higher burnup workshops, prior to finalizing the document.

Significant Safety Related Digital I&C Systems”) on the current NRC digital I&C policy contained in the Staff Requirements Memorandum (SRM) to SECY-93-087 (ADAMS Accession No. [ML003708056](#)). Specifically, the staff conducted a public meeting on February 15, 2022, to gather stakeholder input on potential revisions to the existing policy to better accommodate broader risk-informed approaches.

Several licensees are now planning for digital upgrades. The NRC staff has communicated to industry that pre-application engagement can be vital to enabling efficient and effective reviews of LARs. The staff continues to conduct pre-application meetings to better understand the scope and schedule for LARs for two upcoming major digital modifications: 1) Turkey Point Power Plant Units 3 and 4 planned for April 2022, and 2) Limerick Generating Station Units 1 and 2 planned for August 2022. In advance of its planned Limerick digital I&C LAR, Constellation submitted the defense-in-depth and diversity analysis for the LAR on February 14, 2022 (ADAMS Accession No. [ML22046A074](#)), as supplemented on March 25, 2022 (ADAMS Accession No. [ML22084A114](#)), for NRC staff review. To support these and other anticipated applications, the NRC staff hosted a public workshop with external stakeholders to discuss the lessons learned from the first application of the alternate review process for digital I&C LARs described in interim staff guidance DI&C-ISG-06, Revision 2, “Licensing Process.”

Activities Planned and Completed for the Reporting Period (Q2 FY 2022)

Digital Instrumentation and Control Activities	Projected Completion Date	Completion Date
Review NEI 17-06, “Guidance on Using IEC 61508 SIL Certification to Support the Acceptance of Commercial Grade Digital Equipment for Nuclear Safety Related Applications,” and consider endorsement through issuance of a regulatory guide (RG).		
<ul style="list-style-type: none"> Published draft regulatory guide DG-1402, “Dedication of Commercial-Grade Digital Instrumentation and Control Items for Use in Nuclear Power Plants,” for public comment (ADAMS Accession No. ML22003A180). 	05/31/22	03/18/22
Consideration of Current CCF Policy in SRM to SECY-93-087		
<ul style="list-style-type: none"> Conducted public meeting to gather stakeholder input (ADAMS Accession No. ML22043A002). 	02/28/22	02/15/22
Digital Modernization LAR Using the Improved Digital Regulatory Infrastructure ¹⁰		
<ul style="list-style-type: none"> Conducted sixth pre-application meeting with Constellation on the planned digital I&C LAR for Limerick Generating Station Units 1 and 2 (ADAMS Accession No. ML22038A099). 	01/11/22	01/11/22
<ul style="list-style-type: none"> Conducted sixth pre-application meeting with NextEra/Florida Power & Light (FPL) on the planned digital I&C LAR for Turkey Point Power Plant Units 3 and 4 (ADAMS Accession No. ML22019A222). 	01/31/22	02/02/22 ¹¹

¹⁰ Activities reported in this section are related to planned or submitted digital changes for which the licensee is using some portion of the modernized digital regulatory infrastructure.

¹¹ The meeting was conducted two business days after the previous projected completion date of January 31, 2022, to accommodate the licensee’s schedule.

Digital Instrumentation and Control Activities	Projected Completion Date	Completion Date
<ul style="list-style-type: none"> Conducted seventh pre-application meeting with NextEra/FPL on the planned digital I&C LAR for Turkey Point Power Plant Units 3 and 4 (ADAMS Accession No. ML22056A054). 	03/07/22	03/07/22
<ul style="list-style-type: none"> Conducted workshop with external stakeholders on lessons learned from the first application of the alternate review process (ADAMS Accession No. ML22080A153). 	03/31/22	03/23/22
<ul style="list-style-type: none"> Conducted seventh pre-application meeting with Constellation on the planned digital I&C LAR for Limerick Generating Station Units 1 and 2 (ADAMS Accession No. ML22056A021). 	03/31/22	03/31/22

Projected Activities for the Next Two Reporting Periods (Q3 and Q4 FY 2022)

Projected Digital Instrumentation and Control Activities	Projected Completion Date
Review NEI 17-06, "Guidance on Using IEC 61508 SIL Certification to Support the Acceptance of Commercial Grade Digital Equipment for Nuclear Safety Related Applications," and consider endorsement through issuance of an RG.	
<ul style="list-style-type: none"> Conduct public meeting with stakeholders on DG-1402, following its March 2022 issuance for public comment. 	04/18/22
<ul style="list-style-type: none"> Brief Advisory Committee on Reactor Safeguards (ACRS) Subcommittee on Digital I&C on DG-1402. 	08/31/22
Consideration of Current CCF Policy in SRM to SECY-93-087	
<ul style="list-style-type: none"> Brief ACRS Subcommittee on Digital I&C to discuss CCF policy considerations. 	05/20/22
Digital Modernization LAR Using the Improved Digital Regulatory Infrastructure ¹²	
<ul style="list-style-type: none"> Issue a staff decision on acceptability for review of the NextEra/FPL LAR for digital modernization project at Turkey Point Units 3 and 4 within 60 days of submission by licensee. 	08/30/22 ¹³

2-5 Vogtle Electric Generating Plant Units 3 and 4

The NRC issued two combined licenses (COLs) to Southern Nuclear Operating Company (SNC) and its financial partners on February 10, 2012, for two AP1000 units to be built and operated at the Vogtle site near Augusta, GA. As a result of the COVID-19 pandemic and the dynamic nature of the Vogtle construction project, SNC now projects the start of commercial operations for Vogtle Unit 3 in Q4 FY 2022 or Q1 FY 2023. SNC projects Vogtle Unit 4 to begin commercial operations in Q3 FY 2023 or Q4 FY 2023. The NRC staff adjusted the agency's activities and associated milestone dates to reflect the revised schedule.

¹² Activities reported in this section are related to planned or submitted digital changes for which the licensee is using some portion of the modernized digital regulatory infrastructure.

¹³ The projected completion date is an estimate. The actual date will depend on when the application is received. The date has changed because the licensee is delaying the submittal of this LAR.

During this reporting period, the NRC staff focused on the licensee’s response to quality issues, particularly those associated with installation of electrical components. The NRC staff issued two White findings, which are of low to moderate safety significance, to SNC in a letter dated November 17, 2021 (ADAMS Accession No. [ML21312A412](#)). The first White finding was for the failure to promptly identify and correct conditions adverse to quality for the installation of safety-related cables and associated raceways. The second White finding was for the failure to adequately separate safety-related electrical systems. The NRC staff conducted a supplemental inspection in March 2022 to ensure that SNC had taken adequate corrective actions to resolve those issues. The inspection was completed on March 25, 2022, and the NRC staff will document the results of the inspection in a publicly available report within 45 days of the inspection completion date.

Due to the COVID-19 pandemic, the NRC staff performed mission-critical inspections through a combination of remote inspections and targeted onsite inspections. The NRC maintains its inspection agility through consistent communication with the licensee and resource planning to ensure that the NRC can adapt to changes in the dynamic construction schedule.

Activities Planned and Completed for the Reporting Period (Q2 FY 2022)

Vogtle Electric Generating Plant Units 3 and 4 Activities	Projected Completion Date	Completion Date
Published a notice of the licensee’s intent to operate Vogtle Unit 4 in the <i>Federal Register</i> (FR) to announce the opportunity for the public to request a hearing on the licensee’s conformance with acceptance criteria in the COL (87 FR 5851).	02/02/22	02/02/22

Projected Activities for the Next Two Reporting Periods (Q3 and Q4 FY 2022)

Projected Vogtle Electric Generating Plant Units 3 and 4 Activities	Projected Completion Date
Issue a letter regarding Vogtle Unit 3’s transition to the operating reactor assessment program.	06/30/22 ¹⁴
If the NRC determines that all ITAAC are met, issue the finding that all acceptance criteria contained in the Vogtle Unit 3 license are met in accordance with 10 CFR 52.103(g), after which the licensee may operate the facility in accordance with the terms and conditions of the license.	06/30/22 ¹⁵

A COL allows a licensee to construct a plant and to operate it once construction is complete if certain standards identified in the COL are satisfied. These standards are called ITAAC. The majority of ITAAC are from the design certification for the particular reactor technology that a plant uses. Throughout the construction process, NRC inspectors will perform inspections based on [Inspection Manual Chapter 2503](#), “Construction Inspection Program: Inspections of Inspections, Tests, Analyses and Acceptance Criteria (ITAAC) Related Work,” and the NRC’s [Construction Inspection Program](#) at the plant site to confirm that the licensee has successfully completed the ITAAC.

