

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

**For the Reporting Period of July through September 2019**

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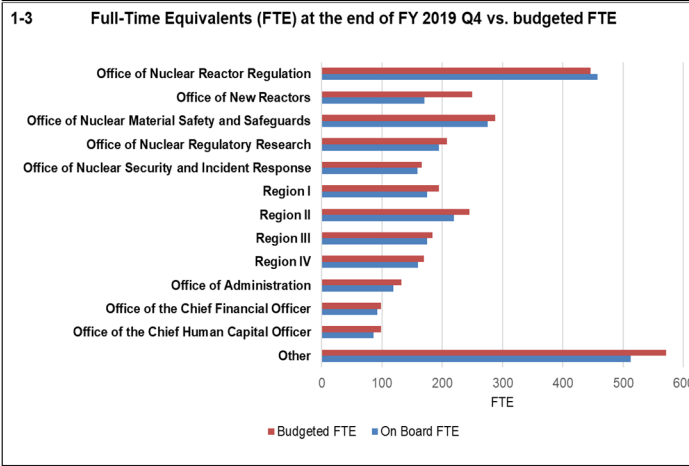
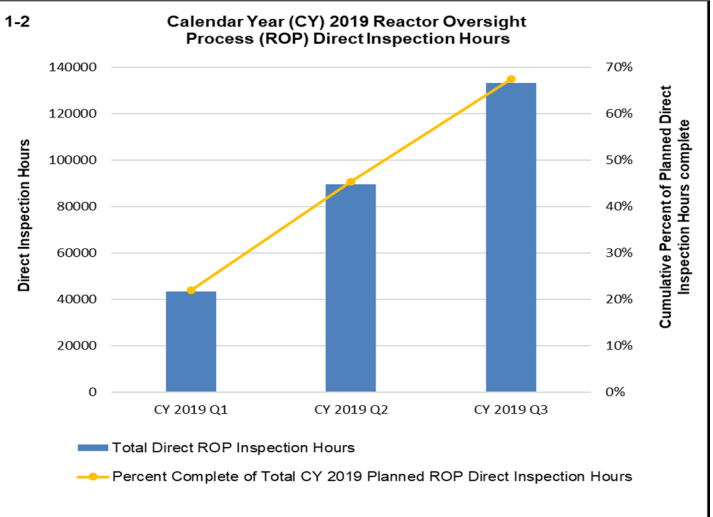
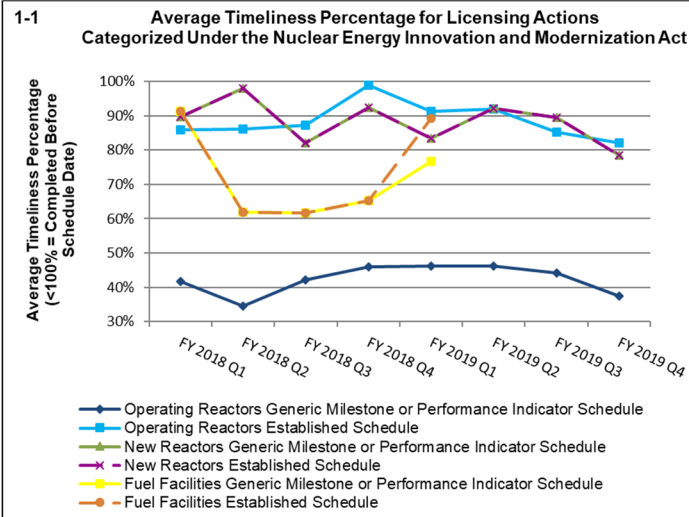
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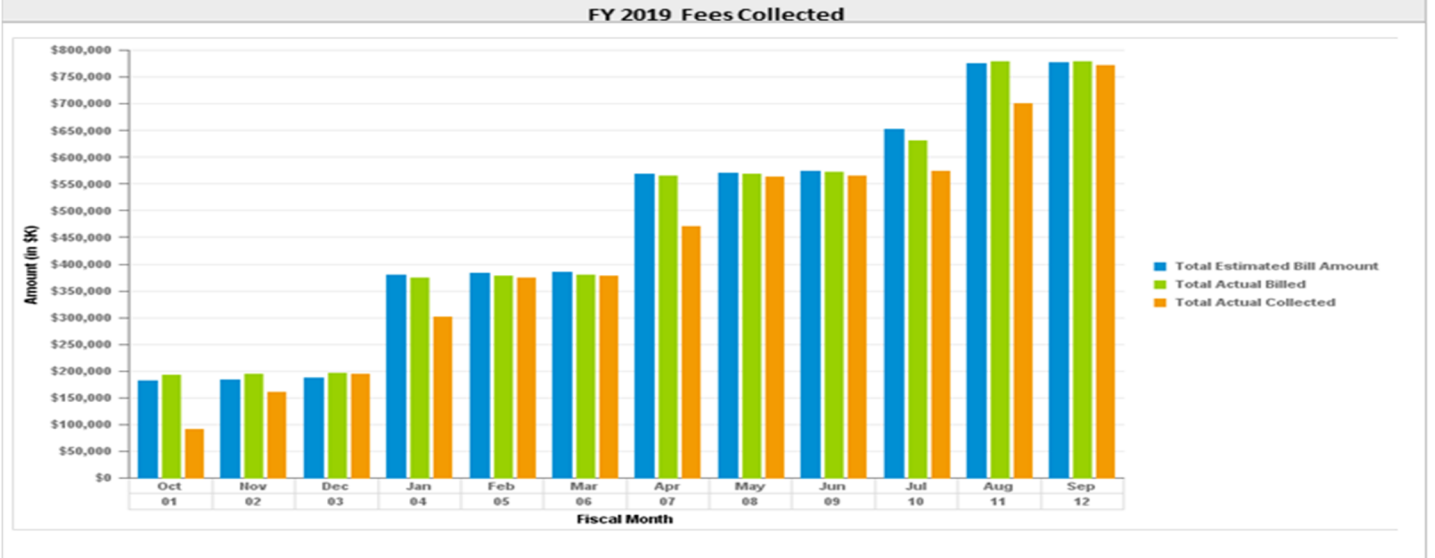
# Enclosure 1 - High Level Summary



**1-4 NRC FY 2019 Budget Authority – Sept. 30, 2019 (Dollars in Thousands)**

Fund Sources	FY 2019 Budget	Percent Obligated
Advanced Reactor	\$10,875	95%
Commission Funds	\$10,742	56%
Fee-Based Funds	\$866,142	96%
General Funds	\$1,303	65%
International Activities	\$16,080	94%
Integrated University Program	\$15,363	97%
Official Representation	\$25	97%
<b>Total</b>	<b>\$920,530</b>	<b>96%</b>
NRC Control Points	FY 2019 Budget	Percent Obligated
Nuclear Reactor Safety	\$470,342	94%
Nuclear Materials and Waste Safety	\$108,609	98%
Decommissioning and Low-Level Waste	\$25,393	93%
Corporate Support	\$300,823	97%
Integrated University Program	\$15,363	97%
<b>Total</b>	<b>\$ 920,530</b>	<b>96%</b>

Total Year to Date (YTD) FTE Utilization	Projected End of Year Total Utilization	Quarter 4 FTE Gains	Quarter 4 FTE Losses	YTD FTE Gains	YTD FTE Losses
2,862	2,862	21	52	48	198



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

Fiscal Year 2017	Fiscal Year 2018	Fiscal Year 2019
\$283.1	\$265.5	\$245.0

## Enclosure 2

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 reporting period.

