Dominion Energy®

NORTH ANNA POWER STATION
ANNUAL REPORT
2024

To be presented before the Louisa County Board of Supervisors and the Citizens of Louisa County
March 3, 2025, 1800

North Anna Power Station
Annual Report to the Citizens of Louisa County
March 3, 2025

The purpose of this report is to provide an update on the operation and performance of Dominion Energy's North Anna Power Station in 2024. At Dominion Energy (Dominion) our mission is to provide reliable, affordable, and increasingly clean energy that powers our customers every day. The Dominion nuclear organization, including North Anna Power Station (North Anna), supports this mission by safely, reliably, and efficiently generating electricity to improve the quality of life for our communities and to protect and sustain a clean energy future.

As stated in Dominion's mission statement, the responsibility to be a good corporate citizen in Louisa County (Louisa) is recognized. Our focus remains on continuously improving performance to allow North Anna to operate for decades to come, therefore continuing to support the economic, environmental, and social climate of Louisa. Dominion and North Anna will maintain our support of Louisa now and in the future.

The topics to be discussed include:

- Operating Performance
- Regulatory Oversight
- Emergency Preparedness
- Security
- Industrial Safety
- Environmental Program
- Groundwater Monitoring
- Low-Level Radioactive Waste
- Independent Spent Fuel Storage Installation
- Federal Status of Long-Term Management & Disposition of Spent Nuclear Fuel
- Renewing Operating Licenses
- Keeping the Nuclear Option Open
- Business Impact
- Lake Anna and WHTF Permitting
- Assistance with Harmful Algal Blooms
- Cooperation with Lake Anna Stakeholders
- Community Involvement

OPERATING PERFORMANCE

Operating performance for North Anna Unit 1 and Unit 2 in 2024 resulted in a combined capacity factor of 96.42%. Unit 1 performed a successful thirty-six (36)-day refueling outage, and a two (2)-day maintenance outage to repair a cable in the control rod system. In addition, Unit 1 was ramped to approximately 95% power for approximately one day to remove a Feedwater Heater from service for maintenance. Unit 2 experienced a brief down power to troubleshoot and repair a Main Turbine Throttle Control Valve.

Except for the outages and down powers outlined in the previous statement, both North Anna units operated at full power in 2024. The overall 2024 Dominion operating performance for North Anna, Millstone, Surry, and VC Summer power stations was a combined capacity factor of 91.47%

North Anna remains an industry leader in the generation of safe, low cost, carbon free electrical power.

REGULATORY OVERSIGHT

The Nuclear Regulatory Commission (NRC) uses the Reactor Oversight Process (ROP) to assess nuclear power plant operating performance. The process monitors three strategic performance areas: Reactor Safety, Radiation Safety, and Safeguards. Each area is further subdivided into essential elements of licensee performance called Cornerstones of Safety. The NRC monitors the Cornerstones of Safety using two methods. The first, Performance Indicators (PI), includes data collected by the nuclear power plants and forwarded to the NRC quarterly. Performance Indicator data provides timely information about plant performance in key safety areas. The second is through direct NRC Inspection Findings during site inspections.

Inspection Findings identified during site inspections are assessed using a significance determination process and color-coded for safety significance. The significance determination is based on risk-based and performance-based models. The color codes for both Performance Indicators and NRC Inspection Findings have the same meaning.

Green	Objectives fully met	Licensee Response
White	Objectives met with little reduction in safety margin	Increased Regulatory Response
Yellow	Objectives met, significant reduction in safety margin	Required Regulatory Response
Red	Performance is significantly outside of design basis	Unacceptable Performance Band

In 2024, North Anna finished the year in the Licensee Response column (Green) of the ROP. However, North Anna was briefly in the Increased Regulatory Response column (White) from December 11, 2024, through December 19, 2024, due to a White finding associated with a legacy issue. This issue was regarding procedural instructions addressing

foreign material control in a relay associated with one of the Emergency Diesel Generators (EDG) for Unit 2. This resulted in the station having to declare the 2J EDG inoperable and submitting a licensee event report. The NRC conducted a supplemental inspection and on December 19, 2024, closed out that inspection; giving credit to North Anna's problem identification and resolution process and stating that corrective actions were sufficient to address the cause.

The NRC publishes a "report card" for each of the 94 operating nuclear power plants on its website, www.nrc.gov/reactprs/operating/oversight/pi-summary.html. The report card displays the current color of the Performance Indicators and Inspection Findings. The NRC website includes graphs and data which support each color of the Performance Indicators and Inspection Findings. The NRC Performance Indicators for the fourth quarter 2024 are provided below.

