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Dominion

November 6, 2003

52-008

Ms. Ellie Irons
Program Manager
Office of Environmental Impact Review
Virginia Department of Environmental Quality
629 East Main Street, 6th Floor
Richmond, VA 23219

**Re: Federal Consistency Certification under the Coastal Zone Management Act
Virginia Coastal Resources Management Program
North Anna Early Site Permit Application**

Dear Ms. Irons:

Enclosed is the Virginia's Coastal Resources Management Program consistency certification as prepared by Dominion for North Anna's Early Site Permit (ESP) Application. We recently forwarded CD copies to you of the entire ESP Application that was submitted to the Nuclear Regulatory Commission (NRC) for their development of an Environmental Impact Statement to satisfy National Environmental Policy Act (NEPA) requirements. Our certification uses relevant information previously provided to the Commonwealth and approved in 2002 for our license renewal project at North Anna Power Station.

As DEQ is the coordinating agency for this consistency review, we request that you distribute the attached certification to appropriate cooperating state agencies for comments and concurrence. We respectfully request that the review be completed by March 1, 2004, or as soon as reasonably possible.

If you have any comments or questions during the review process, please contact Jud White at (804) 273-2948 or Tony Banks at (804) 273-2170.

Sincerely,

Pamela F. Faggert

cc: Michael Murphy - VDEQ
~~Andy Kugler - NRC~~

Enclosure

D074

FEDERAL CONSISTENCY CERTIFICATION FOR NORTH ANNA EARLY SITE PERMIT¹

This is the Dominion Nuclear North Anna LLC (Dominion) certification that U. S. Nuclear Regulatory Commission (NRC) issuance of an early site permit (ESP) for a portion of the North Anna Power Station (NAPS) site would be consistent with the Commonwealth of Virginia's federally approved coastal zone management program. Dominion is providing this certification at the request of the Virginia Department of Environmental Quality, pursuant to 10 CFR 930.54.

CONSISTENCY CERTIFICATION

Dominion has determined that NRC issuance of an ESP would be consistent with the Commonwealth of Virginia's federally approved coastal zone management program. The certification addresses certain site preparation activities that may be permissible with the issuance of the ESP; separate certification would be required should Dominion decide to apply to NRC for a license for nuclear unit construction and operation.

NECESSARY DATA AND INFORMATION

The Federal Coastal Zone Management Act (16 USC 1451 et seq.) imposes requirements on an applicant for a federal permit to conduct an activity that could affect a state's coastal zone. The Act requires the applicant to certify to the permitting agency that the proposed activity would be consistent with the state's federally approved coastal zone management program. The Act also requires the applicant to provide to the state a copy of the certification statement and requires the state, at the earliest practicable time, to notify the federal agency and the applicant whether the state concurs or objects to the consistency certification [16 USC 1456(c)(3)(A)]. The Commonwealth of Virginia has a federally approved coastal zone management program (Ref. 1, Appendix E; and Ref. 2), described below.

Proposed Action

Dominion is an indirect, wholly owned subsidiary of Dominion Resources, Inc. Virginia Electric and Power Company (Virginia Power), which operates the existing nuclear units on the NAPS site, is also a wholly-owned subsidiary of Dominion Resources, Inc. Dominion has submitted an application to the NRC for an ESP for a location in Louisa County, Virginia, identified as the North Anna ESP site.

An ESP is an NRC permit issued pursuant to 10 CFR Part 52, Subpart A, approving a proposed site as suitable for new nuclear plants. Regulation 10 CFR 52, Subpart A authorizes a permit duration of up to 20 years.

An ESP is not an approval to construct or operate such plants and Dominion is not proposing to construct or operate new nuclear plants. The purpose of an ESP is to determine whether a

1. This certification is patterned after the draft model certification included as Appendix E of Reference 1.

proposed site is suitable for new units, before incurring the substantial additional time and expense of designing and seeking approval to construct and operate such facilities. However, under the NRC rules at 10 CFR 52.25(a), the holder of an ESP may perform certain site preparation activities listed in 10 CFR 50.10(e)(1), provided that: 1) the ESP application contains a site redress plan, and 2) the NRC's Final Environmental Impact Statement on the ESP application concludes that such activities will not result in any significant environmental impact that cannot be redressed. Dominion has included a site redress plan as Part 4 of its ESP application.

In order to determine whether the proposed site may be environmentally suitable for new nuclear units, NRC regulations require an applicant to submit an environmental report and NRC to prepare an environmental impact statement that evaluates environmental effects from the following activities:

- Site Preparation
- Construction, Operation, and Decommissioning

A complete copy of Dominion's application, including the environmental report and site redress plan, has been provided to the Virginia Department of Environmental Quality.

The NAPS site is located on a peninsula on the southern shore of Lake Anna and is not within the Virginia coastal zone. However, Spotsylvania County, located across Lake Anna from NAPS, is within the coastal zone and, due to its proximity, future activities at the North Anna ESP site could affect it. In addition, NAPS transmission lines traverse several counties within Tidewater Virginia. Figures 1 and 2 show the NAPS 50-mile and 10-mile regions, respectively. Figure 1 also shows NAPS transmission lines and Figure 3 shows county boundaries within 50 miles. Figure 4 shows Lake Anna, together with the station location, area roads and communities, and local county boundaries.

