

would survey this area during routine civil/engineering survey of the centerline and determine the exact location of the septic system.”⁷⁰¹

Mr. Lake noted that in the DEQ Report submitted on June 18, 2015, the DEQ Office of Wetlands and Stream Protection (“OWSP”) recommended Routes C-1.1c and C-1.2 over Staff’s Supplemental Alternatives based on impacts to wetlands.⁷⁰² Mr. Lake also pointed out that DHR recommends approval of Option C-1.1c, and that DHR asserted that “Options A-2/3 and A-2/3 Staff appear to have the most overall potential for negative impact to recorded historic resources and cannot be recommended.”⁷⁰³

Diana T. Faison responded to Staff witness McCoy’s testimony regarding the CAG by explaining that the purpose of the CAG was “to gather and obtain input from various community stakeholders to aid the Company in identifying feasible route options.”⁷⁰⁴ Ms. Faison disagreed with Mr. McCoy’s contention that the Company failed to provide the CAG information that Option C would be in violation as of its in-service date and would require additional projects to support reliability.⁷⁰⁵ Ms. Faison affirmed that the CAG was advised of new requests from large electrical load users and that the Company proposed a double-circuit structure for the C routes, with one circuit to be held in reserve.⁷⁰⁶

Ms. Faison agreed with Schools witness Livesay that construction of the Option A routes may have a temporary impact on traffic in the area, but such problems may be mitigated by scheduling construction activity around school arrival and dismissal times.⁷⁰⁷

Ms. Faison addressed Schools witness Riordan’s testimony that the Option A-2/3 route would eliminate the extension of the right-hand turning lane on Rogues Road.⁷⁰⁸ Ms. Faison testified that because roadways are allowed to encroach on the right-of-way, Option A-2/3 route should not impede construction of a secondary ingress and egress access point.⁷⁰⁹

Ms. Faison referred to Fauquier County testimony concerning the need for the Company to obtain the County’s approval for changes to the Warrenton Substation and stated that Dominion Virginia Power recognized “that it would most likely need to apply for a new or amended special exception for the Warrenton Substation prior to expanding that facility to accommodate any of the routes currently under consideration (Option A, B or C).”⁷¹⁰

⁷⁰¹ *Id.*

⁷⁰² *Id.* at 23.

⁷⁰³ *Id.* at 23-24.

⁷⁰⁴ Exhibit No. 63, at 2.

⁷⁰⁵ *Id.* at 4.

⁷⁰⁶ *Id.*

⁷⁰⁷ *Id.* at 5.

⁷⁰⁸ *Id.*

⁷⁰⁹ *Id.* at 6.

⁷¹⁰ *Id.*

Ms. Faison pointed to concerns raised by Fauquier County witness Wheatcraft concerning the adverse effects of Staff Supplemental Alternatives on historic resources and the Comprehensive Plan, and stated that such concerns were drivers behind the Company support of Option C.1-1c route.⁷¹¹

Finally, Ms. Faison advised that the Company has no issues with the permit requirements identified in the DEQ Report, and does not object to the Report's bullet-point summary of recommendations to mitigate potential environmental impacts of the Projects.⁷¹²

Public Hearing of August 4, 2015

On August 4, 2015, a public hearing to receive the evidence of the parties and Staff was convened in the Commission's courtroom in Richmond, Virginia, as scheduled. Seventeen public witnesses presented testimony and the testimony of each witness is summarized below.

Delegate Scott Lingamfelter of Prince William County, Virginia, testified that in 2007, both Fauquier County and Prince William County went through a very difficult process concerning the siting of a transmission line, which caused a great deal of consternation.⁷¹³ Based on that experience, Delegate Lingamfelter asked for the formation of a CAG, which in this case "did tremendous work over the course of several months."⁷¹⁴ Delegate Lingamfelter advised that the CAG, which was made up of citizens from the private sector and local government, looked for the best option and arrived at a consensus for Option C.⁷¹⁵ Delegate Lingamfelter stated that he is chairman of the Chesapeake Bay Commission and believed that Option C "actually enhances some of the objectives that we seek when we try to minimize the impact on the tributaries to the bay region."⁷¹⁶ Delegate Lingamfelter confirmed that he had received "approaching a thousand" letters from people adamantly opposed to Option A and supportive of Option C.⁷¹⁷ Delegate Lingamfelter maintained that the Commission has the opportunity to demonstrate "that at the end of the day the people's voices will be heard."⁷¹⁸

Delegate Michael Webert of Marshall, Virginia, contended that based on the numerous letters, phone calls, and conversations on the street, many people in Warrenton and the surrounding area oppose Option A and support Option C.⁷¹⁹ Delegate Webert advised that as an elected official and as a citizen of Fauquier County, he was in opposition to Option A and in favor of Option C.⁷²⁰

⁷¹¹ *Id.* at 7.

⁷¹² *Id.* at 8.

⁷¹³ Lingamfelter, Tr. at 254-55.

⁷¹⁴ *Id.* at 255.

⁷¹⁵ *Id.*

⁷¹⁶ *Id.* at 256.

⁷¹⁷ *Id.*

⁷¹⁸ *Id.* at 257.

⁷¹⁹ Webert, Tr. at 258-59.

⁷²⁰ *Id.* at 259-60.

Randolph Sutliff of Warrenton, Virginia, stated that he does not live near either of the Option A routes, but opposes these routes based on being a customer of the Paws Awhile dog kennel.⁷²¹ Mr. Sutliff expressed concern that the noise from the transmission lines will have a negative impact on dogs.⁷²² Mr. Sutliff pointed to his own experience walking dogs along the W&OD Trail near a 230 kV line, where one of his dogs would not walk near the line and had to be walked in a different area.⁷²³ Mr. Sutliff commended Dominion Virginia Power and the official of Fauquier and Prince William Counties for developing a preferred route that meets the needs of citizens and residents.⁷²⁴ Mr. Sutliff asserted that Staff's effort to save customers less than a mil on their rates was, "at best, a misguided venture."⁷²⁵

Karen Day of Warrenton, Virginia, stated that the current Option A proposal would place the transmission line directly above her home.⁷²⁶ Ms. Day expressed concern for her children being exposed to line at home, at school, on weekends playing sports, or at a friend's house.⁷²⁷ Ms. Day testified that "[l]ess than 1 percent chance of cancer" were the words spoken to her by her daughter's doctor when her daughter's health trials began.⁷²⁸ Ms. Day contended that those words caused her to question the doctors when told that her daughter had brain cancer.⁷²⁹ Ms. Day asserted that she is now being asked to accept those same words from professionals when they say there is no evidence of exposure to power lines causing health issues in children.⁷³⁰ Ms. Day testified:

Every single day I live with the fear of her cancer
returning. Every single day I live with the fear of late effects from
the toxic treatment she had to save her life. Every single day I live
with the fear of her being more susceptible to secondary cancers,
and I am reminded every single day of the nightmare we went
through because of the diseases she will have for the rest of her life
that the tumor caused.

Now must I live with the fear of exposure to these power
lines that could affect my family and community? Please do not
consider Option A.⁷³¹

On cross-examination, Ms. Day stated that she did not receive any notice of the proceeding, but learned of the proceeding from neighbors.⁷³²

⁷²¹ Sutliff, Tr. at 260.

⁷²² *Id.* at 261.

⁷²³ *Id.*

⁷²⁴ *Id.*

⁷²⁵ *Id.* at 261-62.

⁷²⁶ Day, Tr. at 262.

⁷²⁷ *Id.*

⁷²⁸ *Id.* at 263.

⁷²⁹ *Id.*

⁷³⁰ *Id.*

⁷³¹ *Id.* at 264.

Frank Grimes of Nokesville, Virginia, opposed Route C.⁷³³ Mr. Grimes contended that impact of a thousand homes will have a greater impact on the environment and water wells than a power line.⁷³⁴ Mr. Grimes questioned whether the 2011 earthquake caused the Authority's well to be contaminated and asked if the geology is "that much different six miles away that any other well wouldn't be impacted by the same event."⁷³⁵ Mr. Grimes pointed to Staff's determination that Route A offers a more robust electrical solution at less cost, without adding the cost of four additional undetermined projects to the cost of Route C.⁷³⁶ Mr. Grimes also referred to Dominion Virginia Power's rebuttal testimony that "Route C can easily be upgraded to carry another gorilla arm moving an additional 230 kV" as evidence that Route A is the better electrical solution.⁷³⁷

Andrew Wack of Nokesville, Virginia, responded to Dominion Virginia Power's contention that Option A cannot be built in time by stating, "[t]oo bad you didn't think of that and propose Option A at the start"⁷³⁸ Mr. Wack criticized the CAG for failing to have any members that were electrical engineers.⁷³⁹ Mr. Wack responded to legal arguments that the Commission is not tasked with minimizing costs, by requesting that if Option C is chosen, that the line be buried.⁷⁴⁰ Mr. Wack stressed that there is strong opposition to Option C, but such opposition suffers from a smaller population, and a feeling that they are outmatched and "abandoned by their own county government, which has 1.8 million reasons to not contest C."⁷⁴¹

Peter Onoszko of Charles Town, West Virginia, read a statement of Norbert Bromenshenkel of Stafford, Virginia, in which Mr. Bromenshenkel expressed concern for the impact of the proposed transmission line on the Paws Awhile Pet Motel.⁷⁴² Mr. Bromenshenkel pointed to the strength of the electric and magnetic fields at a distance of 150 feet from the centerline of a 230 kV line and contended that the health consequences of these currents on humans and animals are unknown.⁷⁴³ Mr. Bromenshenkel stated that he has been a client of Paws Awhile Pet Motel for over 15 years, but will leave in consideration for the safety of his pets if Option A-2/3 or Option A-2/3 Staff is approved.⁷⁴⁴

⁷³² *Id.* at 265.

⁷³³ Grimes, Tr. at 265.

⁷³⁴ *Id.* at 265-66.

⁷³⁵ *Id.*

⁷³⁶ *Id.*

⁷³⁷ *Id.* at 267.

⁷³⁸ Wack, Tr. at 268.

⁷³⁹ *Id.*

⁷⁴⁰ *Id.* at 269.

⁷⁴¹ *Id.* at 270.

⁷⁴² Onoszko, Tr. at 277-78.

⁷⁴³ *Id.* at 278.

⁷⁴⁴ *Id.* at 278-79.

Mr. Onoszko confirmed that he is also a patron of Paws Awhile Pet Motel who opposed Option A-2/3 and Option A-2/3 Staff.⁷⁴⁵ Mr. Onoszko asserted that Paws Awhile Pet Motel is recognized as one of the best boarding kennels in the extended Northern Virginia area.⁷⁴⁶ Mr. Onoszko expressed concern that the EMF from the transmission line would exacerbate the heart condition of his oldest dog.⁷⁴⁷

Kathy Ewell of Rogues Road, Fauquier County, Virginia, stated that she lives on property that has been in her family for over a hundred years.⁷⁴⁸ Ms. Ewell testified that about five years ago, timber was cut from her property to cover the cost of a cancer treatment not covered by insurance.⁷⁴⁹ Ms. Ewell advised that “[t]he timber was cut at that time so that it could be cut in a similar manner in about 15 years.”⁷⁵⁰ Ms. Ewell opposed both Route A-2/3, which would be catastrophic to the value of the property, and Route A-2/3 Staff, which also cuts across the property.⁷⁵¹

Helen “Jessie” Cleveland of Warrenton, Virginia, opposed both Option As and stated that a proposed adjustment would put the line directly in front of her house.⁷⁵² Ms. Cleveland testified that she moved to Fauquier County over twenty years ago because of the woods and not to be seeing power lines.⁷⁵³ Ms. Cleveland also expressed concern that blasting would damage her private well.⁷⁵⁴

On cross-examination, Ms. Cleveland confirmed that she did not receive any notification for the hearing, but found out through the newspaper and by her neighbor.⁷⁵⁵

George Slack of Warrenton, Virginia, opposed Route A in any form.⁷⁵⁶ Mr. Slack expressed concern for elderly people living in the Springdale and Rock Springs subdivisions that will lose value on their properties when they need to retire or relocate to assisted living communities.⁷⁵⁷ Mr. Slack maintained that tower construction will negatively impact both private and community wells.⁷⁵⁸ Mr. Slack criticized adjustments to Route A proposed by Staff witness McCoy and contended that these changes create more problems than they resolve.⁷⁵⁹

⁷⁴⁵ *Id.* at 280.

⁷⁴⁶ *Id.*

⁷⁴⁷ *Id.* at 280-81.

⁷⁴⁸ Ewell, Tr. at 283.

⁷⁴⁹ *Id.*

⁷⁵⁰ *Id.*

⁷⁵¹ *Id.*

⁷⁵² Cleveland, Tr. at 284.

⁷⁵³ *Id.*

⁷⁵⁴ *Id.* at 285.

⁷⁵⁵ *Id.* at 285-86.

⁷⁵⁶ Slack, Tr. at 287.

⁷⁵⁷ *Id.*

⁷⁵⁸ *Id.*

⁷⁵⁹ *Id.* at 287-88.

Frank Kokoszka of Warrenton, Virginia, expressed concern for the water and “the magnetic forces around that.”⁷⁶⁰ Mr. Kokoszka advised that he has metal knees and his wife has a metal knee and a metal shoulder.⁷⁶¹ Mr. Kokoszka questioned whether the need in this case was related to the EPA’s closing of coal-fired plants and the need to move power from Virginia to Pennsylvania.⁷⁶²

Donald Nuckles of Warrenton, Virginia, testified that he did not want the line in his front yard, and questioned why his home is shown as a red dot on the routing maps.⁷⁶³ Mr. Nuckles stated that “I truly don’t know what that means, but I am sure it’s not good for me.”⁷⁶⁴ Mr. Nuckles confirmed that he built his house in 1986, raised three kids there, had his wife pass away there, and plans to live there as long as “I need a house.”⁷⁶⁵ Mr. Nuckles maintained that he wants “to preserve our neighborhood, protect our property value, and keep my home.”⁷⁶⁶

On cross-examination, Mr. Nuckles acknowledged one of Staff witness McCoy’s adjustments would move Option A-2/3 Staff route a few feet to remove the “red dot.”⁷⁶⁷ Mr. Nuckles stated that “that’s not going to help me or anybody else, a few feet.”⁷⁶⁸

Tim Hoffman of Warrenton, Virginia, opposed Options A-2/3 and A-2/3 Staff, both personally, and based on canvassing more than a hundred homes in the Vint Hill subdivision.⁷⁶⁹ Mr. Hoffman testified that he moved to Vint Hill “to have the peace and tranquility and a small-town-community feel that we found in Vint Hill.”⁷⁷⁰ Because he had experienced “a land take in Fairfax County,” Mr. Hoffman was careful to purchase a home with a preserve behind his home.⁷⁷¹ Mr. Hoffman expressed concern for the valuation of his home and the health of his family if a transmission line is built 90 feet from his back fence.⁷⁷² Mr. Hoffman asserted that the proposed line would likely devalue homes by 10 to 30 percent, and that home values have just gone through a housing recession, with many homes in his subdivision valued below their original purchase price.⁷⁷³ Mr. Hoffman noted that there are 45 homes within 150 yards of this transmission line that will have concerns similar to his.⁷⁷⁴

⁷⁶⁰ Kokoszka, Tr. at 289.

