ATTACHMENT 3

CULTURAL RESOURCES ASSESSMENT, NORTH ANNA POWER STATION

MARCH 2001

CULTURAL RESOURCE ASSESSMENT
NORTH ANNA POWER STATION

Louisa County, Virginia

Prepared for:

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ABSTRACT

On behalf of Dominion Resources, Inc. (Dominion), The Louis Berger Group, Inc. (Berger), has completed a cultural resource assessment of the North Anna Power Station and vicinity in Louisa County, Virginia. Dominion is preparing to submit an application for renewal of the North Anna Power Station's operating license to the United States Nuclear Regulatory Commission. The cultural resource assessment involved: (1) thorough background research to compile existing information about the vicinity of the power station; (2) delineation of areas within the power station property with respect to potential archaeological resources as No Potential, Low Potential, and Moderate-to-High Potential areas.

Classification of the power station property resulted in the identification of the following distinct areas: No Potential areas include the intake canal, intake silt pond, spent fuel storage area, sewage disposal area, combustion generator station, power substation and associated transmission lines, railways to the plant, rail switching station, nuclear power station and surrounding buildings, and the associated buildings to the north of the nuclear power station. The Low Potential areas include one section that lies to the northwest of the power station, an area to the east of the plant along Lake Anna, the lowland areas along streambeds in the southern portion of the power station, and two sections along the railroad tracks to the west of the power station. The remainder of the Study Area surrounding the power station was classified as having a Moderate-to-High potential for yielding archaeological resources based on the relatively undisturbed appearance of the ground surface and the likelihood for prehistoric and historic archaeological sites according to models of prehistoric and historic land use and settlement patterning. The Moderate-to-High Potential area can be divided into two basic sections. Section One includes the ridges and terraces to the south of the power station overlooking the river and along secondary streams, where the relief suggests that it would have been a location for either prehistoric or historic occupation. Section Two includes the ridge tops and the inundated terraces and floodplain of the North Anna River to the north and east of the power station where there is a potential for buried archaeological deposits. The relief in these locations suggests the types of settings that would have been favored for prehistoric and historic occupation. Although the terraces and floodplain of the North Anna River are currently inundated by Lake Anna, these landforms are included in this category because there is a potential for buried archaeological deposits in these areas.

No further archaeological investigations are recommended for the No Potential areas of the power station property. Areas classified as Low Potential and Moderate-to-High Potential would be appropriate for subsurface investigations to identify any possible cultural resources. While these areas all have the potential for archaeological resources, areas classified as Moderate-to-High Potential are more likely to include resources with National Register significance.

Furthermore, should archaeological resources or artifacts be encountered on any portion of the power station property during the course of normal power station activities, employees should be instructed to note the location of the resource and report the discovery to those in charge of the power station property. The discovery then can be evaluated.

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I. INTRODUCTION

On behalf of Domion Resources, Inc. (Dominion), The Louis Berger Group, Inc. (Berger), has completed a cultural resource assessment of the North Anna Power Station and vicinity in Louisa County, Virginia. Dominion is preparing to submit an application for renewal of the North Anna Power Station's operating license to the United States Nuclear Regulatory Commission (NRC). The cultural resource assessment involved: (1) thorough background research to compile existing information about the vicinity of the power station; and (2) delineation of areas within a 1.6-kilometer-radius (1-mile-radius) (Study Area) of the power station property with respect to potential archaeological resources as No Potential, Low Potential, and Moderate-to-High Potential areas (Figure 1).

The cultural resource assessment was conducted pursuant to the National Historic Preservation Act of 1966 (as amended), the Archaeological and Historical Preservation Act of 1974, Executive Order 11593, and Title 36 of the Code of Federal Regulations, Parts 660-66 and 800 (as appropriate). The field investigations and technical report meet the qualifications specified in the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (*Federal Register* 48:190:44716-44742). The Project Manager and Project Archaeologist who performed the cultural resource investigations met or exceeded the qualifications described in the Secretary of the Interior's Professional Qualifications Standards (*Federal Register* 48:44738-44739) (United States Department of the Interior 1983).

