

U.S. NUCLEAR REGULATORY COMMISSIONDOCKET NO. 52-017COMBINED LICENSE APPLICATION FORNORTH ANNA POWER STATIONUNIT 3DRAFT SUMMARY RECORD OF DECISIONBACKGROUND

By letter dated November 26, 2007, Dominion Virginia Power (Dominion) submitted an application to the U.S. Nuclear Regulatory Commission (NRC or the Commission) for a combined license (COL) for authorization to construct and operate a nuclear reactor at the North Anna Power Station (NAPS) site in Louisa County, Virginia. The location of the proposed nuclear reactor, Unit 3, is adjacent to the existing NAPS Units 1 and 2. Dominion is the licensee and operator of the existing two units at the NAPS site and will be the licensed owner and operator of Unit 3. It is estimated that the new unit will be capable of providing a net output of between 1468 and 1523 megawatts of electricity (MW(e)) as a baseload source.

Section 102 of the National Environmental Policy Act of 1969, as amended (NEPA), directs that an environmental impact statement (EIS) be prepared for major Federal actions significantly affecting the quality of the human environment. The NRC's regulations in Title 10 of the *Code of Federal Regulations* (CFR) Part 51, were developed to implement the agency's responsibilities under Section 102 of NEPA. Pursuant to 10 CFR 51.20(b)(2), the NRC defines issuance of a COL as an action for which the agency will prepare an EIS.

In November 2007, the NRC issued an early site permit (ESP-003) to Dominion for two additional nuclear units at the North Anna ESP site (72 FR 68202). Dominion's COL application references the amended ESP-003 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12297A207). The ESP was supported by information contained in the final environmental impact statement, NUREG-1811 (ESP EIS) (ADAMS Accession Nos. ML063480261 and ML063480263). For a COL application that references an ESP, the NRC staff, pursuant to 10 CFR 51.75(c), prepares a supplement to the ESP EIS in accordance with 10 CFR 51.92(e). Therefore, the staff relies upon the analysis in the ESP EIS as the basis in preparation of the supplemental EIS which supports the COL review (hereafter referred to as the COL SEIS).

By letter dated January 28, 2008, the NRC notified Dominion that its application was accepted for docketing (ML080240154). Docket number 52-017 was established for the proposed Unit 3. After acceptance of Dominion's COL application, the NRC began the environmental review process by publishing in the *Federal Register* (FR) on March 13, 2008, a notice of intent to prepare an SEIS and conduct scoping activities (73 FR 13589), in compliance with requirements set forth in 10 CFR Part 51. On July 17, 2008, the NRC published a correction and supplement to the notice of intent to prepare an SEIS (73 FR 41132).

The NRC staff held a scoping meeting on April 16, 2008, in Mineral, Virginia, to discuss the environmental scoping process and to give members of the public an opportunity to provide comments on environmental issues that the NRC should consider during its review of the application. The staff reviewed the oral and written comments received during the scoping process and contacted Federal, State, Tribal, regional and local agencies to solicit comments. A Scoping Summary Report was issued on May 12, 2008 (ADAMS Accession No. ML0812204488).

The NRC prepared and published a draft SEIS, and on January 2, 2009, a 75-day comment period began to allow members of the public and agencies to comment on the results of the environmental review (74 FR 106). On February 3, 2009, the NRC conducted a public meeting in Mineral, Virginia, to describe the results of the environmental review, respond to questions, and accept public comments. In March 2010, the NRC issued the "Final Environmental Impact Statement for Combined License (COL) for North Anna Power Station Unit 3" (NUREG-1917), (ADAMS Accession No. ML100680117). All comments related to the environmental review during the comment period along with NRC responses are included in Appendix E of the final COL SEIS.

Pursuant to 10 CFR 51.102, "Requirement to provide a record of decision; preparation," and 51.103, "Record of decision—general," subpart (a)(1)-(4), the NRC staff has prepared this Summary Record of Decision (ROD) to accompany its action on the combined license application. This Summary ROD incorporates by reference materials contained in the final COL SEIS. See 10 CFR 51.103(c).

## DECISION

[If the Commission's mandatory hearing decision authorizes the NRC staff to issue the license, this Decision section will state:]

The NRC makes the decision to [grant or deny] the COL application based on whether the applicant has met all applicable requirements, including the NRC's safety and environmental regulations. The NRC's safety review of the application is documented in the final safety evaluation report (FSER) issued on January 12, 2017 (ADAMS Accession No. ML16259A210).