⁷⁶¹ *Id.*

⁷⁶² *Id.* at 289-90.

⁷⁶³ Nuckles, Tr. at 291.

⁷⁶⁴ *Id.*

⁷⁶⁵ *Id.*

⁷⁶⁶ *Id.* at 292.

⁷⁶⁷ *Id.* at 294.

⁷⁶⁸ *Id.*

⁷⁶⁹ Hoffman, Tr. at 295.

⁷⁷⁰ *Id.*

⁷⁷¹ *Id.*

⁷⁷² *Id.*

⁷⁷³ *Id.* at 298.

⁷⁷⁴ *Id.* at 299.

Kevin O'Neill of Warrenton, Virginia, advised that Staff's recommendation of Option A places his house within 60 feet of the right-of-way.⁷⁷⁵ Mr. O'Neill stated that he and his wife purchased this home in 1989, and it is where they raised their two daughters, and where they envisioned growing old together and living in "until the day we die."⁷⁷⁶ Mr. O'Neill took issue with Staff's contention that Option A-2/3 is electrically superior.⁷⁷⁷ Mr. O'Neill asserted that Option C meets NERC standards and results in one day in ten years standard, while Option A would result in one day in forty-three years.⁷⁷⁸ Mr. O'Neill cautioned that these are probabilities and not actualities.⁷⁷⁹ Mr. O'Neill argued that even if Option A is technically electrically superior, it is not better because Option C already met the standard.⁷⁸⁰

Mr. O'Neill faulted Staff's recent revision of Option A, which changes the path of the line through Sterling Farms and over the home of Karen Day.⁷⁸¹

Susan Fawcett of Warrenton, Virginia, stated that she felt relief that after a thorough review, Option A was taken out of consideration.⁷⁸² Ms. Fawcett noted her puzzlement that Option A is somehow "put back on the table."⁷⁸³ Ms. Fawcett contended that Option A was determined to have "larger impacts . . . [w]hy is it an option at this time?"⁷⁸⁴

Miriam Morrison of Warrenton, Virginia, stated that her house has been her home since 1985 and is where her three children were raised and where her daughter, son-in-law, and two very young children also live.⁷⁸⁵ Ms. Morrison affirmed that on July 10, 2015, she learned from a neighbor of Staff's adjustment to the A-2/3 Staff alignment that would move the right-of-way to within 200 feet of her home.⁷⁸⁶ Ms. Morrison characterized the proposed transmission line as "effectively a highway in my backyard that I cannot drive on."⁷⁸⁷ Ms. Morrison asserted that her home was her "largest lifetime investment" whose value will be negatively impacted.⁷⁸⁸ Ms. Morrison also expressed concern for the exposure of children to EMFs, including her grandchildren.⁷⁸⁹

My children stood at the end of Hope Lane awaiting their
bus and walked up the lane again at the end of the day. It is

⁷⁷⁵ O'Neill, Tr. at 301.

⁷⁷⁶ *Id.*

⁷⁷⁷ *Id.* at 302.

⁷⁷⁸ *Id.* at 303-04.

⁷⁷⁹ *Id.* at 305.

⁷⁸⁰ *Id.*

⁷⁸¹ *Id.* at 308.

⁷⁸² Fawcett, Tr. at 313.

⁷⁸³ *Id.* at 314.

⁷⁸⁴ *Id.*

⁷⁸⁵ Morrison, Tr. at 315.

⁷⁸⁶ *Id.* at 315-16.

⁷⁸⁷ *Id.* at 316.

⁷⁸⁸ *Id.* at 317.

⁷⁸⁹ *Id.*

disturbing to envision a future where my grandchildren will similarly do so directly under a 230 kV power line and will be each day in a facility close to a power line.⁷⁹⁰

Specifically, Ms. Morrison pointed to an asthma study published in 2011 that found 20.8 percent of children born to mothers exposed to EMF developed asthma, and to a 2014 study of EMF/autoimmune connections that concluded “that there is clear evidence that exposure to EMFs induce changes within the physiological range in number and percentage of circulating immune cells, as well as in the immune response.”⁷⁹¹

Fred Pagonis of Warrenton, Virginia, expressed appreciation that Staff questioned the Company.⁷⁹² Mr. Pagonis contended that the cost of Options A and C were immaterial “because we are going to pay for it one way or the other.”⁷⁹³ Mr. Pagonis opposed Option A because he did not want to look out his front window and see a Christmas tree coming through his development.⁷⁹⁴ Mr. Pagonis expressed sympathy for the people impacted by Option C, but pointed out that such folks are already impacted.

Warrenton Public Hearing

On August 10, 2015, a hearing to receive testimony from public witnesses was held in Warrenton, Virginia. Sixty-nine public witnesses presented testimony. The testimony of each witness is summarized below.

Delegate Michael Webert, resident of Marshall, Virginia, read a prepared statement by Jill Vogel, Member of the Senate of Virginia. In her statement, Senator Vogel urged the Commission not to approve Option A and reminded the Commission that Option A is “universally opposed.”⁷⁹⁵ She stated that her office had received more than 800 letters from constituents who oppose Option A.⁷⁹⁶ In the written statement, Senator Vogel pointed out that her office has not received “one single communication from any constituent who is in favor of Option A.”⁷⁹⁷ The purpose of her written statement was to express that she stands behind her constituents in their opposition to Option A.⁷⁹⁸

Walter Buzzetta of Warrenton, Virginia, testified that he moved to Warrenton two months ago and found out that Option A would place the power line five homes away directly running through his street.⁷⁹⁹ Mr. Buzzetta contended that he was strongly opposed to the power

⁷⁹⁰ *Id.* at 317-18.

⁷⁹¹ *Id.* at 318-19.

⁷⁹² Pagonis, Tr. at 321.

⁷⁹³ *Id.*

⁷⁹⁴ *Id.* at 321-22.

⁷⁹⁵ Webert, Tr. at 761.

⁷⁹⁶ *Id.*

⁷⁹⁷ *Id.*

⁷⁹⁸ *Id.* at 762.

⁷⁹⁹ Buzzetta, Tr. at 762-63.

lines running next to his daughter's school, as well as the blasting and drilling close to the wells that supply water to his house.⁸⁰⁰ He affirmed his opposition to the Option A routes.⁸⁰¹

Andrew Wack of Nokesville, Virginia, read several points from a resolution of the Prince William County Board of Supervisors regarding the County's long range land use plan and zoning requirements for data centers.⁸⁰² He maintained that he does understand that the Commission considers a variety of issues, including economic impact and current and future businesses, when making decisions about power line placement.⁸⁰³ Mr. Wack raised questions regarding route variations through property owned by Brookfield that was "scotched" by Dominion after conferring with Prince William County.⁸⁰⁴ He asserted his opposition to Option C.⁸⁰⁵

Frank Grimes of Nokesville, Virginia, voiced his opposition to Option C.⁸⁰⁶ He testified that the decision of the CAG members may have been affected by personal and business relationships.⁸⁰⁷ He urged the Commission to "choose the better electrical and least expensive solution."⁸⁰⁸

Gary Schoenfeld of Warrenton, Virginia, testified that he lives about 300 to 400 feet off of the power line in the Rock Spring subdivision.⁸⁰⁹ He stated that this power line is not servicing Fauquier County and that Prince William County, the area being serviced by the power line, requested the power lines be buried.⁸¹⁰ He expressed his opposition to Option A and argued that Option A is the least expensive route "only because there will be a reduction in property values....[resulting in] a tax on the land owners that are anywhere near the power line..."⁸¹¹

Denise Schefer of Warrenton, Virginia, spoke out against all Option A routes. She testified that better options including Option C, Dominion's preferred route, exist and that Option C is "only three miles long and doesn't go through residential neighborhoods, wetlands or, very importantly, schools."⁸¹² She expressed concern regarding the negative impact of Option A on the economic value of development in the New Baltimore service district.⁸¹³ Ms. Schefer also pointed out that power lines in Option A run "within hundreds of feet of the largest

⁸⁰⁰ *Id.* at 763.

⁸⁰¹ *Id.*

⁸⁰² Wack, Tr. at 764-65.

⁸⁰³ *Id.* at 766.

⁸⁰⁴ *Id.* at 767.

⁸⁰⁵ *Id.* at 769.

⁸⁰⁶ Grimes, Tr. at 770.

⁸⁰⁷ *Id.* at 771.

⁸⁰⁸ *Id.* at 772.

⁸⁰⁹ Schoenfeld, Tr. at 772.

⁸¹⁰ *Id.* at 774.

⁸¹¹ *Id.* at 775.

⁸¹² Schefer, Tr. at 776.

⁸¹³ *Id.*

well that serves the New Baltimore service district” and that the well could be compromised during construction of the Option A power lines.⁸¹⁴

Janice Barr of Warrenton, Virginia, testified that she and her husband own roughly 13 acres on Rogues Road and they oppose Option A, especially the A-2/3 Staff route.⁸¹⁵ She stated that “the A-2/3 Staff route would travel two-tenths of a mile on [her] land...” and that the route would “take everything.”⁸¹⁶ She maintained that if the A-2/3 Staff route is approved and built, “the land that offers [her family] so much will be decimated, [the line] will destroy our property visibly and fiscally, and end what [they] were hoping to provide [their] family, from college to retirement.”⁸¹⁷ She affirmed that she could not live or raise her family under the high voltage power lines.⁸¹⁸

Kimberly Nickle of Catlett, Virginia, stated that she works at Paws Awhile Pet Motel and that if the power line is approved, Paws Awhile Pet Motel will close and the employees will be left without support.⁸¹⁹ She advised that she has a son with special needs and that he is “very sensitive to sound, vibration of any kind...”⁸²⁰ She affirmed that she needs her job at Paws Awhile Pet Motel because her job is flexible so that she can care for her family.⁸²¹ Ms. Nickle expressed her sentiment regarding how the employees at Paws Awhile are her nontraditional family and if Paws Awhile goes away “there’s going to be a major blow to the community.”⁸²²

Bruce Noble of Warrenton, Virginia, testified that he is a resident of Brookside and a realtor in the area and that he opposes both Option A routes.⁸²³ He contended that the power lines are already having an impact on property values in Brookside.⁸²⁴ He asserted that the median price of properties sold outside of Brookside has increased by \$25,000, whereas in Brookside, the median value has decreased by \$10,000.⁸²⁵ Mr. Noble confirmed that homes in Brookside were sitting on the market an average of 28 days last year and that that number has increased to 62 days in 2015.⁸²⁶ He raised this issue that all the homes in Brookside will have decreased property values because of the way appraisals work. According to Mr. Noble, appraisals are based on communities, first, and distance from comps, second.⁸²⁷

⁸¹⁴ *Id.* at 777.

⁸¹⁵ Barr, Tr. at 777.

⁸¹⁶ *Id.* at 778.

⁸¹⁷ *Id.* at 780.

⁸¹⁸ *Id.*

⁸¹⁹ K. Nickle, Tr. at 781.

⁸²⁰ *Id.*

⁸²¹ *Id.* at 782.

⁸²² *Id.*

⁸²³ Noble, Tr. at 783.

⁸²⁴ *Id.*

⁸²⁵ *Id.*

⁸²⁶ *Id.*

⁸²⁷ *Id.* at 784.

Garrett Nickle of Catlett, Virginia, stated that the electrical towers should not be built because they would destroy the Paws Awhile Pet Motel.⁸²⁸ He testified that Paws Awhile is an important company because the company takes care of his family's dogs when the family goes on vacation and the company also takes care of sick pets.⁸²⁹ He advised that his mother works at Paws Awhile and that if Paws Awhile closes, his mother would not be able to pay rent for the family home and that his father would be responsible for paying all of the rent until his mother found a new job.⁸³⁰ He asserted that he did not want to live near electrical power, and that the power lines would "make a lot of disturbance to [his family's] life and many other's lives."⁸³¹

Samantha Adams of Warrenton, Virginia, testified that the power lines will be located 100 feet from her front yard.⁸³² She expressed her concern with blasting during the construction of the line that could result in damage to property, foundations, and wells.⁸³³ Ms. Adams stated that for the safety of children, family, and the environment, the Commission should not approve the Option A routes.⁸³⁴

Nolan Anderson of Warrenton, Virginia, testified that power lines are noisy and that they can "mess up your hearing."⁸³⁵ He asserted that power lines do not belong on farms and that he would not like to wake up every day and see power lines right across the street from his house.⁸³⁶

Natalie Erdossy of Warrenton, Virginia, testified in opposition of Option A. She stated that Option A will negatively affect current residents, hinder future growth potential in the Brookside area, and threaten the water supply in the New Baltimore service district.⁸³⁷ She affirmed her hope that the Commission will take the concerns of the residents into consideration when making the decision regarding the route.⁸³⁸

Keith Gardner, a resident in the Brookside community, expressed his opposition to Option A from the perspective of protecting wetlands.⁸³⁹ According to Mr. Gardner, the Brookside community is home to one of the largest groups of wetlands in Northern Virginia.⁸⁴⁰ He stated that the Army Corps of Engineers and the open water wetland committee for the Brookside community protect the wetlands from homeowner abuse and they also educate the

⁸²⁸ G. Nickle, Tr. at 785.

⁸²⁹ *Id.*

⁸³⁰ *Id.* at 786.

⁸³¹ *Id.*

⁸³² Adams, Tr. at 787.

⁸³³ *Id.*

⁸³⁴ *Id.*

⁸³⁵ Anderson, Tr. at 788.

⁸³⁶ *Id.*

⁸³⁷ Erdossy, Tr. at 790.

⁸³⁸ *Id.* at 791.

⁸³⁹ Gardner, Tr. at 792.

