

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

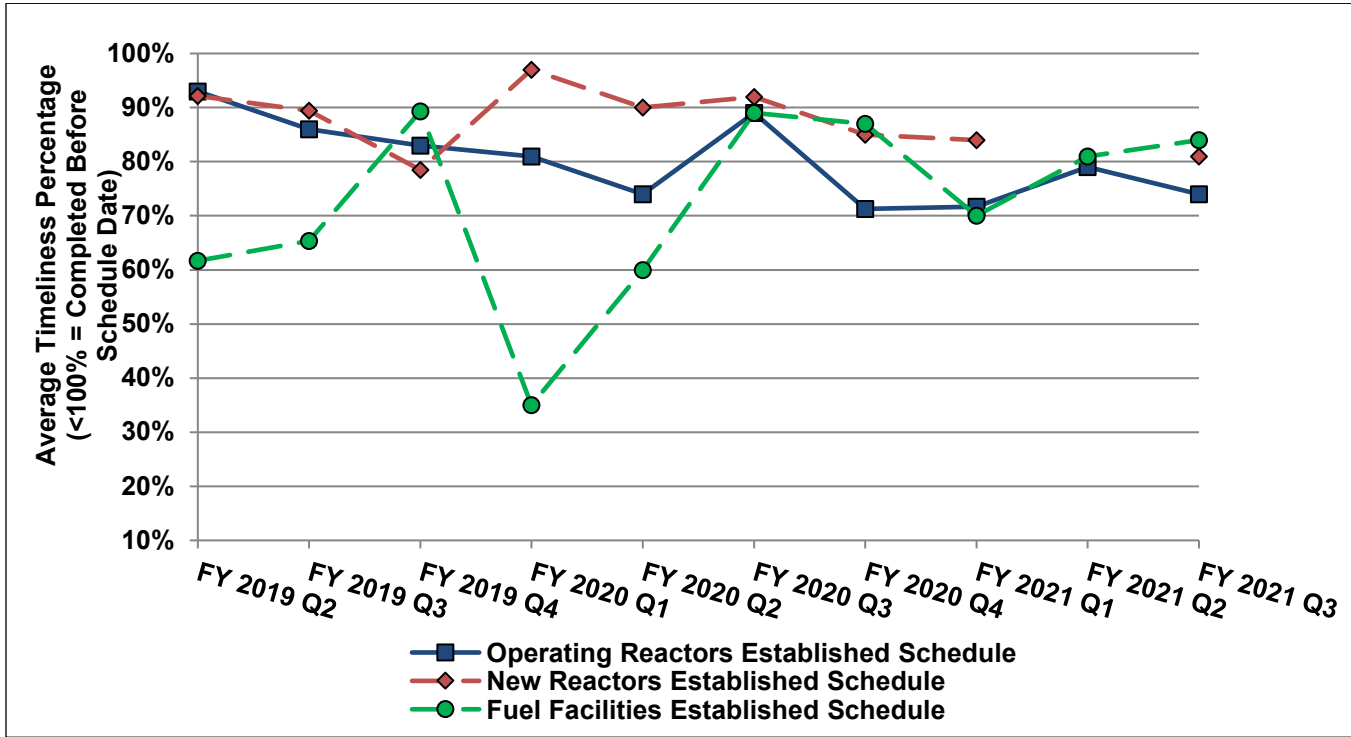
For the Reporting Period of April 1, 2021 through June 30, 2021

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Enclosure 1 – High Level Summary

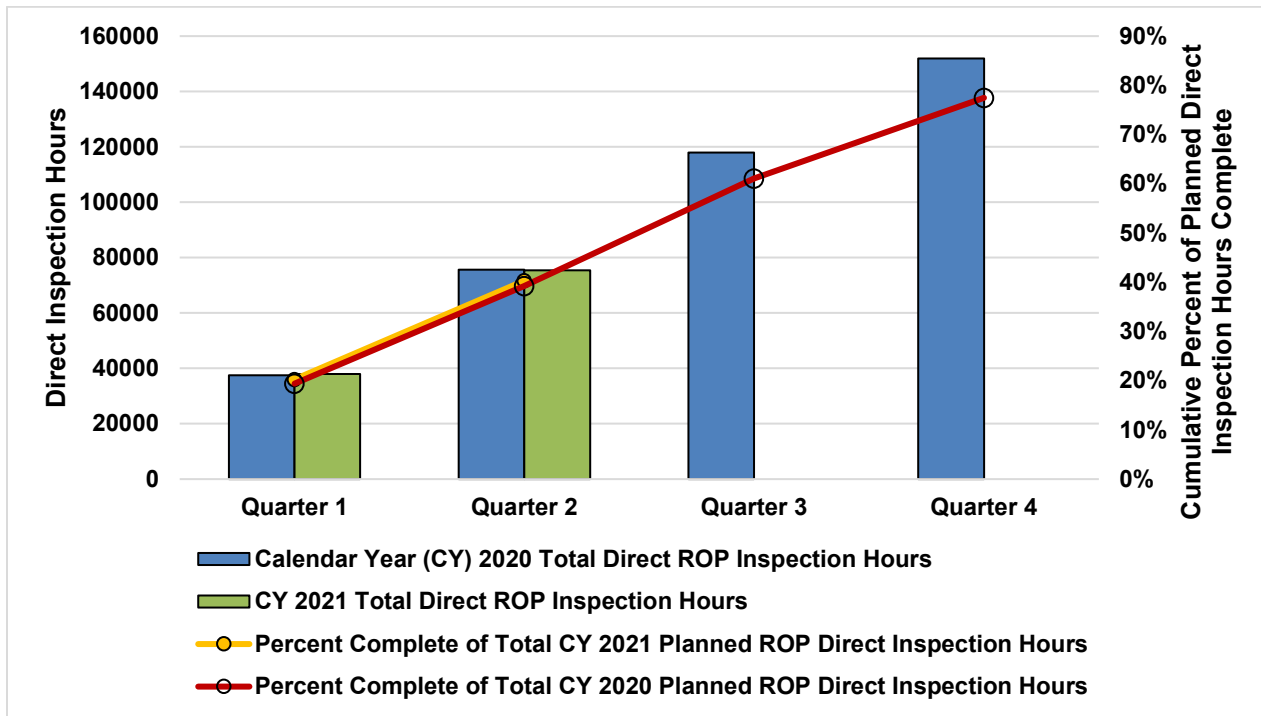
1-1 Average Timeliness Percentage for Licensing Actions Categorized Under the Nuclear Energy Innovation and Modernization Act



1

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

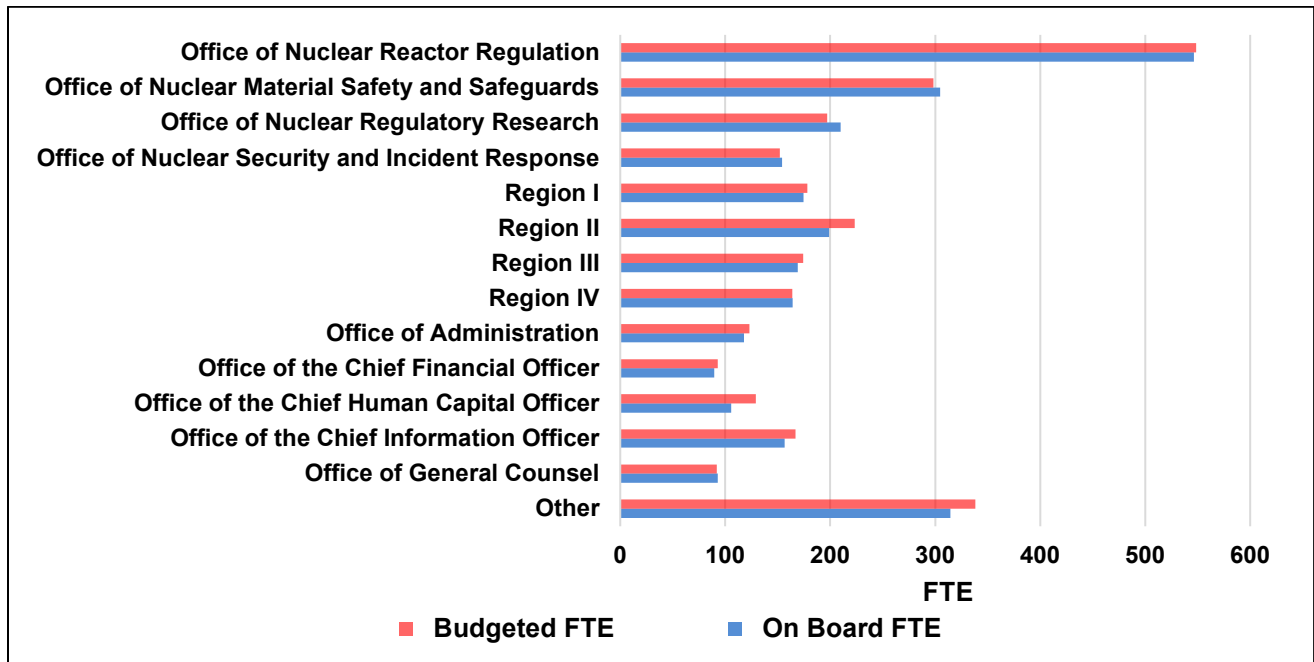
1-2 Reactor Oversight Inspection Hours and Percent Complete



2

² "Planned direct inspection hours" refers to the number of hours associated with completion of the 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 ROP baseline inspection program for the calendar year. In CY 2020, despite falling short of the planned/nominal number of inspection hours (due to circumstances such as the ongoing COVID-19 pandemic and its impact on planned inspection activities), the NRC performed the minimum number of inspection hours associated with program completion. In CY 2021, the NRC is projected to complete a larger number of direct inspection hours than were completed in 2020. Therefore, despite the possibility that the NRC may not complete 100% of the nominal number of hours planned for CY 2021 (as was also the case in 2020), the NRC expects to complete well above the minimum number of hours associated with the program completion in CY 2021.