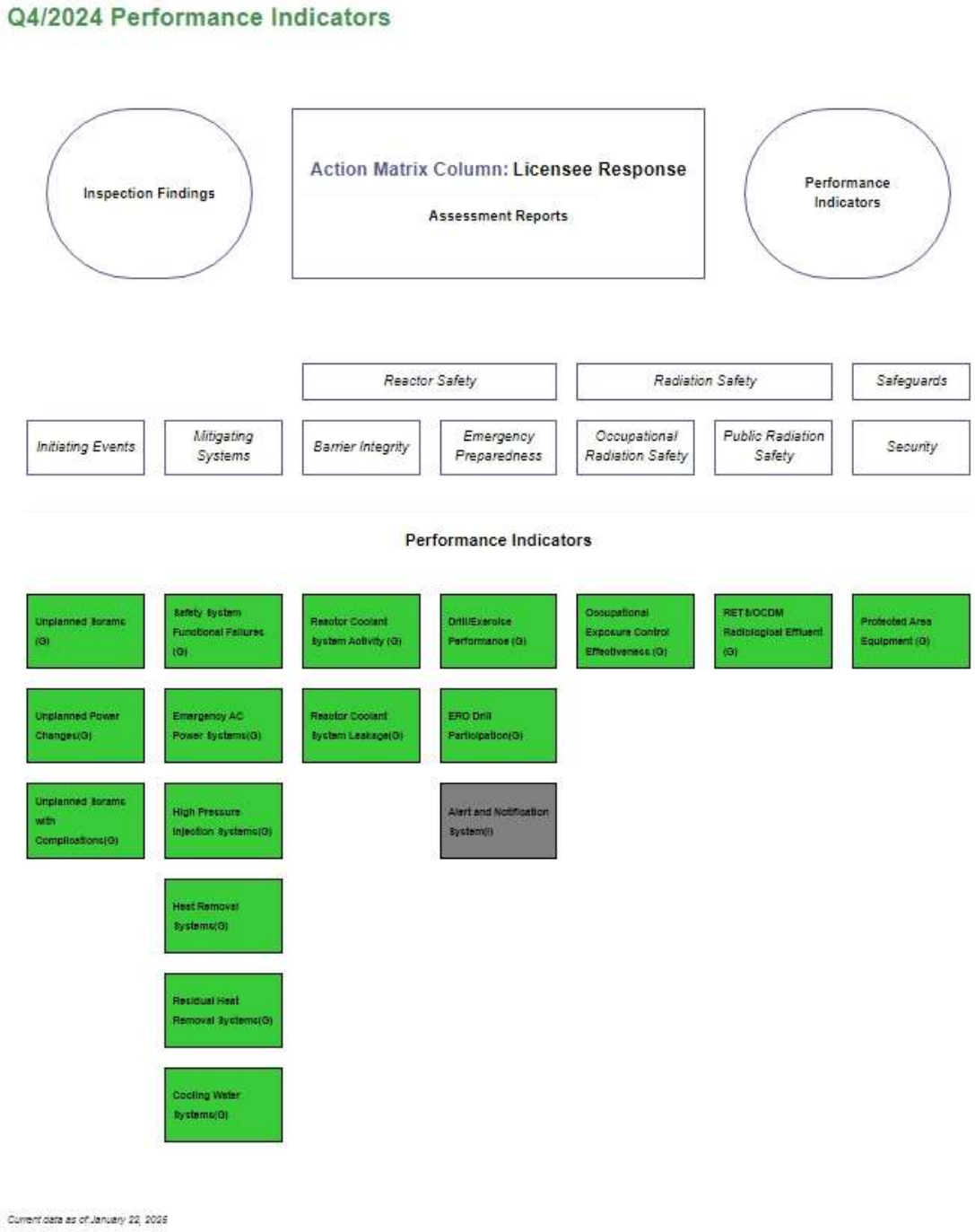
North Anna Unit 1 – Quarterly Performance Summary

Figure 1 - NAPS U1 Fourth Quarter 2024 NRC Performance Indicators

NOTE: The Alert and Notification System PI is no longer used (Grey). In an event requiring public notification, the Integrated Public Alert and Notification System is used. See Emergency Preparedness section.

North Anna Unit 2 – Quarterly Performance Summary

Figure 2 – NAPS U2 Fourth Quarter 2024 NRC Performance Indicators



NOTE: The Alert and Notification System PI is no longer used (Grey). In an event requiring public notification, the Integrated Public Alert and Notification System is used. See Emergency Preparedness section.

EMERGENCY PREPAREDNESS

There were zero (0) declared emergencies at North Anna in 2024.

In an emergency warranting public notification, the Integrated Public Alert and Warning System (IPAWS) is the primary alerting method. IPAWS provides wireless emergency alerts and outreach to media outlets.

An NRC Emergency Preparedness inspection was performed at North Anna in July 2024 and zero (0) findings were identified. This inspection included evaluation of the Biennial Exercise, Emergency Action Level and Emergency Plan Changes, Exercise Evaluation Scenario Review, and Performance Indicator Verification.

The Dominion Emergency Preparedness department continues to work with the Virginia Department of Emergency Management (VDEM), Emergency Managers of the surrounding counties, and Emergency Response Organizations (EROs) to maintain process accuracy to evacuate county residents. Evacuation time estimates are reviewed and validated annually.