II. BACKGROUND RESEARCH

Berger performed background research in order to determine what archaeological and architectural resources have been previously identified within the North Anna Power Station property, and to assess the potential for additional cultural resources. The research primarily involved a review of (1) the archaeological and architectural file inventories at the Virginia Department of Historic Resources [VDHR] in Richmond; (2) historical maps that depict the vicinity of the current power station property; and (3) historical records that document the vicinity of the current power station property. No previously recorded archaeological sites were identified on the power station property or within a 1.6-kilometer-radius (1-mile-radius) of the power station. Seven previously recorded architectural resources (VDHR Inventory Nos. 054-0020, 054-0021, 054-0144, 054-0145, 054-0146, 054-0147, and 088-0133) were identified within a 2.4-kilometer-radius (1.5-mile-radius) of the power station (Table 1). No previously recorded architectural resources lie within the Study Area (1.6 kilometer/1 mile).

No previously recorded archaeological sites were identified on the power station property. A review of historical maps and other historical documentation relative to the power station property show that prior to the construction of the power station and the creation of Lake Anna, several structures were located on what is now the power station property. A circa 1820 map depicts a mill (□Jordan□s Mill□) on the North Anna River near the current location of the power station. The next map to indicate structures on the power station property is the 1942 Contrary Creek, Virginia 7.5 minute Quadrangle map produced by the Army Map Service. This map depicts approximately eight structures within the current power station property. Additionally, Claudia Anderson Chisholm and Ellen Gray Lillie (1979), in *Old Home Places of Louisa County*, refer to several houses that may have been located on the current power station property. These houses include Beech Hill, which is referred to as being □located off Route 700 near the waters of the North Anna River□ (Chisholm and Lillie 1979:61), a location that would place it on the power station property. Chisholm and Lillie (1979:61) refer to the house as having a □striking great chimney, . . . well-preserved frame structure, and [a] deep open well, which was walled with stone.□ They also state that the house was located near a walled cemetery.

Figure 1

TABLE 1

HISTORICAL ARCHITECTURAL RESOURCES RECORDED WITHIN STUDY AREA

VDHR #	ADDRESS/LOCATION	DESCRIPTION
054-0020	Elk Creek Baptist Church/ North side of Rt. 652	1849, one-story classical revival brick church. Modern addition attached at rear corner.
054-0021	Ellerslie/East side of Rt. 614	1770, two-story, brick house, with later additions. Associated extant outbuildings.
054-0144	Laurel Hill/North side of Rt. 652.	ca. 1800, two-story, frame I-house, with later ell addition.
054-0145	Johnson House/North side of Rt 652.	May be the house identified as Longway by Chisholm & Lillie (1979) - Two-story frame house with hipped roof and portico, and a later brick addition connected by a frame breezeway.
054-0146	House/ Rt. 652	ca. 1890, two-story, frame I-house with hipped roof and ell addition
054-0147	Vaughan House/West side of Rt. 614	late 19th-century, two-story, frame house with hipped roof
088-0133	Bel-air/	18th-century two-story, frame house with gambrel roof and side shed additions.

III. CULTURAL CONTEXTS

A. PREHISTORIC CONTEXT

The prehistoric Native American settlement of Virginia is conventionally divided into three general periods: the Paleoindian period (circa 10,000 to 8000 BC); the Archaic period (circa 8000 to 1000 BC); and the Woodland period (circa 1000 BC to AD 1600). The latter two are further divided in Early, Middle, and Late subperiods, and many researchers delineate the time from AD 1500-1675 as the Protohistoric periods (Johnson 1986; VDHR 1992).