The site selected for the ESP is a parcel of land within the NAPS site, where two existing nuclear units are currently located and operated. NRC originally licensed the NAPS site for four reactors, but Virginia Power constructed and operates only Units 1 and 2. The original Units 3 and 4 were cancelled before construction was completed. The site selected for the ESP is adjacent to and generally west of the existing units where the original Units 3 and 4 were going to be built.

NRC recently renewed the operating licenses for Units 1 and 2 and Virginia Power had obtained Commonwealth concurrence with the coastal zone certification for that renewal (Ref. 3). The renewal certification described NAPS operations, permits, and environmental impacts, and how NAPS operations conform to the Virginia coastal zone management program (Ref. 4). The renewal certification summarized information that Virginia Power had presented in an environmental report in accordance with NRC requirements for license renewal applications. Dominion subsequently prepared an environmental report in accordance with NRC requirements for early site permit applications.

If in the future Dominion were to decide to proceed with the development of new nuclear units at the North Anna ESP site, it would have to obtain separate approval from the NRC (as well as other

federal and state approvals) before proceeding with those activities. Regulation 10 CFR 52 Subpart C contains NRC requirements for combined licenses.² If Dominion decides to pursue construction and operation of new nuclear units at the ESP site, it would apply for a combined license. As part of its review of such an application, NRC would determine whether the construction, operation, and decommissioning impacts would be within the bounds of those assumed and analyzed at the time of early site permit issuance.

The focus of the Dominion coastal zone consistency certification is site preparation activities that may be authorized by the ESP. Dominion has made a preliminary determination that the existing NAPS transmission lines have sufficient capacity to carry the total output of the existing units and the new units and Dominion has no plans for line corridor modifications to support new units. Dominion would prepare a separate certification in conjunction with preparing a combined license application for nuclear unit construction and operation.

The ESP site is located on the west side of the existing units developed area, beginning approximately 570 feet west of the center of the Unit 1 containment building. The area that would be affected on a long-term basis if new nuclear units were built is approximately 130 acres. The additional areas that would be disturbed on a short-term basis (e.g., as a result of temporary facilities, laydown areas) total approximately 70 acres. Of these 200 acres, most are open areas used to stage equipment and materials for the existing Units 1 and 2 construction, operation and maintenance activities, and former Units 3 and 4 construction. Approximately 80 acres are wooded. The ESP site is located entirely within the boundaries of the existing NAPS site and, like the rest of the NAPS site, is zoned for industrial use. Figure 5 shows the footprint of the ESP site.

Currently, the entire North Anna Power Station is operated and controlled by Virginia Power, which maintains the site including the portion designated as the ESP site under its existing licenses and authority. If Dominion decides to proceed with any site preparation activities, it would first be required to: 1) enter into and obtain appropriate state approvals of an agreement between Dominion and Virginia Power to authorize Dominion to perform such site preparation activities subject to Dominion's obligation to perform such site redress as may be required by the Site Redress Plan approved by the NRC; and 2) obtain any other permits or authorizations necessary to conduct such site preparation activities.

Dominion estimates that site preparation could take between 12 and 18 months to complete. Under the NRC regulations, permissible site preparation activities include the following:

- Preparation of the site for construction of the facility (including such activities as clearing, grading, construction of temporary access roads, and preparation of borrow areas);

2. NRC regulation 10 CFR 50 established a 2-step construction and operation approval process that is based on separate review and approval processes for a construction permit and an operating license. The 10 CFR 52 process combines the construction and operation approvals into one, hence 10 CFR 52 Subpart C phrase "combined license."

- Installation of temporary construction support facilities (including items such as warehouse and shop facilities, utilities, concrete mixing plants, docking and unloading facilities, and construction support buildings);
- Excavation for facility structures;
- Construction of service facilities (including items such as roadways, paving, railroad spurs, fencing, exterior utility and lighting systems, switchyard interconnects, and sanitary sewage treatment facilities);
- Construction of structures, systems and components which do not prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public, including but not limited to:
 - Cooling towers,
 - Intake and discharge structures,
 - Circulating water lines,
 - Fire protection equipment,
 - Switchyard and on-site interconnections,
 - Microwave towers,
 - Underground utilities.

Before commencing any of these activities, Dominion would:

- Create a record of the existing site conditions within the proposed ESP site by way of photographs, surveys, listings of existing facilities and structures, or other documentation. This record would serve as the baseline for redressing the site in the event ESP site preparation activities are terminated as a result of project cancellation or expiration of the ESP.
- Obtain any state and local permits and authorizations necessary to perform the site preparation activities.
- Provide to NRC a guaranty by Dominion of financial assurance for Dominion's obligation to comply with the Site Redress Plan.

The objective of the Site Redress Plan is to ensure that the site, should it not be fully developed for the intended purpose of new nuclear power generation, would be returned to an unattended, environmentally stable and aesthetically acceptable condition suitable for such non-nuclear use as is consistent with local zoning laws.