The COL SEIS together with the ESP EIS present the staff's evaluation of the environmental effects of constructing and operating a single Economic Simplified Boiling-Water Reactor (ESBWR) at the NAPS site. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering reasonable available alternatives, the NRC concluded that issuance of the COL, subject to the conditions for protection of the environment set forth in the license, is in accordance with NEPA and the NRC's implementing regulations in Subpart A of 10 CFR Part 51, and that all applicable requirements have been satisfied. The COL SEIS as well as the Commission's Order dated [date] document these conclusions.

Accordingly, the NRC issued COL NPF-[####] on [date], authorizing the construction and operation of NAPS Unit 3 at the NAPS site in Louisa County, Virginia. The license is effective as of [date], and extends for 40 years from the date that the Commission finds that the acceptance criteria in the combined license is met in accordance with 10 CFR 52.103(g). This combined license also includes the authorizations required for the licensee to receive, possess, and use source, byproduct, and special nuclear material in connection with the construction and operation of NAPS Unit 3, in accordance with Commission regulations in 10 CFR Part 30,

“Rules of General Applicability to Domestic Licensing of Byproduct Material”; Part 40, “Domestic Licensing of Source Material”; and Part 70, “Domestic Licensing of Special Nuclear Material,” and the general license authorized under 10 CFR Part 72, Subpart K, “General License for Storage of Spent Fuel at Power Reactor Sites.”

### EARLY SITE PERMIT REVIEW

An ESP is a Commission approval of a site for one or more nuclear power facilities. Dominion’s ESP approved the NAPS ESP Site for additional nuclear power units, as described in the ESP application, subject to the conditions specified in the ESP. The Dominion COL application references ESP-003; therefore, in accordance with 10 CFR 52.83, issues resolved as part of the ESP proceeding remain resolved except as set forth in 10 CFR 52.39(a)(2). In particular, environmental issues resolved as part of the ESP EIS are afforded finality at the COL stage, provided that no “new and significant” information is identified concerning the resolved issue. In order for information to be significant to warrant consideration of a resolved issue during the COL environmental review, the information must have the potential to affect the staff’s findings or conclusions from the ESP EIS.

During the NAPS ESP review, the staff evaluated a set of values of plant design parameters for the reactors and associated facilities. This set of values, or plant parameter envelope (PPE), served as a surrogate for actual reactor design information. The ESP approved these PPE values and assumptions for the purpose of determining whether the evaluated environmental impacts would remain bounding at the COL stage. In the COL application, Dominion provided the actual values for these parameters when it chose a reactor design. The staff’s analysis of the environmental impacts during the preparation of the COL SEIS confirmed that either the actual plant design was bounded by the ESP or, for those situations where the actual design characteristics fell outside the PPE, the staff confirmed that the new information was not significant with regard to previously determined impacts.

### Environmental Review for the COL Referencing the ESP

During the ESP review, the applicant deferred topics that the NRC considers optional at the ESP stage, namely the benefits assessment, energy alternatives, severe accident mitigation analysis and decommissioning. In addition, water quality impacts from plant operations was an area not resolved during the ESP review due to the need for chemical constituents of design specific waste streams. These issues were evaluated and documented in the COL SEIS, along with any new or significant information that would have the potential to affect the finding or conclusions reached in the ESP EIS. In accordance with 10 CFR 51.92(e)(3), the COL SEIS does not contain a separate discussion of alternative sites. The NRC’s detailed evaluation of alternative sites is in Chapters 8 and 9 of the ESP EIS. The NRC concluded, in Chapter 9 of the ESP EIS, that none of the alternative sites is obviously superior to the proposed North Anna ESP site.

### AGENCY ROLES AND RESPONSIBILITIES:

The COL SEIS includes information on a broad range of issues that may be regulated by other Federal, State, or local authorities. As documented in the COL SEIS, the COL applicant must obtain and maintain permits from other Federal, State, and local authorities in order to construct and operate NAPS Unit 3.

The NRC was the sole agency responsible for the environmental review of the NAPS Unit 3 COL application, including the development of a supplement to the ESP EIS. In the COL SEIS, the NRC evaluated the impacts of constructing and operating one ESBWR at the NAPS site. The NRC contacted Federal, State, Tribal, regional, and local agencies to solicit comments on the draft COL SEIS. In addition to considering the environmental effects of the proposed action, NRC considered alternatives to the proposed action, including the no-action alternative, alternative energy sources, and alternative technologies. The NRC ensured that the NEPA process was properly conducted and completed before recommending approval for this project. The NRC also documented applicable requirements and necessary permits of other Federal, State, Tribal and local agencies as part of considering the environmental monitoring and mitigation that Dominion would implement.