Ultimately, the Commonwealth of Virginia is responsible for the safe evacuation of its citizens.

SECURITY

Security at North Anna, and all Dominion nuclear stations, remains strong and effective in protecting the facility and ensuring the safety of our employees and the surrounding communities. Security at the station is maintained at the highest degree of readiness. Some methods taken to ensure security readiness include:

- Force-on-Force drills conducted to ensure a continuous state of readiness.
- The Security organization maintains an effective liaison with the Local Law Enforcement Agencies (LLEA) conducting training sessions and incorporating LLEA in the execution of the Force-on-Force exercises. The Louisa County Sheriff's Office has been an integral part of these exercises. Station Security personnel maintain a relationship with outside security agencies that have close ties with Homeland Security.
- Physical security monitoring equipment, barriers and other security hardware are evaluated regularly, and enhancements incorporated as appropriate to remain current with the changing sophistication of potential adversary elements.
- Station Security continues to benefit from intelligence assessments provided by Dominion corporate security department who networks with the NRC, Federal Bureau of Investigation (FBI), Homeland Security, Virginia State Police, Louisa County Sheriff's Office, and others.
- Intelligence gained through the above-mentioned network is disseminated to the security force and is included in the continuing comprehensive training program.

- Dominion Nuclear Security continues to work closely with the Nuclear Energy Institute (NEI) in the development and implementation of policies which affect the operation of nuclear security organizations across the nation.
- North Anna Security remained in the industry top quartile during the year for the NRC Security Performance Indicator which measures the reliability and effectiveness of Perimeter Intrusion Detection Systems.

Successful Force-on-Force drills were performed in 2024.

INDUSTRIAL SAFETY

North Anna continues to strive for industry excellence in Industrial Safety.

In 2024, there were four (4) Occupational Safety and Health Administration (OSHA) Recordable Injuries:

1. **March 11, 2024 –** A contractor was moving a drum on a cart in Unit 1 reactor containment. The drum was being removed from the cart when another individual unexpectedly changed the positioning of the load and the first individual felt a pain in their shoulder.
2. **June 25,2024 –** A contractor was injured while operating a Work Assist Vehicle (WAV), moving a six-foot long threaded rod. When the WAV came to a stop, the rod shifted, slid backwards and to the left behind the individual's legs, which resulted in a cut to the lower right calf, resulting in stiches.
3. **July 1, 2024 –** A Dominion employee received pinch point injury to their left hand, from a rolling fire door in the basement between Unit 1 and Unit 2.
4. **December 18,2024 –** A Dominion employee was injured when a swing gate failure resulted in the employee falling from a platform in the Unit 2 Quench Spray Pump House, resulting in a fracture to the right forearm.

North Anna completed a Unit 1 Spring Refueling Outage with zero (0) Dominion and one (1) contractor OSHA Recordable Injury and two (2) First Aid Events.

North Anna completed the year with an OSHA Total Case Incident Rate (TCIR) of 0.24 and an OSHA Days Away/Restricted, Transferred (DART) rate of 0.00.

North Anna continues to be a Virginia OSHA Voluntary Protection Program (VPP) STAR qualified work site. The OSHA VPP program promotes effective worksite-based safety and health. The VPP STAR qualification recognizes North Anna and its employees who demonstrate exemplary achievement in the prevention and control of occupational safety and health hazards as well as the development, implementation and continuous improvement of their safety and health management system. North Anna received recertification and was again recognized as an OSHA STAR Site in October 2024.

ENVIRONMENTAL PROGRAM

There was one (1) reportable environmental event that occurred at North Anna in 2024:

- While reviewing the station's bulk chemical inventory for the annual Superfund Amendments and Reauthorization Act (SARA) III Tier II report for the year 2023, it was found that a bulk chemical was in use at the station, that meets SARA bulk chemical reporting criteria, that was not initially reported to state and local emergency response agencies within ninety (90) days after it was brought onsite, in accordance with SARA 311 reporting requirements. This chemical biocide (Nalco 7320) has been in use since January 2021. A walkdown of the bulk chemical storage areas and a review of the hazardous substance procedure did not reveal any other bulk chemicals present that needed to be added to the SARA III Tier II reporting inventory.

This event, although reportable, was considered minor and did not result in any negative impact to the environment.

North Anna continues to operate in accordance with the Virginia Pollutant Discharge Elimination System (VPDES) permit, VA0053451, which was reissued by the Virginia Department of Environmental Quality (DEQ) on March 3, 2024.

GROUNDWATER MONITORING

In 2006, the state of Illinois detected tritium in water samples taken offsite of a nuclear station located near the town of Braidwood. Tritium is radioactive hydrogen that is produced naturally in several ways, the most common of which occurs when cosmic rays strike air molecules in the upper atmosphere and interact with atmospheric nitrogen. Tritium is also a byproduct of nuclear reactor operations, formed in nuclear reactors from the fission process. Chemicals needed to control fission and corrosion are activated, producing tritium as a by-product.

