

ACCOMPLISHMENTS AND HIGHLIGHTS FOR 2019-2020

COVID-19

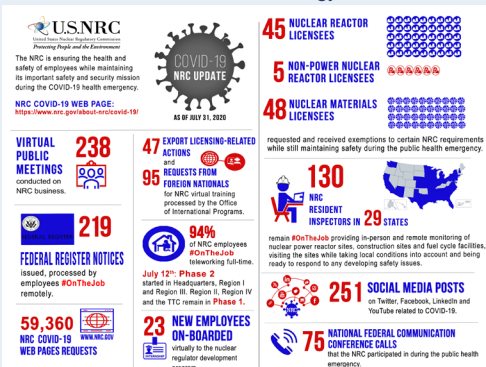
The NRC's response to the COVID-19 public health emergency began in March 2020 when it formed a task force to lead a coordinated, agencywide effort to protect employees, mitigate the spread of the virus at NRC worksites, and maintain the agency's important safety and security mission. By April, approximately 98 percent of the agency workforce, including its inspectors, were successfully working remotely.

Throughout spring 2020, the task force implemented Federal requirements in response to the public health emergency, engaged with other federal agencies on their COVID response; developed agencywide guidance and protocols; and communicated with NRC senior leadership, staff and stakeholders through virtual meetings, social media, dedicated internal and external Web pages, and other means. In June, the agency began a phased re-entry to NRC worksites.

Other NRC actions included:

- Developing COVID-19 guidance for nuclear power plant licensees and nuclear materials licensees
- Communicating regularly with nuclear facilities to discuss current activities and future plans, including staffing, reactor operator licensing, reductions in nonessential maintenance, fire brigade staff requirements, and other matters
- Providing the nuclear power industry with information to facilitate the expedited review of request for temporary exemptions to work-hour limits to allow flexibility in maintaining an appropriate workforce to meet the NRC's minimum reactor operator and security staffing requirements
- Deferring invoicing licensees for annual fees (10 CFR Part 171) and user fees (10 CFR Part 170) normally due in the third quarter of Fiscal Year 2020
- Informing licensees how to request extensions to requirements to account for special nuclear materials, and how nonreactor licensees (such as medical and industrial users and fuel cycle facilities) can request temporary relief from some agency requirements while maintaining safety
- Providing information to NRC licensees to facilitate expedited review of requests for temporary exemptions to some emergency exercise requirements
- Issuing general enforcement guidance on how the agency will examine COVID-19-related potential violations of NRC regulations
- Postponing public meetings or reorganizing them to take advantage of communication technology, such as teleconference, videoconference, webinars, and other means; the agency conducted 254 virtual public meetings on NRC business
- Adjusting inspection plans and schedules to safeguard the health and safety of NRC and licensee staff while effectively implementing the Reactor Oversight Program. Each planned inspection is reviewed to determine if any of the inspection can be performed remotely and how best to perform on-site portions to minimize health risks.
- Extending public comment deadlines, depending on the circumstances of each activity, specific impacts of the COVID-19 public health emergency, and the significance to the NRC's mission
- Creating a new NRC eLearning initiative to help parents with children out of school and for adults who would like to know more about science, nuclear technology, and the NRC

An infographic highlighting the July 2020 NRC activities during the public health emergency.