¹⁴ The projected completion date was modified from March 31, 2022, to June 30, 2022, due to changes in the licensee’s construction schedule for Vogtle Unit 3.

¹⁵ The projected completion date was modified from March 31, 2022, to June 30, 2022, due to changes in the licensee’s construction schedule for Vogtle Unit 3.

Additional information on the ITAAC process as well as closure for Vogtle Units 3 and 4 is available at <https://www.nrc.gov/reactors/new-reactors/oversight/itaac.html>.

Unit	Number of ITAAC Remaining Requiring Inspection	Total Inspections Completed ¹⁶	ITAAC Inspected ¹⁷	ITAAC Inspections Closed ¹⁸
Vogtle 3	43	71	42	23
Vogtle 4	125	8	6	2

ITAAC Reviews Completed for the Reporting Period (Q2 FY 2022)¹⁹

The table below provides ITAAC closure notification reviews completed during the reporting period for Vogtle Units 3 and 4, including the date when the NRC received the ITAAC closure notice and the date when the review was completed.

Unit	ITAAC No.	Received Date	Approval Date
Vogtle 3	2.1.03.07.i	12/21/21	01/04/22
Vogtle 4	2.2.03.08c.xii	12/30/21	01/04/22
Vogtle 3	2.3.06.02a	01/21/22	01/24/22
Vogtle 3	2.3.29.04	01/21/22	01/24/22
Vogtle 3	2.3.09.02b	02/04/22	02/09/22
Vogtle 3	2.6.01.02.i	02/14/22	02/15/22
Vogtle 3	2.1.03.03	02/16/22	02/17/22
Vogtle 3	2.7.02.03a	02/17/22	02/18/22
Vogtle 3	2.6.02.02c	02/21/22	02/22/22
Vogtle 3	2.6.09.13a	02/16/22	02/22/22
Vogtle 3	2.6.09.08	02/16/22	02/22/22
Vogtle 3	3.3.00.16	02/16/22	02/22/22
Vogtle 3	2.3.11.03b	02/22/22	02/23/22
Vogtle 3	2.6.09.05c	02/18/22	02/24/22
Vogtle 3	2.6.09.06	02/18/22	02/24/22
Vogtle 3	2.6.09.13c	01/21/22	02/24/22
Vogtle 3	2.6.09.15a	01/27/22	02/24/22
Vogtle 3	2.3.10.11a	02/23/22	02/24/22
Vogtle 3	2.3.07.06a	02/23/22	02/24/22

¹⁶ This column includes all inspections related to Vogtle Units 3 and 4 completed during the reporting period; the column is not limited to ITAAC (e.g., quality assurance inspections).

¹⁷ "ITAAC Inspected" refers to the number of ITAAC that were inspected as part of ongoing inspections and does not indicate that all inspections were completed for those ITAAC. Only "targeted ITAAC" – ITAAC selected for inspection by the NRC staff – are included in this count.

¹⁸ "ITAAC Inspection Closed" refers to the number of ITAAC for which all associated inspections have been completed during the reporting period.

¹⁹ This table accounts for the total number of ITAAC that SNC provided closure notifications for and that the NRC verified. This includes both ITAAC that were selected for inspection by the NRC staff (targeted ITAAC) and ITAAC that were not selected for inspection by the NRC staff (non-targeted ITAAC). This differs from the previous table, where the "ITAAC Inspected" column is the number of targeted ITAAC that were inspected during the designated reporting period.

Vogtle 3	2.6.02.02a	02/21/22	02/24/22
Vogtle 3	3.3.00.02a.i.b	02/23/22	02/25/22
Vogtle 3	2.6.01.03a	02/24/22	02/28/22
Vogtle 3	2.7.01.06a	02/28/22	02/28/22
Vogtle 3	2.1.02.02a	02/21/22	02/28/22
Vogtle 3	2.6.03.07	02/25/22	02/28/22
Vogtle 3	2.6.02.02b	02/25/22	02/28/22
Vogtle 3	2.3.11.03c	02/24/22	02/28/22
Vogtle 3	2.1.03.12	02/28/22	03/01/22
Vogtle 3	2.3.04.04.ii	02/28/22	03/01/22
Vogtle 3	2.3.13.06b	02/28/22	03/01/22
Vogtle 3	2.2.05.06a	02/28/22	03/02/22
Vogtle 3	2.2.02.06b	02/28/22	03/02/22
Vogtle 3	2.3.02.06b	02/28/22	03/02/22
Vogtle 3	3.5.00.06	03/02/22	03/03/22
Vogtle 3	2.2.01.09	02/28/22	03/04/22
Vogtle 3	3.3.00.05c	02/28/22	03/04/22
Vogtle 3	3.5.00.01.i	03/07/22	03/08/22
Vogtle 3	3.3.00.02b	03/07/22	03/08/22
Vogtle 3	2.3.09.02a	03/07/22	03/08/22
Vogtle 3	2.3.05.02.i	03/08/22	03/09/22
Vogtle 3	2.3.10.07a.ii	03/11/22	03/15/22
Vogtle 3	2.2.02.07f.i	03/14/22	03/15/22
Vogtle 3	2.2.03.10	03/08/22	03/15/22
Vogtle 3	C.2.6.09.07	03/14/22	03/17/22
Vogtle 3	C.2.6.09.08a	03/11/22	03/17/22
Vogtle 3	3.3.00.17	03/11/22	03/17/22
Vogtle 3	2.5.02.05a	03/15/22	03/17/22
Vogtle 3	2.2.01.06b	03/17/22	03/18/22
Vogtle 3	2.1.03.06.i	03/18/22	03/21/22
Vogtle 3	2.2.02.05a.i	03/25/22	03/28/22
Vogtle 3	2.6.04.02a	03/28/22	03/30/22
Vogtle 3	3.3.00.14	03/28/22	03/31/22
Vogtle 3	E.3.9.03.00.02	03/30/22	03/31/22

Vogtle Units 3 and 4 License Amendment Request Reviews Completed (Q2 FY 2022)

Number of License Amendment Request Reviews Forecast to be Completed in the Reporting Period	Number of License Amendment Request Reviews that Were Completed in the Reporting Period
0	0

2-6 NuScale Small Modular Reactor Design Certification

On March 15, 2017, the NRC accepted the NuScale Power, LLC (NuScale) application for a small modular reactor (SMR) design certification review. The NRC staff completed the final Safety Evaluation Report on August 28, 2020 (ADAMS Package No. [ML20023A318](#)), and issued a standard design approval to NuScale on September 11, 2020 (ADAMS Accession No. [ML20247J564](#)). On January 14, 2021, the NRC staff provided the Commission with a draft proposed rule that proposes certifying the design for its consideration (ADAMS Package No. [ML19353A003](#)). On May 6, 2021, the Commission approved the publication of the proposed rule (ADAMS Package No. [ML21126A153](#)), and on July 1, 2021, the proposed rule was published for public comment in the FR ([86 FR 34999](#)) with a comment period ending August 30, 2021. During the public comment period, the staff received a request, submitted on behalf of two public interest groups, to extend the public comment period (ADAMS Accession No. [ML21209A763](#)). On August 24, 2021, the NRC staff published a FR notice extending the public comment period by 45 days to October 14, 2021 ([86 FR 47251](#)). The NRC staff was scheduled to provide the draft final rule to the Commission by March 25, 2022. Due to additional time needed to resolve technical comments, the schedule for providing the draft final rule to the Commission is being revised.