Site redress activities would be commensurate with the level of site modification created by the proposed site preparation activities. Redress activities would reflect applicable land use and/or zoning requirements of local, state and federal agencies. Redress activities would consider the following:

- Recontouring, revegetation, and replanting of cleared areas

- Restoration of sensitive water resource features disturbed for intake and/or discharge structures
- Habitat replacement
- Use of constructed facilities for alternative purposes, or their removal
- Remediation of contamination resulting from site preparation or site redress activities

In planning for site redress, two general categories of conceptual options would be considered:

- Topographic approaches that accomplish the objective stated above as well as preserve the potential of the site for future industrial use
- Completion or addition of site development features that enhance the value of the site for potential future industrial use

Redress activities would begin (in concert with local and/or state land use agencies and industrial development authorities) either when the ESP has expired or reactor construction plans have been abandoned. The redress activities would include those actions necessary to terminate or transfer local and state permits and would identify site features or improvements that would remain and those that must be removed. A detailed redress scope and schedule consistent with this plan would be implemented at that time. The schedule would include adequate preparation time to secure additional input from regulators and local municipalities. The redress activities would comply with applicable environmental requirements. If, prior to commencement of the redress activities, industrial or other acceptable uses for the site are identified that are consistent with its development, the redress would be performed in a manner that accommodates and is consistent with the alternative use. Dominion would carry out the Site Redress Plan to the greatest extent possible consistent with the alternative use.

Prior to the commencement of site redress activities, environmental control of local water quality, air quality, storm water runoff, solid waste, and the protection of critical ecological elements, if any, would be maintained in compliance with approved permits and regulatory requirements.

Environmental Impacts

As indicated above, the NAPS site (within which the ESP site resides) is not located within the Virginia coastal zone. Spotsylvania County, located across Lake Anna, is located within the Virginia coastal zone. Dominion has concluded that the only way that the proposed action, NRC approval of the ESP site, could affect Virginia coastal resources is through potential impacts of site preparation activities to the Spotsylvania County side of Lake Anna. For this reason, the Dominion certification focuses on water impacts.

During site preparation activities that would involve land disturbance, Dominion would employ best management practices (BMPs) described in the Virginia Erosion and Sediment Control Handbook (Ref. 5) to control erosion and minimize the sediment load to Lake Anna in accordance with an approved erosion and sediment control plan. Best management practices may include sediment basins, sediment barriers, vegetative stabilization and filter strips, rip rap, rock filter berms, and mulching. Other than two ephemeral streams, discussed below, there are no existing defined

drainage channels or streams in the proposed area of construction. Visual inspections of erosion control measures would be performed to monitor the effectiveness of the control measures and to aid in determining if other mitigation measures are necessary. Where necessary, special erosion control measures would be implemented to further minimize impacts to the lake, lake users, and existing units operations. Site redress activities would include the use of appropriate stabilization methods to mitigate the long-term delivery of sediment into the lake.

Construction of a cooling water intake structure for any new units at the ESP site would not significantly affect the open water habitat of Lake Anna.³ The intake structure would be constructed in the vicinity of the existing units' cooling water intake structure. The modification to open water habitat resulting from construction of the intake structure would not be considered significant in comparison to the amount of open water habitat found on Lake Anna. If the intake structure is removed as part of site redress activities, the shoreline would be redressed by grading and revegetation to control erosion. Any significant sediment deposition in the vicinity of the intake structure would be removed.

Portions of two small ephemeral streams that discharge to Lake Anna, designated Streams A and B on Figure 6, may be filled to level the area should the construction of cooling towers in that area become a part of the final plant design. Dominion estimates that about 1500 feet of stream channel would require filling. The site drainage system would be designed to incorporate the flow currently conveyed by these streams to the lake. By providing alternate drainage facilities to convey the stream flows, no short-term or long-term adverse hydrologic impacts on site drainage would result. Therefore, the need to redress the streams to their original condition, should construction be terminated, would be evaluated at that time to determine the best way to ensure long-term stability of the site. If considered necessary, the stream channels would be re-excavated and stabilized by vegetation and/or riprap to return the area to an acceptable long-term condition.

New onsite pipelines that cross freshwater streams would be constructed so that no permanent alteration to the streams occurs. Should site preparation activities be terminated, an evaluation would be made at that time regarding removal of these facilities as part of the site redress activities. Should removal be considered necessary, it would be accomplished in such a manner as to minimize disruption to the streams, and the streams would be redressed to an acceptable long-term condition.

The floodplain along the Lake Anna shoreline has been determined using the Federal Emergency Management Agency Flood Insurance Rate Map (Ref. 6). Any flooding that might occur during construction of the new units would be limited to areas adjacent to the lake shoreline (i.e., below elevations of 255 feet above mean sea level). Limited construction activity would occur within the lake floodplain for the construction and installation of a new water intake structure. Any construction work conducted within the floodplain would be performed in accordance with the applicable

3. Lake Anna consists of a Waste Heat Treatment Facility (WHTF) and the larger North Anna Reservoir.

regulatory requirements. Therefore, no construction-related impacts are expected to affect current land uses within floodplains.

Recreational use of the North Anna Reservoir is controlled by the Virginia Department of Conservation and Recreation and is open to the public. Construction of a new water intake system would generally be limited to activity along a small portion of the North Anna Reservoir shoreline. Any work conducted immediately adjacent to the lake would be performed in accordance with applicable federal, Virginia, and local laws and regulations, permits, and authorizations. Therefore, construction-related impacts would not affect the recreational uses of the lake.

Virginia Power has monitored fish populations in Lake Anna and the North Anna River for more than 25 years. No federally- or state-listed fish species has been collected in any of these monitoring studies, nor has any listed species been observed in creel surveys or occasional special studies conducted by Virginia Power biologists. No state- or federally-listed fish species' range includes Lake Anna or the North Anna River, and none is believed to occur in counties adjacent to Lake Anna or the North Anna River (i.e., Caroline, Hanover, Louisa, Orange, and Spotsylvania Counties).