⁸⁴⁰ *Id.*

community regarding how to preserve wetlands for the future.⁸⁴¹ He pointed out that one of the Option A routes runs through the middle of the wetlands for almost a mile and the path would damage the wetlands.⁸⁴² He also testified that he is concerned about the negative impacts to the water supply, personal health, and the property values in the area.⁸⁴³

Scott Harlan of Warrenton, Virginia, testified in opposition to Option A and cited several reasons including health, environmental, and economic concerns.⁸⁴⁴ He stated that the decreased property values would affect residents as homes are investments and part of retirement plans.⁸⁴⁵ He maintained that most affected parties agree that the Option C route has far less of a negative impact and that he did not understand how Option A was still a viable route.⁸⁴⁶

John De Perro of Warrenton, Virginia, testified on his own behalf and also testified as a representative of the Cold War Museum, a unique espionage destination and tourist attraction.⁸⁴⁷ As a representative of the Cold War Museum, Mr. De Perro stated that Option A would run across the “front door” of the proposed museum building.⁸⁴⁸ He pointed out that the power lines could discourage tourist travel to the museum, if the museum is built on the land that is currently under negotiation for purchase.⁸⁴⁹ He contended that the reliability issue, one of the reasons for the new line, is not power reliability for residents in the area but is reliability of the power supply to the FAA Approach Control Facility in Warrenton.⁸⁵⁰

Van Baker of Warrenton, Virginia, stated that he is “100 percent against Option A.”⁸⁵¹ He testified that the people at the hearing and his neighbors are all affected by the Option A route now.⁸⁵² He pointed out that he grew up in Fauquier County and moved back to the area to raise his children.⁸⁵³ His children would go to the three schools directly impacted by Option A.⁸⁵⁴ He ended his testimony by stating that Option A should not be considered at all.⁸⁵⁵

John Browne of Warrenton, Virginia, stated that he is a resident of Brookside in the New Baltimore service district and he is opposed to the Option A routes.⁸⁵⁶ He pointed out that Option A-2/3 would pass through several residential areas, decreasing the quality of life of those

⁸⁴¹ *Id.*

⁸⁴² *Id.*

⁸⁴³ *Id.* at 793.

⁸⁴⁴ Harlan, Tr. at 794.

⁸⁴⁵ *Id.* at 795.

⁸⁴⁶ *Id.* at 796.

⁸⁴⁷ De Perro, Tr. at 796.

⁸⁴⁸ *Id.*

⁸⁴⁹ *Id.*

⁸⁵⁰ *Id.* at 797-98.

⁸⁵¹ Baker, Tr. at 800.

⁸⁵² *Id.* at 801.

⁸⁵³ *Id.*

⁸⁵⁴ *Id.*

⁸⁵⁵ *Id.*

⁸⁵⁶ Browne, Tr. at 801-02.

residents.⁸⁵⁷ He agreed with the Fauquier County School Board's opposition to Option A due to the lines passing close to three schools.⁸⁵⁸ He contended that Option C 1/1 impacts the fewest number of property owners, business owners, and residents.⁸⁵⁹ Mr. Browne also argued that Dominion should underground the power line "where it directly touches a residential community" and that Dominion should pay the price for the undergrounding and not "shift the cost to property owners."⁸⁶⁰

Julie Curry of Warrenton, Virginia, testified that she is opposed to Option A "due to the proximity of these high voltage lines to our homes, the three schools our four sons will attend, and the potential for damage to the water supply to our home and approximately 2800 others."⁸⁶¹ She stated that some of the children who attend the after-school childcare in the county's schools will spend ten to twelve hours under the power lines if Option A is approved.⁸⁶² She expressed her concern with decreased property values if Option A is approved and she recommended Option C as the alternative with fewer impacts to residents, homes, and the environment.⁸⁶³

Andrew Curry of Warrenton, Virginia, testified in opposition to Option A.⁸⁶⁴ He stated that he and his brothers would be "very sad to be around these power lines for ten to twelve hours a day because [they] attend Fauquier community childcare."⁸⁶⁵

Thomas Daily pointed out differences between the Option A routes and the Option C route.⁸⁶⁶ He stated that Option A would negatively affect schools, property values, the water supply for the New Baltimore service district, and wetlands.⁸⁶⁷ He maintained that Option C has less of an impact on the environment, historical sites and protected lands, and residences.⁸⁶⁸

Scott Donaldson of Warrenton, Virginia, testified in opposition to Option A.⁸⁶⁹ He stated that bald eagles have a habitat near Mount Sterling Farm Road and that if Option A went through the Sterling Valley area, the habitat would be damaged.⁸⁷⁰ He expressed concern regarding the effects of Option A on his business, The Inn at Vint Hill, a special event facility.⁸⁷¹ He contended that the structural integrity of The Inn at Vint Hill could be harmed if Dominion

⁸⁵⁷ *Id.* at 802.

⁸⁵⁸ *Id.* at 803.

⁸⁵⁹ *Id.*

⁸⁶⁰ *Id.* at 804.

⁸⁶¹ J. Curry, Tr. at 805.

⁸⁶² *Id.*

⁸⁶³ *Id.* at 806.

⁸⁶⁴ A. Curry, Tr. at 807.

⁸⁶⁵ *Id.*

⁸⁶⁶ Daily, Tr. at 808-11.

⁸⁶⁷ *Id.* at 809.

⁸⁶⁸ *Id.* at 808-09.

⁸⁶⁹ Donaldson, Tr. at 811.

⁸⁷⁰ *Id.* at 811-12.

⁸⁷¹ *Id.* at 812.

has to drill and blast in the area in order to build the towers.⁸⁷² He also pointed out that the scenic view of the mountains and the trees brings visitors to The Inn at Vint Hill to celebrate special occasions and Option A might cause people to reevaluate celebrating life events at The Inn at Vint Hill due to the close proximity of the power lines.⁸⁷³

Maureen Brown of Golden Oaks Court confirmed that she and her husband have lived in Fauquier County for 23 years.⁸⁷⁴ Ms. Brown questioned why the Commission is considering Option A “when it seems abundantly clear to most of us here today that Option C is far less damaging to our residents.”⁸⁷⁵ Ms. Brown stated that she and her husband have used a home equity loan for improvements and to purchase their business.⁸⁷⁶ Ms. Brown asserted that her home is in the direct path of Option A, which would bring devastation on so many levels of which there could be no recovery.⁸⁷⁷

Kevin Madden of Warrenton, Virginia, advised that his neighbors sold their home two weeks ago and lost \$55,000 as a result of Option A being put back on the table.⁸⁷⁸ Mr. Madden expressed concern for people who are underwater and cannot sell, or are transferred, or who depend on the equity in their home for retirement.⁸⁷⁹ Mr. Madden maintained that the homes along Option C were built after the existing transmission line was built.⁸⁸⁰ Mr. Madden also pointed out that DEQ, DOF, the Prince William County Department of Public Works, and PEC all recommended against Option A.⁸⁸¹

Christopher Madden stated that he was eight years old and would live less than 200 feet from the Option A-2/3 power lines.⁸⁸² Mr. Madden expressed concern for all of the beautiful animals that will lose their habitat if Option A-2/3 is chosen.⁸⁸³

Cynthia Petersen of Warrenton, Virginia, opposed Option A because of its impact on her family, especially her mom, who has lived in her house for over 70 years.⁸⁸⁴ Ms. Petersen asserted that the transmission line would cross the front yards of her mother and her aunt, who is also in her 80s.⁸⁸⁵ Ms. Petersen expressed concern for the impact of the transmission line on her

⁸⁷² *Id.*

⁸⁷³ *Id.* at 813.

⁸⁷⁴ Brown, Tr. at 814.

⁸⁷⁵ *Id.* at 814.

⁸⁷⁶ *Id.*

⁸⁷⁷ *Id.* at 815.

⁸⁷⁸ Madden, Tr. at 816-17.

⁸⁷⁹ *Id.* at 817.

⁸⁸⁰ *Id.* at 817-18.

⁸⁸¹ *Id.* at 818.

⁸⁸² C. Madden, Tr. at 819.

⁸⁸³ *Id.*

⁸⁸⁴ Peterson, Tr. at 819.

⁸⁸⁵ *Id.* at 820.

family's health, as well as the water supply, depreciation of property values, wetlands, and schools.⁸⁸⁶

Janet Davis of Catlett, Virginia, opposed Option A.⁸⁸⁷ Ms. Davis compared the "uncountable" attendance of this hearing to a hearing she attended a few years ago that drew only twenty people.⁸⁸⁸ Ms. Davis emphasized that people feel strongly about Option A in that it impacts schools and even animals.⁸⁸⁹ Ms. Davis also pointed to health hazards associated with transmission lines as a reason to oppose Option A.⁸⁹⁰

Bob Faurot of Warrenton, Virginia, opposed Option A and indicated that his home would be about 100 yards from the proposed line of Option A.⁸⁹¹ Mr. Faurot emphasized the scope and breadth of opposition to Option A, including thousands of letters from the residents of Fauquier County, key political leaders, and government entities.⁸⁹² Mr. Faurot also pointed to the negative impacts of Option A to water supplies, property values, and the local economy.⁸⁹³ From a personal standpoint, Mr. Faurot contended that "putting a power line 100 yards from my home will cause me and my family irreparable economic harm."⁸⁹⁴ Mr. Faurot also expressed concern for the health of children that will live and attend school near the transmission lines.⁸⁹⁵

Troy Bowling of Warrenton, Virginia, stated that he moved to Brookside in November 2013 because of its beauty.⁸⁹⁶ Mr. Bowling testified that since his son was killed in a train accident in July, his backyard has become a sanctuary because it is where they enjoyed the views and wildlife together.⁸⁹⁷ Mr. Bowling contended that "right now I sit every night, since my son's death, we have a bonfire, and watch the deer and the animals that I think will disappear if . . . [transmission lines] wind up going up in our back yard."⁸⁹⁸

Jack Scherer of Warrenton, Virginia, opposed the Option A routes and contended that Dominion Virginia Power does not recommend Option A, nor does it recognize Option A as electrically superior.⁸⁹⁹ In addition, Mr. Scherer maintained that Option A is not the least impactful based on its impacts on the environment and habitat, particularly wetlands, forested

⁸⁸⁶ *Id.*

⁸⁸⁷ Davis, Tr. at 821.

⁸⁸⁸ *Id.*

⁸⁸⁹ *Id.*

⁸⁹⁰ *Id.* at 822.

⁸⁹¹ Faurot, Tr. at 823.

⁸⁹² *Id.* at 823-24.

⁸⁹³ *Id.* at 824-25.

⁸⁹⁴ *Id.* at 825.

⁸⁹⁵ *Id.* at 825-26.

⁸⁹⁶ Bowling, Tr. at 826.

⁸⁹⁷ *Id.* at 827.

⁸⁹⁸ *Id.* at 828.

⁸⁹⁹ Scherer, Tr. at 828.

areas, and green space.⁹⁰⁰ Mr. Scherer also pointed to Option A's impacts on historically significant areas and public infrastructure.⁹⁰¹

Bruce Bundick of Warrenton, Virginia, opposed Option A based on the adverse economic impacts and the adverse educational impacts of this option.⁹⁰² Mr. Bundick also expressed concern for this option's deleterious effects on the water supply and on the health of those whose homes and schools lie near this power line.⁹⁰³

Harry Dietrich of Warrenton, Virginia, testified against Option A and affirmed that he will be close to the transmission line and his house is already valued 15 to 20 percent below what he paid for the house eight years ago.⁹⁰⁴ Mr. Dietrich expressed concern for the health impacts of the transmission line on people and children by asserting that there is a big difference between scientific evidence and scientific confirmation.⁹⁰⁵ Mr. Dietrich noted that he spent most of his career in laboratories with very high radiation.⁹⁰⁶ Mr. Dietrich observed that "whenever they revise [the specs for radiation exposure] . . . they don't revise them up."⁹⁰⁷ Mr. Dietrich contended that "when we do manage to do the experiments correctly chances are we'll be able to find out exactly how far away these ought to be, and I don't think it's reasonable to put our children at risk with having these high power lines running right on top of schools where they sit for eight, ten hours or longer."⁹⁰⁸

Nancy O'Neill of Warrenton, Virginia, opposed Option A and argued that Staff's assumptions concerning the lower costs of Option A have been shown to be grossly underestimated.⁹⁰⁹ As for Staff's contention that Option A is electrically superior, Ms. O'Neill pointed out that Option C meets NERC standards and Staff has failed to show how exceeding the standard is necessary or desirable.⁹¹⁰ Thus, Ms. O'Neill maintained that Staff's "recommendation of Option A is without validity."⁹¹¹

Keith Devrin of Warrenton, Virginia, stated that he lived in Brookside and opposed Option A.⁹¹² Mr. Devrin expressed surprise that Option A remains on the table.⁹¹³ Mr. Devrin maintained that Option C households already have a transmission line and have been aware of

⁹⁰⁰ *Id.* at 828-29.

⁹⁰¹ *Id.* at 829.

⁹⁰² Bundick, Tr. at 830.

⁹⁰³ *Id.*

⁹⁰⁴ Dietrich, Tr. at 831.

⁹⁰⁵ *Id.* at 832.

⁹⁰⁶ *Id.*

⁹⁰⁷ *Id.* at 833.

⁹⁰⁸ *Id.*

⁹⁰⁹ O'Neill, Tr. at 833.

⁹¹⁰ *Id.* at 834.

⁹¹¹ *Id.*

⁹¹² Devrin, Tr. at 835.

⁹¹³ *Id.*

Option C being the proposed route for some time.⁹¹⁴ Mr. Devrin disagreed with Staff's reliability concerns that focus on two lines being carried by a single tower and asserted that "it's hypocritical to worry about an extreme event with respect to redundancy rather than worrying about a tower falling near a school."⁹¹⁵ Mr. Devrin questioned why Option A was reopened and hoped that the final decision will be made after careful consideration.⁹¹⁶

Alice Steinemer of Warrenton, Virginia, opposed Option A based on its impact on the Paws Awhile Pet Motel, and the business run by Mother Eirene and the nuns.⁹¹⁷

Donna Rosamond of Warrenton, Virginia, affirmed that she has lived all her life in Fauquier County and that in 1993, she and her husband bought a home in the Rock Springs subdivision and watched the area grow up.⁹¹⁸ Ms. Rosamond testified that she loves her home, but if she goes out her front door and sees power lines, she will move out of concern for her fifth grader, who is autistic and has sensory integration disorder.⁹¹⁹ Ms. Rosamond spoke passionately that she did not want to lose her home, family, and friends.⁹²⁰

Earsaline Anderson of Warrenton, Virginia, stated that she has been a resident of Frytown for 47 years and opposes Option A.⁹²¹ Ms. Anderson asserted that Option A drastically affects the Frytown and Two Hollow communities.⁹²² Ms. Anderson testified that "we are in a retired neighborhood, that would be potential health risks, losses of homes and neighbors, and the potential impact to our local wells and water supply."⁹²³

Rembert Jarrell of Nokesville, Virginia, pointed out that high voltage electric fields generate extra ozone, a damaging gas as it is both a carcinogen and an irritant.⁹²⁴ Mr. Jarrell questioned whether the Projects were needed for reliability since there is no information concerning the meantime between failed and the meantime to repair.⁹²⁵ Mr. Jarrell maintained that if the Projects were needed for growth, "we're already over-mortgaged in terms of our electrical capacity of the East Coast electrical grid."⁹²⁶ In addition, Mr. Jarrell, who just retired after 33 years with the CIA, asserted that it is "childishly" easy for a terrorist to destroy or disrupt an overhead transmission line.⁹²⁷ Mr. Jarrell recommended that if the line is built, it

⁹¹⁴ *Id.* at 836.

⁹¹⁵ *Id.* at 836-37.

⁹¹⁶ *Id.* at 837-38.

⁹¹⁷ Steinemer, Tr. at 838.

⁹¹⁸ Rosamond, Tr. at 839.

⁹¹⁹ *Id.* at 839-40.