1-3 FTE at the End of Q3 FY 2021 vs. Budgeted FTE



1-4 Budget Authority, FTE Utilization, and Fees

U.S. Nuclear Regulatory Commission (NRC) FY 2021 Budget Authority June 30, 2021 (Dollars in Thousands)

Fund Sources	FY 2021 Budget ³	Percent Obligated	Percent Expended
Advanced Reactors	\$19,345	78%	56%
Commission Funds	\$12,813	41%	41%
Fee-Based Funds	\$824,145	69%	56%
General Funds	\$1,158	71%	59%
International Activities	\$14,234	57%	47%
University Nuclear Leadership Program / Integrated University Program	\$21,951	22%	0%
Official Representation	\$25	13%	13%
Total	\$893,670	67%	54%
NRC Control Points	FY 2021 Budget	Percent Obligated	Percent Expended
Nuclear Reactor Safety	\$454,486	69%	60%
Nuclear Materials and Waste Safety	\$103,435	69%	59%

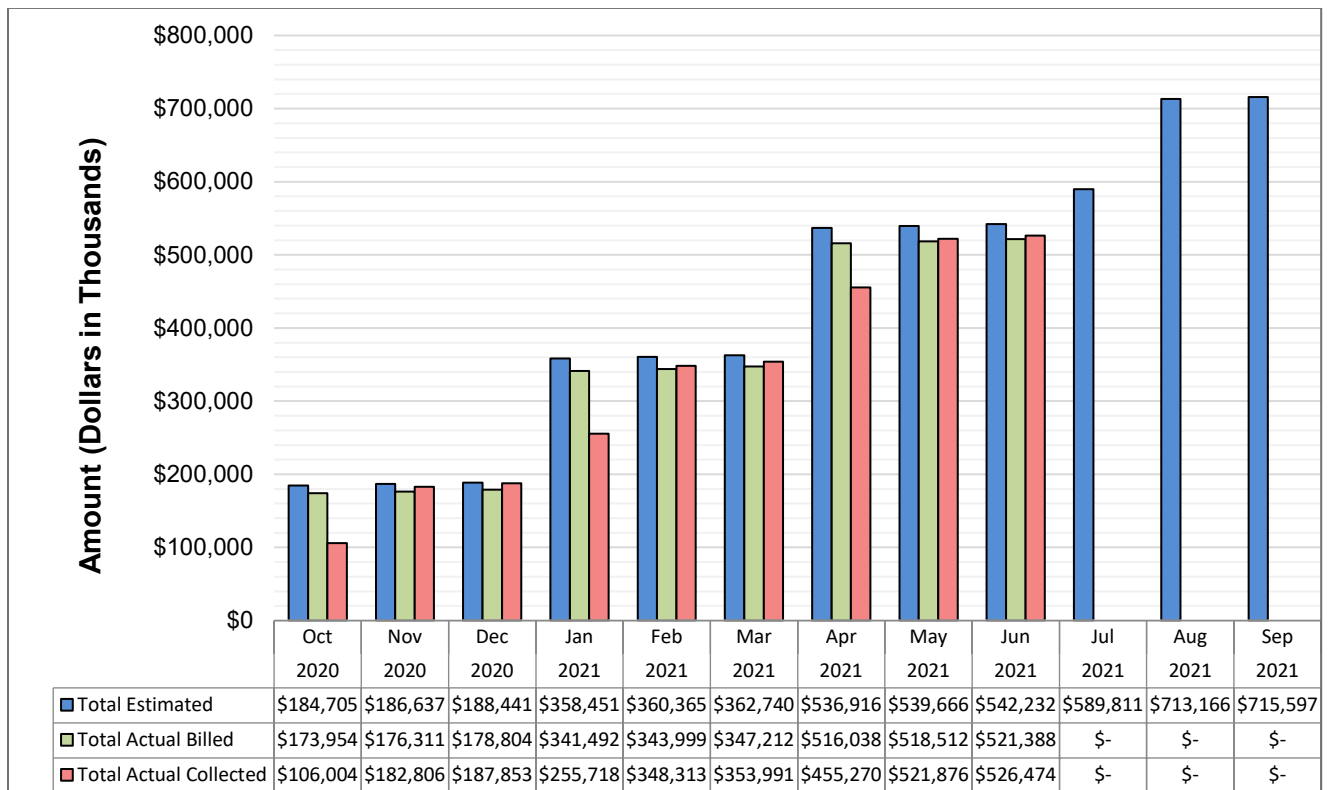
³ FY 2021 Budget reflects the enactment of the Consolidated Appropriations Act, 2021 and includes the enacted budget and carryover allocated. The budget values in this column differ from the previous report due to carryover allocated since the previous report.

Fund Sources	FY 2021 Budget ³	Percent Obligated	Percent Expended
Decommissioning and Low-Level Waste	\$22,771	70%	63%
Corporate Support	\$291,028	67%	46%
University Nuclear Leadership Program / Integrated University Program ⁴	\$21,951	22%	0%
Total	\$893,670	67%	54%

FTE Utilization, Hiring, and Attrition

Total Year to Date (YTD) FTE Utilization	Projected End of Year FTE Total Utilization	Quarter 3 Hiring	Quarter 3 Attrition	YTD Hiring	YTD Attrition
2015.2	2759.2	28	49	88	133

FY 2021 Fees Estimated, Fees Billed, and Fees Collected Through Q3



⁴ 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.

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

FY 2019	FY 2020	FY 2021 Q1-Q3
\$245.3	\$205.7	\$139.0

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 U.S. Nuclear Regulatory Commission’s (NRC) transformation initiative currently encompasses a broad set of activities intended to advance the agency towards the vision of being a more modern, risk-informed regulator. There are 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.

During this reporting period, the NRC marked the one year anniversary of the start of the Nuclear Regulator Apprenticeship Network (NRAN). NRAN is an 18-24 month long program designed to develop entry-level staff into well-rounded regulators in forecasted skill need areas to maintain the Agency’s mission. The inaugural cohort of 23 recent graduates began in June 2020. The agency is considering future cohorts starting in 2022.

Activities Planned and Completed for the Reporting Period (Q3 FY 2021)

Transformation Activities	Projected Completion Date	Completion Date
Launched new training module for the agency’s Be riskSMART framework and included it in the agency’s training management system.	04/30/21	04/30/21
Conducted a survey of NRC staff on organizational culture to assess progress made since the initial survey in March 2020.	04/30/21	04/30/21
Held second Town Hall with the Executive Director for Operations (EDO), as suggested by our culture surveys, to engage all staff in dialogue and address topics of interest to staff.	05/18/21	05/18/21
Briefed the Commission on staff’s transformation activities (public meeting) (Agencywide Documents Access and Management System (ADAMS) Package No. ML21050A177).	06/30/21	06/22/21
Conducted second innovate-a-thon to engage with all staff in innovation activities.	07/01/21	06/18/21

Projected Activities for the Next Two Reporting Periods (Q4 FY 2021 and Q1 FY 2022)

Projected Transformation Activities	Projected Completion Date
Update internal and public websites to include specific transformation related accomplishments.	08/31/21

Projected Transformation Activities	Projected Completion Date
Distribute external stakeholder transformation surveys to gather insights on how transformation changes have enhanced our ability to meet our mission in a more effective and efficient manner.	09/30/21 ⁵
Launch the Mission Analytics Portal Event Reporting module. This module will provide NRC licensees an alternative electronic submission method for reports required under 10 CFR 50.72.	09/30/21
Conduct a series of first-line supervisors' workshops to engage in dialogue on the agency's progress on transformation and identify actions they can take to encourage use of transformation tools, while mitigating the effects of change fatigue.	12/01/21 ⁶

2-2 Workforce Development and Management

The NRC implemented a 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 5 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. The SWP process occurs each FY.

Activities Planned and Completed for the Reporting Period (Q3 FY 2021)

Workforce Development and Management Activities	Projected Completion Date	Completion Date
Completed SWP process steps for FY 2021.	06/30/21	06/30/21
Completed onboarding activities for 55 new and 5 returning Summer 2021 Student Interns.	06/30/21	06/30/21

Projected Activities for the Next Two Reporting Periods (Q4 FY 2021 and Q1 FY 2022)

Projected Workforce Development and Management Activities	Projected Completion Date
Obtain feedback from the SWP points of contact to identify lessons learned and prepare for the FY 2022 SWP process.	09/30/21
Complete updates to the Agency Environmental Scan to support FY 2022 SWP activities.	12/31/21
Utilize insights from the SWP process to inform recruitment activities for the 2022 Nuclear Regulator Apprentice Network and Summer Student Intern programs and make initial selections.	12/31/21

⁵ The projected completion date was previously reported as August 31, 2021. Additional time is needed to pilot the survey with a small group of internal and external stakeholders prior to wider dissemination.