Based on Commonwealth (Division of Natural Heritage) databases, one federally-listed mussel species, one state-listed mussel species, and one mussel species that is a candidate for federal listing occur in counties that border Lake Anna or the North Anna River. None of the three has been found in Lake Anna or the North Anna River.

State Program

Like many states, the Virginia coastal zone management program is a "networked" program, which means that it is based on a variety of existing Commonwealth authorities rather than a single law and set of regulations. The U. S. Department of Commerce and the Virginia Department of Environmental Quality have published programmatic documentation of the Virginia program (Ref. 7), called Virginia's Coastal Resources Management Program. The Virginia Department of Environmental Quality administers the program and has identified enforceable regulatory authorities that comprise the program (Ref. 2).

Table 1 lists the enforceable regulatory authorities and discusses for each the applicability to the ESP and, where applicable, how Dominion would comply. The table documents which program elements are not applicable to the ESP and, for those that are applicable, the ESP activities that represent program compliance.

Findings

1. Dominion has determined that impacts to Virginia coastal resources would be small and would be further mitigated through use of best management practices in accordance with the Virginia Erosion and Sediment Control Handbook.

2. NRC issuance of an ESP would be consistent with the enforceable provisions of the Virginia coastal zone management program.

STATE NOTIFICATION

By this certification that NRC issuance of an ESP is consistent with Virginia's coastal zone management program, the Commonwealth of Virginia is notified that it has six months from receipt of this letter and accompanying information in which to concur or object with Dominion's certification. However, pursuant to 15 CFR 930.63(b), if the Commonwealth of Virginia has not issued a decision within three months following the commencement of state agency review, it shall notify the contacts listed below of the status of the matter and the basis for further delay. The Commonwealth's concurrence, objection, or notification of review status shall be sent to:

Andrew J. Kugler
US Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

Tony Banks
Dominion
Innsbrook Technical Center
5000 Dominion Blvd.
Glen Allen, VA 23060

REFERENCES

1. *NRR Office Instruction LIC-203, "Procedural Guidance for Preparing Environmental Assessments and Considering Environmental Issues,"* U. S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, June 21, 2001.
2. *Virginia Coastal Program: About the Program*, Virginia Department of Environmental Quality, <http://www.deq.state.va.us/coastal/about.html>. Accessed November 5, 2003.
3. Letter, Irons (Virginia Department of Environmental Quality) to White (Dominion Virginia Power Company), *North Anna Power Station License Renewal Application by Dominion Virginia Power Company to U. S. Nuclear Regulatory Commission for Renewed Operating License; Federal Consistency Certification under the Coastal Zone Management Act, DEQ-01-187F*, February 21, 2002.
4. Letter, White (Dominion Virginia Power Company) to Irons (Virginia Department of Environmental Quality), *Coastal Zone Consistency Certifications for Surry and North Anna Power Stations, Applications for Renewed Operating Licenses DEQ 01-186F (Surry) and DEQ-01-187F (North Anna)*, October 11, 2001; as revised by Letter, White (Dominion Virginia Power Company) to Irons (Virginia Department of Environmental Quality), *Federal Consistency Certifications for Surry and North Anna Power Station License Renewals*, October 31, 2001.
5. *Virginia Erosion and Sediment Control Handbook*, 3rd Edition, Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation, 1992.

6. *Flood Insurance Rate Map, Louisa County, VA and Incorporated Areas*, Federal Emergency Management Agency, U.S. Department of Interior, November 1997.
7. *Enforceable Regulatory Programs comprising Virginia's Coastal Resources Management Program*, Commonwealth of Virginia, Department of Environmental Quality, undated.

Table 1. North Anna ESP Compliance With Enforceable Regulatory Programs Composing Virginia's Coastal Resources Management Program

Item	Topic and Virginia Code Citation ¹	Compliance Status
Wetlands Management		
1.	§28.2-1301 through §28.2-1320	This applies to wetlands development. Dominion has no plans for development in wetlands located in the coastal zone. For wetlands work onsite, Dominion would obtain the appropriate permit approval.
2.	§62.1-44.15.5	This applies to excavation in a wetland. Dominion has no plans to excavate in a wetland located in the coastal zone. For excavation in onsite wetlands, Dominion would apply for the appropriate Virginia Water Protection Permit approval.
Fisheries Management		
3.	§28.2-200 to §28.2-713	This applies to activities that Dominion has not undertaken at NAPS and for which Dominion has no plans to undertake as the result of ESP issuance; recreational and commercial fishing, oystering, claming, and crabbing.
4.	§29.1-100 through §29.1-570	This applies to activities that Dominion has not undertaken at NAPS, fishing, trapping, and hunting and for which Dominion has no plans to undertake as the result of ESP issuance with the exception of scientific collection, for which Dominion staff have required permits.
5.	§3.1-249.59 through §3.1-249.62	This applies to activity that Dominion has not undertaken at NAPS and for which Dominion has no plans to undertake during the license renewal term: use of marine antifouling paint containing tributyltin.
Subaqueous Lands Management		
6.	§28.2-1200 through §28.2-1213	This requires a permit for use of state-owned bottomlands. Dominion has no plans for construction on state-owned bottomlands located within the coastal zone. For construction onsite of the intake structure, Dominion would obtain the appropriate permit approval.