⁹²⁰ *Id.* at 840.

⁹²¹ Anderson, Tr. at 841.

⁹²² *Id.*

⁹²³ *Id.* at 842.

⁹²⁴ Jarrell, Tr. at 842-43.

⁹²⁵ *Id.* at 843.

⁹²⁶ *Id.* at 844.

⁹²⁷ *Id.* at 844-45.

should be built underground.⁹²⁸ Mr. Jarrell opposed Option A, which he stated would pass less than 80 yards from the home of his neighbor who is an invalid, retired army colonel.⁹²⁹

Joyce Ferrara of Warrenton, Virginia, vehemently opposed Option A and asserted that the impact “is going to be devastating.”⁹³⁰ Ms. Ferrara testified that she grew up in a wetland in New Jersey where the area had extreme growth and only two out of 20 kids that hung together are now alive, with the others all dying of cancer.⁹³¹ Ms. Ferrara stated that “[y]ou hear constantly that there’s no proven facts, in my mind, I lived it, and I don’t want to see my neighbors struggling with that.”⁹³²

Taylor Chase of Brookmore Drive testified that she and her fiancé, Ivo Carrera, have purchased a home on July 6th of this year without knowledge that Option A would run through its front yard.⁹³³ Ms. Chase contended that with Option A, “we would lose the entire face value of our property which will tremendously affect the resale value of our home as well as the home equity value.”⁹³⁴ Ms. Chase stated that she and her fiancé made \$50,000 in renovations and “have poured our heart, soul, and savings into the property to make it our own.”⁹³⁵ Ms. Chase maintained that “[i]t’s frightening to me that we’ll have to live in a home with power lines above, but the thought of having children living in such an unsafe and unhealthy environment terrifies me for their futures.”⁹³⁶

Ivo Carrera of Brookmore Drive supported the testimony of his fiancé, Taylor Chase, and contended that there are no benefits to Option A.⁹³⁷ Mr. Carrera questioned why Option A was being considered and that “[i]t doesn’t make sense if Option C is much more clear, easier, it doesn’t affect as many people.”⁹³⁸

Jason Kane of Warrenton, Virginia, stated that he lived in Brookside and asked the Commission to take a pragmatic view and pay respect to the testimony of the people speaking against Option A.⁹³⁹ Mr. Kane referred to the people attending the hearing and the long-term effects on the health of people as the “return on investment” to be considered.⁹⁴⁰ Mr. Kane maintained that perceived arbitrary and capricious decision making to this point in the case, and a lack of clarity serves as a source of frustration for the community.⁹⁴¹

⁹²⁸ *Id.* at 845.

⁹²⁹ *Id.* at 846.

⁹³⁰ Ferrara, Tr. at 847.

⁹³¹ *Id.*

⁹³² *Id.*

⁹³³ Chase, Tr. at 848.

⁹³⁴ *Id.*

⁹³⁵ *Id.* at 849.

⁹³⁶ *Id.*

⁹³⁷ Carrera, Tr. at 850.

⁹³⁸ *Id.*

⁹³⁹ Kane, Tr. at 851.

⁹⁴⁰ *Id.* at 852.

⁹⁴¹ *Id.* at 853.

Geoffrey Federmeier of Warrenton, Virginia, emphasized the long-term costs of Option A in any balancing of corporate and citizens' concerns undertaken by the Commission.⁹⁴² Mr. Federmeier maintained that such long-term cost includes environmental costs, and the potential impact on to children 20 to 40 years from now.⁹⁴³

William Dowrey of Warrenton, Virginia, stated that he has been involved with planning in Fauquier County for over 25 years and that when the county created service districts over 45 years ago they became a model for the Commonwealth.⁹⁴⁴ Mr. Dowrey confirmed that New Baltimore is Fauquier County's largest service district with just under 8,000 people.⁹⁴⁵ Mr. Dowrey stressed the importance in consistency in planning and maintained that no one ever thought that an overhead transmission line would be routed through an area planned for dense population development.⁹⁴⁶ Mr. Dowrey contended that "it is a bad idea, bad planning, horrific choice to place those lines through the heart of a service district where the development is already occurred and is planned for future development"⁹⁴⁷

Mr. Dowrey also pointed out that Fauquier County's water source is 100 percent dependent on ground water resources.⁹⁴⁸ Mr. Dowrey is opposed to Option A because it bifurcates a robust community, and devastates the planning model.⁹⁴⁹ Indeed, Mr. Dowrey asserted that to most people in attendance, Option A coming back is extremely puzzling and befuddling.⁹⁵⁰

Joaquin Archilla of Warrenton, Virginia, supported Option C, and stated that he retired from the Federal Aviation Administration ("FAA") after 37 years of service in January 2006.⁹⁵¹ Mr. J. Archilla advised that his son, daughter-in-law, and two grandchildren live in a home that will be impacted by either Option A-2/3, or Option A-2/3 Staff.⁹⁵² Mr. J. Archilla testified that "[t]hey tried putting their home on the market for about six months last year with no luck."⁹⁵³ Mr. J. Archilla pointed to his son's experience as an example of the impact these decisions will have on property values.⁹⁵⁴

⁹⁴² Federmeier, Tr. at 854-55.

⁹⁴³ *Id.* at 855.

⁹⁴⁴ Dowrey, Tr. at 856.

⁹⁴⁵ *Id.*

⁹⁴⁶ *Id.* at 857.

⁹⁴⁷ *Id.* at 858.

⁹⁴⁸ *Id.*

⁹⁴⁹ *Id.* at 859.

⁹⁵⁰ *Id.*

⁹⁵¹ J. Archilla, Tr. at 861.

⁹⁵² *Id.* at 862.

⁹⁵³ *Id.*

⁹⁵⁴ *Id.*

Robert Payne of Warrenton, Virginia, testified that the citizens of Fauquier County oppose Option A based on the its impact on the environment.⁹⁵⁵ Mr. Payne expressed concern for migratory birds that travel up and down the East Coast, and the impact the loss of wetlands may have on their migratory paths.⁹⁵⁶ Mr. Payne maintained that “Option C is the much better option.”⁹⁵⁷

Michael Libbill of Warrenton, Virginia, opposed Option A based on its impact on children, our biggest investment, and our homes.⁹⁵⁸ Mr. Libbill maintained that little, if any, benefit comes to Fauquier County with the installation of these lines, but the county will receive the majority of the negative impacts.⁹⁵⁹ In regard to costs, Mr. Libbill asked for consideration of intangible costs to people, children, animals, and the environment.⁹⁶⁰

Angela Baines of Warrenton, Virginia, stated that she was speaking on behalf of the Spring Run Road homeowners who have purchased within the prior 18 months, and their 27 children, and urged a vote against Option A.⁹⁶¹ Ms. Baines testified that while the initial cost of Option A may appear to be less, it will devastate small businesses, eliminate jobs, and compromise the future growth of the community.⁹⁶² Ms. Baines also contended that Option A has the potential to create an unsafe environment for schools, residences and the community’s water supply.⁹⁶³ Ms. Baines asserted that “all the testimony offered . . . today highlights the undeniable truth that Option A is neither logical nor defensible.”⁹⁶⁴

Susan Weisenborne of Warrenton, Virginia, stated that when she built her home, her backyard included a protected wetland that gave her assurance that nothing would ever be built behind her home.⁹⁶⁵ Mr. Weisenborne opposed Option A, which would place a transmission line within 200 feet of her house.⁹⁶⁶

Amy Fuentes, of Warrenton, Virginia, maintained that the cost of both Option A routes are more expensive in both the short-term and in the long-term.⁹⁶⁷ Ms. Fuentes noted that there will be three times the equipment to build and maintain, as well as greater lost property value and property tax revenue associated with Option A.⁹⁶⁸ Ms. Fuentes testified that “[s]ince there’s another option that would affect less homes, wetlands, water supplies, schools, and would be

⁹⁵⁵ Payne, Tr. at 863-64.

⁹⁵⁶ *Id.* at 864.

⁹⁵⁷ *Id.* at 865.

⁹⁵⁸ Libbill, Tr. at 865-66.

⁹⁵⁹ *Id.* at 866.

⁹⁶⁰ *Id.* at 868.

⁹⁶¹ Baines, Tr. at 869.

⁹⁶² *Id.*

⁹⁶³ *Id.* at 869-70.

⁹⁶⁴ *Id.* at 870.

⁹⁶⁵ Weisenborne, Tr. at 871.

⁹⁶⁶ *Id.* at 872.

⁹⁶⁷ Fuentes, Tr. at 872-73.

⁹⁶⁸ *Id.* at 873.

cheaper to maintain in the future, it would be prudent to choose the Option C as a preferred location for the power line.”⁹⁶⁹

Brad Poindexter of Warrenton, Virginia, opposed the Commission’s decision to reopen Option A and that Option C-1.1 would be the least disruptive route.⁹⁷⁰ Mr. Poindexter pointed out that Option A requires double the amount of construction, crosses more forested land, crosses more forested wetlands, has 5 or 6 times the number of homes within 500 feet, and impact three existing schools.⁹⁷¹ Mr. Poindexter asserted that when considering cost, consideration should be given to the cost of threatened water supply, disrupted ecosystem, potential radiation exposure, and that “it will ruin our chance for our children to grow up in a backyard.”⁹⁷²

Brenda Yates of Warrenton, Virginia, stated that she moved to Frytown years ago and that Frytown is full of history, such as having the well-known musician, Mr. Chauncey Brown, as a resident.⁹⁷³ Ms. Yates testified that her great grandfather, Papa Rhodes, purchased land on which she and her mother were raised, and where her son was raised and is raising his children and grandchildren.⁹⁷⁴ Ms. Yates confirmed that Frytown started with three homes and now has “35 to 36 neighbors.”⁹⁷⁵ Ms. Yates expressed concern for neighbors with heart problems, pacemakers, and defibrillators; for cell phone and satellite television communications; for how long before additional lines are added; and for travel in and out of the neighborhood during construction.⁹⁷⁶

Mary Haak of Leeds Manor Road stated that she was not directly impacted by the transmission lines, but is a customer of Paws Awhile Pet Motel.⁹⁷⁷ Ms. Haak testified that when she lived in Maryland near high power lines, her dog developed epilepsy, but after three years of fighting the disease, they moved to Fauquier County away from power lines and were able to wean their dog off his medication.⁹⁷⁸ Ms. Haak expressed concern for all of the children in the three schools that will be exposed to the transmission lines.⁹⁷⁹

Brandie Schaeffer of Warrenton, Virginia, advised that she did not have a home near the power line or children in the schools, but opposed Option A.⁹⁸⁰ Ms. Schaeffer asserted that Staff’s reconsideration of Option A “is a complete disregard of the citizens”⁹⁸¹ Ms. Schaeffer, an urban planner, maintained that the proposed transmission line is inconsistent with

⁹⁶⁹ *Id.*

⁹⁷⁰ Poindexter, Tr. at 874.

⁹⁷¹ *Id.* at 874-75.

⁹⁷² *Id.* at 875-76.

⁹⁷³ Yates, Tr. at 876.

⁹⁷⁴ *Id.* at 877.

⁹⁷⁵ *Id.*

⁹⁷⁶ *Id.* at 877-78.

⁹⁷⁷ Haak, Tr. at 878.

⁹⁷⁸ *Id.* at 878-79.

⁹⁷⁹ *Id.* at 879.

⁹⁸⁰ Schaeffer, Tr. at 879.

⁹⁸¹ *Id.* at 880.

several sections of the Comprehensive Plan, including the concepts of service districts.⁹⁸² Among other things, Ms. Schaeffer testified:

Our county is over 500,000 acres. You have picked the one percent area that is designated to accommodate all of our growth and is currently accommodating one-third of our residents. And further that you have struck the hearts of that plan in taking our community of Vint Hill.⁹⁸³

Clayton Lesscalleet of Warrenton, Virginia, stated that he has lived in Fauquier County for 35 years and has served as a volunteer on many committees, departments, and boards over that time.⁹⁸⁴ Mr. Lesscalleet testified that he is against Option A and expressed concern for the tens of thousands of children that will be educated in an area impacted by EMF.⁹⁸⁵ Mr. Lesscalleet contended that in making this decision, “can you lay your head down at night and say I know for a fact that those power lines will not harm one child of those tens of thousands of children who will be educated in those schools that are in that area.”⁹⁸⁶

Agniesla Keller of Tucan Court testified that she was a homeowner in Brookside, mother of two beautiful girls, and opposed to Option A.⁹⁸⁷ Ms. Keller asserted that her home faces the wetlands, which are the largest privately owned wetlands in Virginia.⁹⁸⁸ Ms. Keller stated that she is “absolutely horrified to learn that my new home, which I have invested most of my life savings, may be soon neighbor and in close proximity to a new high voltage power line.”⁹⁸⁹ Ms. Keller maintained that the transmission lines pose a health risk and that building these lines over homes, schools, and wetlands is “a clear and present danger to our quality of life, health, and safety.”⁹⁹⁰

Mitchell Freeman of Warrenton, Virginia, stated that he and his wife have children that will attend Greenville Elementary, Auburn Middle and Kettle Run High School if they decide to stay in the area.⁹⁹¹ Mr. Freeman advised that he purchased his home 20 months ago and was shocked to learn of the possibility of a transmission line four months ago.⁹⁹² Mr. Freeman described the Brookside neighborhood as family with its views, lakes, wildlife, trails and people.⁹⁹³ Mr. Freeman questioned the reason for Staff supporting Option A in light of the

⁹⁸² *Id.* at 880-82.

⁹⁸³ *Id.* at 883.

⁹⁸⁴ Lesscalleet, Tr. at 889.

⁹⁸⁵ *Id.* at 889-90.

⁹⁸⁶ *Id.* at 890.

⁹⁸⁷ Keller, Tr. at 891.

⁹⁸⁸ *Id.*

⁹⁸⁹ *Id.*

⁹⁹⁰ *Id.* at 892.

⁹⁹¹ Freeman, Tr. at 893-94.

⁹⁹² *Id.* at 894.