In 2007, the nuclear industry developed a voluntary initiative to monitor and mitigate contamination of groundwater. Between 2007 and 2009, North Anna installed a total of nine (9) wells outside the Protected Area (PA), the fenced area surrounding Unit 1 and Unit 2. No tritium, or any other nuclides, produced by North Anna were detected in these wells in 2024. North Anna has a total of twenty-seven (27) wells and/or piezometers that are monitored as part of the Groundwater Protection Program (GWPP).

In October 2010, North Anna detected tritium in one (1) well inside the PA and made a voluntary report. No other reports have since been made nor required. An additional seven (7) wells were installed in 2011 and six (6) more in 2013 to determine the source of elevated tritium.

Significant efforts were made to identify the source of the tritium, including both underground and above ground piping inspections, internal tank inspections, soil sampling, dye tracer study, additional well installations, and engineering efforts with a consulting geologist. The source of the tritium was identified as the circulating water tunnels and legacy leaks around the Refueling Water Storage Tank. These areas were repaired.

In early 2015, an additional five (5) wells were installed within the PA to further supplement the monitoring program. That same year, a study of the onsite groundwater flow patterns was completed by an independent hydro geological consulting firm. The study concluded that the groundwater wells were in locations that would monitor and provide early detection of any groundwater movement. In 2020, a hydrogeological study was performed by an independent consulting firm that confirmed the groundwater flow patterns had not changed from those stated in the 2015 report and the well locations are still appropriate to provide early detection of any groundwater movement.

North Anna continues to monitor all the wells to confirm the source remains localized and does not extend outside the PA towards Lake Anna or the Waste Heat Treatment Facility (WHTF). The tritium concentration poses no threat to employees or the public and, based on hydrological assessment by experts and sample results from other wells, there was no indication that tritium had or would migrate into groundwater off the North Anna site.

LOW-LEVEL RADIOACTIVE WASTE

Low-level radioactive waste (LLRW) is produced not only by commercial nuclear power plants but also by industrial, research, and medical facilities that use radioisotopes.

No LLRW is stored onsite. Class A waste is either sent directly to Clive, Utah for direct disposal or to a vendor in Tennessee to be compacted for volume reduction. This reduced volume is then shipped directly to Clive, Utah for final disposal. Class B and C waste continue to be processed at facilities in Erwin, Tennessee and Andrews County, Texas. Dominion continues to have a backup contract in place with an Andrews County, Texas burial facility for Class B & C waste.

North Anna strives to reduce LLRW generation by implementing best management practices. Dominion continues to work within the industry, monitoring industry developments and pursuing agreements for LLRW disposal.

INDEPENDENT SPENT FUEL STORAGE INSTALLATION

The Independent Spent Fuel Storage Installation (ISFSI) on-site at North Anna is comprised of three (3) Pads. Pad 1 and Pad 2 at the ISFSI are currently full. North Anna loaded three (3) Nuclear Horizontal Modular Storage (NUHOMS) Extended Optimized Storage (EOS) spent fuel storage

containers on PAD 3 at the on-site ISFSI in 2024.

Pad 1 stores twenty-eight (28) Transnuclear (TN) TN-32 spent fuel storage containers and Pad 2 stores forty (40) NUHOMS HD spent fuel storage containers. Pad 3 had twelve (12) Horizontal Storage Modules (HSMs) installed in 2024, bringing the current total to twenty-six (26). Twelve (12) of the twenty-six (26) HSMs on Pad 3 have been loaded with NUHOMS EOS Dry Shielded Canisters (DSC) with the remaining fourteen (14) HSMs empty. Pad 3 is designed to hold forty-six (46) HSMs.

Zero (0) NUHOMS EOS DSCs are scheduled to be loaded into HSMs in 2025.

Dominion continues to participate in a demonstration program sponsored by the U.S. Department of Energy (DOE) and the Electric Power Research Institute (EPRI) to gain information on the dry storage of fuel assemblies that experienced extended operation in the reactor. This program involved the loading of a specially instrumented TN-32B storage cask to track cask internal temperatures over a ten (10)-year period following placement on Pad 1 in 2017. Temperature data from the cask is collected quarterly by North Anna personnel and provided to the DOE for ongoing research projects on high burn up fuel.

Results from monitoring the radiation and groundwater at this facility show that radiation remains well below NRC limits, and that the groundwater does not contain radioactive material above background levels. Zero (0) unusual occurrences were noted at the facility in 2024.

There were zero (0) technical changes to NRC ISFSI regulations during 2024.
The Conditional Use Permit (CUP) for the on-site ISFSI was renewed by Louisa in 2024, for an additional seven (7) years. Two (2) amendments were approved as part of the CUP renewal:

- Condition 12: Wordsmith amendment to write out MOX as Mixed Oxide Fuel.
- Condition 15: Update Condition to reflect that Pad 3 construction is complete.