⁶ First-line supervisors' workshops were postponed from August and September 2021 due to other activities related to the re-entry to facilities being planned for that timeframe.

2-3 Accident Tolerant Fuel

The NRC continues to make significant progress in its preparation for licensing reviews of Accident Tolerant Fuel (ATF) designs for use in U.S. commercial power reactors. The NRC staff is executing the ATF project plan (ADAMS Accession No. [ML19301B166](#)), which is being revised to address the industry’s increased focus on higher burnup and increased enrichment fuels. The NRC staff is currently reviewing four ATF fuel vendor topical reports. The first topical report is on a new type of doped fuel pellet called “Westinghouse Advanced Doped Pellet Technology (ADOPT™) Fuel” (ADAMS Accession No. [ML20132A014](#)) and the second covers increased burnup limits for a fuel cladding material (ADAMS Package No. [ML20003E125](#)). The third discusses a slight increase in burnup limits for existing Westinghouse fuel designs (ADAMS Package No. [ML20350B834](#)) and the fourth involves increased fuel enrichment (ADAMS Package No. [ML21035A073](#)). The NRC staff is also reviewing a request from Framatome to amend the certificate of compliance (CoC) for the MAP transportation package. The amendment seeks to authorize shipment of 17x17 fuel assemblies with enrichments above 5 weight percent uranium-235 (ADAMS Package No. [ML21090A321](#)). The NRC staff is preparing for several additional ATF submittals from fuel vendors in calendar year (CY) 2021.

Activities Planned and Completed for the Reporting Period (Q3 FY 2021)

ATF Activities	Projected Completion Date	Completion Date
Issuance of a severe accident phenomena identification and ranking table report by Energy Research Inc. that covers the performance of the reactor during severe accidents for the current ATF concepts, higher burnup fuel, and fuel with enrichment above five weight percent. The report also documents findings from the expert elicitation panels held in Q1 and Q2 of FY 2021. The report will be used by the NRC to support changes to the regulatory infrastructure for ATF, higher burnup, and fuel with enrichment above five weight percent uranium-235 (ADAMS Accession No. ML21113A277).	05/31/21	04/23/21
Held second Higher Burnup workshop. This workshop relayed the state of development of higher burnup and increased enrichment technical and regulatory issues. It also provided a public forum for discussions between the NRC, industry, and other stakeholders (ADAMS Package No ML21176A040).	07/31/21	06/10/21

Projected Activities for the Next Two Reporting Periods (Q4 FY 2021 and Q1 FY 2022)

Projected ATF Activities	Projected Completion Date
Issue new revision of the ATF Project Plan. This new revision will take account of both industry and NRC changes in approaches and schedules since the last issuance in October 2019.	09/30/21

Projected ATF Activities	Projected Completion Date
Complete source term calculations for the maximum industry-proposed burnup limits. These calculations will inform the need to revise Regulatory Guide (RG) 1.183, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors," for the higher maximum burnup levels that the industry may be requesting.	10/31/21

2-4 Digital Instrumentation and Control

The NRC staff continues to complete digital instrumentation and control (DI&C) infrastructure improvements to address commercial grade dedication of digital equipment protection against common cause failure (CCF). Further, the NRC staff continues to review and prepare for anticipated digital modernization license amendment requests (LARs). These activities support 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 approved the Nuclear Energy Institute's (NEI) request for a fee exemption for the endorsement review of NEI 17-06, "Guidance on Using IEC 61508 SIL Certification to Support the Acceptance of Commercial Grade Digital Equipment for Nuclear Safety Related Applications." NEI 17-06 is intended to clarify how licensees can use Safety Integrity Level (SIL) certification in their commercial grade dedication programs. These commercial dedication programs would provide increased access to digital equipment from international vendors. The staff also continued to have public interactions with NEI regarding its proposed additional CCF guidance contained in NEI 20-07, "Guidance for Addressing Software Common Cause Failure in High Safety-Significant Safety-Related Digital I&C Systems."

Several licensees are now planning for significant digital upgrades. The NRC staff has communicated to industry that pre-application engagement can be vital to enabling efficient and effective reviews of LARs, and the staff conducted 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 in September 2021, and 2) Limerick Generating Station Units 1 and 2 in September 2022.

Activities Planned and Completed for the Reporting Period (Q3 FY 2021)

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 an RG.		
<ul style="list-style-type: none"> Staff decision on fee exemption requested by NEI (ADAMS Package No. ML21071A151). 	04/30/21	04/15/21
<ul style="list-style-type: none"> Conduct two public meetings to discuss initial staff feedback on NEI 17-06 and review schedule update (ADAMS Accession Nos. ML21160A233 and ML21161A271). 	06/23/21	06/23/21 ⁷

⁷ These meetings were scheduled after the fee exemption was approved. Therefore, they were not included in the last report. The first public meeting was held on May 14, 2021 and the second was held on June 23, 2021.

Digital Instrumentation and Control Activities	Projected Completion Date	Completion Date
Pre-submittal review of NEI 20-07, "Guidance for Addressing Software Common Cause Failure in High Safety-Significant Safety-Related Digital I&C Systems"		
<ul style="list-style-type: none"> Conduct public meetings to discuss resolution of NRC staff's feedback provided in response to 01/12/21 public meeting (ADAMS Accession No. ML21131A229). 	04/30/21	04/21/21
<ul style="list-style-type: none"> Conduct public meeting with NEI to discuss NRC staff feedback related to NEI 20-07 Draft C and its relationship to current NRC policy related to CCF (ADAMS Accession No. ML21162A073).⁸ 	05/18/21	05/18/21 ⁹
Significant Digital Modernization LAR Milestones.		
<ul style="list-style-type: none"> Conduct third pre-application meeting with NextEra for digital modernization project at Turkey Point Units 3 and 4 (ADAMS Accession No. ML21088A014). 	04/08/21	04/08/21
<ul style="list-style-type: none"> Conduct fourth pre-application meeting with NextEra for digital modernization project at Turkey Point Units 3 and 4 (ADAMS Accession No. ML21148A172). 	06/09/21	06/09/21 ¹⁰
<ul style="list-style-type: none"> Conduct third pre-application meeting with Exelon for a digital modernization project at Limerick Generating Station (ADAMS Accession No. ML21176A133). 	07/30/21	06/29/21

Projected Activities for the Next Two Reporting Periods (Q4 FY 2021 and Q1 FY 2022)

Projected Digital Instrumentation and Control Activities	Projected Completion Date
Pre-submittal Review of NEI 20-07, "Guidance for Addressing Software Common Cause Failure in High Safety-Significant Safety-Related Digital I&C Systems"	
<ul style="list-style-type: none"> Conduct public meeting with NEI on its proposed path forward for NEI 20-07 (ADAMS Accession No. ML21173A308). 	07/01/21
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 a public meeting to provide final NRC staff comments to NEI. 	09/30/21
Significant Digital Modernization LAR Milestones	

⁸ The meeting summary includes a copy of NEI-20-07 with NRC staff with comments on specific sections of the document.

⁹ This meeting was scheduled after NEI 20-07 Draft C was received on May 7, 2021. Therefore, it was not included in the last report.

¹⁰ After the April public meeting, NextEra informed the NRC that the submittal will be delayed to September 2021. The need for an additional meeting was not included in the previous report.

Projected Digital Instrumentation and Control Activities	Projected Completion Date
<ul style="list-style-type: none"> Issue license decision to Entergy for LAR to upgrade the core protection calculator at Unit 3 of the Waterford Steam Electric Station. 	08/24/21
<ul style="list-style-type: none"> Conduct fifth pre-application meeting with NextEra for digital modernization project at Turkey Point Units 3 and 4. 	09/30/21
<ul style="list-style-type: none"> Conduct fourth pre-application meeting with Exelon for a digital modernization project at Limerick Generating Station. 	09/30/21
<ul style="list-style-type: none"> Staff decision on acceptability of the NextEra submittal for digital modernization project at Turkey Point Units 3 and 4 within 60 days of submission by licensee. 	11/30/21 ¹¹

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. SNC's public milestone for commercial operation of Vogtle Electric Generating Plant (Vogtle) Unit 3 has shifted to an in-service date in the second quarter of 2022. The NRC staff adjusted the agency's activities and associated milestone dates to reflect the revised initial fuel loading date. In addition, the NRC staff continued licensing and inspection activities to support the NRC staff's evaluation to determine whether the acceptance criteria in the COL are met. SNC has indicated that Vogtle Unit 4 is now slated to start commercial operations by the first quarter of 2023.

During this reporting period, the NRC staff focused on the licensee's response to quality issues (ADAMS Accession No. [ML21176A200](#)). On June 21, 2021, the NRC started a reactive inspection, sending a special inspection team to the site to assess nonconformances with electrical cable separation (ADAMS Accession No. [ML21183A139](#)). The results of that inspection will inform the future quality assurance and corrective action programs inspections.