Activities Planned and Completed for the Reporting Period (Q2 FY 2022)

NuScale Small Modular Reactor Design Certification Activities	Projected Completion Date	Completion Date
None		

Projected Activities for the Next Two Reporting Periods (Q3 and Q4 FY2022)

Projected NuScale Small Modular Reactor Design Certification Activities	Projected Completion Date
Provide the Commission the draft final rule for its consideration.	TBD ²⁰

2-7 Advanced Nuclear Reactor Technologies

The NRC continues to make significant progress in preparation for reviewing non-light-water-reactor (non-LWR) designs, consistent with the NRC staff's vision and strategy (ADAMS Accession No. [ML16356A670](#)) and implementation action plans to achieve non-LWR safety review readiness.²¹ During this reporting period, the NRC staff continued its extensive stakeholder engagement, including holding several public meetings and workshops regarding various advanced reactor topics, development of the 10 CFR Part 53 proposed rule, and development of guidance for the content of advanced reactor licensing applications.

In addition, the NRC staff continues to release for public comment various subparts for the 10 CFR Part 53 preliminary proposed rule, including technical, licensing, and administrative requirements on an iterative basis. During the reporting period, the NRC staff issued a consolidated version of the latest iteration of the preliminary proposed rule language, covering subparts for (A) definitions, (B) safety criteria, (C) design and analyses, (D) siting, (E) construction and manufacturing, (F) operational programs, (G) decommissioning, (H) siting and

²⁰ The projected completion date was modified because the schedule for providing the draft final rule to the Commission is being revised to resolve technical comments.

²¹ The NRC's public Web site lists the implementation action plans and is updated periodically to show the status of these activities (<https://www.nrc.gov/reactors/new-reactors/advanced/details.html#visStrat>).

design approval processes, (I) maintenance of the licensing basis, (J) reporting requirements, and (K) quality assurance, as well as sections related to security, access authorization, and fitness-for-duty (ADAMS Accession No. [ML22024A066](#)). The consolidated preliminary proposed rule language also included language for a more traditional, risk-informed option. The NRC staff discussed portions of the released preliminary proposed rule language with stakeholders during public meetings on January 6, February 8, and March 29, 2022 (ADAMS Accession Nos. [ML21355A270](#), [ML22027A377](#), and [ML22077A766](#)). On February 2, the NRC staff briefed the ACRS full committee on preliminary proposed rule language in Subpart F related to staffing, personnel qualifications, training, and human factors. Details of this ACRS meeting can be found on the NRC's public Web site (<https://www.nrc.gov/reading-rm/doc-collections/acrs/agenda/index.html>).

The NRC staff is scheduled to provide the Commission the Part 53 draft proposed rule package by February 2023 and the draft final rule package, including key guidance, by December 2024. The NRC staff's goal is to issue the final rule by July 2025. Further details about the staff's basis for the schedule extension can be found on the NRC's public Web site (<https://www.nrc.gov/reactors/new-reactors/advanced/rulemaking-and-guidance/part-53.html>).

The NRC holds periodic stakeholder meetings to discuss non-LWR topics of interest. A list of the meetings that the NRC has conducted to date can be found on the NRC's public Web site (<https://www.nrc.gov/reactors/new-reactors/advanced/details.html#stakeholder>). The NRC also holds frequent public meetings regarding the Advanced Reactor Content of Application Project (ARCAP). A list of these meetings and related preliminary draft guidance documents to support the meetings can be found on the NRC's public Web site (<https://www.nrc.gov/reactors/new-reactors/advanced/details.html#advRxContentAppProj>).

Additionally, the NRC staff is preparing, through early interactions with reactor designers, to review specific advanced reactor designs. These pre-application interactions provide predictability in the licensing process through early identification and resolution of technical and policy issues that could affect licensing. Information on the reactor designers that have formally notified the NRC of their intent to engage in regulatory interactions can be found on the NRC's public Web site (<https://www.nrc.gov/reactors/new-reactors/advanced/ongoing-licensing-activities/pre-application-activities.html>).

Activities Planned and Completed for the Reporting Period (Q2 FY 2022)

Advanced Nuclear Reactor Technologies Activities	Projected Completion Date	Completion Date
Issued final safety evaluation (SE) to TerraPower for its topical report on quality assurance program description (ADAMS Accession No. ML22018A301).	02/28/22	01/21/22
Issued annual paper to the Commission on the status of advanced reactor readiness activities (ADAMS Accession No. ML21337A377).	02/28/22	01/31/22
Issued consolidated preliminary proposed rule language for 10 CFR Part 53 technical requirements (ADAMS Accession No. ML22024A066).	01/31/22	02/04/22 ²²

²² Issuance delayed from the previous projected date of January 31, 2022, to provide additional time for the staff to reach alignment on the preliminary proposed rule language.

Advanced Nuclear Reactor Technologies Activities	Projected Completion Date	Completion Date
Issued final SE to Abilene Christian University for its topical report on quality assurance program description (ADAMS Accession No. ML22031A078).	01/31/22	02/14/22 ²³
Published FR notice with supplemental information for draft RG DG-1380 for potential endorsement of ASME Section III, Division 5 Code Cases N-872 and N-898 for Alloy 617 (87 FR 11490).	03/31/22	02/23/22
Published final NUREG-2246, "Fuel Qualification for Advanced Reactors," with fuel qualification methodology to provide guidance for non-LWR developers on qualification of fuel under the Nuclear Energy Innovation and Modernization Act (ADAMS Accession No. ML22063A131).	02/28/22	03/04/22 ²⁴
Published trial use RG 1.247 for potential endorsement of the ASME/American Nuclear Society standard on non-LWR probabilistic risk assessment (ADAMS Accession No. ML21235A008).	03/31/22	03/21/22
Issued final SE to Kairos for its topical report on fuel performance methodology (ADAMS Accession No. ML21354A676).	03/31/22	03/31/22

Projected Activities for the Next Two Reporting Periods (Q3 and Q4 FY 2022)

Projected Advanced Nuclear Reactor Technologies Activities	Projected Completion Date
Issue final SE to Kairos for its topical report on regulatory analysis.	04/30/22 ²⁵
Issue final SE to Kairos for its topical report on mechanistic source term.	04/30/22 ²⁶
Issue Technology-Inclusive Content of Application (TICAP) Guidance and ARCAP Guidance for public comment.	05/31/22
Submit draft proposed rule providing the alternative physical security requirements for advanced reactors to the Commission for its consideration.	06/28/22
Release preliminary proposed rule language for 10 CFR Part 53 traditional, risk-informed alternatives.	06/30/22
Publish the final RG (RG 1.246) for potential endorsement of the ASME Boiler and Pressure Vessel Code Section XI, Division 2, Reliability and Integrity Management standard.	06/30/22

²³ Issuance delayed from the previous projected date of January 31, 2022, to provide additional time for the staff to review supplemental information provided by the applicant.

²⁴ Issuance delayed from the previous projected date of February 28, 2022, to provide additional time for the staff to reach alignment on the technical content of the report.

²⁵ The draft SE was issued in March 2022. The projected completion date was revised from March 31, 2022, to April 30, 2022, to allow time for staff review of Revision 4 of the topical report submitted by Kairos on January 18, 2022.

²⁶ The projected completion date was modified from March 31, 2022, to April 30, 2022, because the staff is awaiting receipt of revised proprietary markings from the vendor.

Projected Advanced Nuclear Reactor Technologies Activities	Projected Completion Date
Issue final SE to X-energy for its topical report on risk-informed performance-based approach.	08/01/22
Issue final SE to Kairos for its topical report on fuel qualification methodology.	08/31/22 ²⁷
Issue final SE to Kairos for its topical report on metallic material qualification program.	09/30/22 ²⁸
Issue final SE to Kairos for its topical report on graphite materials qualification.	09/30/22

2-8 Advanced Reactor Licensing Reviews

Kairos Hermes Construction Permit Application Review

Kairos Power LLC (Kairos) submitted an application for a construction permit for the Kairos Power Fluoride Salt-Cooled, High Temperature Non-Power Reactor (Hermes). Kairos submitted applications documents to the NRC by letters dated September 29, 2021 (submitting the Preliminary Safety Analysis Report) (ADAMS Package No. [ML21272A375](#)) and October 31, 2021 (submitting the Environmental Report) (ADAMS Accession No. [ML21306A131](#)).