FEDERAL STATUS OF LONG-TERM MANAGEMENT & DISPOSITION OF SPENT NUCLEAR FUEL

By law, the DOE is responsible for developing a disposal facility for long-term management of the nation's spent nuclear fuel. After decades of studying the feasibility of building a federal repository for permanent disposal of the nation's high-level radioactive waste, including the submittal of a DOE application to the NRC to store commercial and defense high-level nuclear waste at the proposed Yucca Mountain site, the federal government remains undecided regarding how it will proceed.

Under the Nuclear Waste Policy Act of 1982, the federal government was required to site a permanent repository for the nation's spent commercial nuclear fuel and federal high-level radioactive waste by January 31, 1998. This did not occur, resulting in commercial nuclear utilities in the United States (U.S.) having to store and manage spent fuel primarily at on-site ISFIs.

In 2002, the U.S. approved legislation designating Yucca Mountain as the sole proposed repository for the nation's commercial spent nuclear fuel. DOE submitted a license application to the NRC for the facility on June 3, 2008. Following a change in executive administrations, the government halted design and development work for Yucca

Mountain and cut all funding for the facility in 2009, arguing that the site was "not a workable option."

Following a challenge to the administration's actions, and because of a November 2013 decision by the U.S. Court of Appeals for the District of Columbia Circuit, DOE sent a recommendation to the U.S. Congress in January 2014, to adjust the fee paid by commercial nuclear power generators for disposal of spent nuclear fuel. That waste fee- imposed since 1983 was at a rate of one-tenth (1/10) of a cent per kilowatt hour on electricity generated by commercial nuclear units for the purpose of developing a final repository. It was reduced to $0 effective May 15, 2014.

Between 1983 and 2014, the fees were paid by customers of nuclear energy units into the federal Nuclear Waste Fund. More than $30 billion of collected fees were used to study and build the Yucca Mountain facility. Of that amount, Dominion Virginia Power's customers contributed roughly $833.7 million. Although the fee remains at $0, it could be reinstated by DOE if the federal government revives the Yucca Mountain project or begins developing another solution for managing or disposing of nuclear waste.

In August 2013, the U.S. Court of Appeals for the District of Columbia Circuit issued a decision directing the NRC to continue with the licensing process for the Yucca Mountain repository. In response, in November 2013, the NRC directed the NRC Staff to complete and issue the Safety Evaluation Report (SER) for the repository. NRC completed its technical safety review of DOE's Yucca Mountain application with issuance of the final two (2) volumes of its five (5)-volume SER on January 29, 2015. In addition, the NRC staff completed and issued an Environmental Impact Statement (EIS) supplement in May 2016.

Separately, in 2010, the President established the Blue Ribbon Commission on America's Nuclear Future to conduct a comprehensive review of the full range of scientific and technical options available for the storage, processing, and disposal of spent nuclear fuel. In January 2012, the Blue Ribbon Commission issued its final report, outlining a phased and consent-based approach to siting and implementing a comprehensive management and disposal system.

In January 2013, DOE responded to the Blue Ribbon Commission's report and recommendations by releasing its "Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste." The DOE strategy, consistent with the Blue Ribbon Commission's recommendations – but contrary to existing law – envisions a phased and consent-based approach to siting of both interim and final management and disposal systems. Certain elements of DOE's strategy such as a waste management system containing a pilot interim storage facility with limited capacity; a larger, consolidated interim storage facility; and a permanent geologic repository for disposal of spent nuclear fuel and high-level radioactive waste, are consistent with

initiatives supported by industry. However, these initiatives are not consistent with current law, requiring authorization by legislation to implement many of the proposals contained in DOE's strategy. To date, Congress has not taken any action on DOE's proposals.

Consistent with the Blue Ribbon Commission report, the DOE issued an Invitation for Public Comment on December 23, 2015, and held a kick-off meeting in January 2016 requesting feedback from communities, states, Tribal Nations, and other interested stakeholders on elements to consider in the design of a consent-based siting process. DOE summarized the comments received through the Invitation for Public Comment and eight public meetings in a report issued in December 2016, entitled Designing a Consent-Based Siting Process: Summary of Public Input. In the second phase of this effort, DOE published a draft Consent-Based Siting Process framework for public comment in early January 2017.

Through the Consolidated Appropriations Acts of 2021, 2022, 2023, and 2024, the DOE is to move forward with identifying a site for federal consolidated interim storage, using a consent-based siting process. In 2021, the DOE issued a Request for Information (RFI) on using consent-based sites for interim storage of spent nuclear fuel. In 2023, the DOE announced a $26 million Funding Opportunity Announcement (FOA) to thirteen (13) awardees as part of the Consent-Based Siting Consortia. These awardees will foster community discussion and capture feedback on interim storage of spent nuclear fuel with activities being carried out through 2025 or longer.