With respect to the Coronavirus Disease 2019 (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 (Q3 FY 2021)

Vogtle Electric Generating Plant Units 3 and 4 Activities	Projected Completion Date	Completion Date
Conducted public meeting to discuss Vogtle Readiness Group activities (ADAMS Accession No. ML21130A017).	04/28/21	04/28/21

¹¹ As of this reporting period, the NextEra submittal is expected by September 30, 2021.

Vogtle Electric Generating Plant Units 3 and 4 Activities	Projected Completion Date	Completion Date
Issued safety evaluation for request for alternative, "Alternative Requirements for American Society of Mechanical Engineers (ASME) Section XI Examination Coverage of Weldolet Branch Connection Welds (VEGP 3&4-PSI/ISI-ALT-15)" (ADAMS Package No. ML21090A245).	04/29/21	04/09/21

Projected Activities for the Next Two Reporting Periods (Q4 FY 2021 and Q1 FY 2022)

Projected Vogtle Electric Generating Plant Units 3 and 4 Activities	Projected Completion Date
Publish a notice of the licensee's intent to operate Vogtle 4 in the <i>Federal Register</i> to announce the opportunity for the public to request a hearing on the licensee's conformance with acceptance criteria in the COL.	07/12/21
Issue safety evaluation for request for alternative, "Alternative Requirements for ASME Section III Remediation of Containment Vessel Unistrut Welding (VEGP 3-ALT-16)."	07/30/21
Provided the requisite findings are made, issue amendment regarding emergency plan changes.	09/30/21 ¹²
Once the NRC determines that all inspections, tests, analyses, and acceptance criteria (ITAAC) have been met, issue the finding that all acceptance criteria contained in the Vogtle Unit 3 license have been met and that the licensee may operate the facility, in accordance with 10 CFR 52.103(g) (provided the requisite findings are made).	10/18/21 ¹³

NRC Inspections and ITAAC Reviews for the Reporting Period (Q3 FY 2021)

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.

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>.

¹² SNC's original application dated June 30, 2020, requested staff complete its review by June 2021. The staff found this submittal to be inadequate and provided SNC an opportunity to supplement the application. SNC provided a supplement on August 11, 2020. On September 1, 2020, the staff found SNC's supplemented application acceptable for review and notified SNC that it expects to complete its review by September 2021.

¹³ The projected completion date was modified from September 11 to October 18, 2021, due to the changes in the licensee's construction schedule.

Unit	Number of ITAAC Remaining Requiring Inspection	Total Inspections Completed ¹⁴	ITAAC Inspected ¹⁵	ITAAC Inspections Closed ¹⁶
Vogtle 3	98	39	17	3
Vogtle 4	129	5	5	1

ITAAC Reviews Completed for the Reporting Period (Q3 FY 2021)

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	2.1.02.09c	05/10/21	05/11/21
Vogtle 3	2.1.02.13a	05/01/21	05/03/21
Vogtle 3	2.1.02.13b	05/19/21	05/24/21
Vogtle 3	2.1.02.14	06/16/21	06/21/21
Vogtle 3	2.2.04.09a.ii	05/27/21	06/01/21
Vogtle 3	2.3.02.14	05/28/21	06/01/21
Vogtle 3	2.3.04.02.ii	03/26/21	04/02/21
Vogtle 3	2.3.06.11a	05/28/21	06/01/21
Vogtle 3	2.3.10.12	04/19/21	04/20/21
Vogtle 3	2.5.01.03a	04/28/21	05/04/21
Vogtle 3	2.5.01.03b	04/05/21	04/06/21
Vogtle 3	2.5.06.02	04/26/21	04/27/21
Vogtle 3	2.7.01.02a	04/10/21	04/14/21
Vogtle 3	2.7.03.03	06/24/21	06/28/21
Vogtle 3	2.7.07.02	04/23/21	04/26/21
Vogtle 3	2.3.04.05	06/04/21	06/10/21
Vogtle 3	2.3.07.05.i	06/13/21	06/17/21
Vogtle 3	2.3.29.02	06/18/21	06/24/21
Vogtle 3	C.2.5.04.04a	06/04/21	06/09/21
Vogtle 3	C.2.6.09.06	12/22/20	06/02/21
Vogtle 4	2.2.03.08c.iv.03	06/16/21	06/17/21
Vogtle 4	2.3.07.07b.ii	06/18/21	06/24/21
Vogtle 4	3.3.00.02a.ii.f	06/16/21	06/17/21

¹⁴ This column includes all inspections related to Vogtle Unit 3 and 4 completed during the reporting period; the column is not limited to ITAAC (e.g., quality assurance inspections).

¹⁵ "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.

¹⁶ "ITAAC Inspection Closed" refers to the number of ITAAC for which all associated inspections have been completed during the reporting period.

Vogtle Units 3 and 4 License Amendment Request Reviews Completed (Q3 FY 2021)

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 reactors (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 *Federal Register* (86 FR 34999). The public comment period expires on August 30, 2021.

Activities Planned and Completed for the Reporting Period (Q3 FY 2021)

NuScale Small Modular Reactor Design Certification Activities	Projected Completion Date	Completion Date
Published proposed rule for NuScale SMR design certification. ¹⁷	07/02/21	07/01/21

Projected Activities for the Next Two Reporting Periods (Q4 FY 2021 and Q1 FY 2022)

Projected NuScale Small Modular Reactor Design Certification Activities	Projected Completion Date
Public comment period ends for proposed rule for NuScale SMR design certification.	08/30/21

2-7 Advanced Nuclear Reactor Technologies

The NRC is making 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](#)). The NRC staff is currently executing the implementation action plans to achieve non-LWR safety review readiness.¹⁸ During this reporting period, the NRC staff issued several technical reports and draft guidance documents. The staff also 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

¹⁷ Additional information regarding this rulemaking is available at: <https://www.nrc.gov/reading-rm/doc-collections/rulemaking-ruleforum/active/RuleDetails.html?id=40>.

¹⁸ 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>).

requirements on an iterative basis. During the reporting period, the NRC staff discussed the released sections of the preliminary proposed rule language with various stakeholders during public meetings held on April 8, May 6, and June 10, 2021 (ADAMS Accession Nos. [ML21154A129](#), [ML21154A126](#), and [ML21180A048](#), respectively). The NRC staff also briefed the ACRS on April 22, May 5, and May 20, 2021. Details of these ACRS meetings can be found on the NRC’s public Web site (<https://www.nrc.gov/reading-rm/doc-collections/acrs/agenda/index.html>). On May 30, 2021, the ACRS sent an interim letter to Chairman Hanson on the preliminary proposed rule language for Part 53 (ADAMS Accession No. [ML21140A354](#)). The ACRS found that the overall structure of Part 53 provides a logical framework, is complete with respect to topics that must be covered, and addresses the lifetime of a power reactor. The ACRS expressed general agreement with the direction that Part 53 is taking and offered several recommendations for improvement to the NRC staff, particularly in the areas of technology inclusive safety and design and analysis requirements.

The NRC’s public Web site lists the open and resolved technical and policy issues related to SMRs and non-LWRs and is updated periodically to show the status of the issues (<https://www.nrc.gov/reactors/new-reactors/smr.html#techPolicyIssues>). 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. 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>).

Activities Planned and Completed for the Reporting Period (Q3 FY 2021)

Advanced Nuclear Reactor Technologies Activities	Projected Completion Date	Completion Date
Issued reports on Siting and Licensing Computer Codes, and Computer Code Methodology for Nuclear Fuel Cycle Analysis (ADAMS Accession Nos. ML21085A484 and ML21088A047).	05/31/21	03/31/21
Published draft NUREG for public comment with proposed fuel qualification methodology to provide guidance for non-LWR developers on qualification of fuel under the Nuclear Energy Innovation and Modernization Act (NEIMA) (available at 86 FR 34794 and ADAMS Accession No. ML21168A063).	06/30/21	06/20/21
Issuance of a series of technical reports by NUMARK Associates, Inc. and Oak Ridge National Laboratory on materials, chemistry, and component integrity addressing molten salt chemistry, salt compatibility with high temperature materials, high temperature corrosion, and graphite (ADAMS Accession Nos. ML21116A231 and ML21109A123).	06/30/21	06/17/21

¹⁹ Although both contractor reports are dated May 2021, the June 17, 2021 completion date reflects when the reports were made publicly available in ADAMS.