### 2-1 Transformation Initiative

The U.S. Nuclear Regulatory Commission's (NRC) transformation initiative encompasses a broad set of activities intended to advance the agency towards the vision of being a modern, risk-informed regulator. There are four focus areas for transformation: (1) recruiting, developing, and retaining a strong workforce, (2) accepting risk in decisionmaking, (3) generating innovative ideas to improve the ways that the NRC works, and (4) adopting new technologies and approaches to data analytics. Supporting these four focus areas, the following seven initiatives have been identified and defined:

- 1) **Accepting Risk in Decisionmaking:**<sup>1</sup> Developing a common understanding of what it means to accept risk, how it connects to the vision, and how risk insights can be applied to NRC activities.
- 2) **Agency Desired Culture:** Building into our culture a mindset that welcomes change while reinforcing appropriate behaviors and outcomes.
- 3) **Career Enhancement:** Clearly communicating opportunities to ensure that all staff understand the potential paths that will enable them to grow throughout their career.
- 4) **Innovation:** Finalizing and implementing the new Innovate-NRC 2.0 process and technology platform agencywide to create and sustain a culture of innovation.
- 5) **Process Simplification:** Simplifying and reinforcing our work processes to achieve greater efficiency.
- 6) **Signposts and Markers:** Identifying external signposts and markers pertinent to anticipating future agency workload and adapting the decisionmaking process to incorporate these indicators, ensuring the agency is better prepared to adapt to a changing external landscape.
- 7) **Technology Adoption:** Enabling all staff to easily and efficiently complete their work with available technology and increasing the use of new and existing technology across the agency.

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<sup>1</sup> This activity will produce a framework that gives the staff confidence in incorporating risk considerations in decisionmaking without compromising the NRC's safety and security mission. The framework will inform technical and corporate decisions ranging from reactor safety to fee revenue activities. The intent is to enhance safety and operational effectiveness by appropriately focusing resources on high-value mission priorities.

Activities Planned and Completed for the Reporting Period (Quarter (Q)4 Fiscal Year (FY) 2019)

<b>Transformation Activities</b>	<b>Planned Completion Date</b>	<b>Completion Date</b>
Identify the initiatives that will be undertaken to support the four transformation focus areas.	08/19	08/19
Complete a Transformation Roadmap to establish timeframes and sequences for the initiatives.	08/19	08/19
Establish working teams that will have primary responsibility for implementing the transformation initiatives.	09/19	09/19
Launch a multimedia internal communication strategy to keep staff abreast of transformation activities and to solicit participation in initiative working groups.	09/19	09/19

Projected Activities for the Next Quarter (Q1 FY 2020)

<b>Projected Transformation Activities</b>	<b>Projected Completion Date</b>
Brief the Commission on the staff's transformation activities (public meeting).	10/19
Hold a Transformation Expo for staff to showcase the various change initiatives that are underway at the NRC.	10/19
Establish and integrate into agency decisionmaking processes indicators to reflect future trends in the nuclear energy sector to support strategic foresight.	12/19
Complete preparations for launch of InnovateNRC 2.0, a new process and technology platform to facilitate innovative idea generation, tracking, and implementation.	12/19

**2-2 Workforce Development and Management**

The NRC implements a Strategic Workforce Planning (SWP) process to improve our efforts in developing and managing the NRC workforce and to balance near-term work with long-term staffing projections. This process projects the amount and type of work anticipated in the next five years and identifies the workforce needed to perform that work. By analyzing the current workforce and comparing it to future needs, skill gaps or surpluses 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.

Activities Planned and Completed for the Reporting Period (Q4 FY 2019)

<b>Workforce Development and Management Activities</b>	<b>Planned Completion Date</b>	<b>Completion Date</b>
Analyze results from implementation of SWP and determine the need to develop a pipeline of future talent to fill vacant positions anticipated due to increased attrition expected over the next five years.	08/19	07/19
Initiate plans to recruit 25 entry-level engineers and scientists to develop a pipeline of talent to fill future positions based on results of SWP. The entry-level hires will be part of the NRC's new training program, as described in the table below.	08/19	08/19
Complete the phased approach to implementing the SWP process and kick-off agencywide implementation to include all offices that report to the Office of the Executive Director for Operations, as well as three Commission-level offices (Office of the General Counsel, Office of the Chief Financial Officer, and Office of the Secretary).	08/19	08/19
Provide training to new office and regional participants on the SWP process.	08/19	08/19
Begin using SWP results to inform hiring requests to ensure that hiring actions reflect the projected future needs and workload of the agency.	08/19	08/19
Update the Agency Environmental Scan, which allows offices and regions to monitor key workload drivers and internal and external opportunities and risks that may influence current workload, future workload, or both.	09/19	09/19

Projected Activities for the Next Quarter (Q1 FY 2020)

<b>Projected Workforce Development and Management Activities</b>	<b>Projected Completion Date</b>
Using the information in the Agency Environmental Scan, offices/regions complete step 1 of the SWP process, which is to develop a long-term workload forecast. The results of the workload forecast will provide strategic insights on office/region needs and will identify potential changes to positions or the organization, as well as tactical insights on the necessary pace and direction of workforce changes.	12/19
Make offers to 25 entry-level hires who will join the agency in June 2020 as participants in the agency's new entry-level training program, the Nuclear Regulator Apprenticeship Network (NRAN). The NRAN focuses on preparing individuals to acquire the skills needed for a variety of agency positions, which will enhance agility and our ability to respond to fluctuations in workload.	12/19

### 2-3 Accident-Tolerant Fuel

The NRC is preparing for the anticipated licensing and use of Accident-Tolerant Fuel (ATF) in U.S. commercial power reactors. In coordination with the Department of Energy (DOE), several fuel vendors have announced plans to develop and seek approval for various fuel designs with enhanced accident tolerance (i.e., fuels with longer coping times during loss of cooling conditions). Preparing the agency to conduct meaningful and timely reviews of these advanced fuel designs may require the expansion of the existing regulatory infrastructure, development of additional analysis capabilities, and development of unique critical skills. To increase regulatory stability and certainty, and to enhance and optimize NRC review efforts, the staff developed an ATF project plan (Agencywide Documents Access and Management (ADAMS) Accession No. ML18261A414), which includes a vision for a new paradigm for ATF licensing. The ATF project plan presents the high-level strategy that the staff will follow to ensure that it is ready to receive ATF topical reports or licensing requests for review.