The environment during the Paleoindian period was markedly different from that of today. Temperatures were cooler, causing large amounts of seawater to become trapped in vast glaciers that covered the northern part of the continent. Consequently, water levels in the southern portion of the continent were lower, leaving much of the continental shelf off of Virginia exposed (Edwards and Merrill 1977). During this period, subsistence and settlement patterns were based on hunting and foraging. The native peoples were organized in small, mobile bands, involved in an economy primarily based on the hunting of megafauna, caribou, deer, and elk (Boyd 1989; Kelly and Todd 1998; Meltzer 1988; Smith 1986). In addition to hunting, these peoples would have been involved in foraging and fishing. Because of the focus on hunting, however, the archaeological remains of the activities of Paleoindian-period peoples indicate that they tended to establish short-term habitation sites and other limited-activity sites (such as short-term lithic workshop sites). These sites were primarily located in lowland areas near water sources (Custer 1990), areas in southeastern Virginia that are, today, underwater or predominantly wetlands. The primary diagnostic artifact from the Paleoindian period is the Clovis projectile point. Other projectile point types from this period include Cumberland, Quad, Dalton, and Hardaway. Surface finds of Paleoindian points are commonly encountered in the Virginia Piedmont (Brennan 1982).

The Archaic period is generally defined by a change in subsistence and settlement patterns based on major environmental changes. As the glaciers in the north began to melt, sea levels began to rise. Rising water levels throughout the continent led to a larger exploitable environment. These changing environmental conditions led to the disappearance of the megafauna common to the Paleoindian period. Consequently, the Archaic period demonstrates a shift from an economy based on foraging and the hunting of large game to a more sedentary economy, beginning to focus on the exploitation of rivers and use of the earliest forms of domesticated plants (Egloff and McAvoy 1990). To better define the Archaic period, it is further subdivided into three subperiods: Early Archaic, Middle Archaic, and Late Archaic.

During the Early Archaic subperiod, environmental conditions were similar to those of the Paleoindian period. In the Virginia Coastal Plain, freshwater wetlands continued to be the focus of settlement patterns. Activity sites were still occupied on a seasonal basis (Hantman 1990). It was during this period that hunting patterns began to adapt to changing environmental conditions with an increased dependence on smaller game. This change is seen in the use of smaller projectile points, such as the Palmer and Kirk projectile point types (Broyles 1971).

The Middle Archaic subperiod marks the end of the major climatic changes affecting the environment. The climate had become warm and dry, leading to widespread population movements (Delcourt and Delcourt 1987; Stoltman and Baerreis 1983). By this time, subsistence patterns had led to an increasingly sedentary way of life. A larger variety of projectile points, including Stanly, Morrow Mountain, Guilford, and Halifax types, came into use. Atlatl weights and other groundstone implements found at sites of this period demonstrate the use of increasingly complex tools. On Middle Archaic sites, the presence of storage pits, middens, and large amounts of fire-cracked rock (Smith 1986; Steponaitis 1986), as well as increasing numbers of human burials (Lewis and Lewis 1961), further documents the growing sedentary nature of this subperiod.

The Late Archaic is primarily identified by the introduction of cultivars. Cultivars are early forms of domesticated plants that are capable of producing more fruit when tended by humans. Unlike later

domesticated plants (i.e., cultigens), cultivars are capable of propagating without human assistance. During the Late Archaic, interregional patterns of exchange began to develop (Smith 1986; Steponaitis 1986). Diagnostically, this subperiod is marked by an increase in artifact types. These artifacts include steatite vessels, Savannah River projectile points, and groundstone implements, such as mortars, netsinkers, atlatl weights, and grooved axes (Stoltman 1972; Ward 1983). These artifacts document an increasing emphasis on fishing and early agriculture (Klein and Klatka 1991). This subsistence base was focused on the use of longer term habitation sites and the location of base camps along waterways. In addition, seasonal procurement camps were located on interior ridges.

Archaic sites cover the Piedmont; however, many aceramic sites have been assigned to the Archaic period without confirmation of diagnostic materials. There appears to be a strong preference for ridgetops and ridgetoes as site locations (Parker 1990).

The Woodland period is primarily defined by the development of ceramics. It is during the Woodland period that the bow and arrow first came into use. This period is further marked by a shift from seasonal occupations to longer term, sedentary, habitations. These longer periods of site occupation were due to a shift to an agricultural economy that included the development of cultigens. During the Woodland period, the growing dependence on agriculture led to the development of increasingly complex systems of politics and trade. The Woodland period is subdivided into three subperiods: Early Woodland, Middle Woodland, and Late Woodland.