Advanced Nuclear Reactor Technologies Activities	Projected Completion Date	Completion Date
Issued a draft white paper to provide information to advanced reactor developers on the benefits of robust preapplication engagement in order to optimize both safety and environmental application reviews (ADAMS Accession No. ML21145A106). ²⁰	09/30/21	05/25/21

Projected Activities for the Next Two Reporting Periods (Q4 FY 2021 and Q1 FY 2022)

Projected Advanced Nuclear Reactor Technologies Activities	Projected Completion Date
Provide a report to the appropriate congressional committees for completing a rulemaking to establish a technology-inclusive regulatory framework for optional use by commercial advanced nuclear reactor technologies in new reactor license applications, and ensuring that the agency has adequate expertise to support the evaluation of commercial advanced reactor license applications, in accordance with the NEIMA, Section 103(e).	07/14/21
Publish draft RG for endorsement of the ASME Section III, Division 5 Standard for public comment.	07/31/21. ²¹
Issue a draft white paper to provide information to advanced reactor applicants regarding the applicability of existing regulations to non-light water reactors.	07/31/21
Issue draft Material Control and Accounting guidance for Category II facilities (NUREG-2159) for public comment.	08/31/21. ²²
Release preliminary proposed rule language for 10 CFR Part 53 technical requirements.	08/31/21. ²³
Issue a paper to the Commission providing the Alternative Physical Security Requirements for Advanced Reactors draft proposed rule for its consideration.	09/27/21
Issuance of a report by the Center for Nuclear Waste Regulatory Analyses addressing information gaps and potential information needs associated with transportation and storage of fresh and spent advanced reactor fuel types.	09/30/21
Issuance of a scalable human factors engineering technical review strategy report by Brookhaven National Laboratory.	09/30/21

²⁰ Rather than issue a final white paper previously projected for completion on September 30, 2021, the NRC staff decided to issue a draft white paper on May 25, 2021, which it plans to incorporate into future guidance for advanced reactor applications.

²¹ This activity was previously projected for completion by June 30, 2021 but additional time was required for internal review.

²² Issuance delayed from the previous projected date of May 31, 2021, due to additional time required for internal review.

²³ Preliminary proposed rule language for 10 CFR Part 53 technical requirements was released on April 26 and June 2, 2021. One additional subsection is planned to be released by August 31, 2021. All currently released 10 CFR Part 53 preliminary proposed rule language can be found in ADAMS Package No. [ML20289A534](#). This activity only reflects publicly released preliminary proposed Part 53 technical requirements for early stakeholder engagement. The staff will continue to publish preliminary proposed rule language on licensing and administrative requirements and may continue to release revised iterations of the technical requirements in CY 2021.

Projected Advanced Nuclear Reactor Technologies Activities	Projected Completion Date
Publish a draft RG for endorsement of the ASME Section XI, Division 2, Reliability and Integrity Management Standard for public comment.	09/30/21
Issue a draft white paper to provide NRC guidance for a technology-inclusive content of application methodology for advanced reactors.	10/31/21
Issue a draft white paper to provide guidance for the content and NRC staff review of an advanced reactor application.	10/31/21
Issue several draft white papers to provide guidance for specific chapters or topics of information to be included in an advanced reactor application to support the Advanced Reactor Content of Application Project guidance.	10/31/21
Issue a paper to the Commission providing a draft Advanced Nuclear Reactors Generic Environmental Impact Statement (GEIS) and the associated draft proposed rule for its consideration.	11/30/21
Issue a paper to the Commission providing the Emergency Preparedness Requirements for Small Modular Reactors and Other New Technologies final rule for its consideration.	12/30/21 ²⁴
Publish a trial use RG to provide guidance on the acceptability of non-LWR probabilistic risk assessments (PRAs).	12/31/21

2-8 Oklo Power LLC Combined License Application for the Aurora Compact Fast Reactor

The NRC continues engagement with Oklo related to their advanced reactor design and the associated custom COL application.²⁵ that was submitted to the NRC on March 11, 2020 (ADAMS Package No. [ML20075A000](#)). The proposed Aurora design uses heat pipes to transport heat from the reactor core to a power conversion system, where it is used to generate electricity.

The NRC staff planned to complete the review of the Oklo COL application in a two-step process (ADAMS Accession No. [ML20149K616](#)). On November 17, 2020, the NRC staff issued a letter to Oklo (ADAMS Accession No. [ML20308A677](#)) extending the Step 1 review in the areas of maximum credible accident methodology, safety classification of structures, systems, and components (SSCs), and scope of the quality assurance program. Because Oklo's quality assurance program is closely tied to its safety classification of SSCs, these issues have been combined and are no longer being tracked separately. In the letter, the NRC staff stated that Oklo's responses to requests for additional information, audit documents, and audit discussions enhanced the staff's understanding of Oklo's novel approach to the Aurora safety case but did not provide sufficient information to define the scope of the full Step 2 technical review. The NRC staff completed its review of one of the key aspects of the licensing basis, the applicability of regulations, and issued a letter documenting Step 1 closure on this topic on November 17, 2020 (ADAMS Accession No. [ML20300A593](#)). To close the Step 1 review, Oklo proposed to leverage two topical reports, "Maximum Credible Accident Methodology Topical Report" and

²⁴ This activity was originally projected to be completed by September 30, 2021. The Commission granted a 3-month extension for NRC staff to prepare the final rule package for ACRS to review. The NRC staff is scheduled to brief the ACRS Subcommittee on September 21, 2021 and the full Committee on November 4-5, 2021. The final rule package is due to the Commission by December 30, 2021.

²⁵ A custom COL application provides both the design information that would be provided by a certified design and the site-specific information provided with a COL application.

“Performance-Based Licensing/Classification Topical Report,” to document the staff’s review of methodologies for MCA and classification of SSCs. Oklo submitted the topical reports on July 2, 2021 (Letter Submitting the Reports (ADAMS Accession No. [ML21184A001](#)), Topical Report on Maximum Credible Accident Methodology (ADAMS Accession No. [ML21184A002](#)), and Topical Report on Performance-Based Licensing Methodology (ADAMS Accession No. [ML21187A001](#))). The NRC staff will perform acceptance reviews of the topical reports and if found acceptable, will commence the detailed technical reviews and preparation of safety evaluation reports. The NRC staff will consider Step 1 closed only after the MCA and SSC issues are resolved and then reassess resource needs and the overall COL review schedule and communicate this to Oklo by letter.

The NRC staff holds periodic public meetings to discuss the review of the COL application for the Oklo Aurora design. A list of the meetings can be found on the NRC’s public Web site (<https://www.nrc.gov/reactors/new-reactors/col/aurora-oklo/public-meetings.html>).

Activities Planned and Completed for the Reporting Period (Q3 FY 2021)

Major activities were deferred during this reporting period due to a need for more information from the applicant.

Projected Activities for the Next Two Reporting Periods (Q4 FY 2021 and Q1 FY 2022)

Projected Oklo COL Review Activities	Projected Completion Date
Complete Acceptance Review of two topical reports submitted in July 2021.	08/30/21
Complete technical reviews and preparation of safety evaluations of the two topical reports.	TBD pending acceptance reviews

2-9 Reactor Oversight Process

The ROP is a risk-informed, performance-based oversight program that contains provisions for continuous self-assessment and improvement. The staff developed recommendations for proposed changes to the ROP in SECY-19-0067, “Recommendations for Enhancing the Reactor Oversight Process,” (ADAMS Accession No. [ML19070A050](#)). The staff requested to withdraw this paper because new information and additional staff activities are relevant and were not considered in developing the basis for several of the recommendations in the paper. The Commission approved the staff’s proposal. The staff intends to reevaluate the basis for the previous recommendations and reengage internal and external stakeholders, including regional inspection staff, members of the public, and the nuclear industry, on these and any other proposed changes to the ROP, as appropriate. 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 annual ROP self-assessment program.

Activities Planned and Completed for the Reporting Period (Q3 FY 2021)

Reactor Oversight Process Activities	Projected Completion Date	Completion Date
Briefed the Commission on the results of the Agency Action Review Meeting (ADAMS Package No. ML21050A176).	06/10/21	06/10/21

Projected Activities for the Next Two Reporting Periods (Q4 FY 2021 and Q1 FY 2022)

Projected Reactor Oversight Process Activities	Projected Completion Date
Complete Comprehensive Baseline Inspection Program Review.	09/30/21 ²⁶

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....”²⁷ 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 clarified its backfitting and issue finality policy as well as its policy on “forward fits,” which are 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 *Federal Register* 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 (Q3 FY 2021)

Backfit Activities	Projected Completion Date	Completion Date
None	N/A	N/A

²⁶ Completion of the Comprehensive Baseline Inspection Program Review was previously scheduled for August 31, 2021. Additional time is needed to reach finalize the scope and objectives of the review.

²⁷ 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 (Q4 FY 2021 and Q1 FY 2022)

Projected Backfit Activities	Projected Completion Date
Develop recommendation on whether a proposed technical specification, pertaining to degraded voltage protection (DVR) at the Oconee Nuclear Station, is required under 10 CFR 50.36(c)(3), in accordance with the NRC's backfit rule. ²⁸	07/31/21
Submit to the Commission the Fitness-for-Duty Drug Testing Program Requirements Final Rule, which would constitute a generic backfit via rulemaking.	09/15/21

2-11 Risk-Informed Activities

The NRC staff continues to make progress to advance the use of risk insights more broadly to inform decisionmaking. 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.²⁹ The NRC staff continues to implement and track the use of the agencywide Be riskSMART risk-informed decisionmaking 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,³⁰ 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 (Q3 FY 2021)

Risk-Informed Activities	Projected Completion Date	Completion Date
Completed assessment of the August 2020 derecho event at the Duane Arnold Energy Center and issued report with recommendations for additional regulatory actions based on risk insights from the event (ADAMS Package No. ML21084A010). ³¹	04/30/21	03/30/21

²⁸ On January 28, 2021, the EDO directed the Office of Nuclear Reactor Regulation (NRR) to determine whether a proposed technical specification is required for DVR protection at Oconee under 10 CFR 50.36(c)(3), in accordance with the backfit rule. The NRC staff’s assessment of this issue is due to the EDO in July 2021.