#### Activities Planned and Completed for the Reporting Period (Q4 FY 2019)

<b>ATF Activities</b>	<b>Planned Completion Date</b>	<b>Completion Date</b>
Publish an initial draft of Interim Staff Guidance (ISG), "Supplemental Guidance Regarding the Chromium-Coated Zirconium Alloy Fuel Cladding Accident Tolerant Fuel Concept" (ADAMS Accession No. ML19198A306).	07/19	07/19
Conduct a public meeting to solicit comments from stakeholders on the draft ISG.	08/19	08/19
Publish a draft Appendix A, "Fuel Burnup and Enrichment Extension Preparation Strategy," to the NRC's ATF project plan (ADAMS Accession No. ML19242E192).	08/19	08/19
Send a letter to the Nuclear Energy Institute (NEI) informing them of significant licensing milestones for fuel cycle facilities and transportation vendors seeking to implement ATF with increased uranium enrichment (ADAMS Accession No. ML19235A265).	08/19	08/19
Conduct a public meeting to solicit feedback from stakeholders on the draft Appendix A.	09/19	09/19
Present NRC perspectives on ATF at the DOE's Nuclear Energy Advisory Committee meeting.	09/19	09/19

#### Projected Activities for the Next Quarter (Q1 FY 2020)

<b>Projected ATF Activities</b>	<b>Projected Completion Date</b>
Publish a notice of availability for public comment of an updated draft of the ISG in the <i>Federal Register</i> for a 30-day public comment period.	10/19
Publish ATF Project Plan, Version 1.1 with the inclusion of Appendix A.	10/19
Conduct a planning meeting with Framatome on increased burnup and increased enrichment.	10/19

Projected ATF Activities	Projected Completion Date
Conduct a public meeting to discuss stakeholder comments on the draft ISG.	12/19

## 2-4 Digital Instrumentation and Control

Operating reactors in the United States seek to more efficiently integrate and implement digital upgrades into plant systems to address obsolescence issues with analog components and improve overall plant reliability. In addition, new reactor designs continue to employ highly integrated digital instrumentation and control (I&C) designs for safe and efficient operation of future plants. To address these industry trends, the NRC is modernizing and improving the regulatory infrastructure for digital I&C. The NRC Integrated Action Plan (IAP) for digital I&C (ADAMS Accession No. ML16126A137) defines key improvement activities and the actions for completing modernization efforts. These improvements are expected to increase the timeliness, efficiency, and effectiveness of digital I&C licensing actions. The IAP includes four modernization plans (MP): (1) Protection Against Common Cause Failure (MP1); (2) Considering Digital I&C in Accordance with 10 CFR 50.59, “Changes, Tests, and Experiments” (MP2); (3) Commercial Grade Dedication of Digital Equipment (MP3); and (4) Assessment for Modernization of the I&C Regulatory Infrastructure (MP4).

### Activities Planned and Completed for the Reporting Period (Q4 FY 2019)

Digital Instrumentation and Control Activities	Planned Completion Date	Completion Date
MP1D: Update Branch Technical Position (BTP) 7-19, “Guidance for Evaluation of Diversity and Defense-In-Depth in Digital Computer Based Instrumentation and Control Systems.”		
<ul style="list-style-type: none"> <li>Hold a public meeting</li> </ul>	08/19	08/19
MP2: Considering Digital I&C in Accordance with 10 CFR 50.59.		
<ul style="list-style-type: none"> <li>Complete inspector training</li> </ul>	07/19	07/19
<ul style="list-style-type: none"> <li>Hold a public meeting</li> </ul>	09/19	09/19

### Projected Activities for the Next Quarter (Q1 FY 2020)

Projected Digital Instrumentation and Control Activities	Projected Completion Date
MP1D: BTP 7-19, “Guidance for Evaluation of Diversity and Defense-In-Depth in Digital Computer Based Instrumentation and Control Systems.”	
<ul style="list-style-type: none"> <li>Advisory Committee on Reactor Safeguards (ACRS) informational meeting</li> </ul>	11/19
<ul style="list-style-type: none"> <li>Final publication of BTP 7-19</li> </ul>	12/19
MP2A: Endorsement of NEI 96-07, Appendix D, “Supplemental Guidance for Application of 10 CFR 50.59 to Digital Modifications,” through an update to Regulatory Guide (RG) 1.187, “Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments.”	



<b>Projected Digital Instrumentation and Control Activities</b>	<b>Projected Completion Date</b>
<ul style="list-style-type: none"> <li>ACRS review of RG 1.187</li> </ul>	11/19
<ul style="list-style-type: none"> <li>Final publication of RG 1.187</li> </ul>	12/19
MP3: Endorsement 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," through issuance of an RG.	
<ul style="list-style-type: none"> <li>Hold a public meeting</li> </ul>	10/19
MP4: Assessment for Modernization of the I&C Regulatory Infrastructure.	
<ul style="list-style-type: none"> <li>Issue draft recommendations</li> </ul>	10/19
<ul style="list-style-type: none"> <li>Hold a public meeting</li> </ul>	11/19
<ul style="list-style-type: none"> <li>Issue the final report</li> </ul>	12/19

## 2-5 Vogtle Electric Generating Plant Units 3 and 4

The NRC issued two combined licenses to Southern Nuclear Operating Company and its financial partners on February 10, 2012, for two AP1000 units at the Vogtle site, near Augusta, GA. The NRC's Vogtle Readiness Group (VRG) provides high-level assessments, coordination, oversight, and management direction of NRC activities associated with the licensing, inspection, testing, and operation of Vogtle Units 3 and 4. The VRG tracks the NRC staff's progress using an integrated project plan, that overlays key NRC activities on top of the licensee's construction and start-up schedule.

### Activities Planned and Completed for the Reporting Period (Q4 FY 2019)

<b>Vogtle Electric Generating Plant Units 3 and 4 Activities</b>	<b>Planned Completion Date</b>	<b>Completion Date</b>
Public meeting to discuss 52.103(g) finding process and Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC).	8/13/19	8/13/19
Public meeting to discuss 52.103(g) finding process.	9/10/19	9/10/19

### Projected Activities for the Next Quarter (Q1 FY 2020)

<b>Projected Vogtle Electric Generating Plant Units 3 and 4 Activities</b>	<b>Projected Completion Date</b>
Public meeting on ITAAC hearing process.	10/19
Issue License Amendment Requests (LAR) 19-001, 19-002, 19-005, 19-006, 19-008, and 19-011(provided the requisite findings are made).	12/19

## NRC Inspections and ITAAC<sup>2</sup> Reviews

Reporting Period	Inspections Completed <sup>3</sup>	ITAAC Inspected <sup>4</sup>	Number of ITAAC Remaining Requiring Inspection <sup>5</sup>
Q4 - FY 2019	58	31	360

### ITAAC Reviews Completed (Q4 FY 2019)

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.