The NRC staff performed an acceptance review of the Hermes construction permit application and docketed the application on November 29, 2021 (ADAMS Accession No. [ML21319A354](#)). On December 15, 2021, the staff issued a letter to Kairos (ADAMS Accession No. [ML21343A214](#)) providing the schedule and resource estimates for the review. The NRC staff is currently conducting a detailed technical review of the safety of the Hermes design, which will lead to a safety evaluation report. The NRC staff is also conducting a review of the effects of Hermes design on the environment and will document the review in a draft environmental impact statement. Application documents and information on the review are available on the NRC's public Web site (<https://www.nrc.gov/reactors/non-power/hermes-kairos.html>).

Activities Planned and Completed for the Reporting Period (Q2 FY 2022)

Advanced Reactor Licensing Review Activities	Projected Completion Date	Completion Date
Completed draft safety evaluation report for the Kairos Hermes construction permit application.	02/28/22	03/25/22 ²⁹

Projected Activities for the Next Two Reporting Periods (Q3 and Q4 FY 2022)

²⁷ The projected completion date was extended from March 31, 2022, to September 30, 2022, in anticipation of the vendor submitting revision 2 of the topical report.

²⁸ The date has been extended in anticipation of the submittal of revision 2 of the topical report.

²⁹ Issuance delayed from the previous projected completion date of February 28, 2022, to include additional review time due to Kairos submitting design changes on February 10 and 18, 2022. The NRC staff is making good progress on the next major milestone due in November 2022 and is obtaining additional information from Kairos to close gaps identified during the application review. The overall review remains on schedule to be completed in accordance with what was outlined in the NRC staff's December 15, 2021, letter to Kairos.

Projected Advanced Reactor Licensing Review Activities	Projected Completion Date
Identify if any need for additional information on the Kairos Hermes construction permit application, prepare requests for additional information (RAIs), and issue RAIs to Kairos.	TBD depending on need

2-9 Reactor Oversight Process

The Reactor Oversight Process (ROP) is a risk-informed, performance-based oversight program that contains provisions for continuous self-assessment and improvement. The NRC staff developed recommendations for proposed changes to the ROP in SECY-18-0113, “Recommendations for Modifying the Reactor Oversight Process Engineering Inspections” (ADAMS Accession No. [ML18144A567](#)), and SECY-19-0067, “Recommendations for Enhancing the Reactor Oversight Process” (ADAMS Accession No. [ML19070A050](#)). The staff requested to withdraw these papers, and on August 5, 2021, the Commission approved the staff’s proposed withdrawal (ADAMS Accession No. [ML21217A284](#)). The staff plans to revisit the recommendations in these withdrawn papers prior to the end of FY 2022, as discussed with external stakeholders at a public meeting on January 26, 2022. The staff also continues to assess and improve the ROP as part of its normal work practices through the NRC’s transformation activities, stakeholder correspondence, feedback from ROP public meetings, and the ROP self-assessment program. The staff will seek Commission approval of changes to the ROP, or provide the Commission with notification of changes, in accordance with Management Directive/Directive Handbook 8.13, “Reactor Oversight Process” (ADAMS Accession No. [ML17347B670](#)).

Activities Planned and Completed for the Reporting Period (Q2 FY 2022)

Reactor Oversight Process Activities	Projected Completion Date	Completion Date
None		

Projected Activities for the Next Two Reporting Periods (Q3 and Q4 FY 2022)

Projected Reactor Oversight Process Activities	Projected Completion Date
Complete CY 2021 ROP Self-Assessment and send information paper to the Commission.	04/15/22
Send a paper to the Commission recommending whether a revision should be made to the frequency of engineering inspections.	05/13/22
Send a paper to the Commission with options for the frequency of problem identification and resolution team inspections.	06/30/22
Send a paper to the Commission recommending whether a revision should be made to the emergency preparedness significance determination process.	08/31/22
Send a paper to the Commission recommending whether the minimum four quarter requirement for greater-than-green findings, coupled with a revision to the treatment of greater-than-green performance indicators should be eliminated.	09/30/22
Complete an effectiveness review of the incorporation of safety culture oversight into the ROP.	09/30/22

Projected Reactor Oversight Process Activities	Projected Completion Date
Complete a ROP program area evaluation on the Significance Determination Process timeliness.	09/30/22

2-10 Backfit

The NRC’s backfitting rules are codified in 10 CFR 50.109, 70.76, 72.62, and 76.76. The backfitting rules define backfitting “as the modification of or addition to systems, structures, components, or design of a facility; or the design approval or manufacturing license for a facility; or the procedures or organization required to design, construct or operate a facility; any of which may result from a new or amended provision in the Commission’s regulations or the imposition of a regulatory staff position interpreting the Commission’s regulations that is either new or different from a previously applicable staff position...”³⁰ The rules require, in the absence of an applicable exception, an analysis showing that the backfit would result in a substantial increase in the overall protection of the public health and safety or the common defense and security and that the increased protection warrants the direct and indirect costs of implementation. There are similar requirements, referred to as “issue finality,” that apply when there are new or amended requirements for licenses, permits, and design approvals and certifications issued under 10 CFR Part 52.

The Commission changed its backfitting and issue finality policy as well as its policy on “forward fits,” which it defined as requirements or staff interpretations of requirements imposed as a condition of agency approval of a licensee request that result in the modification of or addition to systems, structures, components, or design of a facility, in NRC Management Directive 8.4, “Management of Backfitting, Forward Fitting, Issue Finality, and Information Requests” (ADAMS Accession No. [ML18093B087](#)). The NRC completed draft NUREG-1409, “Backfitting Guidelines,” Revision 1, in March 2020 and issued a notice of availability in the FR for public comment (ADAMS Accession No. [ML18109A498](#)). This revision would provide additional guidance for the NRC staff on how to implement the Commission’s backfitting and issue finality regulations and policies and forward fitting policy, including how to process violations that are contested based on claims of unjustified backfitting. The NRC received approximately 250 individual comments from members of the public, licensees, and industry representatives. The NRC staff evaluated the comments, updated the draft NUREG, and provided the Commission with the staff’s proposed NUREG-1409, Revision 1 (Final Report) (ADAMS Package No. [ML21006A431](#)). This revised document is currently before the Commission for its consideration.

Activities Planned and Completed for the Reporting Period (Q2 FY 2022)

Backfit Activities	Projected Completion Date	Completion Date
Published, for public comment, a proposed rule that contains a proposed change to NRC regulations that would constitute backfitting if issued as a final rule: Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning (87 FR 12254).	03/04/22	03/03/22

³⁰ 10 CFR 50.109(a)(1). Substantially similar definitions are provided in § 70.76, “Backfitting,” § 72.62, “Backfitting,” and § 76.76, “Backfitting,” for non-reactor facilities.

Projected Activities for the Next Two Reporting Periods (Q3 and Q4 FY 2022)

Projected Backfit Activities	Projected Completion Date
Provide to the Commission a draft proposed rule that contains a proposed change to NRC regulations that would constitute backfitting if issued as a final rule: Alignment of Licensing Processes and Lessons Learned from New Reactor Licensing.	05/26/22

2-11 Risk-informed Activities

The NRC staff continues to make progress to advance the use of risk insights more broadly to inform decision-making. There are numerous activities ranging in scope from agencywide initiatives, such as the “Be riskSMART” initiative, which is part of the transformation efforts discussed in section 2-1, to the advanced reactor risk-informed activities listed in section 2-7, to individual undertakings in program and corporate offices.³¹ The NRC staff continues to implement and track the use of the agencywide Be riskSMART risk-informed decision-making framework to inform a broad range of decisions spanning technical, legal, and corporate arenas. For example, the NRC staff continues to review and approve applications to adopt advanced risk management programs such as 10 CFR 50.69, “Risk-informed categorization and treatment of structures, systems and components for nuclear power reactors” and Risk-Informed Technical Specifications Initiative 4b,³² that provide for operational flexibilities that enhance safety by ensuring that power reactor licensees and the NRC prioritize the most risk significant issues.