²⁹ 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>.

³⁰ 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>

³¹ A public meeting was held on May 27, 2021 with industry representatives to exchange risk insights and other information that could further enhance licensees’ responses to similar severe weather events (ADAMS Accession No. [ML21172A263](#)).

Risk-Informed Activities	Projected Completion Date	Completion Date
Issued draft Interim Staff Guidance (ISG), "Supplemental Guidance for Radiological Consequence Analyses Using Alternative Source Terms," for public comment (86 FR 27657). Once finalized, this ISG is intended to provide guidance to the staff on using risk insights in deterministic evaluations.	05/21/21	05/21/21. ³²
Issued Revision 2 of RG 1.205, "Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants" (ADAMS Accession No. ML21048A448).	05/31/21	05/28/21. ³³
Conducted tabletop exercises of past fuel cycle facility licensing basis questions that have arisen during inspections using the drafted risk-informed process that was developed as part of the very low safety significance issues resolution initiative.	06/15/21	04/28/21
Briefed ACRS on draft Revision 2 of RG 1.205, following the public comment period (ADAMS Accession No. ML21161A350).	06/30/21	05/05/21
Implemented one of two of the longer-term recommendations on building a smarter fuel cycle inspection program (ADAMS Accession No. ML20183A242). ³⁴	06/30/21	03/30/21

³² A decision to issue the draft ISG for public comment, including the schedule and milestones, was made after the last report was submitted and therefore is new in this report.

³³ This item was not included in the previous projected activities list because of uncertainty in the extent of public comments and ACRS feedback that would have to be addressed prior to issuance of the RG.

³⁴ In the previous report, staff indicated that while all the inspection procedures identified for revisions have been issued, the staff planned to implement the following two longer-term recommendations from the smarter fuel cycle inspection report the third quarter of FY 2021: 1) performing an in-depth assessment of the scope of resident inspector guidance and 2) incorporating into the inspection program the results of the Operating Experience Program and the Fuel Cycle Inspection Assessment Program. Although the staff implemented the first of these longer-term recommendations during this reporting period, the NRC staff now plans to implement the second longer-term recommendation concerning the Operating Experience Program and the Fuel Cycle Inspection Assessment Program in Q2 FY 2022. The implementation of the second longer-term recommendation was delayed due to expansion of the scope of the Operating Experience Program beyond just the Fuel Cycle Inspection Program to include all of the Office of Nuclear Material Safety and Safeguards' (NMSS) responsibilities and activities.

Risk-Informed Activities	Projected Completion Date	Completion Date
Conducted public meeting to discuss the status, results of tabletop exercises, and path forward on the nuclear materials' low safety significance issue resolution initiative (ADAMS Accession No. ML21162A066).	06/30/21	06/15/21
Considered the expansion of the Risk Informed Process for Exemptions (RIPE) and decided to expand RIPE to additional reactor licensees by allowing the use of risk insights obtained from probabilistic risk assessments developed to support TSTF-425, "Surveillance Frequency Control Program" (ADAMS Accession No. ML21180A012).	06/30/21	06/30/21

Projected Activities for the Next Two Reporting Periods (Q4 FY 2021 and Q1 FY 2022)

Projected Risk-Informed Activities	Projected Completion Date
Issue final safety evaluation report for the first topical report related to Holtec's spent fuel storage systems. The topical report involves a generic and risk-informed approach on heat load zone configurations. This approach, if approved and adopted for a given Holtec design, will reduce the number of future license amendments.	07/30/21 ³⁵
Complete review of LAR to revise the emergency plans for SNC fleet to change emergency response organization staffing composition and extend staff augmentation times. These LARs are significant in that they result from the risk-informed aspects of the 2019 revision of NUREG-0654, the definitive emergency preparedness evaluation guidance. ³⁶	09/30/21
Identify potential need for changes in guidance to the definition of term "gross-rupture," which could result in operational and licensing efficiencies for spent fuel storage systems through engagement with external stakeholders.	09/30/21 ³⁷
Evaluate expansion of RIPE in other nuclear reactor licensing actions such as topical reports and continue outreach with other interested parties to expand RIPE in areas outside of the operating and new reactor business lines.	09/30/21

³⁵ This activity was originally projected to be completed by April 30, 2021. Additional time was required to consider future implementation of the topical report.

³⁶ This activity was originally projected to be completed by March 23, 2021. However, the licensee submitted new information for consideration. Thus, the completion date has been changed to September 30, 2021.

³⁷ This activity was originally projected to be completed by June 30, 2021. However, additional preparatory meetings were conducted from January to April to share operating experience and research results so that the technical meetings that occurred in June would be as successful as possible. To account for the additional information gleaned from these meetings, the expected completion date was moved to September 30, 2021.

Initiate exploratory activities for applying the RIPE concept to review nuclear materials licensing requests.	09/30/21 ³⁸
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.	12/31/21

2-12 Coronavirus Disease 2019 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 Re-Occupancy of Facilities

During this reporting period, occupancy limits at all NRC facilities remained at 25 percent and the agency remained in a maximum telework posture. The agency continues to closely monitor State and local conditions as well as guidance from the CDC, General Services Administration, Occupational Safety and Health Administration, Office of Management and Budget, and Office of Personnel Management as part of NRC's re-occupancy planning process in order to facilitate a healthy and safe re-entry of the NRC workforce. The NRC is coordinating its planning for expanded re-occupancy in accordance with directions and expectations set forth by the President's Management Council.

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/>).

During the reporting period, the agency provided notice of 218 public meetings to address a range of NRC issues. Due to health and safety concerns related to COVID-19, these meetings were held virtually via webcast or by teleconference. 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

³⁸ This activity was originally projected to be completed by June 30, 2021. The NRC staff, through the NMSS Low Safety Significance Issue Resolution (LSSIR) Working Group, is currently aligning on a path forward on the application of the RIPE concept to the review of nuclear materials licensing requests.

how the NRC is adapting its regulatory approach during the pandemic. Between April 1 and June 30, 2021, the NRC issued 10 licensing actions granting temporary flexibilities to maintain the safe and secure operation of nuclear reactor and nuclear materials licensees. A complete list of licensing actions 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 Requests³⁹
Power Reactor	8	22
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	0	N/A
Medical, Industrial and Academic Uses of Nuclear Materials and Agreement States	2	46 ⁴⁰

³⁹ This average is calculated based on the date 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.

⁴⁰ During the reporting period, the NRC staff approved two COVID-19 related exemptions with 18-day and 64-day review periods. The second exemption request, which was received on April 16, 2021, extended a previously approved exemption, which had been approved until June 30, 2021. The staff issued the approval on June 29, 2021 before the previous exemption expired.

Enclosure 3 – Summary of Activities

3-1 Reactor Oversight Process Findings

The table below provides the CY ROP findings for the YTD and 3-year rolling metrics.

Location	Number of Findings	CY 2018	CY 2019	CY 2020	CY2021 (YTD)
Nationally	Total	478	440	291	150 ⁴¹
Region I	Green	107	95	50	37
	White	1	0	0	1
	Yellow	0	0	0	0
	Red	0	0	0	0
	Greater Than Green Security	0	0	0	0
	Total	108	95	50	38
	No. of Units Operating During CY	25	24	21 ⁴²	21
Region II	Green	113	110	77	28
	White	0	1	2	0
	Yellow	0	0	0	0
	Red	0	0	0	0
	Greater Than Green Security	0	0	1	0
	Total	113	111	80	28
	No. of Units Operating During CY	33	33	33	33
Region III	Green	110	96	51	27
	White	2	1	0	0
	Yellow	0	0	0	0
	Red	0	0	0	0
	Greater Than Green Security	0	0	0	1

⁴¹ The inspection reports for the second quarter of CY 2021 will continue to be finalized through August 15, 2021. The report for the next reporting period will be updated to include any additional findings from the second quarter of CY 2021.

⁴² 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.

Location	Number of Findings	CY 2018	CY 2019	CY 2020	CY2021 (YTD)
	Total	112	97	51	28
	No. of Units Operating During CY	23	23	22 ⁴³	22
Region IV	Green	145	137	110	56
	White	0	0	0	0
	Yellow	0	0	0	0
	Red	0	0	0	0
	Greater Than Green Security	0	0	0	0
	Total	145	137	110	56
	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 NRC staff issues a final safety evaluation. These totals do not include 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 ⁴⁴	Percentage of Licensing Actions Completed Prior to the Established Schedule ⁴⁵
Q4 FY 2020	238	233 ⁴⁶	186	100%	98%
Q1 FY 2021	224	226	237	100%	92%

⁴³ The reduction of one unit for CY 2020 reflects the permanent shutdown of Duane Arnold on August 10, 2020.

⁴⁴ Consistent with previous reports, this excludes unusually complex and Fukushima-related licensing actions accepted or initiated prior to July 13, 2019.

⁴⁵ The “established schedule” is the schedule communicated to the licensee and made publicly available at the completion of the acceptance review.

⁴⁶ In the previous report, the 2 in 233 was inadvertently deleted.