Reporting Period	Unit	ITAAC ID No.	Received Date	Approval Date
Q4 - FY 2019	Vogtle 4	2.2.03.08d	7/25/2019	7/30/2019
	Vogtle 3	2.3.03.02	7/22/2019	7/24/2019
	Vogtle 3	3.3.00.06b	7/15/2019	7/17/2019
	Vogtle 4	2.3.09.03.iii	6/26/2019	7/8/2019
	Vogtle 3	2.3.05.03a.ii	6/28/2019	7/3/2019
	Vogtle 4	2.2.03.08c.v.01	6/26/2019	7/3/2019
	Vogtle 3	2.2.03.08c.iv.02	7/26/2019	8/5/2019
	Vogtle 3	2.3.10.02a	7/24/2019	8/1/2019
	Vogtle 3	2.3.05.03c.i	9/24/2019	9/30/2019
	Vogtle 3	2.3.05.03d.i	9/24/2019	9/30/2019
	Vogtle 3	2.3.07.07b.vii	9/18/2019	9/20/2019
	Vogtle 3	2.3.07.07b.i	9/18/2019	9/20/2019
	Vogtle 4	C.2.6.12.06	8/26/2019	9/19/2019
	Vogtle 3	2.2.05.07e	9/06/2019	9/16/2019
	Vogtle 4	C.2.6.12.02	8/30/2019	9/5/2019
	Vogtle 4	C.2.6.12.01	8/30/2019	9/5/2019
	Vogtle 3	2.2.03.08c.iii	8/28/2019	9/3/2019
	Vogtle 4	C.2.6.12.03	8/28/2019	9/3/2019
	Vogtle 4	C.2.6.12.04	8/26/2019	9/3/2019

<sup>2</sup> The ITAAC descriptions are available in the Vogtle Units 3 and 4 ITACC Status Report at <https://www.nrc.gov/reactors/new-reactors/oversight/itaac.html>.

<sup>3</sup> This column indicates only the inspections that were completed for the reporting period. The forecast of when inspections are planned for a specific month varies due to the fluidity of the construction schedule.

<sup>4</sup> "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.

<sup>5</sup> This column includes targeted ITAAC inspections.

Vogtle Units 3 and 4 License Amendment Request Reviews Completed (Q4 FY 2019)

Reporting Period	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
Q4 - FY 2019	1	2 <sup>6</sup>

**2-6 NuScale Small Modular Reactor Design Certification**

On March 15, 2017, the NRC accepted the NuScale Power, LLC application for a small modular reactor (SMR) design certification review. The NRC staff’s technical review is proceeding in six phases under an established public milestone schedule. The review is currently in Phase 4 (Advanced Safety Evaluation Report (SER) with no open items). During this quarter, the staff issued one request for additional information (RAI) and closed 244 RAIs. As of September 30, 2019, the staff had issued a total of 1,325 RAIs, and the applicant has responded to 1,323 of them. The staff expects that it can complete the NuScale SMR design certification review within the established 42-month schedule.

Activities Planned and Completed for the Reporting Period (Q4 FY 2019)

NuScale Small Modular Reactor Design Certification Activities	Planned Completion Date	Completion Date
Complete Phase 2 of the safety review (SER with open items).	05/19	07/19
Complete Phase 3 of the safety review (ACRS review of SER with open items).	08/19	07/19

Projected Activities for the Next Quarter (Q1 FY 2020)

Projected NuScale Small Modular Reactor Design Certification Activities	Projected Completion Date
Complete Phase 4 of the safety review (Advanced SER with no open items).	12/19

**2-7 Advanced Nuclear Reactor Technologies**

The NRC is actively preparing for the review of non-light-water-reactor (non-LWR) designs. The agency staff has developed a vision and strategy to ensure that NRC is ready to conduct safety reviews for these technologies effectively and efficiently.<sup>7</sup> The vision and strategy has three strategic objectives: (1) enhancing technical readiness, (2) optimizing regulatory readiness, and (3) optimizing communication. The NRC staff has identified specific activities that it plans to

<sup>6</sup> A license amendment request review that was not due to be completed until November 2019 was completed early and is counted in the above table for Q4 FY 2019.

<sup>7</sup> NRC Vision and Strategy: Safely Achieving Effective and Efficient Non-Light-Water Reactor Mission Readiness (ADAMS Accession No. ML16356A670).

conduct in the near-term (0-5 years), mid-term (5-10 years), and long-term (beyond 10 years) timeframes to achieve non-LWR review readiness.

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

Activities Planned and Completed for the Reporting Period (Q4 FY 2019)

Advanced Nuclear Reactor Technologies Activities	Planned Completion Date	Completion Date
As required by Section 103(b) of the Nuclear Energy Innovation and Modernization Act (NEIMA), prepare a report to Congress on expediting and establishing stages in the licensing process for commercial advanced nuclear reactors (ADAMS Accession No. ML19128A319).	07/19	07/19
As required by Section 103(c) of NEIMA, prepare a report to Congress on increasing the use of risk-informed and performance-based evaluation techniques and regulatory guidance in licensing commercial advanced nuclear reactors within the existing regulatory framework (ADAMS Accession No. ML19128A324).	07/19	07/19
Issue a draft policy paper entitled “Population-Related Siting Considerations for Advanced Reactors” (ADAMS Accession No. ML19203A219) to support ongoing public discussions, including an NRC staff meeting with the ACRS.	07/19	07/19
Publish the regulatory basis for the Physical Security for Advanced Reactors rulemaking (ADAMS Accession No. ML19099A017).	07/19	07/19
Provide staff training on high-temperature gas-cooled reactors.	07/19	07/19
Hold a public meeting to discuss the regulatory basis on physical security for advanced reactors.	08/19	08/19
Hold a public meeting on possible regulatory process improvements for advanced reactor designs, including the first public outreach on the scope of the rulemaking to establish a regulatory framework for advanced reactors in accordance with section 103(a)(4) of NEIMA.	08/19	08/19
Brief the ACRS Future Plant Design Subcommittee on micro-reactor technical and policy issues.	08/19	08/19
Issue draft report on the NRC’s non-LWR analytical code strategy and brief the ACRS (ADAMS Accession Nos. ML19093B424 (Volumes 1 and 3) and ML19246C319 (Volume 2)).	09/19	09/19
Brief the ACRS Future Plant Design Subcommittee and Full Committee on Population-Related Siting Considerations for Advanced Reactors.	09/19	09/19