While federal efforts continue in determining a permanent storage solution, two (2) Consolidated Interim Storage Facilities (CISF) have been issued a license for construction and operation for spent nuclear fuel. Interim Storage Partners received its license from the NRC for a CISF in Andrews County, Texas in September 2021. Holtec International received its license from the NRC for its HI-STORE CISF in Lea County, New Mexico in May 2023. However, in August 2023 for Interim Storage Partners and March 2024 for Holtec International, the U.S. Court of Appeals for the Fifth Circuit directed the NRC to vacate both licenses. ISP and the NRC, separately, filed petitions asking the U.S. Supreme Court to overturn the Fifth Circuit's ruling and reinstate the license for ISF with Holtec doing the same for their license. In October 2024, the U.S. Supreme Court agreed to hear ISFs case with argument being set for March 5, 2025. As of February 1, 2025, Holtec's petition is pending.

Dominion continues to monitor ongoing federal developments pertaining to the management of commercial nuclear fuel.

Related and current federal legislation supported by Dominion in the 118th Congress:

- HR 1051- To require the Secretary of Energy to obtain the consent of affected State and local governments before making an expenditure from the Nuclear Waste Fund for a nuclear waste repository, and for other purposes.
- S 404- To require the Secretary of Energy to obtain the consent of affected State and local governments before making an expenditure from the Nuclear Waste Fund for a nuclear waste repository, and for other purposes.

- HR 243- A resolution expressing the sense of the Senate that the President and the Secretary of State should ensure that the Government of Canada does not permanently store nuclear waste in the Great Lakes Basin.
- SR 117- A resolution expressing the sense of the Senate that the President and the Secretary of State should ensure that the Government of Canada does not permanently store nuclear waste in the Great Lakes Basin.
- HR 9786- To establish a new organization to manage nuclear waste, providing a consent-based process for siting nuclear waste facilities, ensure adequate funding for managing nuclear waste, and for other purposes.
- S 5157- To Require the Secretary of Energy to study innovative technologies and opportunities for recycling spent nuclear fuel, and for other purposes.

The 118th Congress ended on January 3, 2025. None of the listed legislation passed. The 119th Congress convened on January 3, 2025. As of February 1, 2025, the following legislation has been reintroduced:

- HR 1051 reintroduced as HR 466
- S 404 reintroduced as S 101

Zero (0) bills were introduced during the 2024 Virginia General Assembly directly affecting spent fuel interim storage and disposal. Dominion continues to discuss this topic with legislators representing North Anna, Louisa, and the surrounding area and show our support for efforts related to the establishment of a permanent repository.

In the interim, North Anna continues to move spent nuclear fuel, as necessary, to its on-site dry storage facility to maintain the ability to unload all fuel assemblies currently inside Unit 1 and Unit 2 reactors, should it be necessary to defuel them, into the spent fuel pool. North Anna will continue to safely operate and expand the dry storage facility as necessary to meet the needs and electricity requirements of our customers.

RENEWING OPERATING LICENSES

The original forty (40)-year operating licenses for North Anna Unit 1 and Unit 2 were renewed by the NRC in 2003 for additional twenty (20)-year terms expiring in 2038 and 2040, respectively. On November 13, 2017, the company notified the NRC of its intent to relicense North Anna Unit 1 and Unit 2 for an additional twenty (20)-year term. The subsequent license renewal application was filed on behalf of both North Anna units on August 24, 2020.

The NRC hosted virtual public meetings on November 4, 2020, and January 30, 2024, and an in-person meeting on February 6, 2024, to provide an overview of the subsequent license renewal process and environmental scoping and receive public comment. The NRC issued their final application decision approving subsequent license renewal for both North Anna Unit 1 and Unit 2

on August 28, 2024, allowing for operations through April 2058 and August 2060, respectively. Upgrades to North Anna to support these renewals have already begun and the company expects to invest up to a combined $4 billion in upgrades to its North Anna and Surry Power Station as part of the relicensing process.

KEEPING THE NUCLEAR OPTION OPEN

Dominion Energy Virginia applied to the NRC in November 2007 to build and operate a new nuclear unit at North Anna. The GE-Hitachi reactor would provide an additional one thousand four hundred seventy (1,470) net megawatts of nuclear-generated electricity.

On May 31, 2017, the NRC approved issuance of the North Anna Combined Operating License (COL) for the General Electric-Hitachi's ESBWR nuclear technology with the COL being issued on June 2, 2017. This license is for an initial forty (40) years of operation, from the time that nuclear fuel is loaded into the reactor.

Dominion believes that an all-of-the-above generation portfolio is essential to meeting the future needs of our customers, and that nuclear energy is currently the only large-scale, baseload, carbon-free option. Though the company has not made the decision to build the new unit, having the COL means that it can build and operate the unit if the decision is made to move forward. Dominion would be required to get approval from the Virginia State Corporation Commission (SCC) before it could construct the unit.

Dominion continues to investigate the possibilities of small modular reactors (SMR). On July 10, 2024, Dominion announced its Request for Proposals (RFP) from leading SMR nuclear technology companies to evaluate the feasibility of developing an SMR on North Anna property. Separately, on October 16, 2024, Dominion Energy Virginia and Amazon announced they had a Memorandum of Understanding (MOU) to explore innovative new development structures that would help advance potential SMR development in Virginia. SMRs have the same reliability and environmental benefits as traditional nuclear, but with a significantly smaller footprint and lower upfront capital costs. If the company decides to move forward, its first SMR is expected to be in service by the early-to-mid 2030s.