Activities Planned and Completed for the Reporting Period (Q2 FY 2022)

Risk-Informed Activities	Projected Completion Date	Completion Date
Completed the acceptance review for the first-of-a-kind Risk-informed Process for Evaluations (RIPE) submittal from Arizona Public Service Company (APS) for an exemption from 10 CFR 50.62(c)(1) to remove the diverse auxiliary feedwater actuation system (DAFAS) from the Palo Verde Nuclear Generating Station licensing basis for all three units (ADAMS Accession No. ML22032A031).	02/04/22	01/31/22
Issued an exemption to APS for the RIPE submittal to remove the DAFAS from the Palo Verde Nuclear Generating Station licensing basis for all three units (ADAMS Accession No. ML22054A004).	04/15/22 ³³	03/23/22

³¹ The NRC maintains a listing of risk-informed activities that is updated annually at <https://www.nrc.gov/about-nrc/regulatory/risk-informed/rpp.html>.

³² A description of these and other operating reactors risk-informed initiatives is available at <https://www.nrc.gov/about-nrc/regulatory/risk-informed/rpp/reactor-safety-operating.html>. To date, the NRC has approved 24 and 17 applications enabling licensees to adopt 10 CFR 50.69 and Risk-Informed Technical Specifications Initiative 4b, respectively.

³³ The schedule for this exemption was not yet established when the previous quarterly report was issued.

Risk-Informed Activities	Projected Completion Date	Completion Date
Completed report summarizing the Office of Nuclear Reactor Regulation (NRR) activities regarding the use of risk-informed decision-making (RIDM) for licensing reviews. The report details NRR's efforts to increase the use of RIDM and provides recommendations on how to proceed into the next phase of realizing NRR's goal to enhance process efficiency and effectiveness (ADAMS Accession No. ML22090A108).	02/28/22	03/30/22 ³⁴

Projected Activities for the Next Two Reporting Periods (Q3 and Q4 FY 2022)

Projected Risk-Informed Activities	Projected Completion Date
Complete pilot program of risk tool to risk-inform technical reviews for spent fuel dry storage (ADAMS Accession No. ML20318A269).	04/30/22 ³⁵
Complete the revision of 10 materials inspection procedures (IPs) associated with Inspection Manual Chapter 2800. The NRC staff developed risk modules in each IP, with each module focusing on the risks of the relevant types of radioactive materials and their usage.	05/31/22 ³⁶
Develop guidance for expanding the use of RIPE to Technical Specification LARs.	06/30/22
Complete LIC-504 assessment of the risk significance of high energy arcing faults and issue report with recommendations for any regulatory actions based on the risk insights from the assessment.	07/22/22

2-12 Coronavirus Disease (COVID-19) Pandemic

The NRC COVID-19 Coordination Team (including a COVID-19 Task Force and Working Group) continues to develop and implement precautionary measures in response to the pandemic to help protect the health and safety of our workforce consistent with guidance provided by the Federal Government, including the Centers for Disease Control and Prevention (CDC), as well as considerations of State and local conditions around NRC facilities. In addition, the NRC continues to protect public health and safety and the environment. The NRC is monitoring the effects of the COVID-19 pandemic on NRC-licensed activities as well as actions taken in response to State, local, and site-specific conditions. The NRC is poised to take additional steps as warranted.

NRC Occupancy of Facilities

During this reporting period, the NRC continued to operate in a hybrid work environment at all locations, combining telework and in-office staff presence. The guidance for inspection program

³⁴ Issuance was delayed from the projected date of February 28, 2022, to provide additional time for staff to resolve comments on recommendations for future activities.

³⁵ The projected completion date was changed from January 31, 2022, to April 30, 2022, to capture technical review feedback, develop the report, and submit to management for final approval.

³⁶ The projected completion date was changed from March 31, 2022, to May 31, 2022, to allow for coordination of deployment between the NRC and the Agreement States.

implementation remains in effect in accordance with memorandum, “Implementation of Inspection Programs Following Re-Entry from the Public Health Emergency for the Reactor Safety Program” (ADAMS Accession No. [ML21295A302](#)). The agency continues to closely monitor guidance from the Federal Government’s Safer Federal Workforce Taskforce, the CDC, and the Occupational Safety and Health Administration to facilitate a healthy and safe physical workspace.

Licensing and Oversight Items of Interest

The NRC staff has taken steps to identify areas of our regulations that are challenging during the pandemic, and the areas where temporary flexibilities, such as exemptions, would not compromise the ability of licensees to maintain the safe and secure operation of NRC-licensed facilities. The NRC staff continues to communicate the processes available to licensees for requesting these flexibilities in a transparent way through public communications, such as teleconferences, webcasts, and letters. In addition, these processes and the approved flexibilities are posted and updated on the NRC public Web site (<https://www.nrc.gov/about-nrc/covid-19/>).

The NRC has also developed portions of its Web site devoted to the regulatory activities taken in response to the COVID-19 pandemic. Specific posts related to [nuclear power plant licensees](#), [nuclear materials licensees](#), and [security and emergency preparedness](#) have been developed to keep the public informed on how the NRC is adapting its regulatory approach during the pandemic. Between January 1 and March 31, 2022, the NRC approved nine licensing actions granting temporary flexibilities to maintain the safe and secure operation of nuclear reactor and nuclear materials licensees. A complete list of licensing requests approved by the NRC in response to the COVID-19 pandemic is available on the NRC public Web site at <https://www.nrc.gov/about-nrc/covid-19/>.

Regulatory Activities Taken in Response to the COVID-19 Pandemic During the Reporting Period

Licensee Type	Number of COVID-19 Requests Approved During the Reporting Period	Average Number of Days to Review COVID-19 Requests ³⁷
Power Reactor	7	5
Non-Power Reactor	0	N/A
Other (e.g., topical reports)	0	N/A
Decommissioning of Nuclear Facilities and Uranium Recovery	0	N/A
Storage and Transportation of Spent Nuclear Fuel	0	N/A
Fuel Cycle Facilities	1	7
Medical, Industrial and Academic Uses of Nuclear Materials and Agreement States	1	6

³⁷ This average is calculated based on the dates the request is received and the review is completed; review time may be longer in cases where a supplement to a request is received after the initial submission date.

Enclosure 3 – Summary of Activities

3-1 Reactor Oversight Process Findings

The table below provides the calendar year (CY) Reactor Oversight Process (ROP) findings for the year-to-date (YTD) and 3-year rolling metrics.

Location	Number of Findings	CY 2019	CY 2020	CY2021	CY2022
Nationally	Total	440	291	278 ³⁸	74 ³⁹
Region I	Green	95	50	61	28
	White	0	0	1	0
	Yellow	0	0	0	0
	Red	0	0	0	0
	Greater Than Green Security	0	0	0	0
	Total	95	50	62	28
	No. of Units Operating During CY	24	21 ⁴⁰	21	20 ⁴¹
Region II	Green	110	77	69	14
	White	1	2	0	0
	Yellow	0	0	0	0
	Red	0	0	0	0
	Greater Than Green Security	0	1	0	0
	Total	111	80	69	14
	No. of Units Operating During CY	33	33	33	33
Region III	Green	96	51	65	11
	White	1	0	0	1
	Yellow	0	0	0	0
	Red	0	0	0	0
	Greater Than Green Security	0	0	1	1
	Total	97	51	66	13
	No. of Units Operating During CY	23	22 ⁴²	22	22
Region IV	Green	137	110	81	19
	White	0	0	0	0

³⁸ For the purposes of this report, the total number of findings per calendar year is based on the year in which an inspection report was issued instead of the year in which a finding was identified. The latter approach was used to describe the inspection finding trend in SECY-22-0029, “Reactor Oversight Process Self-Assessment for Calendar Year 2021” (ADAMS Accession No. [ML22033A288](#)) which shows the first year-over-year increase in green inspection findings since CY 2011.

³⁹ The inspection reports for the first quarter of CY 2022 will continue to be finalized through May 15, 2022. The report for the next reporting period will be updated to include any additional findings from the first quarter of CY 2022.

⁴⁰ The reduction of three units for CY 2020 reflects the permanent shutdown of Pilgrim Nuclear Station on May 31, 2019; Three Mile Island, Unit 1, on September 20, 2019; and Indian Point Nuclear Generating Unit 2 on April 30, 2020.

⁴¹ The reduction of one unit for CY 2022 reflects the permanent shutdown of Indian Point Nuclear Generating Unit 3 on April 30, 2021.

⁴² The reduction of one unit for CY 2020 reflects the permanent shutdown of Duane Arnold on August 10, 2020.