⁹⁹³ *Id.*

Commission's mission statement.⁹⁹⁴ Mr. Freeman contended that there was no evidence supporting Option A and that he did not want to live near a transmission line like he did in Prince William County.⁹⁹⁵

Barbara Ebert of Warrenton, Virginia, strongly opposed any Option A and supported Option C.⁹⁹⁶ Ms. Ebert stated that she and her husband moved to Vint Hill two years ago, and if Option A is built the line will be within one mile of their home.⁹⁹⁷ Ms. Ebert opposed Option A due to its devaluation of her and her neighbors' property, and threat to endangered or rare species, and because of the potential health implications.⁹⁹⁸ Ms. Ebert found it inconceivable that the Commission would consider any Option A route.⁹⁹⁹

C.B. Compton of Kinsey Road, Fauquier County, Virginia, stated that he moved on to his small farm in 1975, and has developed and built three homes on that land and has plans for several more.¹⁰⁰⁰ Mr. Compton maintained that the proposed transmission line would mean that he would be unable to develop the remaining land.¹⁰⁰¹

Ginette Tellado of Warrenton, Virginia, opposed Option A, which she learned about four days after purchasing her home.¹⁰⁰² Ms. Tellado testified that the home was a dream-come-true for herself, her three children, and her husband, a retired NYPD captain.¹⁰⁰³ Ms. Tellado expressed concern for the health and safety of her three daughters, who are home schooled, and for the loss in value for their home that was purchased with their life savings.¹⁰⁰⁴ Ms. Tellado also pointed out that the transmission lines will be in contact with her septic drain field.¹⁰⁰⁵

Emily Cave of Warrenton, Virginia, advised that she lived in a subdivision purchased by her grandmother over 75 years ago, and has raised her own family there.¹⁰⁰⁶ Ms. Cave stated that there are nine homes in the subdivision and that each home had its own well.¹⁰⁰⁷ Ms. Cave expressed concern for possible damage to the wells and to the foundation of the homes.¹⁰⁰⁸ Ms. Cave opposed Option A.¹⁰⁰⁹

⁹⁹⁴ *Id.* at 895.

⁹⁹⁵ *Id.* at 895-96.

⁹⁹⁶ Ebert, Tr. at 897.

⁹⁹⁷ *Id.*

⁹⁹⁸ *Id.*

⁹⁹⁹ *Id.* at 897-98.

¹⁰⁰⁰ Compton, Tr. at 898-99.

¹⁰⁰¹ *Id.* at 899.

¹⁰⁰² Tellado, Tr. at 899.

¹⁰⁰³ *Id.* at 899-900.

¹⁰⁰⁴ *Id.* at 900.

¹⁰⁰⁵ *Id.* at 901.

¹⁰⁰⁶ Cave, Tr. at 902.

¹⁰⁰⁷ *Id.* at 902-03.

¹⁰⁰⁸ *Id.* at 903.

¹⁰⁰⁹ *Id.*

Scott Russell of the Brookside development testified that he and his wife chose their home so that their children could experience playing in the backyard.¹⁰¹⁰ Mr. Russell asserted that with a power line within 200 feet of his house, his children and wife would be adversely impacted as his children are home schooled.¹⁰¹¹ Mr. Russell also contended that the Option A routes would threaten his public water supply and lower property values long-term.¹⁰¹² Mr. Russell maintained that Option A would unfairly change the rules on the developers of Brookside and on Fauquier County.¹⁰¹³ Mr. Russell expressed frustration that the Staff failed to focus on the citizens of the Commonwealth.¹⁰¹⁴

Jesse Cleveland of Warrenton, Virginia, opposed both Option A routes because the power lines will be in front of her property.¹⁰¹⁵ Ms. Cleveland expressed concern for her daughter walking under the transmission lines to catch her school bus, and attending Kettle Run High School, which is also affected by the lines.¹⁰¹⁶ Furthermore, Ms. Cleveland maintained that she will depend on the equity in her home to fund her daughter's college education, but questioned whether she would have enough if her home's value is reduced by transmission lines.¹⁰¹⁷

Ike Broaddus of Broad Run, Virginia, opposed the Option A routes.¹⁰¹⁸ Mr. Broaddus confirmed that as the chairman and executive director of the Vint Hill Economic Development Authority, he learned that the southern part of the Vint Hill property was the best place to put higher density development for both residential and commercial developments.¹⁰¹⁹ Mr. Broaddus maintained that the Option A routes will bifurcate the southern Vint Hill property, which from an economic development standpoint would be absolutely devastating to the land owners and to the county from a jobs and tax revenue standpoint.¹⁰²⁰

Mr. Broaddus testified that prior to being the economic development director, he was a real estate broker for 20 years.¹⁰²¹ Mr. Broaddus estimated that there are over a thousand homes directly impacted by Option A, which will reduce property values by approximately \$50 million, and reduce county property taxes by \$500,000 per year.¹⁰²²

¹⁰¹⁰ Russell, Tr. at 903-04.

¹⁰¹¹ *Id.* at 904.

¹⁰¹² *Id.*

¹⁰¹³ *Id.* at 905.

¹⁰¹⁴ *Id.* at 906.

¹⁰¹⁵ Cleveland, Tr. at 908.

¹⁰¹⁶ *Id.* at 908-09.

¹⁰¹⁷ *Id.* at 909-10.

¹⁰¹⁸ Broaddus, Tr. at 910.

¹⁰¹⁹ *Id.* at 910-11.

¹⁰²⁰ *Id.* at 911.

¹⁰²¹ *Id.* at 911-12.

¹⁰²² *Id.* at 912.

Mr. Broaddus advised that after selling his real estate business, he invested his life savings into a brewery/beer garden in Vint Hill.¹⁰²³ Mr. Broaddus asserted that the transmission lines would go across the viewshed of the beer garden.¹⁰²⁴ Mr. Broaddus contended that there is absolutely no question that power lines will affect the businesses that dependent on people's enjoyment.¹⁰²⁵

If folks want to sit out in the beer garden and enjoy the view
they're not going to enjoy it as much if they're looking out at
power lines that tower over these structures in the beautiful setting
we've got.¹⁰²⁶

Kimberly Olsen of Warrenton, Virginia, advised that she is a breast cancer survivor, diagnosed at age 37, and had six surgeries in 20 months.¹⁰²⁷ Ms. Olsen testified that three years ago she would not have moved into the community if she had known that power lines were going to be built.¹⁰²⁸ Ms. Olsen stated that she works in the medical community and has researched the health implications of EMF.¹⁰²⁹ Ms. Olsen contended that "the question is not whether there is a health implication the question is . . . what is the health implication."¹⁰³⁰ Ms. Olsen questioned whether any additional risk is acceptable when we have a viable alternative such as Option C.¹⁰³¹ Ms. Olsen expressed concern for the impact of the transmission lines on children who will be exposed both at school and at home under Option A.¹⁰³² As a cancer survivor, Ms. Olsen asked that Option C be approved, or is Option A is built, to place the lines underground.¹⁰³³

Catherine Pennington, of Warrenton, Virginia, stated that she volunteers at the schools and has a special needs child who is very sensitive to noises.¹⁰³⁴ Ms. Pennington expressed concern for all of the children that are very sensitive to noises that will be affected by the transmission line.¹⁰³⁵ Ms. Pennington told of how her son was distracted by the noise from an adjoining classroom where a Special Ed teacher was conducting a class of one or two children.¹⁰³⁶ Ms. Pennington maintained that children with sensory processing disorder have a heightened sense of what is around them and may be unable to concentrate with power lines

¹⁰²³ *Id.* at 913.

¹⁰²⁴ *Id.*

¹⁰²⁵ *Id.* at 914.

¹⁰²⁶ *Id.*

¹⁰²⁷ Olsen, Tr. at 915.

¹⁰²⁸ *Id.*

¹⁰²⁹ *Id.*

¹⁰³⁰ *Id.*

¹⁰³¹ *Id.* at 916.

¹⁰³² *Id.*

¹⁰³³ *Id.* at 916-17.

¹⁰³⁴ Pennington, Tr. at 917.

¹⁰³⁵ *Id.* at 918.

¹⁰³⁶ *Id.*

emitting sounds day in, day out.¹⁰³⁷ Thus, Ms. Pennington questioned the magnitude of the impact of Option A on children with special needs.¹⁰³⁸

Chris Johnson of Nokesville, Virginia, confirmed that he owned two parcels of property that will be crossed by Option A, and has not received any notice.¹⁰³⁹ Mr. Johnson testified that he learned that Option A was back on the table from a friend and neighbor, and because he received a letter from an attorney in Richmond willing to represent him if he wanted to sue.¹⁰⁴⁰ Mr. Johnson expressed concern on how Option A came back on the table.¹⁰⁴¹

Robert Cameron of Warrenton, Virginia, testified, with his wife's permission, on behalf of his wife and three girls.¹⁰⁴² Mr. Cameron stated that he moved here from south Florida because of concern about the possibilities, not probabilities, of what might happen to his children, the education system, and societal influences.¹⁰⁴³ Mr. Cameron expressed concern for the possibilities of negative impacts.¹⁰⁴⁴ Mr. Cameron took the position that "[i]f Loudoun County needs better power and more power let them build a power plant."¹⁰⁴⁵

Maureen Kersey of Warrenton, Virginia, stated that she moved to Brookside eight years ago "in search of something for my kids that really represented a dream that I was not finding in Prince William County."¹⁰⁴⁶ Ms. Kersey confirmed that over the eight years she has lived in Brookside, it has blossomed, with walking paths, lakes and a revitalized Vint Hill.¹⁰⁴⁷ Ms. Kersey advised that she owns a business in Manassas and hopes to relocate her business to the area to fulfill "the dream of being able to play and live and work and shop all within a few miles of our center and not actually have to drive half hour to enjoy any of those things."¹⁰⁴⁸ Ms. Kersey expressed concern for the unintended consequences that if Option A is constructed, market dynamics will change the character of the community and replace people who are committed to stay and build a life or business with people who will come for a few years because of the power lines.¹⁰⁴⁹

¹⁰³⁷ *Id.* at 918-19.

¹⁰³⁸ *Id.* at 919.

¹⁰³⁹ Johnson, Tr. at 920.

¹⁰⁴⁰ *Id.* at 920-21.

¹⁰⁴¹ *Id.* at 921.

¹⁰⁴² Cameron, Tr. at 922.

¹⁰⁴³ *Id.*

¹⁰⁴⁴ *Id.*

¹⁰⁴⁵ *Id.*

¹⁰⁴⁶ Kersey, Tr. at 923-24.

¹⁰⁴⁷ *Id.* at 924-25.

¹⁰⁴⁸ *Id.* at 925.

¹⁰⁴⁹ *Id.* at 926-28.

DISCUSSION

At the conclusion of the hearings, four options or routes were under consideration for meeting the undisputed transmission needs identified by the Company. Based on the filing of briefs, the participants in this case now recommend one of two options. Staff recommends Option A-Gainesville using the Alternative A-2/3 Staff Route, which, for simplicity, will be referred to as Option A in this discussion.¹⁰⁵⁰ Dominion Virginia Power supports Option C-Gainesville using Route C-1.1c, which will be referred to as Option C in this discussion.¹⁰⁵¹ PEC, Neighbors, Brookside, Authority, Schools, and Fauquier County all filed briefs recommending Option C. No one advocated the adoption of Option A-Gainesville using the Alternative A-2/3 Route, or Option B.

Pursuant to the Utility Facilities Act,¹⁰⁵² it is unlawful for any public utility to construct facilities without first obtaining a certificate of public convenience and necessity from the Commission.¹⁰⁵³ For overhead transmission lines of 138 kV or more, § 56-265.2 A of the Code requires compliance with the provisions of § 56-46.1 of the Code.

Section 56-46.1 of the Code directs the Commission to consider several factors in regard to proposed new facilities. For example, § 56-46.1 A of the Code directs the Commission to consider the effect of the facility on the environment and establish “such conditions as may be desirable or necessary to minimize adverse environmental impact.” Section 56-46.1 A of the Code directs the Commission to consider all reports that relate to the proposed facility by state agencies concerned with environmental protection and, if requested, to local comprehensive plans. In addition, § 56-46.1 A of the Code states that “the Commission (a) shall consider the effect of the proposed facility on economic development within the Commonwealth . . . and (b) shall consider any improvements in service reliability that may result from the construction of such facility.”

Section 56-46.1 B of the Code states as follows:

As a condition to approval the Commission shall determine that the line is needed and that the corridor or route the line is to follow will reasonably minimize adverse impact on the scenic assets, historic districts and environment of the area concerned. To assist the Commission in this determination, as part of the application for Commission approval of the line, the applicant shall summarize its efforts to reasonably minimize adverse impact on the scenic assets, historic districts, and environment of the area concerned. In making the determinations about need, corridor or route, and method of installation, the Commission shall verify the applicant’s

¹⁰⁵⁰ Staff Brief at 2-3, n.3, and n.4. Presumably, Morris Farm continues to support Staff’s recommendation.

¹⁰⁵¹ Company Brief at 4.

¹⁰⁵² Chapter 10.1 of Title 56, §§ 56-265.1 to 56-265.9 of the Code.

¹⁰⁵³ Section 56-265.2 A of the Code.

load flow modeling, contingency analyses, and reliability needs presented to justify the new line and its proposed method of installation. . . . Additionally, the Commission shall consider, upon the request of the governing body of any county or municipality in which the line is proposed to be constructed, (a) the costs and economic benefits likely to result from requiring the underground placement of the line and (b) any potential impediments to timely construction of the line.

Section 56-46.1 C of the Code provides for hearings and includes a requirement that “[i]n any hearing the public service company shall provide adequate evidence that existing rights-of-way cannot adequately serve the needs of the company.” This requirement is further supported by § 56-259 C of the Code which states that “[p]rior to acquiring any easement of right-of-way, public service corporations will consider the feasibility of locating such facilities on, over, or under existing easements of rights-of-way.”

Section 56-46.1 D of the Code provides that “‘environment’ or ‘environmental’ shall be deemed to include in meaning ‘historic,’ as well as a consideration of the probable effects of the line on the health and safety of the persons in the area concerned.”

Section 56-46.1 E of the Code permits the Commission to cause the publishing of additional notice to consider a route or routes significantly different from the route described in the notice required by § 56-46.1 B.

In reviewing the Commission’s application of the above statutes, the Virginia Supreme Court stated that the “Commission, pursuant to Code § 56-46.1(B), determines whether a need for the proposed infrastructure exists.”¹⁰⁵⁴ The Court provided that in determining need, “the Commission must assess the magnitude and timing of any such need.”¹⁰⁵⁵ The Court also noted the statutory requirement to “verify the applicant’s load flow modeling, contingency analyses, and reliability needs presented to justify the new line and its proposed methods of installation;” and acknowledged consideration of additional factors, along with minimizing adverse impacts, such as cost of construction, economic and environmental factors, reliability of electric service and engineering feasibility.¹⁰⁵⁶

Furthermore, the Court addressed the Commission’s consideration of the adverse impacts of a project, which “are not to be considered in a vacuum.”¹⁰⁵⁷ The Court found that “the Commission must ‘balance’ adverse impacts along with other ‘factors’ and ‘traditional considerations.’”¹⁰⁵⁸ The Court concluded “that the use of the word ‘reasonably’ demonstrates

¹⁰⁵⁴ *BASF Corp. v. SCC*, 289 Va. 375, 394 (2015) (“*BASF*”).

¹⁰⁵⁵ *Id.*

¹⁰⁵⁶ *Id.* citing *Board of Supervisors v. Appalachian Power Co.*, 216 Va. 93, 104 (1975).

¹⁰⁵⁷ *BASF* at 394.

¹⁰⁵⁸ *Id.* at 395, citing *Board of Supervisors* at 100.