### PURPOSE AND NEED

As identified in Section 1.3, “Purpose and Need for the Proposed Action” of the COL SEIS, the purpose of this proposed action, authorization of the construction and operation of one additional nuclear unit at NAPS, is to provide for additional baseload electric generating capacity for Dominion customers. In 2016, the NRC staff re-affirmed that there is an expected future shortage of baseload power in the Dominion service territories region that could be at least partially addressed by the construction of Unit 3.

### PROPOSED FEDERAL ACTION

The proposed NRC Federal action is issuance, under the provisions of 10 CFR Part 52, of a COL authorizing the construction and operation of one ESBWR at the NAPS ESP site. The location for the proposed NAPS Unit 3 is on the NAPS ESP site in Louisa County, Virginia.

The COL SEIS supplements the ESP EIS as appropriate and provides the staff’s analysis of the environmental impacts that could result from the construction and operation of the proposed new unit at the NAPS site. These impacts are analyzed to resolve any issues deferred from the ESP proceeding and to determine if there is new and significant information regarding issues that were resolved in the ESP proceeding.

Environmental impacts that may arise from the construction and operation of NAPS Unit 3 were examined for the following resource areas: land use; surface water and groundwater hydrology; terrestrial and aquatic ecology; socioeconomics; environmental justice; historic and cultural resources; meteorology and air quality; geology; non-radiological health; radiological health; transportation of nuclear materials; and postulated accidents. These resource areas were also considered within a defined region of influence with other developments or activities that affect the resources cumulatively.

### NRC EVALUATION OF THE PROPOSED ACTION

Section 102(2)(C)(iii) of NEPA states that EISs are to include a detailed statement analyzing alternatives to the proposed action. Accordingly, the COL SEIS together with the ESP EIS present the NRC staff’s evaluation of the proposed action and numerous alternatives to the proposed action. Evaluation criteria included land use, air quality, water use and quality, ecology, socioeconomics, human health, historic and cultural resources, and environmental justice. Alternatives were evaluated against the proposed action to determine if any of the alternatives presented were environmentally preferable.

To guide its assessment of the environmental impacts of the proposed action and alternatives, the NRC has established a standard of significance for impacts based on Council on Environmental Quality guidance (40 CFR 1508.27). Table B-1 of 10 CFR Part 51, Subpart A, Appendix B, provides the following definitions of the three significance levels established by the NRC:

SMALL – Environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource.

MODERATE – Environmental effects are sufficient to alter noticeably, but not to destabilize, important attributes of the resource.

LARGE – Environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

The COL SEIS, along with the ESP EIS, presents the NRC staff's analysis, which considers and weighs the environmental impacts of the proposed action at the NAPS site. Impacts from constructing the facility were considered to be SMALL to MODERATE for socioeconomic community characteristics and were considered to be SMALL for most other resource areas. Impacts from operating the facility were considered to be SMALL to MODERATE for socioeconomic aesthetics and recreation, MODERATE for water use during drought years and SMALL for most other resource areas. Mitigation of environmental impacts is discussed in more detail below. Additionally, a range of SMALL to LARGE beneficial socioeconomic impacts were identified due to the increase of tax revenue in the region.

#### Evaluation of Alternatives in the COL Review

Chapter 9, "Environmental Impacts of Alternatives," of the COL SEIS addresses the following three categories of alternatives to the proposed action: (1) the no-action alternative, (2) energy source alternatives, and (3) system design alternatives. Alternative sites were reviewed as part of the ESP EIS and were not discussed separately in the COL SEIS, in accordance with 10 CFR 52.92(e)(3). As summarized below, none of the potential alternatives considered in the COL SEIS is environmentally preferable to the proposed action.

##### *i. No-Action Alternative*

The No-Action alternative, discussed in Section 9.1 of the COL SEIS, refers to a scenario in which the NRC would deny Dominion's application for a COL. Upon such a denial, the construction and operation of a new nuclear generating unit at the NAPS ESP site would not occur. There would be no environmental impacts at the NAPS site associated with not issuing the COL, except the impacts associated with any site preparation and preliminary construction activities authorized by the ESP undertaken by Dominion. Should the COL not be issued, those impacts would be redressed as described in the ESP. If no other facility would be built or strategy implemented to take its place, the electrical capacity to be provided by the proposed project would not become available. If no additional conservation measures were enacted to decrease the amount of electrical capacity that would otherwise be required for power in the region of interest (ROI), the need for power discussed in Chapter 8 would not be met. Therefore, the purpose of and need for this project would not be satisfied if the no-action alternative was chosen and the need for power was not met by other means.