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 ⁴⁴	Percentage of Licensing Actions Completed Prior to the Established Schedule ⁴⁵
Q2 FY 2021	264	135	105	100%	96%
Q3 FY 2021	226	49	71	100%	100%

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
Q4 FY 2020	3	1	6	100%	100%
Q1 FY 2021	2	1	2	100%	100%
Q2 FY 2021	2	0	0	N/A	N/A
Q3 FY 2021	2	1	1	100%	100%

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
Q4 FY 2020	3	1	2	100%	100%
Q1 FY 2021	2	1	2	100%	0% ⁴⁷
Q2 FY 2021	2	4	4	100%	75% ⁴⁸
Q3 FY 2021	4	3	1	100%	100%

⁴⁷ One licensing action was complex; the other was completed approximately 25 days after the established schedule. Both licensing actions were completed within the generic milestone schedule.

⁴⁸ One licensing action was complex, which resulted in it exceeding the established schedule by 27 days. The licensing action was completed within the generic milestone schedule.

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 safety evaluation. 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).

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 ⁴⁹	Percentage of LAR Reviews Completed Prior to the Established Schedule ⁵⁰
Q4 FY 2020	362	125	145	100%	91%
Q1 FY 2021	354	84	94	100%	92%
Q2 FY 2021	276	36	107	100%	90%
Q3 FY 2021	249	56	66	100%	97% ⁵¹

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
Q4 FY 2020	3	1	3	100%	100%
Q1 FY 2021	1	0	2	100%	100%
Q2 FY 2021	1	0	0	N/A	N/A
Q3 FY 2021	1	0	0	N/A	N/A

⁴⁹ Consistent with previous reports, this excludes unusually complex and Fukushima-related LARs accepted or initiated prior to July 13, 2019.

⁵⁰ The “established schedule” is the schedule communicated to the licensee and made publicly available at the completion of the acceptance review.

⁵¹ 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 60-day public comment period and opportunity to request a hearing. The staff expects to complete its review in September 2021.

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
Q4 FY 2020	14	7	5	100%	80%
Q1 FY 2021	14	6	6	100%	100%
Q2 FY 2021	10	4	8	100%	75%. ⁵²
Q3 FY 2021	9	7	8	100%	83%

Unusually Complex LARs⁵³

The staff has identified certain LARs (accepted for review prior to July 13, 2019), as unusually complex. Consistent with the previous reports, these unusually complex submittals are not included in the internal performance measures as they do not lend themselves to realistic schedule forecasting. Rather, they are given escalated management attention to ensure progress is made toward resolving outstanding issues and completing the reviews in a timely manner.

Unusually Complex LAR Description	Exclusive Justification	Age (Months)
None	N/A	N/A

3-4 Research Activities⁵⁴

Summary of New Research Projects

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

Regulatory Research Supporting Aging Management of Chloride-Induced Stress Corrosion Cracking of Stainless-Steel Canisters (NMSS-2021-004)	
Importance to the NRC Mission	Enhance the NRC's understanding of important technical issues for the successful aging management of chloride-induced stress corrosion cracking of stainless-steel canisters in dry storage systems.

⁵² Two licensing actions had delayed issuance at the end of the year, which resulted in both items exceeding the established schedule by 2 percent (5 days).

⁵³ There were no unusually complex LARs for new reactors, operating reactors, or fuel facilities during the reporting period. The previously-reported unusually complex Point Beach exemption request was withdrawn by the licensee on February 11, 2021 (ADAMS Accession No. [ML21042A002](#)).

⁵⁴ 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.

Regulatory Research Supporting Aging Management of Chloride-Induced Stress Corrosion Cracking of Stainless-Steel Canisters (NMSS-2021-004)	
Planned Activities:	<p>This activity will provide research support to risk-inform the licensing and oversight of stainless-steel canisters in dry storage systems. The following tasks are planned:</p> <ul style="list-style-type: none"> • Obtain crack growth rate data under conditions relevant to the range of operating conditions for dry storage facilities to inform canister inspection frequencies, • Assess the use of cold spray technologies for mitigation and repair of stainless-steel canisters, • Develop a probabilistic assessment for chloride-induced stress corrosion cracking based on its likelihood and timing, and • Support engagement with the Department of Energy and industry on efforts related to the inspection, mitigation, and repair of stainless-steel canisters.
Requesting Business Line	Spent Fuel Storage and Transportation
Estimated Completion	FY 2023
Estimate of Total Research Resources	2.5 FTE and \$620K over a 3-year period

Holtec SMR Confirmatory Analysis and Licensing Support (NRR-2021-015)	
Importance to the NRC Mission	Conduct confirmatory analysis and support licensing review for the Holtec SMR-160 design application. Technical analysis of the reactor design will assist in understanding performance of integrated plant systems during design basis accidents to support safety assessment.
Planned Activities:	This activity includes conducting an NRC evaluation of the phenomena important to the operation of the Holtec reactor and performing research to support the design basis accident analysis and containment analysis reviews. The timing for this support will largely depend on when design information is provided to the NRC and the overall licensing schedule for the applicant.
Requesting Business Line	New Reactors
Estimated Completion	FY 2025
Estimate of Total Research Resources	5.7 FTE and \$200K over a 5-year period

Summary of Completed Research Projects⁵⁵

During the reporting period, Office of Nuclear Regulatory Research completed the following activities:

Reactor Pressure Vessel Fluence Evaluation Methodology Guidance (NRR-2015-002)	
Importance to the NRC Mission	Provide a technical basis for determining the applicability of RG 1.190 for evaluating neutron fluence in the extended beltline region and help inform decisions concerning changes to calculational methodology guidance that may be needed.
Research Results or Findings	<p>The research analysis assessed the performance of nuclear transport calculations used to evaluate the impacts of fluence in the reactor pressure vessel extended beltline region.</p> <p>The technical basis for the conclusion that RG 1.190 is applicable to evaluations of neutron fluence in the extended beltline region and can help inform decisions concerning changes to calculational methodology guidance is provided in the following reports:</p> <ul style="list-style-type: none"> • Technical Letter Report (TLR), “Reactor Pressure Vessel Fluence Evaluation Methodology Guidance,” (ADAMS Package No. ML17264A085). • TLR-RES-CIB-2021-08, “Calculational Methods for Reactor Pressure Vessel Fluence in Extended Beltline Locations,” (ADAMS Accession No. ML21137A309) • TLR-RES-CIB-2021-09, “Reactor Pressure Vessel Fluence, DPA, and Uncertainty Quantification in Extended Beltline Locations,” (ADAMS Accession No. ML21137A310) <p>Additional information on the technical basis will be included in the following report, which is expected to be issued by September 2021:</p> <ul style="list-style-type: none"> • NUREG/CR-XXXX, “Reactor Pressure Vessel Fluence Evaluation Methodology for Extended Beltline Locations,” (Oak Ridge National Laboratory report ORNL/SPR/2021-1998).
Duration of the Project	6 years
Estimate of Total Research Resources	1.2 FTE and \$1.8M over the 6-year period

⁵⁵ 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.

3-5 Fees Billed

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.⁵⁶

Fee Class	FY 2021 Part 170 Receipts Proposed – Annual Fee Rule (\$M)	Part 170 Billed in FY 2021 Q3 (\$M)	Total Part 170 – Billed in FY 2021 (\$M)
Fuel Facilities	\$7.4	\$1.6	\$5.4
Generic Decommissioning	\$0.5	\$0.9	\$2.5
Materials Users ⁵⁷	\$1.0	\$0.2	\$0.7
Operating Power Reactors	\$157.0	\$39.3	\$118.5
Research and Test Reactors	\$3.7	\$0.9	\$2.0
Spent Fuel Storage / Reactor Decommissioning	\$12.4	\$2.7	\$8.3
Transportation	\$3.6	\$0.8	\$1.3
Uranium Recovery	\$0.3	\$0.1	\$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, Oklo's Aurora COL application, and the SHINE Medical Technologies, LLC (SHINE) operating license application review.

Docket	Project Name	Projected Resources (\$M) ⁵⁸	Fees Billed to Date (\$M) ⁵⁹
Point Beach Units 1 and 2 05000266/05000301	Point Beach Units 1 and 2 Subsequent License Renewal Application — Safety Review	\$5.0 ⁶⁰	\$1.3
Point Beach Units 1 and 2 05000266/05000301	Point Beach Units 1 and 2 Subsequent License Renewal	\$1.4	\$0.3

⁵⁶ The FY 2021 Final Fee Rule was published on June 16, 2021 (86 FR 32146).

⁵⁷ Materials Users—Billed as flat fee applications and included in the estimates and billed.

⁵⁸ 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.

⁵⁹ 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 April, May, and June, would be invoiced to the licensee/applicant in July. Therefore, the total billed amounts listed in Table 3-5 reflects costs for NRC work performed through March 2021.