The Early Woodland was very similar to the Late Archaic, with Early Woodland sites located in the same types of riverine locations as Late Archaic sites (Ayers 1972; Stewart 1980). The two subperiods are primarily differentiated by their artifact assemblages. Steatite-tempered Marcey Creek ceramic wares and sand- and grit-tempered Acookeek ceramic wares are defining characteristics of Early Woodland sites. In addition, large triangular projectile points dominate the tool assemblage of the Early Woodland. In southeastern Virginia, North Landing stemmed lobed projectile points and North Landing ovate projectile points are particularly common in the area of the Dismal Swamp (Mouer et al. 1981).

The Middle Woodland subsistence and settlement patterns were based on the occupation of large, sedentary base camps. The base camps were located in river valleys, and with the additional resources that were supplied by other small, limited activity sites, were capable of supporting large groups of people year-round in one location. Expanding emphasis on sedentary habitations is revealed by the archaeologically recovered remains of this subperiod. Ceramics from the Middle Woodland are generally tempered with crushed quartz and cordmarked or fabric-impressed on the exterior. These ceramics include Stony Creek and Mockley wares. The development of the bow and arrow is documented by evidence of the increasing use of small, triangular projectile points. Houses and other structures are definable through the identification of postholes and storage pits. Flexed and extended burials are common during the Middle Woodland, and there is an increased emphasis on grave goods.

In southeastern Virginia, the Late Woodland is defined by the use of permanent and semipermanent villages. These advanced habitation sites are in part related to political and cultural developments of the late Middle Woodland. During this time Virginia appears to have been occupied by western Siouan groups and eastern Algonquin groups. The division between these groups was roughly equivalent to the division between the Piedmont and Coastal Plain regions of Virginia. As a result of this division, local groups appear to have become increasingly involved in complex economies of trade. This, in part, led to the development of permanent villages. These villages were located along waterways and were supplemented by short-term procurement sites located further inland. Archaeological evidence demonstrates that these villages were much more developed than the base camps of the Middle Woodland. The remains of Late Woodland villages demonstrate the use of more complex housing types, such as long-houses, and defensive structures, such as palisades. Subsistence patterns in the Late Woodland were based on agriculture, hunting, gathering, and intergroup trade. Artifact assemblages from the Late Woodland suggest that villages were organized into

redistributive chiefdom-level societies (Rountree 1989). The artifacts in these assemblages demonstrate the continuing use and development of ornate ceramics and small triangular projectile points. Another artifact of interest that is found on Late Woodland sites is the tobacco pipe. Evidence of the development of highly complex social organizations is demonstrated by the palisaded villages and the burial of human remains in ossuaries.

The end of the Late Woodland is often referred to as the Protohistoric period. This period, which roughly includes the years AD 1500 to 1675, is primarily identified by the added presence of European trade goods. An increase in trade networks led to the inclusion of additional Native American ceramics, such as Gaston and Roanoke types (Egloff and Potter 1982). It was during the Protohistoric period that the Algonquian-speaking Powhatan chiefdom became the dominant social organization in the Lower James River area (Rountree 1989). Some Powhatan settlements in southeastern Virginia are noted on the John Smith map of 1612. These settlements are located on the same types of riverine locations as the villages of the earlier part of the Late Woodland.

The Piedmont was occupied by several Siouan-speaking groups during the late prehistoric and early historic contact period (Coe 1952; Dickens et al. 1987; Lewis 1951; Mouer 1983). The size and complexity of settlements increased throughout the Late Woodland period.

2. HISTORIC CONTEXT

Louisa County was formed in 1742 from the upper portion of Hanover County (Martin 1836:216). Hanover County, along with Albemarle, King and Queen, and King William counties, was once part of New Kent County, formed in 1654 (Harris 1936:12). The boundaries of Louisa County have remained unchanged since an upper portion was taken for Albemarle County in 1761. The county was named in honor of Princess Louis of Great Britain (Martin 1836:220).