*ii. Alternative Energy Sources*

The purpose and need for the proposed project identified in Section 1.3 of the COL SEIS is to provide additional baseload electrical generation capacity for use in Dominion's service territory in Virginia. Chapter 9 of the COL SEIS examines the potential environmental impacts associated with alternatives to the construction and operation of a new baseload nuclear generating facility.

To compare different types of energy plants with the proposed NAPS Unit 3, the NRC analyzed other power-generation sources, a combination of sources, and power-generation technologies that are technically reasonable and available. The three primary energy sources for generating baseload electric power in the U.S. are coal, natural gas, and nuclear energy. Coal-fired plants and nuclear plants are the primary sources of baseload power generation in Virginia. Natural-gas combined-cycle power-generation plants are often used as intermediate generation sources, but can also be used for baseload power. These alternatives, which would be necessary in order to generate the same baseload power, are discussed in Section 9.2.2 of the COL SEIS.

In the coal-fired plant analysis, the COL SEIS assumed construction and operation of three supercritical pulverized coal-fired units at the NAPS site, each with a net electrical generation capacity of 507 MW(e), would be required to generate the same baseload power as NAPS Unit 3. Air emissions effects would be greater for a coal-fired plant than for NAPS Unit 3 due to the release of carbon dioxide gas and other air pollutants. Coal combustion generates waste in the form of ash. Disposal of the waste could noticeably affect land use and terrestrial ecology, because of the acreage needed. Other environmental effects would be similar to those described for the proposed additional nuclear unit at NAPS.

For the natural gas-fired alternative, the COL SEIS assumed construction and operation of three 500 MW(e) natural-gas fired combined-cycle units at the NAPS site. Air emissions are greater for a natural gas plant than for a new nuclear power plant because of the release of carbon dioxide gas and other air pollutants. Building a new underground gas pipeline to the site would result in greater land use impacts. Other environmental effects would also be similar to those described for the NAPS site.

Renewable energy sources such as wind and solar power were considered, but current technologies for these energy sources are not capable of reliably producing at least 1500 MW(e) of baseload power targeted by Dominion. For both wind and solar generating technologies, the intermittent nature of the source make them impractical as an alternative to meet a need for baseload generating capacity. Wind and solar alternatives, and the basis for determining they were not viable alternatives to the proposed action, are discussed in Section 9.2.3 of the COL SEIS.

The NRC also considered whether a combination of alternatives might be a viable alternative to the proposed action. The staff assessed the environmental impacts of an assumed combination of two 500 MW(e) natural gas combined-cycle generating units at the NAPS site, and the following contributions from within Dominion's ROI: 150 MW(e) of hydropower, 150 MW(e) of wind power, and 100 MW(e) of biomass sources, and 100 MW(e) of new energy efficiency programs beyond what is currently planned. The impacts to air quality for this combination would be greater than those for the nuclear plant because of the emissions from the natural gas and biomass plants. Land use impacts would also be greater, with the wind, hydroelectric and biomass facilities, and their transmission lines adding to the impacts of the natural gas plant.

The wind and hydroelectric facilities would cause increased impacts to ecological resources, while the biomass plant would increase the impacts of waste. This combination of energy alternatives and the basis for determining it was not environmentally preferable to the proposed action are discussed in Section 9.2.4 of the COL SEIS.

Therefore, the staff concluded that none of the alternative energy options or the combination of the alternative energy options would be both consistent with Dominion's objective of providing approximately 1500 MW(e) of baseload power and environmentally preferable to the proposed action.

### *iii. Alternative System Designs*

Alternatives to the closed-cycle, combination wet and dry (hybrid) cooling system proposed for Unit 3 were evaluated in Section 8.2 of the ESP EIS, in which once-through, wet, and dry cooling are discussed as alternatives to the proposed combination of wet and dry cooling for the proposed Unit 3. The staff did not identify any information that was both new and significant regarding alternative heat dissipation systems. Therefore, the conclusion from the ESP EIS that the proposed combination of wet and dry cooling for the proposed Unit 3 is preferable to the other three cooling alternatives is still valid.