NEED

the General Assembly's recognition of the multifactorial balancing that goes into such an investigation"¹⁰⁵⁹

NEED

Staff and the parties to this proceeding do not contest the need for a transmission solution.¹⁰⁶⁰ Indeed, the issue presented by this case is whether Option A or Option C complies with the directives of § 56-46.1 B of the Code by meeting the electrical need and reasonably minimizing adverse impacts. The need portion of the discussion will begin by reviewing the Company and NERC Reliability Standards used to determine need and the Company's forecasts by which it determined the need for additional transmission. This will be followed by brief discussions on the elimination of Option A-Gainesville using the Alternative A-2/3 Route and Option B from consideration.

After reviewing the determination of need for additional transmission, Option A and Option C will be examined and compared by analyzing such factors as: (i) local benefits, (ii) system benefits, (iii) cost of construction, (iv) construction schedules, and (v) economic benefits. Based on this analysis, a determination of the overall electrical benefits of Option A and Option C will be provided.

Company and NERC Reliability Standards

As acknowledged by Staff, Dominion Virginia Power is required to develop and adhere to transmission planning standards that conform to NERC's Reliability Standards.¹⁰⁶¹ Pursuant to the federal Energy Policy Act of 2005, NERC's Reliability Standards became mandatory, subject to FERC oversight.¹⁰⁶² Indeed, the Company advised that utilities could be fined up to \$1 million per day per violation if found to be in noncompliance.¹⁰⁶³

In this case, the Company's load forecasts and studies show that sustained load growth, as well as potential additional large block load requests, pose a significant threat to the Company's ability to meet its mandatory reliability standards.¹⁰⁶⁴ More specifically, by the summer of 2017, the Gainesville Substation will be in excess of its 300 MW load transmission planning criteria and by the summer of 2018, the Warrenton Substation will be in excess of its 100 MW load transmission planning criteria.¹⁰⁶⁵ Staff witnesses Martin and Chiles confirmed the Company's analysis.¹⁰⁶⁶ Staff witness Chiles verified and confirmed the Company's load

¹⁰⁵⁹ *BASF* at 395.

¹⁰⁶⁰ *See, e.g.*, Company Brief at 12; Neighbors Brief at 3; Staff Brief at 5; and PEC Brief at 4.

¹⁰⁶¹ Exhibit No. 48, Attached Staff Report at 4.

¹⁰⁶² Pub. L. No. 109-85, Title XII, Subtitle A, 119 Stat. 594, 941 (2005), codified at 16 U.S.C. 824 (o).

¹⁰⁶³ Dominion Virginia Power Brief at 13.

¹⁰⁶⁴ *Id.*

¹⁰⁶⁵ *Id.* at 15, 16.

¹⁰⁶⁶ Exhibit No. 48, Attached Staff Report at 5-6; Exhibit No. 54.

flow models and contingency analysis.¹⁰⁶⁷ Moreover, Staff agreed with Dominion Virginia Power that the area of the Proposed Projects is extremely dynamic and requires building flexibility into any transmission solutions.¹⁰⁶⁸

Elimination of Option A-Gainesville using the Alternative A-2/3 Route

On brief, Staff advises that Alternative A 2/3 Staff Route, as further adjusted by Staff witness McCoy and accepted by Company witness Lake, is Staff's preferred alignment for Option A.¹⁰⁶⁹ Dominion Virginia Power developed the A 2/3 Staff Route at Staff's request as a means of avoiding Fauquier County-owned land that would be crossed by the Alternative A-2/3 Route.¹⁰⁷⁰

The Company points to the crossing of Fauquier County-owned land and argues that the Alternative A-2/3 Route is not a viable or "buildable" alternative and should be rejected by the Commission.¹⁰⁷¹ Dominion Virginia Power affirmed that the Alternative A-2/3 Route will cross two non-common open space easements and land owned by the Schools at Kettle Run High School.¹⁰⁷² For the two non-common open space easements, the Company is required by § 10.1-1704 of the Code to obtain a determination by Fauquier County that the conversion is essential to development and growth, and is in accordance with its comprehensive plan.¹⁰⁷³ As the Company acknowledged, and as confirmed by Fauquier witness Trumbo, Fauquier County "is not willing to convey property in order to facilitate Alternative Route A 2/3."¹⁰⁷⁴ Thus, the Company asserted that "[w]ithout the ability to use condemnation as an assurance to securing the necessary right-of-way, the Company has no assurance that it can construct this alternative."¹⁰⁷⁵

Staff offered no testimony or argument on brief that indicates how the Alternative A-2/3 Route could be built without Fauquier County's cooperation or agreement. Therefore, with Staff's recommendation focused on the Alternative A-2/3 Staff Route, which was designed to avoid crossing Fauquier County land, and no other party supporting or recommending use of the Alternative A-2/3 Route, I find that no further consideration or discussion should be devoted to this alternative.

Elimination of Option B

As in the prior section, Staff did not support or recommend the adoption of Option B, nor did any of the parties support or recommend Option B. Indeed, Option B may not meet the needs identified in this proceeding as Virginia Dominion Power notes:

¹⁰⁶⁷ Exhibit No. 54, at 4-5.

¹⁰⁶⁸ Staff Brief at 8-10; Company Brief at 43-45.

¹⁰⁶⁹ Staff Brief at 3, n.4.

¹⁰⁷⁰ *Id.*

¹⁰⁷¹ Company Brief at 10.

¹⁰⁷² *Id.*; Exhibit No. 69, at 8.

¹⁰⁷³ *Id.*; *Id.*

¹⁰⁷⁴ Exhibit No. 41, at 5.

¹⁰⁷⁵ Company Brief at 11.

Option B would continue to be impacted by the Haymarket load that would likely be served from the line between the Company's Loudoun and Wheeler Stations. This identified additional load would push the total load served from this network in excess of the 300 MW threshold for allowable load loss associated with a NERC Category C (N-1-1) criteria violation by approximately 2017, based on current planning assumptions. Because of the need by summer 2017 for the Vint Hill to Wheeler segment based on the Haymarket load for Option B, if Option B is chosen as the solution in this proceeding, the Vint Hill to Wheeler segment would likely need to become a part of the future Haymarket project.¹⁰⁷⁶

Based on the identified additional load and its impact on Option B, the Company rejected Option B. Staff witness Martin agreed that Option B should be rejected and took the position that Option B was not viable.¹⁰⁷⁷ In its brief, the Authority observed that in regard to Option B, "[n]o party supported this alternative as it does not fully solve the need that is driving this case."¹⁰⁷⁸ Therefore, based on the lack of any support or recommendation for its use and because of questions concerning whether it would fully resolve the need identified in this proceeding, I find that no further consideration or discussion should be devoted to Option B.

Option A vs. Option C – Needs

In comparing Option A to Option C, it is important to keep in mind that both Option A and Option C meet the needs identified in this proceeding. For example, on brief, Dominion Virginia Power, while advocating Option C, stated that Option A met the planned need.¹⁰⁷⁹ Likewise, Staff held Option A to be electrically superior to Option C, but, Staff witness Martin affirmed that Option C "does meet the need."¹⁰⁸⁰ Nevertheless, whether Option A or Option C is the better electrical solution was contested by the participants. Therefore, the following sections focus on the electrical benefits and factors associated with Option A and Option C.

1. Local Benefits – Both Staff and the Company highlight the dynamic nature of the area that is the subject of this proceeding.¹⁰⁸¹ Staff, Dominion Virginia Power, and several of the other respondents maintained that there is a need to build flexibility into the transmission system.¹⁰⁸² For example, during the hearing, Company witness Gill reported that the Company had received a request to serve a large governmental customer in Warrenton, was planning to serve a new Opel Substation with 10 to 20 MWs, and knew of a zoning change to attract a data

¹⁰⁷⁶ *Id.* at 4-5, n.9.

¹⁰⁷⁷ Exhibit No. 48, Attached Staff Report at 18.

¹⁰⁷⁸ Authority Brief at 2.

¹⁰⁷⁹ Company Brief at 43.

¹⁰⁸⁰ Martin, Tr. at 555; *See*, Exhibit No. 48, Attached Staff Report at 29.

¹⁰⁸¹ Staff Brief at 9-10; Company Brief at 21-22, 43.

¹⁰⁸² *Id.*; *Id.*; and Neighbors Brief at 19.

center in the Vint Hill office park.¹⁰⁸³ Mr. Gill maintained that such possible additions to local load make it challenging to plan for this area.¹⁰⁸⁴ Consequently, while the needs identified in this proceeding are local to: (i) the Gainesville Substation, which will be in excess of its 300 MW load transmission planning criteria by the summer of 2017; and (ii) the Warrenton Substation, which will be in excess of its 100 MW load transmission planning criteria by the summer of 2018, Staff and all parties recognize the importance of employing an electrical solution that meets the identified need, and postures the Company to respond to unanticipated load growth.

For Option C, Neighbors and Dominion Virginia Power point to the flexibility, or “head room” gained from meeting the local loads. Mr. Gill testified, and Staff witness Martin confirmed that the load of Option A is forecasted to be 249.7 MVA in 2017 and 274.6 MVA in 2023; while the Option C load is forecasted to be 150.8 MVA in 2017 and 165.8 MVA in 2023.¹⁰⁸⁵ Because Option C is much further below the 300 MW reliability threshold than Option A, Neighbors pointed to the testimony of Mr. Gill and contended that Option C “‘offers more flexibility to handle the local load issues’ which is key because ‘a good electrical solution also has to account for the future load growth.’”¹⁰⁸⁶ Dominion Virginia Power emphasized the need for flexibility in this area to permit the Company to respond to new and sudden demands that could potentially be large if associated with a data center or a large block load.¹⁰⁸⁷ In addition, the Company noted that certain sections of Option C, such as Vint Hill to Dam Junction, will be engineered and constructed to accommodate a second 230 kV line.¹⁰⁸⁸

Staff witness Martin argued that: (i) it is possible that neither network will ever reach the 300 MW threshold; (ii) the point at which Option A requires a subsequent project to relieve a transmission violation could be so far in the future that it should be greatly discounted; and (iii) if a very large block load, such as a data center, were added, both networks could reach the 300 MW in the same, or nearly the same, years.¹⁰⁸⁹ Instead of focusing on the projected loadings on Option A and Option C, Staff emphasized the relative strength of the transmission network associated with Option A.¹⁰⁹⁰ Indeed, Staff’s case and recommendation of Option A appear to be driven primarily by the following argument from its brief:

While a double-circuit radial supply is expected to provide better reliability than a single circuit radial supply, two supplies from two separate sources are far better. For example, because a double circuit radial supply line fails to network the Warrenton substation, in the case of a tower failure along the Remington to Warrenton

¹⁰⁸³ Gill, Tr. at 656-58.

¹⁰⁸⁴ *Id.* at 656-58, 673-74.

¹⁰⁸⁵ Exhibit No. 16, at 3-4; Exhibit No. 48, Attached Staff Report at 23.

¹⁰⁸⁶ Neighbors Brief at 19 (quoting Gill, Tr. at 655).

¹⁰⁸⁷ Company Brief at 22.

¹⁰⁸⁸ *Id.*

¹⁰⁸⁹ Exhibit No. 48, Attached Staff Report at 23.

¹⁰⁹⁰ Staff Brief at 20.

path, the proposed double-circuit radial supply would fail entirely.¹⁰⁹¹

Furthermore, Staff contended that Option A offers more flexibility to meet local load growth where local load growth would push both options beyond the 300 MW threshold.¹⁰⁹² Generally, this flexibility can be summed up as “[i]f the Company constructs Option C now rather than Option A, it would be difficult, if not impossible, for the Company to acquire the necessary right-of-way for such a line in the future.”¹⁰⁹³ Thus, because it will be easier in the future to construct the facilities associated with Option C than to construct facilities associated with Option A, Staff maintained that constructing Option A now offers more flexibility.¹⁰⁹⁴

Company witness Gill testified that “‘network’ means that there is more than one electrical path between any two points in the system.”¹⁰⁹⁵ Mr. Gill disagreed with Staff that a Remington CT-Warrenton double circuit 230 kV line would be a “double-circuit radial supply,” and advised that Section C.2.6 of the Company’s Transmission Reliability Criteria, among other things, provides:

Accordingly, loading on single source radial transmission lines will be limited to the follow[ing]:

- 100 MW Maximum
- 700 MW-Mile Exposure (MW-Mile = Peak MW X Radial Line Length)

Once a radial loading limit exceeds any of these thresholds, an additional transmission source is required. Acceptable transmission source includes but is not limited to the following:

- Network from a separate transmission substation source (Preferred)
- Loop back to same transmission substation source
- Normally open network or loop transmission source¹⁰⁹⁶

¹⁰⁹¹ *Id.* (footnote omitted). Interestingly, the Staff Report actually states: “While a double-circuit radial supply is expected to provide **significantly** better reliability than a single-circuit radial supply, two supplies from two different sources **should generally be** better.” Exhibit No. 48, Attached Staff Report at 25 (emphasis added).

¹⁰⁹² Staff Brief at 25-27.

¹⁰⁹³ *Id.* at 36.

¹⁰⁹⁴ *Id.* at 25-27.

¹⁰⁹⁵ Exhibit No. 60, at 10-11.

¹⁰⁹⁶ *Id.* Attached Rebuttal Schedule 4, at 16 of 43.

In addition, Company witness Koonce contended that “lightning strikes are the single greatest cause of momentary outages to the Company’s transmission system.”¹⁰⁹⁷ Mr. Koonce maintained that two separate transmission lines will face greater reliability issues than transmission lines using common towers because of the greater “exposure footprint” of the two separate transmission lines (assuming a double circuit line of equal circuit length).¹⁰⁹⁸

In assessing the benefits of Option A and Option C, I find that more weight should be given to projected loading on the respective networks, which favors Option C. Even as early as 2017, Option A will be a little over 50 MVA from surpassing the 300 MW transmission planning threshold, while Option C will be a little over halfway to the 300 MW transmission planning threshold. Thus, Option C will provide a better hedge against an unexpected data center or block load. As for the networking benefits that may be associated with Option A, such benefits will have more of an impact on the system benefits discussed in the next section. Nonetheless, in regard to local benefits, the Company’s Transmission Reliability Criteria provide the best guidance in that Option A is the preferred approach, but Option C is acceptable. Finally, Staff’s flexibility argument appears inconsistent with the testimony of Staff witness Martin. Staff bases its flexibility argument on the point in time in which both Option A and Option C, are above the 300 MW transmission planning threshold. In referring to a project to address only Option A being at or above the 300 MW transmission planning threshold in the 2023+/- period, in its brief, Staff states: “As Staff witness Martin testified, if that project is far in the future, its time-discounted weight is nil.”¹⁰⁹⁹ Because Option C is projected to have less loading than Option A, the point in time in which both Option A and Option C, are above the 300 MW transmission planning threshold will be at or beyond the time in which only Option A is at or above the 300 MW transmission planning threshold. Consequently, following Mr. Martin’s “nil” assessment, Staff appears to argue that little, if any, weight should be given to Staff’s flexibility argument.