<b>Advanced Nuclear Reactor Technologies Activities</b>	<b>Planned Completion Date</b>	<b>Completion Date</b>
Establish a memorandum of understanding (MOU) with DOE regarding Versatile Test Reactor Engagement (ADAMS Accession No. ML19266A003).	09/19	09/19
Issue draft Non-LWR Review Strategy that provides NRC staff guidance for reviewing non-LWR applications submitted before 2027 (ADAMS Accession No. ML19275E869).	09/19	09/19

Projected Activities for the Next Quarter (Q1 FY 2020)

<b>Projected Advanced Nuclear Reactor Technologies Activities</b>	<b>Projected Completion Date</b>
Enter into an MOU with DOE to implement provisions of the Nuclear Energy Innovation Capabilities Act of 2017 relating to sharing technical expertise and knowledge on advanced nuclear reactor technologies and nuclear energy innovation.	10/19
Hold a public meeting with stakeholders on non-LWR topics.	10/19
Hold a public meeting with stakeholders on micro-reactor technical and policy issues.	10/19
Chair a meeting of the Nuclear Energy Agency’s Working Group on the Safety of Advanced Reactors.	10/19
Issue a knowledge management report on the “NRC Regulatory History of Non-Light Water Reactors.”	10/19
Hold a public meeting with stakeholders on non-LWR topics.	12/19
Provide a policy paper to the Commission on “Technology-Inclusive, Risk-Informed, and Performance Based Methodology to Inform the Licensing Basis and Content of Applications for Licenses, Certifications, and Approvals for Non-Light-Water Reactors.”	12/19
Issue final reports on the NRC’s non-LWR analytical code strategy.	12/19

## **2-8 Reactor Oversight Process**

The NRC developed the Reactor Oversight Process (ROP) as a risk-informed, performance-based oversight program. Risk-informed is defined as an approach to regulatory decisionmaking that considers both quantitative and qualitative risk insights and other relevant information, as appropriate. The staff developed recommendations to enhance the ROP, those recommendations are provided in SECY-19-0067, “Recommendations for Enhancing the Reactor Oversight Process,” (ADAMS Accession No. ML19070A050) and are being considered by the Commission. The staff’s recommendations resulted from NRC’s Transformation Initiative, stakeholder correspondence, feedback from ROP public meetings, and the annual ROP self-assessment program. In August, the staff sought public comment on its recommendations and the ROP generally and the public comments received will be shared with the Commission for consideration. The goal of this ROP improvement effort is to focus the NRC’s inspection and oversight resources on the most safety significant issues.

Activities Planned and Completed for the Reporting Period (Q4 FY 2019)

Reactor Oversight Process Activities	Planned Completion Date	Completion Date
Commence working group for review of the problem identification and resolution inspection program.	07/19	07/19
Commence working group for effectiveness review of the cross-cutting issues process.	07/19	07/19
Issue revision to inspection procedure (IP) 71111.05, "Fire Protection," adding guidance to include fire areas with equipment categorized as Regulatory Treatment of Non-Safety Systems for the AP1000 (ADAMS Accession No. ML19170A368).	08/19	08/19
<p>Publish a <i>Federal Register</i> Notice (84 FR 38675) to offer a 60-day comment period for the public to provide comments on</p> <ul style="list-style-type: none"> <li>• the staff's recommended changes in SECY-19-0067, "Recommendations for Enhancing the Reactor Oversight Process," dated June 28, 2019; and</li> <li>• additional ROP enhancement topics, including the problem identification and resolution inspection program, the cross-cutting issues process, radiation protection inspection procedures, the inspection program for Independent Spent Fuel Storage Installation (ISFSI), and the Significance Determination Process.</li> </ul>	08/19	08/19

Projected Activities for the Next Quarter (Q1 FY 2020)

Projected Reactor Oversight Process Activities	Projected Completion Date
Complete effectiveness review of the cross-cutting issues process.	10/19
Issue report of the cross-cutting issues process effectiveness review.	12/19
Issue revisions to IP 71111.12, "Maintenance Effectiveness;" IP 71111.13, "Maintenance Risk Assessments and Emergent Work Control;" IP 71111.18, "Plant Modifications;" IP 71111.22, "Surveillance Testing;" and IP 71153, "Follow-up of Events and Notices of Enforcement Discretion." These revised documents will provide additional guidance for oversight of risk-informed initiatives and will also incorporate new guidance for inspecting the AP1000 reactor design.	12/19

## 2-9 Backfit

Backfitting is the imposition of a new or amended regulatory requirement or staff position on certain licensees after issuance of an NRC regulatory approval (e.g., a license or license amendment). The NRC’s backfitting rules are codified in 10 CFR 50.109, 70.76, 72.62, and 76.76. The backfitting provisions 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 direct and indirect costs of implementation are justified in view of this increased protection. There are similar requirements, referred to as “issue finality,” that apply when the NRC imposes new or amended requirements on licenses, permits, and design certifications issued under 10 CFR Part 52. The Commission recently clarified its backfitting and issue finality policy in NRC Management Directive (MD) 8.4, “Management of Backfitting, Forward Fitting, Issue Finality, and Information Requests.” The NRC staff is currently revising its guidance for implementing the revised policy in MD 8.4 and preparing a draft for public comment (NUREG-1409).

### Activities Planned and Completed for the Reporting Period (Q4 FY 2019)

Backfit Activities	Planned Completion Date	Completion Date
No activities to report for Q4 FY 2019	--	--

### Projected Activities for the Next Quarter (Q1 FY 2020)

Projected Backfit Activities	Projected Completion Date
Publish the revised MD 8.4.	10/19
Provide draft NUREG-1409, Revision 1 to the Commission for information prior to issuing it for public comment.	12/19

## 2-10 Risk-Informed Activities

The agency is transforming to enable staff to use risk insights more broadly in decisionmaking. The intent is to enhance safety and operational effectiveness by appropriately focusing resources on the most important activities. There are numerous activities ranging from overarching (e.g., the risk acceptance transformation initiative mentioned in section 2-1 of this enclosure) to individual undertakings throughout program and corporate offices. Some notable specific undertakings are listed below. Under the same tasking, the staff is identifying challenges to promulgating risk-informed thinking throughout agency activities. The risk acceptance initiative will then devise strategies for overcoming these challenges.