In the early eighteenth century, the first Europeans arrived in the county and occupied the fertile lands along the North and South Anna River valleys to cultivate tobacco (Harris 1936:12-13). Later, settlement spread out to the countryside. However, soils proved generally unproductive, a situation exacerbated by over planting, excessive grazing, poor ploughing, little use of fertilizers, and the culture of tobacco (Martin 1836:216). By 1836, production of tobacco had resulted in severe soil exhaustion; tobacco was replaced by an emphasis on the planting of wheat and corn as agricultural staples (Martin 1836:216).

Only one vast tract of some eight or ten thousand acres known as Green Spring Land proved to be the exception in Louisa County. Unlike the surrounding gritty and sandy soils, this roughly circular tract was composed of fine gray soil on top of a red clay layer. Here, wheat grew in abundance, up to as much as 30 bushels per acre (Martin 1836:217).

By 1810, Louisa County s population included 5,253 whites and 6,430 slaves. By 1820, these figures had increased respectively to 5,967 and 7,560 inhabitants. By 1830, there were 6,464 white inhabitants and 9,382 slaves (Martin 1836:219). The paucity of highly productive agricultural soils probably contributed to the overall slow growth and limited prosperity of the county. As of the 1830s, dwellings in Louisa County remained simple and plain, usually of one story and of frame or log construction. At the time, there were only about 20 brick dwellings in the county (Martin 1836:219).

With the discover of gold in the Virginia Piedmont in western Spotsylvania County in 1806, interest in the mining of precious metals soared (Sweet 1980:2). The soils and rocky terrain found unsuitable for farming in the county turned out to be ideal for precious metal mining. Fold was first found on David Tinder's property at Contrary Creek. One historian noted that Tinder's Mine yielded $20,000 worth of gold from depths of less than 12 feet (Martin 1836:217). By 1832, this new industrial boom of gold mining was fully established in Louisa County (Sweet and Trimble 1983:117, 131). Some mines were no more than "flashes in the pan," yielding disappointing profits. In 1840, only $3,000 worth of gold was found countywide (Howe 1852:358). Other more productive mines were utilized until about 1865, when gold was no longer as easily accessible (Sweet and Trimble 1983:131). The gold mining industry gradually declined after the Civil War before ceasing altogether by 1935 (Sweet 1980:33).

Other Louisa County metal deposits also were exploited. Although iron ores had been mined in the region before the American Revolution to supply a furnace in Spotsylvania, processing of ore on a substantial scale did not occur in Louisa County until the middle of the nineteenth century (Martin 1836:218). In 1848, the Hart family began to operate their "Rough and Ready Furnace" near Mineral, which converted iron ore into pig iron. Nearby was Victoria Furnace, another iron foundry. Copper and mica also were mined in the county (Harris 1936:133-134). Iron pyrites were utilized by 1856 for the production of sulfuric acid, an ingredient critical to many industrial processes (Harris 1936:133-134). By the turn of the twentieth century, the pyrite mines eventually were discontinued due to competition from more successful operations mining sulfur deposits in Louisiana (Harris 1936:134).

Quarries emerged as another industry during the 1830s boom. Because of its extremely fine grain, the "Virginia Oilstone" was highly prized as whetstone material, and was shipped all over the United States and Europe (Martin 1836:218 and footnote). Another quarry, for more coarse whetstones, was located near Arrack-punch Spring (Martin 1836:218).

Despite the existence of these extractive industries, Louisa County remained largely rural and agricultural in character through the nineteenth century (Martin 1836:219). Associated industries included silversmiths, tanneries, carriage and saddler shops, grist mills, and enterprises for picking cotton and carding wool. There were no cotton or woolen manufacturers in the county, however (Martin 1836:219).