2. System Benefits – As touched upon above, and key to the discussion of both system benefits and costs, is an analysis of future transmission projects that may be required under Option A and Option C. A summary chart of this analysis is provided below.¹¹⁰⁰

¹⁰⁹⁷ Exhibit No. 64, at 3-4.

¹⁰⁹⁸ *Id.*

¹⁰⁹⁹ Staff Brief at 18.

¹¹⁰⁰ Exhibit No. 20; Exhibit No. 49.

Year	Initial Costs	Option A (millions)	Option C (millions)	Notes
		\$80.7	\$93.1	These costs do not include the estimated \$10.8 million to acquire NOVEC's Line #922.
Year	Violation			
2018	Bristers 500-230 kV Transformer		\$2.0	Swap with Chickahominy transformer
2018	Line #299	\$1.0		Reconductor 1 mile
2018	Line #569		\$3.0	Wreck Rebuild 1.26 miles
	2018 Total	\$81.7	\$98.1	\$16.4 difference
2023	Loudoun 500-230 kV Transformers		\$6.0	Add 3 rd Loudoun-Mosby Line
2023	Line #2114		\$28.0	Reconductor approximately 24.56 miles
	2023 Total	\$81.7	\$132.1	\$50.4 difference
2023+	300 MW	\$32.6		Construct double-circuit Rem CT-Warrenton
	Total	\$114.3	\$132.1	\$17.8 difference

Company witness Gill testified that the above chart is based on Dominion Virginia Power's 2019 Regional Transmission Expansion Plan ("RTEP"), with the 2018 case based on loads scaled back to the 2018 level based on PJM projections.¹¹⁰¹ Likewise, the 2023 case was based on the 2019 RTEP with loads scaled to a 2023 level based on PJM projections.¹¹⁰² Mr. Gill stated that "we are fairly confident that if either Option A or Option C, whichever is constructed, those projects would have to be built in 2018."¹¹⁰³ Mr. Gill was less certain regarding the 2023 projects as they are based on the topology of the 2019 RTEP.¹¹⁰⁴ For example, Mr. Gill referred to the 2023 reconductoring of Line #2114 as a "worst case."¹¹⁰⁵

As for the 2023+ project, Mr. Gill advised that this item would be more accurately depicted as 2023+/- and related it to the possibility of an unexpected block load or data center as was discussed in the above section on local benefits.¹¹⁰⁶ As Staff witness Martin confirmed, the 2023+ project is the only project depicted on the chart that is related to local issues, while all of the other projects are associated with broader, system or network power flows.¹¹⁰⁷

¹¹⁰¹ Gill, Tr. at 337.

¹¹⁰² *Id.* at 337-38.

¹¹⁰³ *Id.* at 338.

¹¹⁰⁴ *Id.*

¹¹⁰⁵ *Id.*

¹¹⁰⁶ *Id.* at 339.

¹¹⁰⁷ Martin, Tr. at 544-49.

Staff asserted that the additional projects required with Option C illustrate “the superior system benefits that Option A provides.”¹¹⁰⁸ In addition, Staff pointed to over 1000 MW of gas-fired generation in the Remington area and maintained:

When looking at a map of the area transmission system, the lack of transmission between the Warrenton Substation and Wheeler Substation is apparent. It is intuitive that bridging this Warrenton-Wheeler gap should assist in moving electric power from the generation-rich Remington area where more than 1000 MW of gas-fired generation is located to high-load northern Virginia, particularly during contingencies.¹¹⁰⁹

Staff advised that “Option A provides such a pathway to the north.”¹¹¹⁰ Furthermore, Staff argued that “Option C would leave Warrenton isolated,” and “1000 MW of generation would remain disconnected from Northern Virginia.”¹¹¹¹

While none of the parties dispute the analysis of future transmission projects summarized in the above chart, the Company and other respondents tended to give this information much less weight than Staff. For example, the Authority contended that “[t]he evidence in the case . . . makes clear that adding these modest benefits to the system flows sacrifices significant flexibility for [Dominion Virginia Power] to reliably provide service and meet the local needs of the area that must bear the burden of the transmission line.”¹¹¹²

I agree with Staff that Option A provides system benefits, but I also agree with the Authority that such benefits are modest. Based on the testimony of Company witness Gill, only the 2018 projects should be considered with a high degree of certainty. Of the remaining projects, more weight should be given to the 2023+/- project than to the 2023 projects because it is local in nature and not as dependent on a system topology that is subject to change.

Furthermore, I disagree with the statement in Staff’s brief that “Option C would leave Warrenton isolated.” As discussed in the local benefits section above, Option C acceptably networks Warrenton to Remington CT by creating two electrical paths.¹¹¹³ In addition, the statement in Staff’s brief that “1000 MW of generation would remain disconnected from Northern Virginia,” is wrong. As shown on the maps of the existing transmission system, the Remington CT currently is connected to Northern Virginia.¹¹¹⁴ Indeed, one of the 2023 projects in the analysis of future transmission projects summarized in the above chart is for a violation on

¹¹⁰⁸ Staff Brief at 16.

¹¹⁰⁹ Exhibit No. 48, Attached Staff Report at 19.

¹¹¹⁰ Staff Brief at 19.

¹¹¹¹ *Id.*

¹¹¹² Authority Brief at 12.

¹¹¹³ *See*, Exhibit No. 60, at 10-11.

¹¹¹⁴ Exhibit No. 5, Attachment I.A.2, Attachment I.E.1. Copies of these maps are provided in Attachment 1 to this Report.

Line #2114 which is the existing Remington CT – Gainesville line.¹¹¹⁵ Nonetheless, I do find that Option A would provide system benefits by providing an additional path for Remington generation to flow to Northern Virginia.

3. Cost of Construction – Staff pointed to the cost estimates summarized in the chart in the prior section and contended that Option A is less expensive, based on the initial construction costs and over time as additional projects may be required.¹¹¹⁶ However, as presented by Neighbors, the option with the lowest overall costs is dependent upon which of the possible future projects are required.¹¹¹⁷

In addition, PEC highlighted the testimony of Neighbors witness Rodgers, who testified that based on his experience of over seventeen years as president of a civil contracting firm, Option A would require greater cost and take more time to construct.¹¹¹⁸ Moreover, the Authority maintained that the Commission must consider that Option A may present significantly higher costs during the construction phase that are not captured by the Company's estimate using per-mile costs from previous projects.¹¹¹⁹

In the prior section on system benefits, a ranking of the likelihood of the possible additional projects was determined. This finding was based on Company witness Gill's testimony that only the 2018 projects should be considered with a high degree of certainty.¹¹²⁰ Of the remaining projects, the 2023+/- project was seen as more probable than the 2023 projects. Thus, the cost differences would be as follows:

	<u>Option A</u> (millions)	<u>Option C</u> (millions)	<u>Lower Cost Option</u> (millions)
Initial Costs	\$80.7	\$93.1	Option A by \$12.4
Initial Costs + 2018 Projects	\$81.7	\$98.1	Option A by \$16.4
Initial Costs + 2018 Projects + 2023+/- Project	\$114.3	\$98.1	Option C by \$16.2
Initial Costs + 2018 Projects + 2023+/- Project + 2023 Projects	\$114.3	\$132.1	Option A by \$17.8

Therefore, while it is possible that Option C ultimately may be the least costly option, based on the testimony of Mr. Gill, I find that for evaluating Option A and Option C, the most weight should be given to the cost projection that includes the initial costs and the 2018 projects. Consequently, I find that Option A is likely to be the least costly option.

¹¹¹⁵ Exhibit No. 20; Exhibit No. 49.

¹¹¹⁶ Staff Brief at 28-29.

¹¹¹⁷ Neighbors Brief at 20-22.

¹¹¹⁸ PEC Brief at 7; Exhibit No. 32, at 5-7.

¹¹¹⁹ Authority Brief at 13-14; Shevenock, Tr. at 711.

¹¹²⁰ Gill, Tr. at 338.

As for the quality of the cost estimates, or more specifically the likelihood that the cost projections for Option A are understated, during the hearing, Company witness Shevenock agreed with much of Mr. Rodger's testimony on the higher forestry and access costs associated with construction of Option A.¹¹²¹ However, Mr. Shevenock testified that \$4.3 million of \$4.8 million in added costs presented by Mr. Rodgers already is included in the Company's estimated costs.¹¹²² Thus, I find that the Company's estimates of cost provide a reasonable guide in assessing the two options in this case, but some allowance in the overall weighting should be made for the possibility that Option A may have higher than estimated costs.

4. Construction Schedules – The need for transmission facilities in this case is based on Dominion Virginia Power's forecasts that by the summer of 2017, the Gainesville Substation will be in excess of its 300 MW load transmission planning criteria, and by the summer of 2018, the Warrenton Substation will be in excess of its 100 MW load transmission planning criteria.¹¹²³ The Company advised that Option C can be built in time with the Vint Hill-Wheeler-Gainesville 230 kV lines expected to take 16 months to construct and the Remington CT-Warrenton Double Circuit 230 kV Line expected to take 28 months to construct.¹¹²⁴

Company witness Allen advised that if Option A is chosen, the entire project would be needed by the summer of 2017, but would take 40 months to construct, or until May 2019.¹¹²⁵ The Company maintained that the longer construction time for Option A reflects that Option A requires the construction of a longer right-of-way, with more extensive tree and vegetation removal, wetland impacts, and other construction obstacles.¹¹²⁶ In addition, Dominion Virginia Power noted that its anticipated construction schedule for Option A "includes time necessary to obtain appropriate permits from the Fauquier County Planning Authority and the Fauquier County Board of Supervisors."¹¹²⁷ Fauquier County warned that in light of its opposition to Option A, in the opinion of Fauquier County witness Supervisor Trumbo, "it would be unlikely the Board would approve a special exception for the Warrenton Substation to the extent such approval would facilitate the A routes."¹¹²⁸ Moreover, Fauquier County witness Fogle outlined that the County decision process could take as long as twelve to fourteen months, and that the decision of the County would be subject to an appeals process that could proceed through Circuit Court and the Virginia Supreme Court.¹¹²⁹

Staff does not appear to dispute the Company's construction duration estimates. Nonetheless, Staff contended that such estimates should not be dispositive because the Gainesville Substation exceeded the 300 MVA contingency level in 2010, 2011, and 2013; and is

¹¹²¹ Shevenock, Tr. at 709.

¹¹²² *Id.*

¹¹²³ Company Brief at 15, 16.

¹¹²⁴ *Id.* at 29; Exhibit No. 68, at 7.

¹¹²⁵ *Id.* at 29-30; *Id.* at 6-7, Attached Rebuttal Schedule 1.

¹¹²⁶ *Id.* at 49-50; *Id.* at 4-6; Allen, Tr. at 717-18, 722-25.

¹¹²⁷ *Id.* at 30.

¹¹²⁸ Fauquier County Brief at 8; *See*, Exhibit No. 41, at 5.

¹¹²⁹ *Id.* at 8-9; Fogle, Tr. at 485-87.

projected to exceed the 300 MVA contingency level in 2014, 2015, and 2016.¹¹³⁰ Staff argued that “[t]he Company failed to explain why exceeding the actual and forecasted 300 MW threshold is acceptable in almost every year between 2010 and 2017, but not in 2018 and 2019.”¹¹³¹ Furthermore, Staff noted the lack of sanctions.¹¹³²

Staff also pointed to the possibility of opposition to Option C by Prince William County that could adversely impact its construction schedule.¹¹³³ Staff supported this contention with the testimony of one of the few public witnesses that opposed Option C.¹¹³⁴

In assessing the record regarding the construction schedules of two options, no one disputes that from a construction standpoint, Option A would take longer to construct than Option C. As for the likelihood of Fauquier County delaying Option A by withholding required approvals, I find that the participation of Fauquier County, and the testimony of its witnesses, demonstrate significant risk to the construction schedule of Option A. On the other hand, I find little if any credible evidence that Prince William County is likely to withhold any required approvals. Prince William County did not participate as a respondent, have a representative appear as a public witness, or even file written comments. Prince William County was represented on the CAG.¹¹³⁵ More importantly, Prince William County granted an easement to the Company for a segment of Option C across a planned park.¹¹³⁶ Consequently, I find that Option C is the option that is most likely to be built in time to meet the projected needs.

As for Staff’s point that since the Gainesville Substation currently exceeds the 300 MW transmission planning threshold, a few more years should be permitted, I find that this point goes to the overall weight to be given construction schedules when assessing the two options. I agree with Staff that the construction schedule in this case should not be dispositive. In other words, if Option A was otherwise the electrically superior option and otherwise met the statutory requirement to reasonably minimize adverse impacts on the scenic assets, historic districts and environment of the area concerned, then it should not be discarded in this case due to a longer construction schedule. However, in assessing which option better meets the electrical needs presented in this case, given that Gainesville Substation currently exceeds and is expected to continue to exceed the 300 MW transmission planning threshold seems to argue for more weight to be given to the quicker construction schedule in this case. Being above the 300 MW transmission planning threshold indicates that this portion of transmission system is experiencing an unacceptably high risk of an outage. It would seem better to address such a risk sooner rather than later.

¹¹³⁰ Staff Brief at 12; Exhibit No. 52; Exhibit No. 53.

¹¹³¹ Staff Brief at 12 (footnotes omitted).

¹¹³² *Id.*

¹¹³³ *Id.* at 14.

¹¹³⁴ *Id.* at 15-16.

¹¹³⁵ Beckner, Tr. at 11; Lingamfelter, Tr. at 255-57.

¹¹³⁶ Company Brief at 41; Exhibit No. 11, Attached Supplemental Attachment 3 – DTF.

ROUTING

5. Economic Benefits – Staff argued that Option A provides superior economic benefits by offering better reliability than Option C at a lower overall cost.¹¹³⁷ On the other hand, Neighbors focuses on the negative impact Option A will have on economic development of the local community.¹¹³⁸

Generally, I find that the discussions regarding economic benefits in this case fail to offer any new considerations and are repetitive of other arguments. That is, Staff repeats its reliability and cost contentions, while Neighbors emphasizes some of the negative impacts that will be addressed below.

Option A vs. Option C – Needs Conclusion

While both Option A and Option C meet the needs identified in this proceeding, as discussed above, I find that Option C provides greater local benefits and flexibility as this option is shown to have a much lower projected loading at the Warrenton Substation, which provides the “headroom” to allow the Company to serve an unexpected data center or block load without further upgrades or projects. Option C also has the shorter construction schedule. Offsetting these findings, Option A will provide more system benefits that can be achieved at a generally lower cost. Because the needs underlying this proceeding are local needs associated with the loading of the Warrenton and Gainesville Substations, I give more weight to the local benefits of Option C and find that this option best meets the needs identified in this proceeding.

ROUTING

Among other things, § 56-46.1 B of the Code directs the Commission to determine “that the corridor or route the line is to follow will reasonably minimize adverse impact on the scenic assets, historic districts and environment of the area concerned.” The routing portion of the discussion will focus solely on a comparison of Option A to Option C, and will address the following topics: (i) measurable impacts, (ii) other impacts, (iii) the impacts of possible future projects, and (iv) McCoy’s Adjustments.