Location	Number of Findings	CY 2019	CY 2020	CY2021	CY2022
	Yellow	0	0	0	0
	Red	0	0	0	0
	Greater Than Green Security	0	0	0	0
	Total	137	110	81	19
	No. of Units Operating During CY	18	18	18	18

3-2 Licensing Actions

The tables below provide the status of licensing actions organized by licensing program. Consistent with Section 102(c) of NEIMA, the licensing actions referenced in this section include “requested activities of the Commission” for which the U.S. Nuclear Regulatory Commission (NRC) staff issues a final safety evaluation (SE). These totals do not include license amendment requests (LARs), as they are addressed separately in section 3-3. “Total Inventory” refers to the total number of licensing actions that are open and accepted by the NRC at the end of the quarter. “Licensing Actions Initiated During the Reporting Period” are the number of licensing actions (regardless of acceptance) that are received by the NRC during the reporting period.

Operating Reactors

Reporting Period	Total Inventory	Licensing Actions Initiated During the Reporting Period	Licensing Actions Completed During the Reporting Period	Percentage of Licensing Actions Completed Prior to the Generic Milestone Schedule	Percentage of Licensing Actions Completed Prior to the Established Schedule ⁴³
Q3 FY 2021	223	58	76	100%	100%
Q4 FY 2021	207	83	95	100%	94%
Q1 FY 2022	132	33	107	100%	94%
Q2 FY 2022	144	103	93	100%	95%

New Reactors

Reporting Period	Total Inventory	Licensing Actions Initiated During the Reporting Period	Licensing Actions Completed During the Reporting Period	Percentage of Licensing Actions Completed Prior to the Generic Milestone Schedule	Percentage of Licensing Actions Completed Prior to the Established Schedule
Q3 FY 2021	2	1	1	100%	100%
Q4 FY 2021	2	1	1	100%	100%
Q1 FY 2022	2	3	3	100%	100%

⁴³ The “established schedule” is the schedule communicated to the licensee and made publicly available at the completion of the acceptance review.

Reporting Period	Total Inventory	Licensing Actions Initiated During the Reporting Period	Licensing Actions Completed During the Reporting Period	Percentage of Licensing Actions Completed Prior to the Generic Milestone Schedule	Percentage of Licensing Actions Completed Prior to the Established Schedule
Q2 FY 2022	1	0	1 ⁴⁴	N/A	N/A

Fuel Facilities

Reporting Period	Total Inventory	Licensing Actions Initiated During the Reporting Period	Licensing Actions Completed During the Reporting Period	Percentage of Licensing Actions Completed Prior to the Generic Milestone Schedule	Percentage of Licensing Actions Completed Prior to the Established Schedule
Q3 FY 2021	4	3	1	100%	100%
Q4 FY 2021	4	3	3	100%	0% ⁴⁵
Q1 FY 2022	2	11	13	100%	92% ⁴⁶
Q2 FY 2022	6	8	4	100%	75%

3-3 Licensing Amendment Request Reviews

The tables below provide the status of LARs organized by licensing program. Consistent with Section 102(c) of NEIMA, the LARs referenced in this section include “requested activities of the Commission” for which the NRC staff issue a final SE. The total inventory is the number of open LARs at the end of the quarter. LARs are included in the total inventory after they have been accepted by the NRC (the acceptance review period is generally 30 days after the application is submitted).

⁴⁴ During the reporting period, the NRC staff denied, without prejudice, the Oklo Aurora COL application and terminated all review activities.

⁴⁵ One licensing action was complex; the other three actions were completed within 13 days of the established schedule. All the licensing actions were completed within the generic milestone schedule.

⁴⁶ One licensing action was complex due to security issues, which resulted in it exceeding the established schedule by 17 days.

Operating Reactors

Reporting Period	Total Inventory	LARs Submitted During the Reporting Period	LAR Reviews Completed During the Reporting Period	Percentage of LAR Reviews Completed Prior to the Generic Milestone Schedule	Percentage of LAR Reviews Completed Prior to the Established Schedule ⁴⁷
Q3 FY 2021	286	103	82	100%	98% ⁴⁸
Q4 FY 2021	293	106	102	100%	91%
Q1 FY 2022	317	105	81	99%	95% ⁴⁹
Q2 FY 2022	304	72	94	100%	99%

New Reactors

Reporting Period	Total Inventory	LARs Submitted During the Reporting Period	LAR Reviews Completed During the Reporting Period	Percentage of LAR Reviews Completed Prior to the Generic Milestone Schedule	Percentage of LAR Reviews Completed Prior to the Established Schedule
Q3 FY 2021	1	0	0	N/A	N/A
Q4 FY 2021	1	1	1	100%	100%
Q1 FY 2022	0	0	1	100%	100%
Q2 FY 2022	0	0	0	N/A	N/A

Fuel Facilities

Reporting Period	Total Inventory	LARs Submitted During the Reporting Period	LAR Reviews Completed During the Reporting Period	Percentage of LAR Reviews Completed Prior to the Generic Milestone Schedule	Percentage of LAR Reviews Completed Prior to the Established Schedule
Q3 FY 2021	10	8	8	100%	83%
Q4 FY 2021	13	7	4	100%	100%
Q1 FY 2022	5	5	13	100%	100%
Q2 FY 2022	11	12	7	100%	100%

3-4 Research Activities⁵⁰

⁴⁷ The “established schedule” is the schedule communicated to the licensee and made publicly available at the completion of the acceptance review.

⁴⁸ One review of an LAR exceeded the established schedule by 180 days, due to the NRC staff identifying an issue that resulted in the licensee submitting a supplement that changed the scope of the request. Given the change in scope, a supplemental *Federal Register* Notice was published, providing for a new 30-day public comment period and a 60-day opportunity to request a hearing. The staff completed its review in September 2021.

⁴⁹ One review of an LAR that proposed a first-of-a-kind design exceeded the established schedule by 180 days. The NRC staff identified an issue that resulted in the licensee submitting an update that expanded the licensee’s proposed submission and extended the staff’s review. The staff issued the SE on February 28, 2022.

⁵⁰ This section provides information about projects that were started or completed during the reporting period that exceeded 300 staff hours or \$500K of program support for the total duration of the project.

Summary of New Research Projects

During the reporting period, the Office of Nuclear Regulatory Research (RES) initiated research on or substantially revised the following projects:

Support to Develop, Update, and Maintain Technical Guidance Related to Implementation of Risk-Informed Activities (NRR-2022-004)	
Importance to the NRC Mission	The activities include updates to NRC guidance and development of tools for diverse risk-informed applications as the current status does not represent the state-of knowledge needed to effectively support the Probabilistic Risk Assessment (PRA) policy statement and related efforts, consistent with a modern risk-informed regulatory agency. Outcomes include achieving greater technical consistency across all reactor designs and providing the NRC staff with improved resources to review licensing submittals effectively and efficiently.
Planned Activities:	Activities include development of regulatory guidance on PRA acceptability, enhancement of guidance on the treatment of uncertainties, update of the NRC's glossary of risk-related terms, development of a PRA standards and methods database, revisions to or development of regulatory guidance on risk-informed decision-making, and development of guidance on the performance of internal fire PRA for low-power and shutdown-types of plant operating states for non-light-water reactors. The staff plans to develop and/or enhance the guidance on the uses of risk results and insights, the methodologies for risk-informed activities, and the associated technical acceptability of PRA to address the needs of light-water reactors, advanced light-water reactors, and non-light water reactors. This activity supersedes prior request NRR-2011-009.
Requesting Business Line	Operating Reactors and New Reactors
Estimated Completion	FY 2027
Estimate of Total Research Resources	17.6 FTE and \$2.35M over a 5-year period

User Need Request for Evaluating the Reliability of Nondestructive Examinations (NRR-2022-007)	
Importance to the NRC Mission	Nondestructive examinations (NDE) are used to help maintain the structural integrity of passive nuclear power components. The technology and the qualification methods have changed significantly in the past 10 years. The research being conducted under this user need request will allow the NRC staff to proactively assess and identify the capabilities, effectiveness, reliability, interchangeability, and deficiencies of advanced NDE methods and techniques. The staff will use the findings to provide justifications for NRC regulatory decisions related to NDE and in-service inspection. Further, this work will enable the staff to evaluate licensees' alternatives to American Society of Mechanical Engineers (ASME) Code requirements as well as proposed changes to the ASME Code.