Related and current federal legislation supported by Dominion in the 118th Congress:

- HR 762 – To establish the Supply Chain Resiliency and Crisis Response Office in the Department of Commerce, and for other purposes.
- HR 995 – To direct the Secretary of Energy to conduct a study on the global status of the civilian nuclear energy industry, and for other purposes.
- HR 1009 – To require the President to develop a national strategy for utilizing microreactors to assist with natural disaster response efforts, and for other purposes.
- HR 1086 – To require the Secretary of Energy to establish a Nuclear Fuel Security Program, expand the American Assured Fuel Supply program, and for other purposes.

- S 452 – A bill to require the Secretary of Energy to establish a Nuclear Fuel Security Program, expand the American Assured Fuel Supply Program, and submit a report on civil nuclear credit program, and for other purposes.
- H Res.124 – Expressing the sense of the House of Representatives that the U.S. should support the expansion of domestic nuclear energy and advanced nuclear technology as a viable source of power to promote U.S. nuclear energy leadership and global energy independence.
- H. Con. Res. 26 – Expressing the sense of Congress relating to nuclear power being a necessary clean baseload energy source to achieve a reliable, secure, and green electric grid.
- S 1111 – A bill to enhance United States civil nuclear leadership, support the licensing of advanced nuclear technologies, strengthen the domestic nuclear energy fuel cycle, and supply chain, and improve the regulation of nuclear energy, and for other purposes.
- HR 8674 – To establish milestone-based development and demonstration projects relating to nuclear fuel, and for other purposes.
- HR 1006 – To require the NRC to distribute an optional and anonymous survey to certain Commission employees to ultimately find solutions to improve the efficiency and effectiveness of the Commission, and for other purposes.
- H.R. 4528 – To amend the Atomic Energy Act of 1954 to address the insufficient compensation and recruitment of employees and other personnel of the Nuclear Regulatory Commission, and for other purposes.
- S 4228 – To amend the Atomic Energy Act of 1954 to provide for more efficient hearings on nuclear facility construction applications, and for other purposes.
- S 5421 – To provide enhanced provisions for advanced nuclear energy projects receiving loan guarantees through the Department of Energy, and for other purposes.
- HR 1007 – To amend the Nuclear Energy Innovation and Modernization Act to assist small businesses that seek to engage in research, development, and deployment of advanced nuclear reactors by delaying onerous licensing fees, and for other purposes.
- HR 6544 – To advance the benefits of nuclear energy by enabling efficient, timely, and predictable licensing, regulation, and deployment of nuclear energy technologies, and for other purposes.
- HR 9710 – To amend the Energy Policy Act of 2005 to support a program to advance the research, development, demonstration, and commercial application of small modular reactors and micro-reactors in order to accelerate the availability of U.S.-based technologies, and for other purposes.
- HR 806 – To require the Secretary of the Treasury to instruct the U.S. Executive Director at the World Bank and other international financial institutions to support assistance for nuclear energy, and for other purposes.
- HR 1042 – To prohibit the importation into the U.S. of unirradiated low-enriched uranium that is produced in the Russian Federation, and for other purposes. *Became Law 5/13/24*
- S 763 – A bill to prohibit the importation into the U.S. of unirradiated low-enriched uranium that is produced in the Russian Federation or by a Russian entity, and for other purposes.
- S 458 – A bill to establish a program to reduce the reliance of allied and partner nations on natural gas, petroleum, nuclear fuel, and minerals produced in Russia, and for other purposes.

- S 571 – A bill to require reports on the dangers posed by nuclear reactors in areas that might experience armed conflict.
- S 826 – A bill to facilitate the development of a whole-of-government strategy for nuclear cooperation and nuclear exports.
- HR 2938 – To facilitate the development of a whole-of-government strategy for nuclear cooperation and nuclear exports.
- S 1928 – A bill to modify the prohibition on financing in the Export-Import Bank of the U.S., and for other purposes.
- HR 4530 – To establish an Office of Public Engagement and Participation within the NRC, and for other purposes.
- HR 8046 – To impose sanctions with respect to Rosatom, and for other purposes.
- HR 3486 – To exert American nuclear leadership by establishing global relationships and facilitating civil nuclear trade strategies with embarking nuclear nations, and for other purposes.

The 118th Congress ended on January 3, 2025. Unless noted above, none of the listed legislation passed. The 119th Congress convened on January 3, 2025. As of February 1, 2025, none of the listed legislation has been reintroduced.

Related and current Virginia legislation supported by Dominion in the 2024 General Assembly:

- HB 1323- Electric utilities; recovery of development costs associated with small modular reactor
- SB 454- Electric utilities; recovery of development costs associated with small modular reactor. *Became Law 7/1/24*
- HB 741- Nuclear energy electric generation facilities; permitting
- SB 561- Nuclear energy electric generation facilities; permitting

Unless noted above, none of the listed legislation passed.