Although no major historical events took place within the confines of the county, the inhabitants "bore their full share" int he French and Indian War and the American Revolution. Lt. Banistre Tarleton bypassed the Louisa County Courthouse during his 1781 attempt to capture Thomas Jefferson in Charlottesville (Marting 1836:220). Around this time, Lafayette intercepted the British three or four miles above "Green Spring Land" on a road known by 1836 as the "Marquis's Road" (Martin 1836:220).

During the Civil War, Louisa County experienced at least two raids and one battle. "Stoneman's Raid" occurred during May 1863 when the union cavalry confiscated crops and livestock as they crossed the county (Harris 1936:96). Dahlgren's Raid in February 1864, destroyed a portion of the railroad at Fredericks Hall before continuing on towards Thompsons Cross Roads (Harris 1936:98). The Battle of Trevillians Station occurred during June 1864 between cavalry forces belonging to Sheridan and Hampton.

Louisa County experience economic hardship and an economic decline after the Civil War, although agriculture remained a primary economic pursuit. While remaining predominantly rural, towns began to grow up around crossroads during this period. In 1873, the Town of Louisa was incorporated. The courthouse had been located there for over a century. In 1905, a new courthouse was completed (Peters and Peters 1995:196). The Town of Mineral was incorporated in 1902 to support the mining industry in the area (Cooke 1993:68).

Agriculture remained the top economic pursuit in the county into the mid-twentieth century; however, during the Great Depression of the 1930s, prices for Louisa's staple products such as corn, wheat, tobacco, and cattle , declined sharply. In the post World War II era, Louisa's economy continued to rely on agriculture and extractive industries. Timbering and mills made up 75 percent of the county's economy by the 1950 (Abercrombie 1992:147). In addition, approximately 40,000 to 50,000 tons of vermiculite have been mined annually in the county since the 1970s (Abercrombie 1992:147).

IV. ARCHAEOLOGICAL POTENTIAL

A. INTRODUCTION

The background research suggests that the Study Area surrounding the power station has the potential to yield archaeological sites. It appears from background research that the house foundation and well located near Cemetery 2 is Beech Hill, the former Collins home; several other house sites could be located within this area, as well. In addition, historical maps indicate that the site of Jordan's Mill may have been inundated by Lake Anna or may lie on or adjacent to the power station. Additional historic domestic sites could be located within the Study Area. Although no prehistoric sites have been previously recorded within the Study Area surrounding the power station, there is the potential that such sites could be encountered along the upland portions of the around the power station and in the inundated terraces and floodplain of Lake Anna.

The data derived from the background research as well as information from models of prehistoric and historic land use settlement patterning were employed to classify the Study Area with respect to archaeological resource potential as: (1) No Potential, (2) Low Potential, and (3) Moderate-to-High Potential (see Figure 1). The No Potential locations are those areas where there is no likelihood for the occurrence of an archaeological site because they have been disturbed. The Low Potential areas are those undisturbed locations that are greater than 15 percent in slope and are typically not likely to be the location of an archaeological site. The Moderate-to-High Potential locations are undisturbed and relatively flat areas that are likely to be locations for archaeological resources.

B. NO POTENTIAL

Due to disturbances related to construction of the power station's major structures, much of the power station property has no potential to yield archaeological resources. These No Potential areas include the intake canal, intake silt pond, spent fuel storage area, sewage disposal area, combustion generator station, power substation and associated transmission lines, railways to the plant, rail switching station, nuclear power station and surrounding buildings, and the associated buildings to the north of the nuclear power station. No further archaeological investigations are recommended for the areas of the power station property classified as having No Potential for archaeological resources.

3. LOW POTENTIAL

Several areas of the Study Area were classified as having low potential to yield archaeological resources. The Low Potential areas include one section that lies to the northwest of the power station, an area to the east of the plant along Lake Anna, the lowland areas along streambeds in the southern portion of the power station, and two sections along the railroad tracks to the west of the power station. These areas are typically considered to have a low potential for the occurrence of archaeological sites due to degree of slope (greater than 15 percent). For this reason, there exists a low potential for discovering archaeological sites. For those areas to the west of the power station, subsurface testing would not be necessary in locations where previous disturbance could be documented. Areas with a low potential for archaeological resources would be appropriate for Phase I subsurface testing depending on the specific ground conditions.