Table 1. North Anna ESP Compliance With Enforceable Regulatory Programs Composing Virginia's Coastal Resources Management Program

Dunes Management		
7.	§28.2-1400 through §28.2-1420	This applies to activity that Dominion has not undertaken at NAPS and for which Dominion has no plans to undertake for ESP: development in coastal dunes.
Point Source Air Pollution Control		
8.	§10-1.1300	For ESP site preparation activities, Dominion would obtain appropriate state permit approval for temporary construction emission sources such as a concrete batch plant.
Point Source Water Pollution Control		
9.	§62.1-44.15	Dominion has Virginia Pollutant Discharge Elimination System Permit Number VA0052451 for NAPS discharges. Dominion would obtain appropriate state permit approval for ESP activities such as storm water management.
Non-Point Source Water Pollution Control		
10.	§10.1-560 et seq.	Dominion would follow best management practices in accordance with the Virginia Erosion and Sediment Control Handbook and an approved erosion and sediment control plan.
Shoreline Sanitation		
11.	§32.1-164 through §32.1-165	This applies to activities that Dominion does not undertake at NAPS and for which Dominion has no plans to undertake for ESP: operation of septic tanks and land disposal of sewerage.
Coastal Lands Management -- Chesapeake Bay Preservation Act		
12.	§10-1.2100 through §10-1.2114	This is a developing part of the program. It is Dominion understands that implementation will be through existing permit and regulatory control programs. Dominion is committed to complying with these requirements.

1 VDEQ 2003

Reference:

VDEQ (Virginia Department of Environmental Quality). 2003. *Virginia Coastal Program: About the Program*. Program Administration. Available online at <http://www.deq.state.va.us/coastal/about.html>. Accessed November 6.