Activities Planned and Completed for the Reporting Period (Q4 FY 2019)

<b>Risk-Informed Activities</b>	<b>Planned Completion Date</b>	<b>Completion Date</b>
Issue NUREG-2178, "Refining and Characterizing Heat Release Rates from Electrical Enclosures During Fire," Vol. 2 for public comment (ADAMS Accession No. ML19162A406).	07/19	07/19
Issue NUREG-2230, "Methodology for Modeling Fire Growth and Suppression for Electrical Cabinet Fires in Nuclear Power Plants," for public comment (ADAMS Accession No. ML19087A215).	07/19	07/19
Conduct training on the use of risk information during licensing reviews.	08/19	08/19
Hold public meetings to discuss the closure of fire probabilistic risk assessment (PRA) frequently asked questions and the progress on addressing fire PRA realism topics.	09/19	09/19
Hold public meetings related to building a smarter fuel cycle inspection and licensing programs.	09/19	09/19
Complete an assessment of the current ISFSI Inspection Program to determine how to make the program more risk-informed.	09/19	09/19

Projected Activities for the Next Quarter (Q1 FY 2020)

<b>Projected Risk-Informed Activities</b>	<b>Projected Completion Date</b>
Issue NUREG/CR-2233, "Methodology for Modeling Transient Fires in Nuclear Power Plant Fire Probabilistic Risk Assessments," for public comment.	12/19
Publish a draft report on initiative related to building a smarter fuel cycle inspection and licensing programs.	12/19
Evaluate the recommendations made by the ISFSI Inspection Program working group to determine which recommendations will make a more effective inspection program that is focused on the most risk-significant activities.	12/19



## Enclosure 3

### 3-1 Reactor Oversight Process Findings

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

Location	Number of Findings	CY 2016	CY 2017	CY 2018	CY 2019
Nationally	Total	704	560	478	244
Office of Nuclear Security and Incident Response (all regions)		19	N/A <sup>8</sup>	N/A	N/A
RI	Green	155	126	107	66
	White	2	2	1	0
	Yellow	0	0	0	0
	Red	0	0	0	0
	Greater than green Security	0	0	0	0
	Total	157	128	108	66
	No. of units operating during the CY	25	25	25	24 <sup>9</sup>
RII	Green	151	119	113	68
	White	0	3	0	1
	Yellow	0	0	0	0
	Red	0	0	0	0
	Greater than green Security	1	2	0	0
	Total	152	124	113	69
	No. of units operating during the CY	33	33	33	33
RIII	Green	177	133	110	39
	White	1	4	2	1
	Yellow	0	0	0	0
	Red	0	0	0	0
	Greater than green Security	1	0	0	0
	Total	179	137	112	40
	No. of units operating during the CY				

<sup>8</sup> Starting in FY 2017, these findings are included in the findings for each region.

<sup>9</sup> The reduction of one unit from CY 2018 reflects the permanent shutdown of Oyster Creek on September 17, 2018.

Location	Number of Findings	CY 2016	CY 2017	CY 2018	CY 2019
	No. of units operating during the CY	23	23	23	23
RIV	Green	196	167	145	69
	White	1	2	0	0
	Yellow	0	0	0	0
	Red	0	0	0	0
	Greater than green Security	0	2	0	0
	Total	197	171	145	69
	No. of units operating during the CY	19	18 <sup>10</sup>	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 license amendment requests, as they are addressed separately in section 3-3 below. The inventory of licensing actions is the total number open at the end of the quarter.

#### 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 <sup>11</sup>	Percentage of Licensing Actions Completed Prior to the Established Schedule <sup>12</sup>
Q1 FY 2019	176	55	98	100%	92%
Q2 FY 2019	215	97	66	88%	60%
Q3 FY 2019	204	67	83	100%	95%
Q4 FY 2019	160	72	120	100%	96%

<sup>10</sup> The reduction of one unit from CY 2016 to CY 2017 reflects the permanent shutdown of Fort Calhoun on October 24, 2016.

<sup>11</sup> Excludes unusually complex and Fukushima-related licensing actions accepted or initiated prior to July 13, 2019 (consistent with previous monthly reports).

<sup>12</sup> The established scheduled is the schedule communicated to the licensee at the completion of the acceptance review.

## New Reactors

<b>Reporting Period</b>	<b>Total Inventory</b>	<b>Licensing Actions Initiated During the Reporting Period</b>	<b>Licensing Actions Completed During the Reporting Period</b>	<b>Percentage of Licensing Actions Completed Prior to the Generic Milestone Schedule</b>	<b>Percentage of Licensing Actions Completed Prior to the Established Schedule</b>
Q1 FY 2019	10	0	0	N/A	N/A
Q2 FY 2019	10	0	0	N/A	N/A
Q3 FY 2019	9	0	1	100%	100%
Q4 FY 2019	7	0	2	100%	100%

## Fuel Facilities

<b>Reporting period</b>	<b>Total Inventory</b>	<b>Licensing Actions Submitted in the Reporting Period</b>	<b>Licensing Actions Completed in the Reporting Period</b>	<b>Percentage of Licensing actions Completed Prior to the Generic Milestone Schedule</b>	<b>Percentage of Licensing Actions Completed Prior to the Established Schedule</b>
Q1 FY 2019	1	2	3	100%	100%
Q2 FY 2019	3	3	1	100%	100%
Q3 FY 2019	1	1	3	100%	100%
Q4 FY 2019	2	1	0	N/A	N/A

No licensing actions have extended 180 days beyond the generic milestone (if received after July 13, 2019) or the established schedule.

### **3-3 License Amendment Request Reviews**

The tables below provide the following information: the status of license amendment request reviews for the licensing programs including total inventory; license amendment requests submitted during the quarter; and reviews completed during the quarter. The percentage of reviews completed prior to the respective generic milestone and the percentage of reviews completed prior to the respective established schedule are also presented. These tables exclude unusually complex license amendments accepted prior to July 13, 2019. License amendment request reviews 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). In many cases, requests submitted during a reporting period are not included in the total inventory until the following reporting period.

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
Q1 FY 2019	341	101	109	100%	60%
Q2 FY 2019	342	147	106	100%	72%
Q3 FY 2019	394	140	89	100%	71%
Q4 FY 2019	400	129	123	100%	86%

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
Q1 FY 2019	18	5	5	100%	100%
Q2 FY 2019	16	3	7	100%	100%
Q3 FY 2019	13	5	6	100%	100%
Q4 FY 2019	16	8	2	100%	100%

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
Q1 FY 2019	8	5	2	100%	100%
Q2 FY 2019	8	6	6	100%	83%
Q3 FY 2019	8	3	3	100%	100%
Q4 FY 2019	6	1	3	100%	100%

Unusually Complex License Amendment Requests

The staff has identified certain license amendment requests (accepted for review prior to July 13, 2019), as unusually complex. Consistent with the previous monthly 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. There are currently no such reviews ongoing that have exceeded their original schedule by more than 180 days.