User Need Request for Evaluating the Reliability of Nondestructive Examinations (NRR-2022-007)	
Planned Activities:	This activity provides confirmatory research and analyses of the industry's efforts to implement new NDE technologies and applications of ultrasonic simulation used for the examination of new construction and operating power plants. This request also covers the NDE of novel materials and the use of machine learning and automated data analysis.
Requesting Business Line	Operating Reactors
Estimated Completion	FY 2026
Estimate of Total Research Resources	12.5 FTE and \$7.65M over a 5-year period

Molten Salt Reactor Materials and Fuel Performance (NRR-2022-002)	
Importance to the NRC Mission	The purpose of the requested assistance is to support NRC efforts related to advanced reactors, including those related to pre-application and potential licensing actions involving molten salt reactors. The research activities described in this request will support pre-application and licensing activities involving various molten salt reactor technologies, which include the use of both fluoride and chloride salts. The work products developed aim to provide the necessary information and tools needed for the NRC to review technical submittals related to molten salt reactor technologies.
Planned Activities:	Activities include development of technical letter reports on salt compatibility, evaluation of electrochemical methods to monitor and control salt chemistry, and off-gas system management. This activity will enable RES to continue ongoing engagement with the Department of Energy regarding molten salt reactor coordination efforts.
Requesting Business Line	New Reactors
Estimated Completion	FY 2025
Estimate of Total Research Resources	3.6 FTE and \$1.05M over a 3.5-year period

Summary of Completed Research Projects⁵¹

During the reporting period, there were no research projects completed.

3-5 Fees Billed

⁵¹ The research project resources are estimates of staff hours and program support costs based on inspection of project records, including staffing plans and contract spending plans.

The tables below provide information on Part 170 fees billed for each fee class. For each fee class, the NRC staff compared the fees billed to the receipts estimated in the annual fee rule.⁵²

Fee Class	FY 2022 Part 170 Receipts Estimated – Annual Fee Rule (\$M)	Part 170 Billed in Q2 FY 2022 (\$M)	Total Part 170 – Billed in FY 2022 (\$M)
Fuel Facilities	\$7.8	\$1.8	\$4.1
Generic Decommissioning	\$0.7	\$0.7	\$1.5
Materials Users ⁵³	\$0.9	\$0.3	\$0.5
Operating Power Reactors	\$160.0	\$37.0	\$81.5
Research and Test Reactors	\$5.8	\$0.6	\$1.3
Spent Fuel Storage / Reactor Decommissioning	\$10.3	\$2.9	\$6.8
Rare Earth	\$0.1	\$0	\$0
Transportation	\$2.8	\$0.7	\$1.7
Uranium Recovery	\$0.5	\$0.2	\$0.2

Significant Ongoing Licensing Actions

The following table includes a comparison of the fees billed to projected resources for subsequent license renewal application reviews, the SHINE Medical Technologies, LLC (SHINE) operating license application review, and the Kairos Hermes construction permit application review.

Docket	Project Name	Projected Resources (\$M) ⁵⁴	Fees Billed to Date (\$M) ⁵⁵
Point Beach Units 1 and 2 05000266/05000301	Point Beach Units 1 and 2 Subsequent License Renewal Application — Safety Review	\$5.0 ⁵⁶	\$3.2
Point Beach Units 1 and 2 05000266/05000301	Point Beach Units 1 and 2 Subsequent License Renewal Application — Environmental Review	\$1.4	\$1.1

⁵² The FY 2022 Proposed Fee Rule estimated collections are being used until the FY 2022 Final Fee Rule is published. The FY 2022 Proposed Fee Rule was published on February 23, 2022 ([87 FR 10081](#)).

⁵³ Materials Users—Billed as flat fee applications and included in the estimates and billed.

⁵⁴ Projected resources are calculated based on the FTE estimates provided to applicants in the acceptance letters. Dollar amounts are obtained by multiplying the hours estimate by the professional hourly rate.

⁵⁵ The NRC bills its licensees/applicants in the first month of the quarter following the timeframe in which the work was performed. For example, NRC work performed in January, February, and March would be invoiced to the licensee/applicant in April. Therefore, the total billed amounts listed in Table 3-5 reflects costs for NRC work performed through December 2021.

⁵⁶ When the formal acceptance letter for the Point Beach subsequent license renewal application was sent to the licensee on January 15, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. [ML21006A417](#)), the NRC estimated that it would take approximately \$6.4M to complete the application review.

Docket	Project Name	Projected Resources (\$M) ⁵⁴	Fees Billed to Date (\$M) ⁵⁵
North Anna Units 1 and 2 05000338/05000339	North Anna Units 1 and 2 Subsequent License Renewal Application — Safety Review	\$5.0 ⁵⁷	\$3.0
North Anna Units 1 and 2 05000338/05000339	North Anna Units 1 and 2 Subsequent License Renewal Application — Environmental Review	\$1.4	\$1.4
Oconee Units 1, 2, and 3 05000269/05000270/ 05000287	Oconee Units 1, 2, and 3 Subsequent License Renewal Application — Safety Review	\$5.0 ⁵⁸	\$2.4
Oconee Units 1, 2, and 3 05000269/05000270/ 05000287	Oconee Units 1, 2, and 3 Subsequent License Renewal Application — Environmental Review	\$1.4	\$0.5
SHINE Medical Technologies, LLC 05000608	SHINE Medical Isotope Production Facility Operating License Application Review — Safety and Environmental Reviews	\$6.2 ⁵⁹	\$5.5
St. Lucie Units 1 and 2 05000335/05000389	St. Lucie Units 1 and 2 Subsequent License Renewal Application — Safety Review	\$5.0 ⁶⁰	\$1.1
St. Lucie Units 1 and 2 05000335/05000389	St. Lucie Units 1 and 2 Subsequent License Renewal Application — Environmental Review	\$1.4	\$0.1
Kairos Hermes 05007513	Kairos Hermes – Construction Permit – Safety and Environmental Reviews	\$5.5 ⁶¹	\$0.1

3-6 Requests for Additional Information

The table below provides information on requests for additional information (RAIs) associated with licensing actions that are considered “requested activities of the Commission” for which the

⁵⁷ When the formal acceptance letter for the North Anna subsequent license renewal application was sent to the licensee on October 13, 2020 (ADAMS Accession No. [ML20258A284](#)), the NRC estimated that it would take approximately \$6.4M to complete the application review.

⁵⁸ When the formal acceptance letter for the Oconee subsequent license renewal application was sent to the licensee on July 22, 2021 (ADAMS Accession No. [ML21194A245](#)), the NRC estimated that it would take approximately \$6.4M to complete the application review.

⁵⁹ The projected resource estimate was provided to SHINE by letter dated April 30, 2020 (ADAMS Accession No. [ML20114E315](#)).

⁶⁰ When the formal acceptance letter for the St. Lucie subsequent license renewal application was sent to the licensee on September 24, 2021 (ADAMS Accession No. [ML21246A091](#)), the NRC estimated that it would take approximately \$6.4M to complete the application review.

⁶¹ The projected resource estimate was provided to Kairos Power LLC by letter dated December 15, 2021 (ADAMS Accession No. [ML21343A214](#)).

NRC staff issues a final SE, consistent with Section 102(c) of NEIMA. While Section 102(c) of NEIMA only applies to licensing actions accepted after July 13, 2019, the RAI data also include licensing actions accepted prior to July 13, 2019, to provide a complete inventory.

Type of Facility or Activity Type	Total Inventory of Open RAIs as of the End of Reporting Period	Total Number of RAIs Issued in Reporting Period	Total Number of RAIs Responded to in Reporting Period	Total Number of RAIs Closed in Reporting Period ⁶²
Operating Reactors	241	143	122	86
Non-Power Production and Utilization Facilities ⁶³	453 ⁶⁴	27	41	178
Design Certifications for New Reactors ⁶⁵	N/A	N/A	N/A	N/A
Early Site Permits for New Reactors ⁶⁶	N/A	N/A	N/A	N/A
Combined Licenses for New Reactors	0 ⁶⁷	0	0	0
Construction Permits for New Reactors or Non-Power Production and Utilization Facilities	0	0	0	0
Fuel Facilities	25	10	5	12
Power Reactor Decommissioning	60	5	13	44
Research and Test Reactor Decommissioning	0	0	0	0
Spent Fuel	720	48	93	8
Materials	0	0	0	0

⁶² RAIs are considered closed once the final SE, environmental assessment, or environmental impact statement is finalized except for RAIs associated with new reactor application reviews. Due to the phased approach taken over several years for new reactor application reviews, RAIs are closed throughout the review process once the staff has determined that no additional information is needed to resolve the issue.