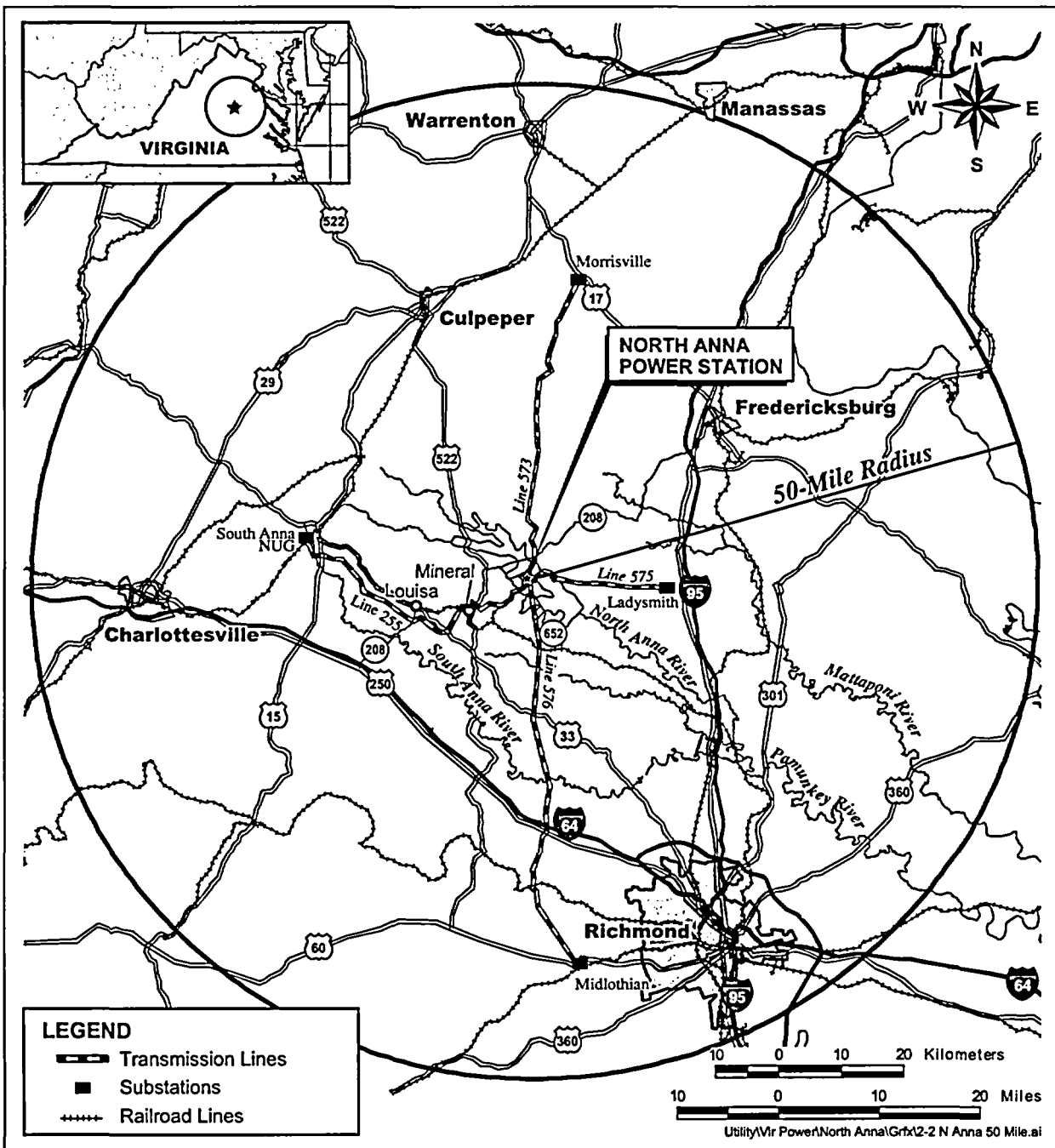


Figure 1. North Anna Power Station 50-Mile Map

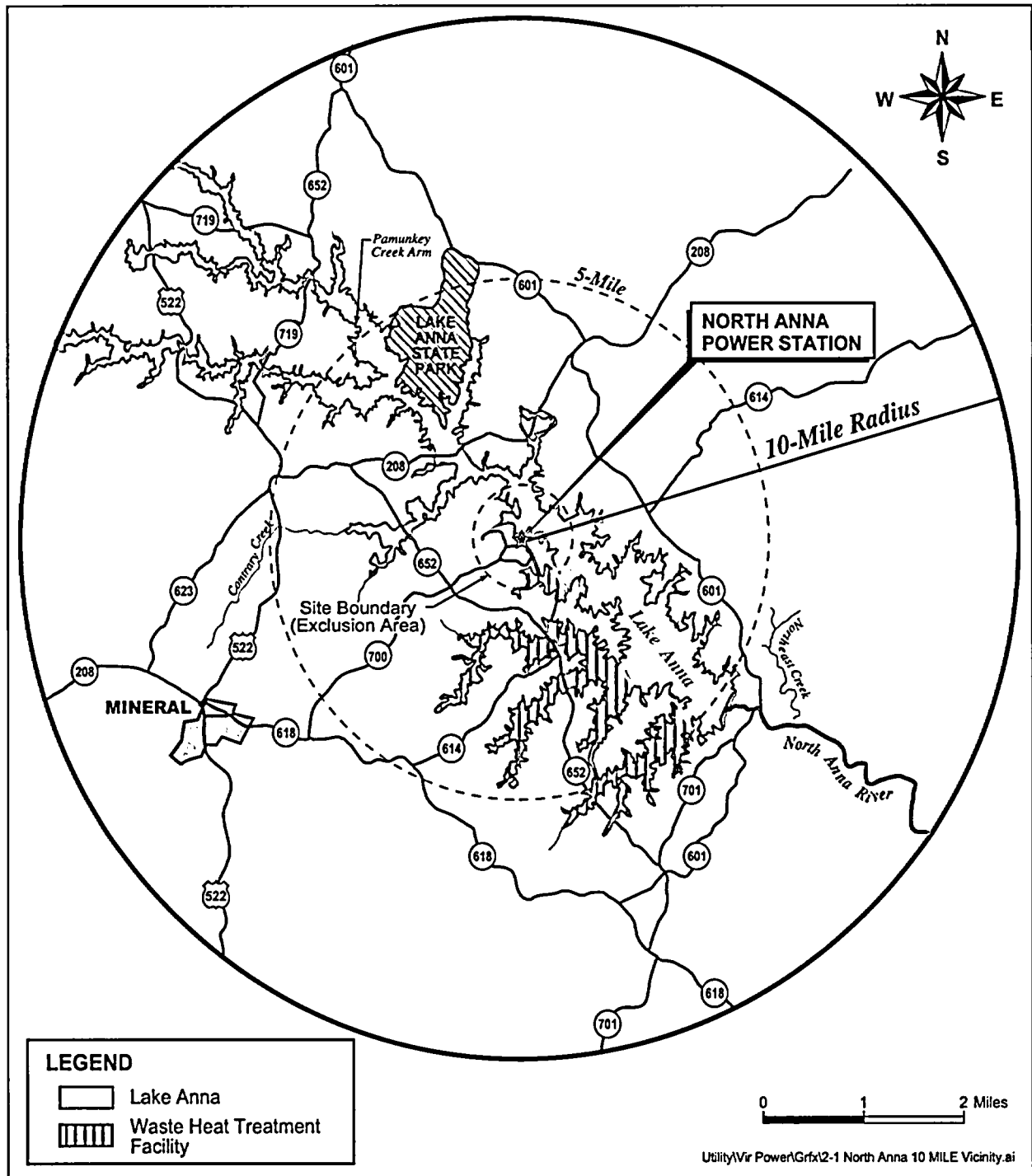