Operating Reactors

Unusually Complex LAR Description	Exclusion Justification	Age (Months)
Sequoyah Units 1 and 2—Updated Final Safety Analysis Reports Regarding Changes to Hydrologic Analysis	The licensee plans to withdraw this LAR and submit a new LAR by the end of 2019.	85
Browns Ferry 1, 2, and 3—MELLLA+ Core Flow Operating Range Expansion	MELLLA+ reviews are unusually complex due to their technical nature.	17
Hatch—National Fire Protection Association (NFPA) 805 Review	NFPA-805 reviews are unusually complex due to the complicated nature of the subject matter.	15
Hatch—Adopt 10 CFR 50.69, Risk-Informed Categorization and Treatment of Structures, Systems, and Components for Nuclear Power Reactors	This review is tied to the review of the Hatch NFPA-805 application.	14
North Anna Units 1 and 2—Revision of the Small Break Loss of Coolant Accident (SBLOCA) Analytical Methodologies	Involves multiple plant-specific SBLOCA methodologies.	13
Surry Units 1 and 2—Revision of Analytical Methodologies for SBLOCA	Involves multiple plant-specific SBLOCA methodologies.	13
Palo Verde Units 1, 2, and 3—Framatome High Thermal Performance Fuel	First-of-a-kind review.	10
Brunswick Units 1 and 2—ATRIUM 11 Advanced Fuel Transition	First-of-a-kind review.	10
Virgil C. Summer Unit 1—Request to Revise the Approved NFPA-805 Program	NFPA-805 reviews are unusually complex due to the complicated nature of the subject matter.	12
Calvert Cliffs Units 1 and 2—Adopt 10 CFR 50.69, Risk-Informed Categorization and Treatment of Structures, Systems and Components for Nuclear Power Reactors	First-of-a-kind seismic risk-informed review.	8

New Reactors

None

Fuel Facilities

None

### 3-4 Research Activities

#### Summary of New Research Projects<sup>13</sup>

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

Name of New or Revised Project	Requesting Business Line	Estimated Completion
Regulatory Research Supporting Dry Cask Storage Thermal Performance  This research will support evaluation of advances in dry cask configurations and benchmarking experiments to validate new computational fluid dynamics models.	Spent Fuel Storage and Transportation	FY 2022
Human Factors Engineering User Needs  This research will support operating, new, and advanced reactor licensing review guidance development.	Operating Reactors	FY 2025

#### Summary of Completed Research Projects<sup>14</sup>

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

Name and Purpose of Completed Project	Duration of the Project	Estimate of Research Resources	Project Research Results or Findings
No research projects were closed during the reporting period.	--	--	--

### 3-5 Fees Billed

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

Fee Class	FY 2019 Part 170 Receipts Estimated— Annual Fee Rule (\$M)	Part 170— Billed in FY 2019 Q4 (\$M)	Part 170— Billed in FY 2019 Q1-4 (\$M)
Fuel Facilities	\$7.3	\$1.6	\$6.8

<sup>13</sup> Provides information about projects that were reviewed and approved during the reporting period and exceeded 300 staff hours or \$500K of program support for the duration of the project (consistent with previous monthly reports).

<sup>14</sup> Provides information about projects that were completed or terminated during the reporting period and exceeded 300 staff hours or \$500K of program support for the duration of the project. 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.

Fee Class	FY 2019 Part 170 Receipts Estimated—Annual Fee Rule (\$M)	Part 170—Billed in FY 2019 Q4 (\$M)	Part 170—Billed in FY 2019 Q1-4 (\$M)
Generic Decommissioning	\$3.2	\$1.2	\$4.1
Materials Users <sup>15</sup>	\$1.1	\$0.1	\$0.8
Operating Power Reactors	\$217.7	\$49.6	\$212.9
Research and Test Reactors	\$0.5	\$0.0	\$0.3
Spent Fuel Storage/Reactor Decommissioning	\$17.8	\$3.3	\$16.0
Transportation	\$3.7	\$0.7	\$3.4
Uranium Recovery	\$0.8	\$0.0	\$0.8

#### Significant Ongoing Licensing Actions

The table below includes a comparison of the fees billed to projected resources for the NuScale SMR design certification review and subsequent license renewal application reviews.

#### Significant Ongoing Licensing Actions

Docket	Project Name	Projected Resources (\$M) <sup>16</sup>	Fees Billed to Date (\$M)
NuScale Power Reactor 05200048	NuScale SMR Design Certification Application Review	\$66.0 <sup>17</sup>	\$51.0
NuScale Power Reactor 99902043	NuScale SMR Topical Report Reviews (only those that directly support the design certification review)		\$7.1
Turkey Point Units 3 and 4 05000250/05000251	Turkey Point Units 3 and 4 Subsequent License Renewal Application—Safety Review	\$5.2	\$4.9

<sup>15</sup> Materials Users—Billed as flat fee applications and included in the estimates and billed.

<sup>16</sup> Projected resources are calculated based on the full-time equivalent (FTE) estimates provided to applicants in the acceptance letters. Dollar amounts are obtained by multiplying the hours estimate by \$275/hour.

<sup>17</sup> When the NuScale design certification application was submitted, it was not the NRC's practice to provide projected resources to applicants. This number was calculated for this report using fees billed to date (for the NuScale design certification application and supporting topical reports - \$58.1M) plus a projection of the fees that the NRC staff expects to bill through the end of the technical review in September 2020 (\$7.9M). This estimate is based on critical assumptions such as high quality and timely submittals by NuScale for the remainder of the review. Costs associated with pre-application activities are not included.

Docket	Project Name	Projected Resources (\$M) <sup>16</sup>	Fees Billed to Date (\$M)
Turkey Point Units 3 and 4 05000250/05000251	Turkey Point Units 3 and 4 Subsequent License Renewal Application—Environmental Review	\$3.6	\$2.6
Peach Bottom Units 2 and 3 05000277/05000278	Peach Bottom Units 2 and 3 Subsequent License Renewal Application—Safety Review	\$4.3	\$3.3
Peach Bottom Units 2 and 3 05000277/05000278	Peach Bottom Units 2 and 3 Subsequent License Renewal Application—Environmental Review	\$1.5	\$1.2
Surry Units 1 and 2 05000280/05000281	Surry Units 1 and 2 Subsequent License Renewal Application—Safety Review	\$4.9	\$3.2
Surry Units 1 and 2 05000280/05000281	Surry Units 1 and 2 Subsequent License Renewal Application—Environmental Review	\$1.4	\$1.1

### 3-6 Requests for Additional Information

The table below provides information on RAIs for the Q4 FY 2019 associated with licensing actions that were accepted for review after July 13, 2019. 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. The number of RAIs issued and responded to will increase in future reports, as most of these reviews have just started. Several licensing actions are under review that were accepted prior to July 13, 2019, the staff continues to issue and close RAIs on these actions. The staff is collecting information on the RAIs for licensing actions accepted prior to July 13, 2019, and will provide a total inventory of open RAIs in future reports.

Type of Facility or Activity Type	Number of RAIs Issued in Q4 <sup>18</sup>	Number of RAIs Responded to by Licensees/ Applicants and Closed <sup>19</sup> in Q4
Operating Reactors	9	8
Research and Test Reactors	0	0
Design Certifications for New Reactors <sup>20</sup>	N/A	N/A

<sup>18</sup> The RAIs reported in this table do not include “draft” RAIs that may be sent to a licensee or applicant to foster discussion about the application.