NUCLEAR REACTORS

Power Reactors

- Completed more than 1,400 licensing actions and other licensing tasks that support operating, new, and advanced reactors, including numerous actions related to the adoption of risk-informed initiatives, topical reports, and the safe transition of operating plants to decommissioning
- Issued a notice in the *Federal Register* of intended operations for Vogtle Unit 3 under 10 CFR Part 52 and continued the oversight of construction for Vogtle Units 3 and 4
- Prepared a proposed rulemaking plan to develop the regulatory infrastructure to support the licensing of advanced reactors
- Completed the proposed rule for the emergency preparedness requirements for small modular reactors and other new technologies
- Completed the acceptance review of a custom COL application for the Aurora microreactor, submitted by Oklo, Inc.
- Issued the final safety evaluation report for the NuScale small modular reactor DC application review
- Issued the first interim staff guidance for an accident tolerant fuel concept (chromium-coated cladding) and revised the associated project plan to detail the preparation strategy for increased fuel burnup and enrichment
- Granted two subsequent license renewal applications for Turkey Point Units 3 and 4, and Peach Bottom Units 2 and 3, within the established 18-month review schedule, which is the first time the NRC has issued renewed licenses authorizing reactor operation from 60 to 80 years
- Implemented various data-analysis initiatives to enhance and modernize operating reactor workload management
- Established the Very Low Safety Significance Issue Resolution process to enable issues with very low safety significance to be addressed promptly without excessive use of NRC and licensee resources
- Completed all calendar year 2019 required inspection and assessment activities of the Reactor Oversight Process
- Submitted 10 reports to Congress, as required by the Nuclear Energy Innovation and Modernization Act, on various topics, including the licensing process for accident tolerant fuel, research and test reactors, and advanced reactors; increasing the use of risk-informed and performance-based evaluation techniques for advanced reactors; and guidance on the examinations for baffle-former bolts
- Issued the early site permit to the Tennessee Valley Authority for the Clinch River Nuclear Site located in Oak Ridge, TN
- Issued the direct final rule to certify Korea Electric Power Corporation and Korea Hydro and Nuclear Power's APR 1400
- Issued the final safety evaluation report for GE-Hitachi ABWR DC renewal application, the first renewal that has been completed under 10 CFR Part 52
- Completed 61 force-on-force inspections in Cycle 5, testing licensees' abilities to protect against the design-basis threat; during the COVID-19 public health emergency, worked collaboratively with licensees to adjust the inspection schedule
- Completed five full-implementation cybersecurity inspections; in the face of the COVID-19 public health emergency, worked collaboratively with licensees to adjust inspection schedule
- In calendar year 2019, conducted 180 baseline security inspections at operating power reactors and Category I fuel cycle facilities
- Issued Revision 2 of NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"; this revision, the first since 1980, was a multiyear effort involving considerable coordination with the FEMA
- Completed an evaluation of physical security inspections planned for Vogtle Units 3 and 4 and revised the inspection plan, resulting in an overall improvement in efficiency through increased synergies between 10 CFR Part 50 and 10 CFR Part 52 inspection activities

ACCOMPLISHMENTS AND HIGHLIGHTS FOR 2019-2020

- Completed a preliminary foreign ownership control or influence review and communicated proposed mitigation measures to Centrus Energy Corporation
- Completed, in conjunction with FEMA, the first-ever review and acceptance of an integrated public alert and warning system as a licensee's and local jurisdiction's primary means of public alert and notification (Wolf Creek Generating Station in Coffey County, KS)
- Signed a memorandum of understanding with the Federal Bureau of Investigation on the RAPBack Program, which will allow the NRC and licensees to receive notification of activity on individuals who hold positions of trust or who are under criminal justice supervision or investigation

Nonpower Reactors

- Accepted the license application and commenced the timely safety review of the SHINE Medical Technologies, LLC, operating license application to operate its medical isotope production facility located in Janesville, WI
- Issued a license amendment to the Massachusetts Institute of Technology authorizing a complete replacement of the analog instrumentation and control systems with an all-digital system and reactor console