⁶⁰ When the formal acceptance letter for the Point Beach subsequent license renewal application was sent to the licensee on January 15, 2021 (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) ⁵⁸	Fees Billed to Date (\$M) ⁵⁹
	Application — Environmental Review		
North Anna Units 1 and 2 05000338/05000339	North Anna Units 1 and 2 Subsequent License Renewal Application — Safety Review	\$5.0 ⁶¹	\$2.3
North Anna Units 1 and 2 05000338/05000339	North Anna Units 1 and 2 Subsequent License Renewal Application — Environmental Review	\$1.4	\$0.8
Surry Units 1 and 2 05000280/05000281 ⁶²	Surry Units 1 and 2 Subsequent License Renewal Application — Safety Review	\$4.9	\$4.6
Surry Units 1 and 2 05000280/05000281 ⁶³	Surry Units 1 and 2 Subsequent License Renewal Application — Environmental Review	\$1.4 ⁶⁴	\$1.9
SHINE Medical Technologies, LLC 05000608	SHINE Medical Isotope Production Facility Operating License Application Review — Safety and Environmental Reviews	\$6.2 ⁶⁵	\$4.3
Oklo Aurora 05200049	Oklo Aurora COL Application – Safety Review	\$0.5 ⁶⁶	\$0.4
Oklo Aurora 05200049	Oklo Aurora COL Application – Environmental Review	\$0.2	\$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 NRC staff issues a final safety evaluation, 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.

⁶¹ 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.

⁶² The NRC staff issued the Surry Units 1 and 2 Subsequent License Renewal on May 4, 2021. Final billing totals for the safety review will be included in the next report and thereafter this item will be removed.

⁶³ The NRC staff issued the Surry Units 1 and 2 Subsequent License Renewal on May 4, 2021. Final billing totals for the environmental review will be included in the next report and thereafter this item will be removed.

⁶⁴ When the Surry subsequent license renewal application was accepted for review on December 3, 2018 (ADAMS Accession No. [ML18320A236](#)), the NRC estimated it would take approximately \$6.3M to complete the application review.

⁶⁵ The projected resource estimate was provided to SHINE by letter dated April 30, 2020 (ADAMS Accession No. [ML20114E315](#)).

⁶⁶ When the Oklo COL application was accepted for review, the NRC indicated that the staff plans to complete the review in a two-step process. This table contains the projected resources to complete the identified Step 1 safety and environmental aspects of the review (ADAMS Accession No. [ML20308A677](#)), including reviews of any applicable topical reports.

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 ⁶⁷
Operating Reactors	357	112	128	229
Non-Power Production and Utilization Facilities ⁶⁸	627 ⁶⁹	60	52	0
Design Certifications for New Reactors ⁷⁰	N/A	N/A	N/A	N/A
Early Site Permits for New Reactors ⁷¹	N/A	N/A	N/A	N/A
Combined Licenses for New Reactors	10	0	0	0
Fuel Facilities	42	12	4	92
Power Reactor Decommissioning	70	26	16	17
Research and Test Reactor Decommissioning	6	0	0	0
Spent Fuel	804	87	29	81
Materials	0	0	0	0
Pre-Application Activities for Advanced Reactors	4 ⁷²	4	0	0

⁶⁷ RAIs are considered closed once the final safety evaluation, 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.

⁶⁸ 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.

⁶⁹ The "Total Inventory of Open RAIs as of the End of Reporting Period" column has been corrected to account for an error in the total inventory of open RAIs. Specifically, 531 RAIs were reported in the previous report but the number should have been 567 RAIs.

⁷⁰ 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.

⁷¹ 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.

⁷² The four RAIs listed concern the NRC staff's review of a topical report submitted by TerraPower, LLC.

3-7 Workforce Development and Management

FY 2021 Staffing by Office⁷³

	FY 2021 Budget	FTE Utilization 03/14/21 - 04/24/21	FTE Utilization 04/25/21 - 05/22/21	FTE Utilization 05/23/21 - 06/19/21	FTE Utilization as of 06/19/21	Delta (Q3 FTE Utilization – FY 2021 Budget)	End of Year (EOY) ⁷⁴ Projection w/ Personnel Actions	Delta (EOY Projection – FY 2021 Budget)
Totals	2877.9	210.7	210.5	214.8	2015.2	-862.7	2759.2	-118.7
COMM	45.0	2.6	2.5	2.2	24.8	-20.2	32.7	-12.3
OIG	63.0	4.3	4.3	4.4	40.9	-22.1	55.5	-7.5
Totals Other Offices	2769.9	203.8	203.7	208.1	1949.5	-820.4	2670.9	-99.0
OCFO	93.0	6.6	6.5	6.8	64.6	-28.4	88.4	-4.6
OGC	92.0	6.7	6.8	7.1	65.3	-26.7	90.0	-2.0
OCA	10.0	0.8	0.8	0.8	7.9	-2.1	10.9	0.9
OCAA	7.0	0.5	0.5	0.5	4.9	-2.1	6.7	-0.3
OPA	13.0	1.0	1.0	1.0	9.5	-3.5	12.9	-0.1
SECY	17.0	1.4	1.4	1.3	12.9	-4.1	17.5	0.5
OIP	34.0	2.5	2.5	2.6	23.7	-10.3	32.8	-1.2
ASLBP	23.0	1.5	1.5	1.5	14.9	-8.1	20.0	-3.0
ACRS	24.0	1.8	1.9	1.7	17.8	-6.2	24.3	0.3
OEDO	23.0	1.8	1.8	1.9	16.9	-6.1	23.6	0.6
NRR	548.4	40.7	40.6	41.7	391.6	-156.8	536.1	-12.3
NMSS	298.3	22.6	22.7	23.4	217.8	-80.5	299.3	1.0
RES	197.0	15.1	15.1	16.2	141.5	-55.5	197.4	0.4
NSIR	152.0	11.6	11.5	11.8	112.1	-39.9	152.7	0.7
R-I	178.2	13.5	13.5	13.5	125.7	-52.5	171.3	-6.9
R-II	223.3	15.9	15.7	15.5	151.5	-71.8	204.8	-18.5
R-III	174.4	12.7	12.8	13.0	120.6	-53.8	165.2	-9.2
R-IV	164.0	12.5	12.4	12.5	118.4	-45.6	162.3	-1.7
OE	30.3	2.3	2.2	2.3	21.2	-9.1	29.6	-0.7
OI	35.0	3.0	2.9	2.8	28.3	-6.7	38.0	3.0
OCIO	167.0	11.3	11.5	12.0	108.7	-58.3	150.2	-16.8
ADM	123.0	8.7	8.8	9.0	83.8	-39.2	114.0	-9.0
SBCR	13.0	0.9	0.9	0.9	8.8	-4.2	12.3	-0.7
OCHCO	129.0	8.4	8.2	8.1	79.6	-49.4	108.6	-20.4

⁷³ Some numbers might not add due to rounding.

⁷⁴ Based on FTE utilization as of June 19, 2021.

	FY 2021 Budget	FTE Utilization 03/14/21 - 04/24/21	FTE Utilization 04/25/21 - 05/22/21	FTE Utilization 05/23/21 - 06/19/21	FTE Utilization as of 06/19/21	Delta (Q3 FTE Utilization – FY 2021 Budget)	End of Year (EOY) ⁷⁴ Projection w/ Personnel Actions	Delta (EOY Projection – FY 2021 Budget)
CSU	1.0	0.2	0.2	0.2	1.5	0.5	2.0	1.0

3-8 Inspection Activities

The table below shows the average number of hours of direct inspection per plant in CY 2021.

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
793 Hours	766 Hours	1189 Hours ⁷⁵	1261 Hours ⁷⁶	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 2020 (Hours)	CY 2021 (YTD) (Hours)
i.	Baseline Inspection	219,178	110,540
ii.	Plant-Specific Inspection	7,521	616
iii.	Generic Safety Issue Inspections	911	914
iv.	Performance Assessment	1,880	2,849 ⁷⁷
v.	Other Activities	86,074	41,698
vi.	Total Staff Effort	315,563	156,617
vii.	Total Staff Effort Per Operating Site	5,536 ⁷⁸	2,797 ⁷⁹

3-9 Backfit

Facility-Specific Backfits

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

⁷⁵ As of June 1, 2021, Callaway Plant (1-unit Pressured Water Reactor (PWR)), Clinton Power Station (1-unit BWR), James A. Fitzpatrick (1-unit BWR) and Turkey Point Nuclear Generating Unit 3 (2-unit PWR) are in Column 2 of the ROP Action Matrix. Surry Power Station Unit 2 (2-unit PWR) was in Column 2 in Q1 of CY 2021 and returned to Column 1 on April 1, 2021 (ADAMS Accession No. [ML20365A007](#)).

⁷⁶ On March 3, 2021, Grand Gulf Nuclear Station (1-unit BWR) entered Column 3 of the ROP Action Matrix in Q4 CY 2020 (ADAMS Accession No. [ML21055A008](#)).

⁷⁷ The increase in Performance Assessment hours is due to a change in tabulation of hours. The CY 2020 hours did not include hours assigned to ROP cycles other than 2020, while the CY 2021 hours includes ROP Cycle 2020 hours charged in 2021. Applying the same methodology to the CY 2020 hours would increase the number to 3,569 from 1,880.

⁷⁸ Total staff effort is divided by 57 sites for CY 2020, due to Three Mile Island Unit 1, permanently ceasing operations on September 20, 2019.

⁷⁹ Total staff effort is divided by 56 sites for CY 2021, due to Duane Arnold Unit 1 permanently ceasing operations in August 2020. Because Duane Arnold Unit 1 operated for the majority of CY 2020, it was included as an operating site in CY 2020.

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.