Figure 2. North Anna Power Station 10-Mile Map

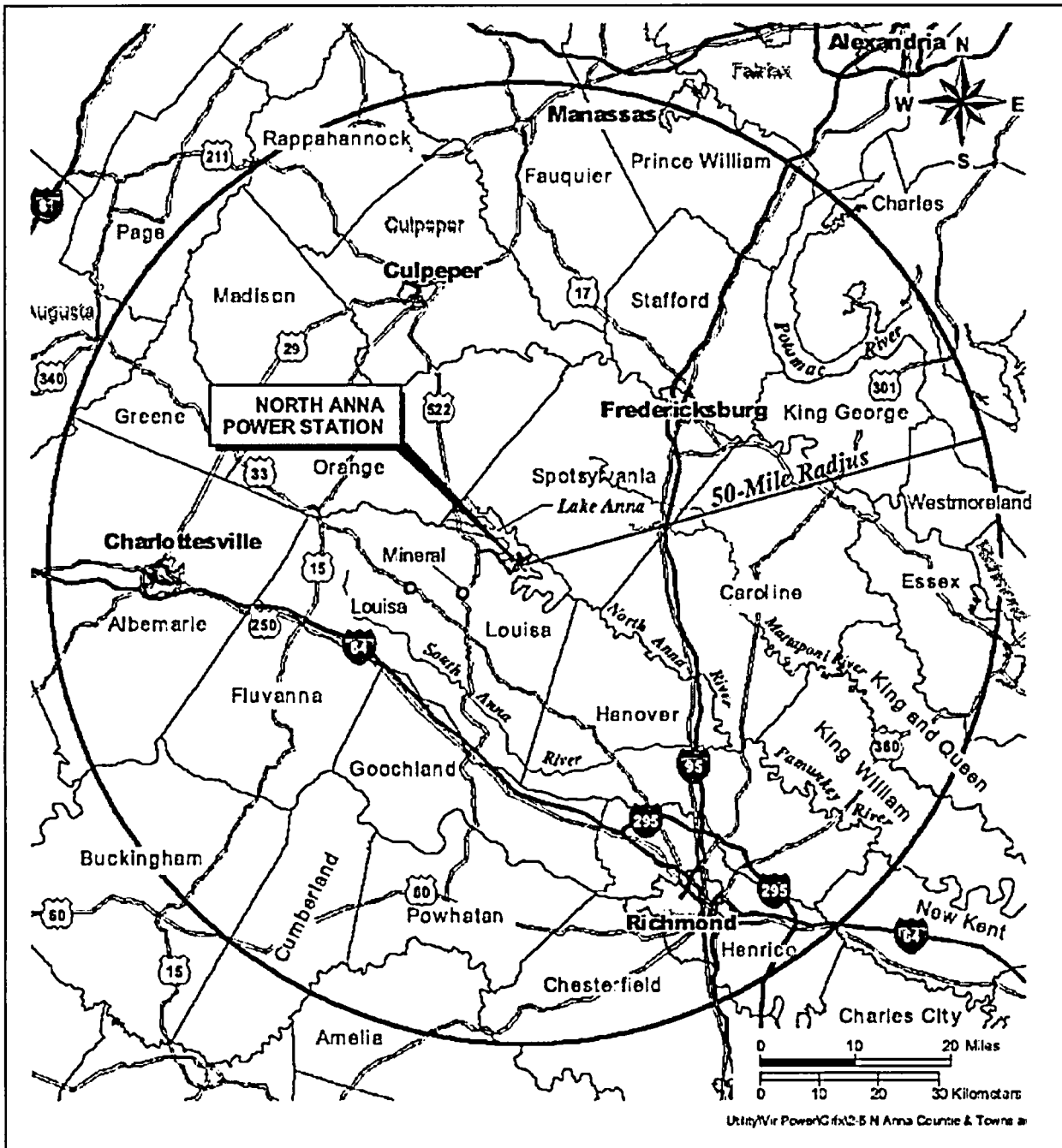


Figure 3. North Anna Power Station Area Counties