Alternatives to the water intake and discharge structure designs, water supply, and water treatment systems for the proposed Unit 3 were not evaluated in the ESP EIS and were, therefore, evaluated in Section 9.3 of the COL SEIS. The staff analyzed three alternative intake designs and three alternative discharge designs and concluded that none of them were environmentally preferable to the proposed designs. The staff also considered alternative water supplies (e.g., interbasin transfer from the James River) and alternative water treatment systems and concluded that no feasible alternative was environmentally preferable to the proposed action.

## MITIGATION MEASURES

The construction and operation of NAPS Unit 3 will have effects on multiple environmental and regional resources. As explained in the COL SEIS, Dominion's environmental report submitted to the NRC as part of its COL application included an Environmental Protection Plan (EPP) identifying measures and controls it plans to implement to avoid or minimize environmental harm from the proposed action. The NRC evaluated this information in its impact analysis. There are also numerous reviews, permits, authorizations, consultations, and certifications required by other Federal, state and local agencies related to the construction and operation of Unit 3 at the NAPS site. Many of the SMALL impacts described in the COL SEIS are considered minimal because Dominion's monitoring and use of environmental practices and safeguards will reduce any negative effects to environmental resources.

The EPP included in the license includes applicable measures and controls proposed by Dominion. The EPP also includes conditions resulting from consultations with the Virginia Department of Historical Resources (VDHR) pursuant to Section 106 of the National Historic Preservation Act. The EPP applies to the licensee's actions affecting the protected environmental resources evaluated in the COL SEIS and the licensee's actions that may affect any newly discovered protected environmental resources. The EPP is intended to be consistent with Federal, State, and local requirements for environmental protection.

Below are mitigation measures described in the COL SEIS with respect to individual resource areas.

#### *Water Use and Quality*

Dominion will comply with the water-use conditions specified in the Virginia Water Protection permit issued by the Virginia Department of Environmental Quality (VDEQ). This permit, issued in 2012, authorizes withdrawal of make-up water from Lake Anna for the operation of Unit 3, specifies conditions for these water withdrawals, and defines the normal cooling modes of operation for Unit 3. The permit also requires a three inch rise in the normal target pool elevation of the lake as compensatory mitigation, and specifies procedures for lake level management and Lake Anna dam instream flow release conditions.

Dominion will comply with water quality requirements specified in a Virginia Pollutant Discharge Elimination System (VPDES) permit issued by VDEQ. Treated effluent from the proposed new sanitary waste treatment system will be regulated and monitored according to applicable regulations and permits such as Virginia's State Water Control Board's Sewage Collection and Treatment Regulations and the VPDES permit.

Dominion will develop and implement a construction Storm Water Pollution Prevention Plan and spill response plan during construction. Dominion will compensate for unavoidable impacts to streams and wetlands according to the terms of the permit, issued in 2011 by the US Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act. The USACE temporarily suspended its permit on November 16, 2016, pending completion of consultation under the Endangered Species Act.

#### *Land Use*

Dominion will conduct ground disturbing activities in accordance with regulatory and permit requirements and will use adequate erosion controls and stabilization measures to reduce impacts. The new transmission line will be located in an existing corridor. Land clearing necessary to accommodate the new transmission tower foundations will be controlled by existing transmission line procedures, good construction practices, and established best management practices (BMPs). Once construction of transmission lines has been completed, Dominion will restore disturbed areas.

#### *Terrestrial Ecosystems*

In building NAPS Unit 3, and the associated upgrades to the transmission lines, Dominion will institute construction BMPs for erosion and dust control, noise abatement and proper equipment maintenance. Dominion designed the current layout to minimize impacts to wetlands and streams and will adhere to the permit conditions and mitigation requirements specified in the Section 404 permit from the USACE.

#### *Aquatic Ecosystem*

In addition to requirements specified in the Section 404 permit, Dominion will implement a stormwater pollution prevention plan and spill response plan during project construction. It will implement an erosion and sediment control plan that describes its use of recognized BMPs. Dominion will adhere to seasonal restrictions on in-water construction activities and it will design and install an appropriate barrier to prevent turbid water from migrating into the lake. Work

related to stream crossings, intake construction, and the completion of the temporary barge slip at the Walkerton roll-off location will be performed in accordance with VDEQ standards and specifications and BMPs. Materials used for temporary crossings of streams and creeks will be removed and the landscape restored upon completion of the construction activities. Following temporary construction disturbance, intake channel cove will be re-colonized by benthic organisms and fish.