BUSINESS IMPACT

North Anna is a major employer and taxpayer in Louisa and contributes greatly to the local economy. North Anna employs approximately eight hundred and three (803) full-time Dominion employees. Day-to-day, North Anna employs approximately two hundred (200) long-term contractors to support ongoing operating and maintenance activities. During refueling outages approximately one thousand (1,000) additional supplemental personnel support station activities. This temporary increase in the station workforce provides additional revenue for merchants and service-related businesses in Louisa, as well as increased revenue from taxes.

Dominion's tax payment to Louisa on behalf of the North Anna in 2024 was $11,169,288. Total taxes paid to Louisa by Dominion in 2024 totaled $12,934,597. Total taxes paid to Louisa by Dominion through 2024 amounts to over $435 million.

LAKE ANNA PERMITTING

North Anna continues to process dredging and construction and use permits for Lake Anna stakeholders. In 2024 a total of one hundred seventy-eight (178) permits were issued in Louisa; one-hundred seventeen (117) of those permits were for the waste heat treatment facility (WHTF). Fifty-nine (59) permits were issued in Spotsylvania County. Eight (8) permits were issued in Orange County.

As of January 28, 2025, there are forty-nine (49) pending construction and use permits in Louisa; twenty-four (24) for the WHTF. There are twenty-six (26) pending permits in Spotsylvania County and five (5) in Orange County. These permits are awaiting additional information from the stakeholders before the permits may be processed by Dominion. There are zero (0) active dredging permits for Lake Anna and the WHTF.

ASSISTANCE WITH HARMFUL ALGAL BLOOMS

Zero (0) confirmed potential harmful algal blooms (HABs) were recorded in 2024 for the WHTF.

Dominion and North Anna continue to work with Lake Anna stakeholders to study, monitor, and mitigate harmful algal blooms in Lake Anna. Dominion continued to serve as an active member in supporting the Lake Anna Advisory Committee's Lake Anna Cyanobacteria Mitigation and Remediation Program, including participating in the Request for Proposal (RFP) process for the state funded mitigation.

COOPERATION WITH LAKE ANNA STAKEHOLDERS

Dominion continued cooperation with Lake Anna Stakeholders in 2024 by serving as members of the Lake Anna Advisory Committee, Lake Anna Business Partnership, Louisa County Chamber of Commerce, Louisa Forward Foundation, Bumpass Volunteer Fire Department, Orange County Volunteer Fire Company, and other Lake Anna supporting organizations.

Furthermore, Dominion participated in several community meetings to provide information, answer questions, and receive feedback regarding North Anna and the company's plans for the future of nuclear in Louisa. These meetings included:

- Louisa County Chamber of Commerce lunch and learn held at the North Anna Nuclear Information Center (NANIC) on July 23, 2024
- Dominion hosted public information meeting held at the NANIC on September 19, 2024

COMMUNITY INVOLVEMENT

Through its Dominion Energy Charitable Foundation, as well as directly from North Anna and other corporate funding opportunities, Dominion contributed more than $96,000 to community causes and organizations supporting Louisa, Orange, and Spotsylvania Counties in 2024.

North Anna financially supported the following groups and organizations in 2024:

- Crosspoint Outdoorsman
- Freedom Grappling
- Giving Words
- Lake Anna Elite Anglers
- Louisa County High School Athletics
- Louisa County High School Equine Science
- Louisa Education Foundation
- Louisa Little League
- Orange County Children's Toy Box
- Relay for Life
- North Anna Family Scholarships

Dominion and the Dominion Energy Charitable Foundation supported the following groups and organizations in 2024:

- American Climate Partners
- Fredericksburg Regional Food Bank
- Friends of the Rappahannock
- Lake Anna Business Partnership
- Louisa County Chamber of Commerce
- Louisa Chapter Ducks Unlimited
- Louisa County Public Schools Career & Technical Education
- Louisa County High School Athletics
- Louisa County Resource Council
- Piedmont Regional Dental Clinic
- Spotsylvania Fire and Rescue Foundation

Employees at North Anna continue to dedicate themselves to performing their duties in a professional and safe manner and reaching out to the surrounding communities to show they care. In 2024, Dominion employees logged over four hundred fifty (450) hours of volunteer service in Louisa and over one thousand eight hundred twenty (1,820) volunteer hours in Lake Anna communities – valued at over $60,000 in labor. In total, North Anna employees logged over five thousand (5,000) total hours of volunteer service.

Additional Louisa projects sponsored by North Anna volunteers included:

- Adopt-a-Highway

- Angel Tree
- Thanksgiving Drive
- Toys for Tots

As displayed above, Dominion Energy's North Anna Power Station is committed to being a good corporate citizen in Louisa County. We are a business and a neighbor who is proud to call Louisa County home.

"Powering Your Every Day"