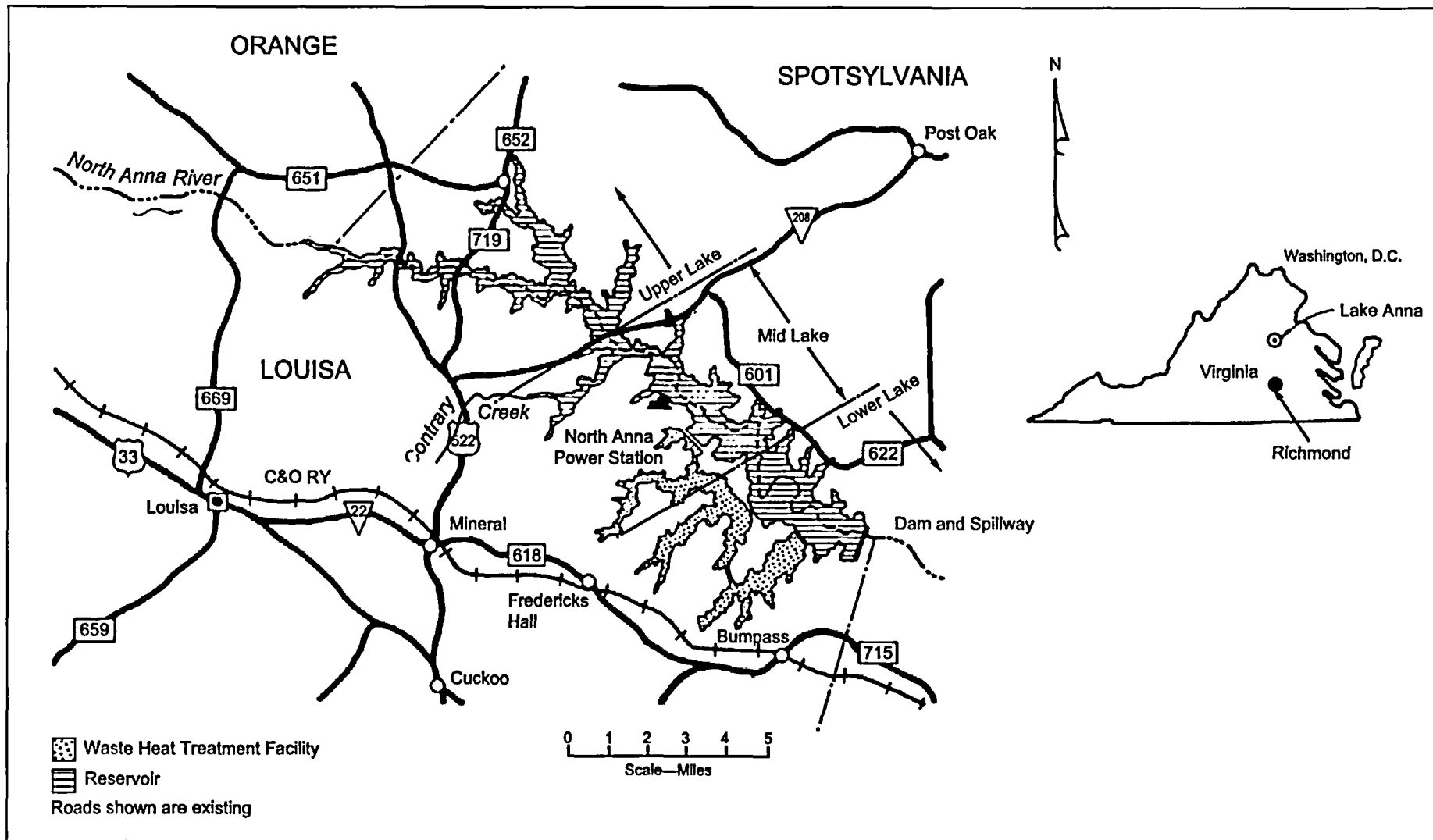


Figure 4. Lake Anna

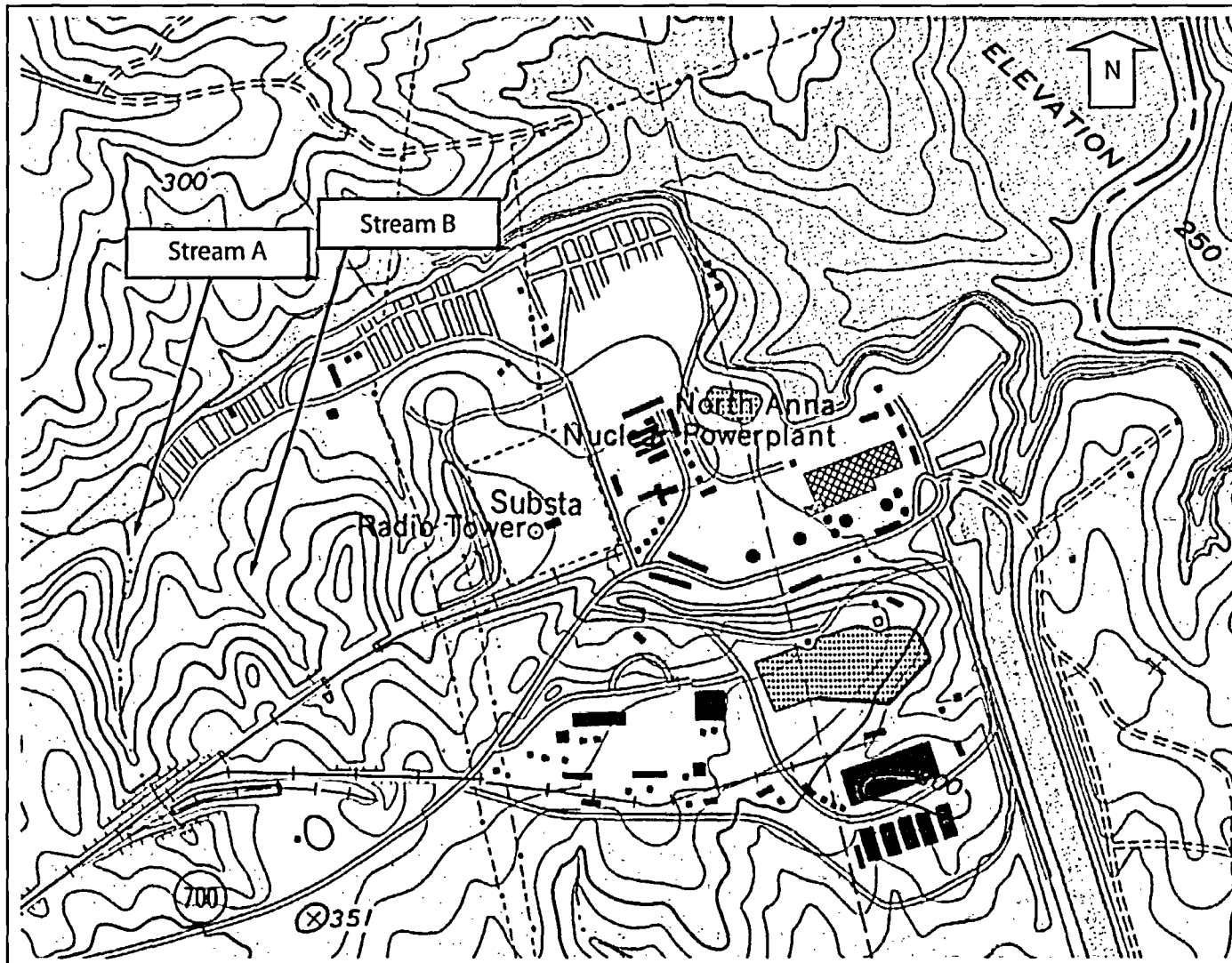


Figure 6. Ephemeral Steam Locations