Materials and Waste

- Completed approximately 1,500 radioactive materials licensing actions
- Completed 11 Integrated Materials Performance Evaluation Program reviews of Agreement States
- Issued a revision to Regulatory Guide 8.39, "Release of Patients Administered Radioactive Material," in April 2020
- Completed the review of the Agreement State application for Vermont, which became an Agreement State on September 30, 2019
- Issued a revision to Inspection Manual Chapter 2800, "Materials Inspection Program" on March 2, 2020. The changes to the chapter enhance the efficiency and effectiveness of the materials inspection program and further risk-inform this program
- Issued a rule on March 18, 2020, to authorize the use of modern individual monitoring devices in industrial radiographic, irradiator, and well-logging operations
- Issued orders approving the transfers of the La Crosse and Zion Units 1 and 2 licenses back to the original site owners upon completion of decommissioning activities at the sites
- Issued orders approving the transfers of the Oyster Creek, Pilgrim, and Crystal River Unit 3 licenses for the purpose of decommissioning
- Issued reports for the fuel cycle smarter inspection program and the independent spent fuel storage installation (ISFSI) oversight enhancements initiatives to ensure safety as well as provide for a comprehensive and consistent inspection program
- Endorsed the "ISFSI License and Cask CoC Format Content, and Selection Criteria" document to improve the spent fuel dry storage licensing process by applying risk insights to clarify the information required in Certificates of Compliance and technical specifications and removing or relocating details that are not risk significant to safety
- Issued the license renewal for the Honeywell International uranium conversion plant in Metropolis, IL concluding that renewing the license would not pose an undue risk to public health and safety and will not significantly affect the quality of the environment
- Renewed the license for the Rancho Seco ISFSI for an additional 40-year term; the renewed license includes implementation of an aging management program to ensure that important-to-safety structures, systems, and components will continue to perform their intended functions during the extended storage period authorized by the renewal
- Terminated the materials license for the General Atomics facility in San Diego, CA
- Conducted 11 public meetings and two nationwide public webinars to consult with host States and communities near decommissioning reactors to identify best practices for establishing and operating local community advisory boards, and provided the results of the public feedback in a report to Congress, as required by the Nuclear Energy Innovation and Modernization Act
- Signed a memorandum of understanding with the Environmental Protection Agency to improve coordination and cooperation in the regulation of the in-situ recovery process of uranium extraction.

Agencywide

- Continued to oversee the safe and secure operation of nuclear power plants and fuel cycle facilities, as well as the possession and use of radioactive materials
- Completed the successful reunification of the Office of Nuclear Reactor Regulation (NRR) and the Office of New Reactors, while maintaining the NRC's focus on ensuring safety and security
- Established the EMBARK Venture Studio to build and implement sustainable innovations and creative solutions to enable and promote the risk-informed mindset within the Nuclear Reactor Safety Program
- Stood up the NRR Coronavirus Disease 2019 Coordination Team to rapidly address more than 60 emergent licensing requests and inspection impacts necessitated by the public health emergency
- Pursued substantial rulemaking activities on topics including American Society of Mechanical Engineers codes and code cases; reactor vessel material surveillance; personnel dosimetry; low-level radioactive waste disposal; and petitions for rulemaking submitted by members of the public
- Implemented FY 2020 eBilling, a public facing, Web-based application for use by NRC licensees, that provides immediate delivery of NRC invoices, customizable e-mail notifications, the capability to view and analyze invoice details, and the convenience to access U.S. Treasury systems to pay invoices
- Issued 57 escalated enforcement actions under traditional enforcement, the Reactor Oversight Process, and the Construction Reactor Oversight Process; the agency processed 13 enforcement actions that involved civil penalties (10 proposed, 3 imposed) totaling \$634,250 proposed and \$101,500 imposed; 9 were enforcement orders without a proposed civil penalty, and 35 were escalated notices of violation without a proposed civil penalty
- Published extensive research results on a variety of topics related to operating facility safety, severe accident analysis, improved methods for risk assessment, reliability of examination methods for primary system boundary components, seismic analysis, and fire modeling
- Signed a memorandum of understanding with the DOE on the Nuclear Energy Innovation Capabilities Act to support agency readiness to review the new nuclear technologies.; also signed an addendum supporting agency cooperation on DOE's Advanced Reactor Demonstration Project
- Received 86 proposals for the Integrated University Program and awarded 45 grants in FY 2019: 11 faculty development, 14 scholarship, 17 fellowship, and 3 trade school/ community college scholarships; awarded \$15 million in grants to 33 academic institutions
- Awarded more than \$2.85 million in grants to eight Minority Serving Institutions in FY 2019