D. MODERATE-TO-HIGH POTENTIAL

The remainder of the Study Area surrounding the power station was classified as having a moderate-to-high potential for yielding archaeological resources based on the relatively undisturbed appearance of the ground surface and the likelihood for prehistoric and historic archaeological sites according to models of prehistoric and historic land use and settlement patterning. The Moderate-to-High Potential area can be divided into two basic sections. Section One includes the ridges and terraces to the south of the power station overlooking the

river and along secondary streams, where the relief suggests that it would have been a location for either prehistoric or historic occupation. Section Two includes the ridge tops and the inundated terraces and floodplain of the North Anna River to the north and east of the power station where there is a potential for buried archaeological deposits. Again, the relief in these locations suggests the types of settings that would have been favored for prehistoric and historic occupation. Although the terraces and floodplain of the North Anna River are currently inundated by Lake Anna, these landforms are included in this category because there is a potential for buried archaeological deposits in these areas. Ground disturbing activities, such as dredging, cut bank stabilization, or dock construction, could have an impact on any resources located here. Within those portions of the Moderate-to-High Potential area that appear to be predominantly undisturbed, Phase I subsurface testing would be appropriate prior to the undertaking of any ground-disturbing activities, in order to identify any possible cultural resources.

Should archaeological resources or artifacts be encountered on any portion of the power station property during the course of normal power station activities, employees should be instructed to note the location of the resource and report the discovery to those in charge of the power station property. The discovery can then be evaluated.

V. SUMMARY AND RECOMMENDATIONS

On behalf of Dominion Resources, Inc., The Louis Berger Group, Inc., has completed a cultural resource assessment of the North Anna Power Station and vicinity in Louisa County, Virginia, as part of Dominion's relicensing of the North Anna Power Station with the Nuclear Regulatory Commission. The cultural resource assessment involved: (1) thorough background research to compile existing information about the vicinity of the power station; and (2) delineation of areas within the power station property with respect to their potential for archaeological resources.

No extant historic architectural resources were located within a 1.6-kilometer (1-mile) radius of the power station property, and no historic architectural resources are present within the power station property. There are five recorded architectural resources within a 2.4-kilometer (1.5-mile) radius of the power station property; however, none of these are affected by current activities at the power station.

On the basis of the background research performed in February 2001, Berger divided the North Anna Power Station property into three classifications with respect to potential for archaeological resources as: (1) No Potential, (2) Low Potential, and (3) Moderate-to-High Potential. Following are Berger's suggestions regarding the course of action to be taken if future ground-disturbing activities are to occur in the respective areas.

A. AREAS WITH NO POTENTIAL FOR ARCHAEOLOGICAL RESOURCES

No further archaeological investigations are recommended for the areas of the power station property classified as having no potential for archaeological resources.

2. AREAS WITH LOW POTENTIAL FOR ARCHAEOLOGICAL RESOURCES

Areas of the property with low potential for archaeological resources would be appropriate for Phase I subsurface testing depending on the specific ground conditions. For those areas in the vicinity of the power substation, subsurface testing would not be necessary in locations where the power company could document previous disturbance. For those areas to the west of the power station, subsurface testing would not be necessary in locations where previous disturbance could be documented. Areas with a low potential for archaeological resources would be appropriate for Phase I subsurface testing depending on the specific ground conditions.

C. AREAS WITH MODERATE-TO-HIGH POTENTIAL FOR ARCHAEOLOGICAL RESOURCES

In areas of the property with a moderate-to-high potential for archaeological resources which appear to be predominantly undisturbed, Phase I subsurface testing would be appropriate prior to undertaking ground-disturbing activities in order to identify any possible cultural resources.

In addition, should archaeological resources or artifacts be encountered on any portion of the power station property during the course of normal power station activities, employees should be instructed to note the location of the resource and report the discovery to those in charge of the power station property. The discovery can then be evaluated.

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