⁶³ For the purposes of RAI reporting, non-power production and utilization facilities include all operating research and test reactors and medical radioisotope facilities licensed under 10 CFR Part 50, including the ongoing review of the SHINE operating license application.

⁶⁴ 11 RAIs inadvertently included in past reports for actions that are not considered “requested activities of the Commission” under NEIMA were removed from the total open inventory in Q2 FY 2022.

⁶⁵ No design certification applications are currently under review by the NRC; therefore, there will be no RAI data to report until an application is submitted and accepted by the NRC for review.

⁶⁶ No early site permit applications are currently under review by the NRC; therefore, there will be no RAI data to report until an application is submitted and accepted by the NRC for review.

⁶⁷ The NRC staff ended its review of the Oklo Aurora COL application on January 6, 2022. Therefore, all RAIs associated with this review have been closed.

Type of Facility or Activity Type	Total Inventory of Open RAIs as of the End of Reporting Period	Total Number of RAIs Issued in Reporting Period	Total Number of RAIs Responded to in Reporting Period	Total Number of RAIs Closed in Reporting Period ⁶²
Pre-Application Activities for Advanced Reactors	5	0	5	4

3-7 Workforce Development and Management

FY 2022 Staffing by Office⁶⁸

	FY 2022 Budget	FTE Utilization 12/19/21 - 01/29/22	FTE Utilization 1/30/22 - 02/26/22	FTE Utilization 02/27/22 - 03/26/22	FTE Utilization as of 03/26/22	Delta (Q2 FTE Utilization – FY 2022 Budget)	End of Year (EOY) ⁶⁹ Projection w/ Personnel Actions	Delta (EOY Projection – FY 2022 Budget)
Totals	2888.4	309.1	204.4	204.6	1347.4	-1541.0	2734.4	-154.0
COMM	45.0	2.5	1.7	1.8	11.5	-33.5	28.2	-16.8
OIG	63.0	6.8	4.5	4.5	29.6	-33.4	59.3	-3.7
Totals Other Offices	2780.4	299.8	198.2	198.3	1306.3	-1474.1	2646.9	-133.5
OCFO	92.0	10.4	6.7	6.9	44.1	-47.9	90.0	-2.0
OGC	90.7	10.8	7.1	7.1	47.2	-43.5	93.7	3.0
OCA	10.0	1.3	0.8	0.8	5.2	-4.8	10.2	0.2
OCAA	7.0	0.8	0.4	0.4	3.2	-3.8	6.1	-0.9
OPA	13.0	1.5	1.0	1.0	6.5	-6.5	13.0	0.0
SECY	17.0	1.8	1.3	1.3	8.2	-8.8	16.5	-0.5
OIP	34.0	3.7	2.5	2.5	16.3	-17.7	34.1	0.1
ASLBP	23.0	2.3	1.5	1.5	9.9	-13.1	20.4	-2.6
ACRS	23.5	2.5	1.9	1.9	11.6	-11.9	23.1	-0.4
OEDO	26.0	3.0	2.0	2.0	13.1	-12.9	26.5	0.5
NRR	565.6	59.4	38.8	39.0	257.5	-308.1	524.1	-41.5
NMSS	303.4	33.4	22.1	21.5	145.4	-158.0	292.0	-11.4
RES	203.5	21.6	14.1	14.3	94.6	-108.9	193.1	-10.4
NSIR	151.4	16.3	10.8	11.0	71.7	-79.7	146.5	-4.9
R-I	173.2	18.9	12.3	12.4	82.6	-90.6	163.5	-9.7
R-II	208.0	22.3	14.9	15.0	97.3	-110.7	197.0	-11.0
R-III	170.7	18.8	12.9	12.8	82.4	-88.3	167.6	-3.1
R-IV	160.9	19.2	12.7	12.7	83.5	-77.4	165.6	4.7
OE	31.5	3.4	2.2	2.2	15.0	-16.5	29.7	-1.8
OI	35.0	3.7	2.4	2.5	16.8	-18.2	33.5	-1.5
OCIO	169.0	16.6	11.0	11.0	72.4	-96.6	151.1	-17.9
ADM	121.0	13.1	8.8	8.7	57.0	-64.0	116.4	-4.6

⁶⁸ Some numbers might not add due to rounding.

⁶⁹ Based on FTE utilization as of March 26, 2022.

	FY 2022 Budget	FTE Utilization 12/19/21 - 01/29/22	FTE Utilization 1/30/22 - 02/26/22	FTE Utilization 02/27/22 - 03/26/22	FTE Utilization as of 03/26/22	Delta (Q2 FTE Utilization – FY 2022 Budget)	End of Year (EOY) ⁶⁹ Projection w/ Personnel Actions	Delta (EOY Projection – FY 2022 Budget)
SBCR	13.0	1.5	1.0	1.0	6.5	-6.5	13.2	0.2
OCHCO	135.0	13.2	8.7	8.8	57.3	-77.7	117.9	-17.1
CSU	3.0	0.2	0.2	0.2	1.0	-2.0	2.0	-1.0

3-8 Inspection Activities

The table below shows the average number of hours of direct inspection per plant in CY 2022.

Average Reactor Oversight Process Direct Inspection Hours

Nationwide Per Plant (unit)	Column 1 of ROP Action Matrix	Column 2 of ROP Action Matrix	Column 3 of ROP Action Matrix	Column 4 of ROP Action Matrix
289 Hours	281 Hours	633 Hours ⁷⁰	No Plants in Column 3	No Plants in Column 4

The table below shows the staff hours expended for inspection-related effort at operating power reactor sites by CY.

Items	Description	CY 2021 (Hours)	CY 2022 (Hours)
i.	Baseline Inspection	230,383	47,398
ii.	Plant-Specific Inspection	4,854	3,220
iii.	Generic Safety Issue Inspections	2,426	0
iv.	Performance Assessment	3,530	1,825
v.	Other Activities	93,068	21,191
vi.	Total Staff Effort	334,261	73,634
vii.	Total Staff Effort Per Operating Site	5,969 ⁷¹	1,339 ⁷²

3-9 Backfit

Facility-Specific Backfits

No facility-specific backfits were issued during the reporting period.

⁷⁰ As of December 31, 2021, Callaway Plant (one-unit Pressured Water Reactor (PWR)) was in Column 2 of the ROP Action Matrix ([ROP Action Matrix](#)). Surry Power Station Unit 2 (two-unit PWR) was in Column 2 in Q1 CY 2021 and returned to Column 1 on April 1, 2021 (ADAMS Accession No. [ML20365A007](#)). Clinton Power Station (one-unit Boiling Water Reactor (BWR)) was in Column 2 in Q1 and Q2 CY 2021 and returned to Column 1 on July 1, 2021 (ADAMS Accession No. [ML21197A022](#)). Turkey Point Nuclear Generating Unit 3 (two-unit PWR) was in Column 2 in Q1, Q2, and Q3 CY 2021 and returned to Column 1 on October 1, 2021 (ADAMS Accession No. [ML21307A137](#)). James A. Fitzpatrick (one-unit BWR) was in Column 2 in Q1, Q2, and Q3 CY 2021 and returned to Column 1 on October 1, 2021 (ADAMS Accession No. [ML21308A407](#)).

⁷¹ Total staff effort is divided by 56 sites for CY 2021, due to Duane Arnold Unit 1 permanently ceasing operations in August 2020.

⁷² Total staff effort is divided by 55 sites for CY 2022, due to Indian Point Unit 3 permanently ceasing operations in April 2021.

Generic Backfits

No generic backfits were issued during the reporting period.

Backfit Appeals Filed by Licensees and Applicants

There were no backfit appeals submitted to the NRC during the reporting period.