International Activities

- Represented the NRC as part of U.S. delegations, negotiating agreements for civil nuclear cooperation (Section 123 Agreements) and participating in activities such as meetings of the Nuclear Suppliers Group, International Atomic Energy Agency (IAEA) Board of Governors, Group of Seven Nuclear Safety and Security Group, and Joint Standing Committees on Nuclear Energy Cooperation
- Issued 47 licenses to export nuclear materials and equipment; issued an Order prohibiting general license exports to Pakistan; and completed an assessment of regulatory readiness to export advanced reactors
- Supported the development of enhanced regulatory infrastructure for radiological sources, research reactors, and nuclear power plant safety and security around the world through the provision of technical expertise and assistance funding—reinforcing U.S. Government national security and foreign policy objectives
- Participated as part of U.S. Government delegations to international meetings addressing the implementation of treaties and conventions, including the Technical Meeting of Representatives to the Convention on the Physical Protection of Nuclear Materials (CPPNM) and its Amendment (A/CPPNM), and the Meeting of Legal and Technical Experts in Preparation for the 2021 Conference of the Parties to the A/CPPNM. (Note: The Eighth Review

ACCOMPLISHMENTS AND HIGHLIGHTS FOR 2019-2020

Meeting of Parties to the Convention on Nuclear Safety and the Review Conference for the Treaty on the Non-Proliferation of Nuclear Weapons, both scheduled to take place in 2020, were postponed due to COVID-19.)

- Facilitated numerous virtual meetings with regulatory counterparts after international travel was suspended due to the COVID-19 public health emergency
- Signed a first-of-a-kind memorandum of cooperation with the Canadian Nuclear Safety Commission to increase regulatory effectiveness through collaborative work on the technical reviews of advanced reactors and small modular reactors
- Issued the U.S. National Report for the 8th Convention on Nuclear Safety to the IAEA (the NRC leads this U.S. legally-mandated initiative and prepared the report in coordination with the Institute for Nuclear Power Operations, U.S. Department of State, and DOE)

Administration

- Processed 510 Freedom of Information Act (FOIA) requests and 93 appeals in FY 2019, with 66 FOIA requests and three FOIA appeals in the backlog by the end of FY 2019
- Closed 76 investigations; in 93 percent (71 investigations), Office of Investigations (OI) developed sufficient information to reach a conclusion about substantiated or unsubstantiated allegations of willful wrongdoing, exceeding the office's performance measure of 90 percent for FY 2019
- Conducted agency outreach to audiences interested in NRC activities, including through the use of social media
- Awarded and maintained a portfolio of approximately 835 contracts, blanket purchase agreements, purchase orders, interagency agreements, and grants, with obligations in approximately \$287 million in FY 2019

Public Meetings and Involvement

- Conducted approximately 1,000 public meetings in the Washington, DC, area and around the country addressing a full range of NRC issues to support transparency with agency stakeholders
- Conducted 10 full committee meetings of the Advisory Committee on Reactor Safeguards and approximately 40 subcommittee meetings in calendar year 2019
- Held six public meetings of the Advisory Committee on the Medical Uses of Isotopes in calendar year 2019
- Posted most of the presentations on the agency Web site for the annual Regulatory Information Conference, where thousands of participants from around the world discuss the latest technical issues; the conference was canceled due to the COVID-19 public health emergency
- During calendar year 2019, 813 meetings were scheduled, of which 114 were cancelled and 699 were held; 59 closed meetings were also held

News and Information

- Maintained the NRC Web site and free listserv subscription services at <https://www.nrc.gov/public-involve/listserve.html> to post and distribute NRC news releases
- Shared information with the public using social media through platforms that address the major categories of social communication, with a focus on social networking and microblogging (Facebook and Twitter, respectively)
- In CY 2019, gained nearly 1,500 followers on Twitter and sent approximately 485 tweets; gained more than 1,400 page likes and published approximately 230 posts on Facebook
- Issued 176 news releases in FY 2019

For more information on the agency's accomplishments, go to <https://www.nrc.gov/reading-rm/doc-collections/congress-docs/>.