<sup>19</sup> For the purpose of this report, RAIs are considered closed when they are responded to by licensees/applicants.

<sup>20</sup> The active design certification reviews were all accepted for review prior to July 13, 2019, and are not reported in this table. Information on the NuScale SMR design certification review is reported in section 2-6 of this report. The staff completed the advanced final safety evaluation report for GE-Hitachi Nuclear Energy’s Advanced



Type of Facility or Activity Type	Number of RAIs Issued in Q4 <sup>18</sup>	Number of RAIs Responded to by Licensees/ Applicants and Closed <sup>19</sup> in Q4
Early Site Permits for New Reactors <sup>21</sup>	N/A	N/A
Combined Licenses for New Reactors <sup>21</sup>	N/A	N/A
Fuel Facilities	0	0
Decommissioning	0	0
Spent Fuel	0	0
Materials <sup>22</sup>	0	0

### 3-7 Workforce Development and Management

The table below provides information on staffing by office for the reporting period. The budgeted amount for each office is the budget for the fiscal year.

	FY 2019 Staffing by Office (As of 9/28/2019)				
	FY 2019 Budget	FTE Utilization as of 9/28/2019	Delta	EOY Projection w/ Personnel Actions	Delta
<b>TOTALS</b>	3,114.4	2,848.6	-265.8	2,920.5	-193.9
<b>TOTALS NON-IG</b>	3,051.4	2,790.3	-261.1	2,862.0	-189.4
COMM	45.0	28.0	-17.0	30.0	-15.0
<b>TOTALS OTHER OFCS</b>	3,006.4	2,762.3	-244.1	2,832.0	-174.4
OCFO	99.0	91.7	-7.3	95.1	-3.9
OGC	102.0	96.6	-5.4	97.1	-4.9
OCA	11.0	11.0	0.0	10.3	-0.7
OCAA	8.0	6.7	-1.3	5.9	-2.1
OPA	15.0	14.0	-1.0	14.4	-0.6
SECY	18.0	15.0	-3.0	16.1	-1.9
OIP	36.0	33.4	-2.6	34.6	-1.4
ASLBP	28.0	21.7	-6.3	22.3	-5.7

Boiling-Water Reactor design certification renewal in June 2019; there are no open RAIs, and no additional RAIs are expected to be issued. The staff is performing a review of the U.S. Advanced Pressurized-Water Reactor application at a reduced pace with a minimal number of RAIs being issued per quarter. At the beginning of Q4 FY 2019, the inventory of open RAIs on this review was 149.

<sup>21</sup> There are currently no early site permit applications or combined license applications 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.

<sup>22</sup> This section covers complex materials sites. It does not include nuclear material user licensing actions because those actions (e.g., portable gauges, industrial radiography, medical use licensees, etc.) do not result in issuance of a safety evaluation and thus are not within the scope of section 102(c) of NEIMA.

FY 2019 Staffing by Office (As of 9/28/2019)					
	FY 2019 Budget	FTE Utilization as of 9/28/2019	Delta	EOY Projection w/ Personnel Actions	Delta
ACRS	26.0	27.1	1.1	26.9	0.9
OEDO	23.0	21.4	-1.6	20.8	-2.2
NRR	445.7	455.4	9.7	449.2	3.5
NRO	249.5	169.5	-80.0	201.7	-47.8
NMSS	287.9	274.6	-13.3	281.7	-6.2
RES	208.2	192.1	-16.1	196.3	-11.9
NSIR	166.3	159.4	-6.9	161.2	-5.1
R-I	194.6	173.5	-21.1	182.6	-12.0
R-II	244.8	218.9	-25.9	228.2	-16.6
R-III	183.8	174.1	-9.7	174.4	-9.4
R-IV	169.3	159.2	-10.1	161.3	-8.0
OE	33.3	30.4	-2.9	32.7	-0.6
OI	42.0	40.9	-1.1	37.8	-4.2
OCIO	171.0	159.8	-11.2	160.3	-10.7
ADM	132.0	117.2	-14.8	117.1	-14.9
SBCR	13.0	10.6	-2.4	11.9	-1.1
OCHCO	98.0	86.1	-11.9	90.1	-7.9
CSU	1.0	2.0	1.0	2.0	1.0
OIG	63.0	58.2	-4.8	58.5	-4.5

Note: Some numbers might not add due to rounding.

### 3-8 Inspection Activities

The table below shows the average number of hours of direct inspection per plant in FY 2019.

#### 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
1,379 Hours	1,365 Hours	1,605 Hours <sup>23</sup>	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 calendar year.

<sup>23</sup> Grand Gulf, Watts Bar Units 1 and 2, and Brunswick Unit 1 were in Column 2 of the ROP Action Matrix during Q4 FY 2019.

Items	Description	Calendar Year 2018 (Hours)	Calendar Year 2019 (YTD) (Hours)
i.	Baseline Inspection <sup>24</sup>	261,691	192,678
ii.	Plant-specific inspections	14,788	7,605
iii.	Generic safety issue inspections	5,471	2,169
iv.	Performance Assessment	1,783	1,374
v.	Other Activities	70,288	77,994 <sup>25</sup>
vi.	Total staff effort	354,021	281,820
vii.	Total staff effort per operating site	6,104 <sup>26</sup>	4,944 <sup>27</sup>

### 3-9 Backfit

#### Facility-Specific Backfits

There were no facility-specific backfits issued during the reporting period.

#### Generic Backfits

There were no generic backfits issued during the reporting period.

<sup>24</sup> Baseline inspection hours includes inspection preparation and documentation hours, which are approximately 70 percent of the direct inspection effort.

<sup>25</sup> The increase in "Other Activities" was anticipated and can be attributed, in large part, to the change in the FY 2019 fee rule that retired the previous 6 percent surcharge on Part 170 fees to recover costs for senior resident inspectors (SRIs) and resident inspectors (RIs) indirect time (in an official duty status but not related to a specific inspection). This surcharge was used to recover the full cost of each SRI and RI assigned to a specific plant, which is required by 10 CFR 170.12(c)(1). In the FY 2019 fee rule, the NRC made this fee recovery effort more transparent by retiring the 6 percent surcharge and replacing it with SRIs and RIs charging indirect time to docket-specific cost accounting codes that align to "Other Activities."

<sup>26</sup> This total is divided by 58 sites operating in calendar year 2018 (including Oyster Creek, which permanently ceased operations on September 17, 2018).

<sup>27</sup> This total is divided by 57 sites operating in calendar year 2019 (decrease due to Oyster Creek). This number includes Pilgrim Nuclear Power Station, which permanently ceased operations on June 1, 2019, and Three Mile Island Unit 1, which permanently ceased operations on September 20, 2019.