Within 90 days of the termination of use of the barge slip at the Walkerton roll-off location, Dominion will remove all fill and dolphins and restore the impacted areas to pre-construction conditions. Wetland and submerged aquatic vegetation bed restoration and subsequent monitoring will also be performed in that area. As compensation for temporary impacts to wetlands, shorelines and the Mattaponi River at the Walkerton roll-off location, Dominion will preserve 11,775 linear feet of stream channels with riparian buffers and secure 8.7 ac of wetland compensation credits and 5624 stream compensation credits from an approved wetland/stream-mitigation bank. A Memorandum of Agreement between Dominion and Virginia Department of Game and Inland Fisheries includes a proposal to provide funds to enhance aquatic habitats within the North Anna and Pamunkey River watersheds.

#### *Wetlands Impacts*

According to the USACE Section 404 permit, Unit 3 will impact approximately 308 linear ft of perennial stream channel, 6380 linear ft of intermittent stream channel, 0.77 ac of open water, 4.15 ac of palustrine forested wetlands, 0.46 ac of palustrine emergent wetlands, 0.18 ac of estuarine emergent wetlands, and 8.14 ac of wetlands around the shoreline of Lake Anna. It also notes that mooring dolphins associated with the Walkerton Roll-Off Facility will encroach 435 ft into the waters of the Mattaponi River. The permit includes a requirement for Dominion to purchase stream and wetland compensatory mitigation credits from USACE-approved mitigation banks or in-lieu fee projects.

#### *Protected Species*

The NMFS concurred that the proposed North Anna Unit 3 project (all elements) is not likely to adversely affect Federally protected species within their jurisdiction or result in adverse modification of designated or proposed critical habitat. Dominion has committed to refraining from in-water work within the Mattaponi River during two windows of time (February 15 to June 30 and August 1 to October 31) to minimize potential impacts to spawning Atlantic Sturgeon.

The NRC submitted a Supplemental Biological Assessment (BA) to the USFWS which reports the NRC's determination that the project is not likely to adversely affect Federally protected species within the jurisdiction of the USFWS. [This paragraph would be updated to reflect the results of the consultation.]

The USACE Section 404 permit for the North Anna Unit 3 project requires biennial surveys for Federally listed threatened and endangered species and/or their habitat for areas within the jurisdiction of the USACE.

#### *Socioeconomics and Environmental Justice*

Dominion will take several mitigating actions to reduce impacts from construction related activities on local traffic, road conditions and recreational use of Lake Anna. Dominion will

develop and implement a traffic management plan and coordinate with local planning authorities to handle increased traffic loads.

#### *Historic and Cultural Resources*

The VDHR concurred with the staff's finding of no adverse effect to historic properties from project related activities. Dominion will avoid specific archaeological sites and will implement a VDHR approved Ground Disturbance Plan. Dominion will conduct sub-surface testing prior to initiating ground disturbing activities to identify buried historic or archaeological resources and will coordinate with the VDHR regarding the potential presence of historic and cultural resources within planned disturbed areas. Dominion will take appropriate actions (e.g., stop work) following an unanticipated discovery and will follow its existing procedures for contacting the appropriate regulatory agencies. To avoid impacts to the identified archaeological site within the transmission line corridor, the site will be marked and/or flagged prior to and during construction of the new transmission line. Dominion will conduct any ground disturbing activities necessary for operation in coordination with the VDHR and professional archaeological practices consistent with the process established for construction activities.

#### *Air Quality*

Dominion will prepare a dust-control plan before the start of construction to mitigate the impacts of emissions from construction.

#### *Human Health*

With respect to radiological health impacts, doses to construction workers, the public, and wildlife will be maintained below Federal standard public dose limits.

With respect to impacts from nonradioactive waste, Dominion will develop a waste minimization program and will ensure that solid, liquid, and gas wastes that are generated will be handled according to applicable EPA regulations.

#### DETERMINATION:

Based on an independent review, analysis and evaluation contained in the ESP EIS and the COL SEIS; careful consideration of all the identified social, economic, and environmental factors and input received from other agencies, organizations and the public; the factors and mitigation measures outlined above; and the input received during the mandatory hearing, it is determined that the standards for issuance of a combined license, as described in 10 CFR 52.97, have been met and the requirements of Section 102 of NEPA have been satisfied.

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