1. Measurable Impacts - With the possible exception of Staff, all participants in this proceeding maintain that Option C has fewer adverse impacts than Option A. Indeed, all of the witnesses addressing routing issues sponsored by participants, including Staff witness McCoy, agree that Option C is the least impacting alignment.¹¹³⁹

At the outset of reviewing the impacts of Option A and Option C, it is important to remember that these options include construction of several lines and facilities. The chart below summarizes the two Options.

¹¹³⁷ Staff Brief at 28-29.

¹¹³⁸ Neighbors Brief at 52-58.

¹¹³⁹ McCoy, Tr. at 605.

Option A ¹¹⁴⁰	Option C ¹¹⁴¹
Reconductoring of 11.8 miles of Line #2086 between Remington CT Station and Warrenton Substation	The wreck and rebuild of approximately 11.8 miles of Line #2086 between the Remington CT Station and Warrenton Substation, which would require the use of 20 feet of additional temporary right-of-way during construction
The construction of a new single-circuit 230 kV transmission line of approximately 9.6 miles between the existing Warrenton and Wheeler Substations	The construction of 3.4 miles of new 230 kV transmission line from the new Vint Hill Switching Station to Dam Junction, where the new line would connect with the rebuilt portion of Line #922 and continue to the new Wheeler Switching Station
The acquisition of the existing Wheeler-Gainesville 115 kV Line #922 from NOVEC and the uprate and conversion of this line to 230 kV	The wreck and rebuild of approximately 2.0 miles of Line #922 between Wheeler Substation and Dam Junction and the uprate and conversion from 115 kV to 230 kV of the remaining 4.1 miles of Line #922 between Dam Junction and the Gainesville Substation
The expansion of the existing Warrenton Substation on Virginia Power property	The expansion of the existing Warrenton Substation on Virginia Power property
The construction of a new switching station on property adjacent to NOVEC's Wheeler Substation	The construction of a new switching station on property adjacent to NOVEC's Wheeler Substation
	The construction of a new switching station on property adjacent to the planned NOVEC Vint Hill Delivery Point

The analysis of the impacts presented by Company, and adopted by Staff and most other participants reflects the impacts of the total of all of the above items included within Option A and Option C. Nonetheless, in this case some care and emphasis should be placed on impacts caused by new greenfield construction. For example, Company witness Lake reported that for Option C, twelve homes would be located within 60 feet of the edge of the right-of-way, and for Option A, fifteen homes would be located within 60 feet of the edge of the right-of-way.¹¹⁴² However, all twelve of the homes for Option C, and ten of the fifteen homes for Option A are located along the existing Line #2086 Remington CT - Warrenton.¹¹⁴³ Thus, in comparing the impacts of Option A to Option C, it is important to note that Option A will bring a transmission line to within 60 feet of five homes that heretofore have not been impacted by a transmission line, while Option C has no such impacts.

¹¹⁴⁰ Exhibit No. 24, at 4; Exhibit No. 56, Attachment WDM-1.

¹¹⁴¹ *Id.* at 4-5; *Id.*

¹¹⁴² Exhibit No. 24, at 7-9.

¹¹⁴³ *Id.*

Consequently, the key factor in evaluating the relative impacts of Option A and Option C is that Option A would introduce 9.2 miles of new transmission line to areas with no existing transmission, while Option C would introduce only 3.4 miles of new transmission to areas with no existing transmission.¹¹⁴⁴

In addition, Option A is shown to have a greater impact than Option C for the following: forested lands crossed (9.4 miles to 5.1 miles); clearing of forested lands (93.1 acres to 32.4 acres); forested wetlands cleared (8.2 acres to 6.9 acres); homes within 500 feet of the centerline (243 to 131); private parcels crossed (149 to 96); and NRHP-eligible battlefields within the right-of-way (1.9 miles to 1.6 miles).¹¹⁴⁵

In its brief, Staff points out that Option C is not without its impacts. For example, Option C has a greater impact than Option A on archaeological sites within the right-of-way (2 for Option A to 4 for Option C), and local government lands crossed (0 miles for Option A to 2.0 miles for Option C).¹¹⁴⁶

Furthermore, Staff pointed to the greater impacts of Option C related to the wreck and rebuild of approximately 11.8 miles of Line #2086 between the Remington CT and Warrenton Substation.¹¹⁴⁷ Staff states that “[t]his reconductoring [sic] would require the towers to be approximately 45 feet *taller* along this entire section, causing greater visual impact.”¹¹⁴⁸ Dominion Virginia Power maintained that “although the new transmission structures used for the wreck and rebuild along the Remington CT and Warrenton line would be *slightly taller* than the existing facilities, it would not represent a new utility corridor or a dissimilar use in this area.”¹¹⁴⁹ While I agree that the impacts of the Remington CT and Warrenton line should be considered, at this point, the conflicting (and inaccurate) statements of Staff and the Company should be resolved. The Supplemental Appendix to the Application shows the average tower heights, both before and after the wreck and rebuild of Line #2086 to be as follows:

¹¹⁴⁴ *Id.* at Supplemental Direct Schedule 2.

¹¹⁴⁵ *Id.*; Company Brief at 32-33; Neighbors Brief at 26-27.

¹¹⁴⁶ Staff Brief at 32; Exhibit No. 24, at Supplemental Direct Schedule 2.

¹¹⁴⁷ Staff Brief at 32-33.

¹¹⁴⁸ *Id.* at 32 (emphasis in original) (footnote omitted).

¹¹⁴⁹ Company Brief at 31-32 (emphasis added) (footnote omitted).

Line Segment	Existing Towers	Proposed Towers	Difference
First 0.61 miles ¹¹⁵⁰	94 feet ¹¹⁵¹	101 feet ¹¹⁵²	7 feet ¹¹⁵³
Next 5.10 miles ¹¹⁵⁴	83 feet ¹¹⁵⁵	107 feet ¹¹⁵⁶	24 feet ¹¹⁵⁷
Next 0.81 miles ¹¹⁵⁸	58.4 feet ¹¹⁵⁹	104 feet ¹¹⁶⁰	45.6 feet ¹¹⁶¹
Next 5.37 miles ¹¹⁶²	82 feet ¹¹⁶³	106 feet ¹¹⁶⁴	24 feet ¹¹⁶⁵

Therefore, the towers will be approximately 45 feet taller for less than 7%¹¹⁶⁶ of this line. Most of the towers on this line will be 24 feet taller, which I do not classify as *slightly taller*.

2. Other Impacts – In addition to the measurable, quantifiable impacts discussed in the prior section, other impacts should be considered. These other impacts include: (i) routing constraints that cause significant qualitative impacts; (ii) the relative impact of Option C on the Morris Farm subdivision; (iii) the impact or risks to the Authority's water supply; (iv) DEQ and other state agency reviews; (v) comprehensive plans; and (vi) public input.

Routing Constraints – Company witness Lake highlighted several areas along the Option A route that would cause significant visual and qualitative impacts due to routing constraints.¹¹⁶⁷ Two examples of areas that will be negatively transformed are the intersection of Frys Lane and Duhollow Road, and the intersection of Riley Road and Albrecht Lane. Mr. Lake described the impact to the Frys Lane and Duhollow Road areas as follows:

Because of space limitations caused by topography, the locations of existing homes, and the location of a non-common open space easement held by Fauquier County on the east side of Duhollow Road, the route would cross Frys Lane twice at a long diagonal and

¹¹⁵⁰ Exhibit No. 5, at Attachment II.A.3.a, Attachment II.A.3.b.

¹¹⁵¹ *Id.* at Attachment II.A.3.a.

¹¹⁵² *Id.* at Attachment II.A.3.b.

¹¹⁵³ 7 = 101 – 94.

¹¹⁵⁴ Exhibit No. 5, at Attachment II.A.3.c, Attachment II.A.3.d.

¹¹⁵⁵ *Id.* at Attachment II.A.3.c.

¹¹⁵⁶ *Id.* at Attachment II.A.3.d.

¹¹⁵⁷ 24 = 107 – 83.

¹¹⁵⁸ Exhibit No. 5, at Attachment II.A.3.e, Attachment II.A.3.f.

¹¹⁵⁹ *Id.* at Attachment II.A.3.e.

¹¹⁶⁰ *Id.* at Attachment II.A.3.f.

¹¹⁶¹ 45.6 = 104 – 58.4.

¹¹⁶² Exhibit No. 5, at Attachment II.A.3.g, Attachment II.A.3.h.

¹¹⁶³ *Id.* at Attachment II.A.3.g.

¹¹⁶⁴ *Id.* at Attachment II.A.3.h.

¹¹⁶⁵ 24 = 106 – 82.

¹¹⁶⁶ 6.8% = 0.81 ÷ (0.61 + 5.10 + 0.81 + 5.37).

¹¹⁶⁷ Company Brief at 33-35; Exhibit No. 24, at 10-11.

within a narrow valley containing a streambed and mature hardwood forest with trees taller than 100 feet (estimated) supporting a closed canopy. The trees make up a good portion of the backyards of two of the three homes near the crossing, and because of the steeply sloped area adjacent to the right-of-way near the homes, some large trees (danger trees) located outside of the boundaries of the right-of-way could also likely require clearing.¹¹⁶⁸

Mr. Lake also testified that at the intersection of Riley Road and Albrecht Lane the new transmission line following Option A would span across the front yard of the home of Neighbors witness Hardy,¹¹⁶⁹ be located within 60 feet of another house, and cross directly over the intersection.¹¹⁷⁰

Based on observations made during the June 2nd Routing Tour, I find Mr. Lake's testimony regarding routing constraints to be reliable.

Option C Impact on the Morris Farm Subdivision – In its brief, Staff stated that “Staff presented evidence that Option C impacts the Morris Farm subdivision, including homes not already impacted by a transmission line, the pool, and the Morris Farm community center.”¹¹⁷¹ However, in comparing the relative impacts of Option A on homes and subdivisions, to the impacts of Option C on the Morris Farm subdivision, Neighbors witness Beckner referred to the June 2nd Route Tour and maintained “along Staff's Supplemental Alternatives we saw houses where the route would literally cross a few feet from front doors, while along Route C-1.1c, we saw the Morris Farm community pool where the route was so far in the distance that tree cover would entirely shield it from view when the pool was being used, and without tree cover the lines would barely be visible above the tree tops.”¹¹⁷²

Based on observations made during the June 2nd Routing Tour, I find Mr. Beckner's testimony regarding routing constraints to be reliable.

Risks to the Authority's Water Supply – In its brief, the Authority warned that construction of the transmission line along the Option A route will pass “adjacent to one of the Authority's main supply wells . . . that provides over 15% of the water for over 2,800 customers in the New Baltimore Service District.”¹¹⁷³ The Authority expressed concern that construction in this area could damage the well or subsurface rock such that the well would become contaminated with bacteria from surface water.¹¹⁷⁴ Authority witness Sherrill recounted

¹¹⁶⁸ Exhibit No. 24, at 11.

¹¹⁶⁹ See, Exhibit No. 30; Hardy, Tr. at 395; Exhibit No. 69, Attached Rebuttal Schedule 1, page 6.

¹¹⁷⁰ Exhibit No. 24, at 10.

¹¹⁷¹ Staff Brief at 31-32.

¹¹⁷² Exhibit No. 34, at 10-11.

¹¹⁷³ Authority Brief at 7.

¹¹⁷⁴ *Id.*

difficulties experienced by the Authority with surface water contamination traveling through bedrock fractures in other wells in this area.¹¹⁷⁵ Moreover, if the Authority's well is damaged, a multi-million dollar treatment facility that would take a number of years to build may be required.¹¹⁷⁶

The Company contended that it could construct the necessary tower supports without a risk of disturbing adjacent wells by monitoring and keeping construction vibrations below a safe threshold level.¹¹⁷⁷ Company witness Allen testified that research over the years has shown that a peak particle velocity of two inches per second or less does not impact adjacent wells or properties.¹¹⁷⁸ Mr. Allen also advised that Dominion Virginia Power could use a spread footer foundation, which is a large concrete slab with a surface area of 20 by 40 foot, and a depth of only 12 to 20 inches.¹¹⁷⁹ Nonetheless, on cross-examination, Mr. Allen acknowledged that the Company could undertake further analysis to determine if underlying rock in this area is more susceptible to fracturing thus requiring a lower vibration threshold.¹¹⁸⁰

I find that the Authority has established that Option A poses a risk of damage to its water supply that should receive consideration in evaluating the impacts of Option A and Option C.

DEQ and Other State Agency Reviews – In the Second DEQ Report, filed on June 18, 2015, which considered Option A, Option B, and Option C, DEQ recommended selection of C-1.1 (proposed route) or C-1.2 (alternative route) because they have the least potential impacts to wetlands.¹¹⁸¹ DGIF recommended “choosing the alternative that results in the fewest impacts upon interior forest, wetlands, streams and other natural resources as well as co-locating the line within already-disturbed corridors.”¹¹⁸² DOF recommended the selection of Route A-5 underground due to the impact on forest resources.¹¹⁸³ DHR recommended Option C-1.1c, but noted that “Option B sufficiently minimizes potential impacts to recorded significant historic resources.”¹¹⁸⁴ Furthermore, DHR stated “that Options A-2/3 and A-2/3 Staff appear to have the most overall potential for negative impact to recorded historic resources and does not recommend their selection.”¹¹⁸⁵

Staff limited the value of the Second DEQ Report and maintained the following:

The DEQ Report comments only on the exact routes proposed, it does not include anticipated impacts from future projects, nor does

¹¹⁷⁵ *Id.* at 7-8; Exhibit No. 37, at 3-5.

¹¹⁷⁶ *Id.* at 10; *Id.* at 5-6.

¹¹⁷⁷ Company Brief at 60; Allen, Tr. at 724.

¹¹⁷⁸ Allen, Tr. at 724.

¹¹⁷⁹ *Id.* at 718.

¹¹⁸⁰ *Id.* at 725.

¹¹⁸¹ Exhibit No. 40, at 6.

¹¹⁸² *Id.*

¹¹⁸³ *Id.*

¹¹⁸⁴ *Id.*

¹¹⁸⁵ *Id.*

it examine the impact on the surrounding area, the “area concerned.” Moreover, the DEQ Report does not factor reliability of the proposed options into its analysis.¹¹⁸⁶

I find that the Second DEQ Report provides further analysis that will assist the Commission in fulfilling the directive of § 56-46.1 B of the Code “that the corridor or route the line is to follow will reasonably minimize adverse impact on the scenic assets, historic districts and environment of the area concerned.” The Second DEQ Report, taken as a whole, supports a finding that Option C has less adverse impacts on cultural and environmental resources than Option A.

Comprehensive Plans – Fauquier County pointed to the testimony of its witnesses, Supervisor Trumbo, Kimberley P. Fogle, and Wendy Wheatcraft, and argued that Option A is inconsistent with the County’s comprehensive plan.¹¹⁸⁷ Fauquier County contended that Option A would undermine Fauquier County’s efforts to guide development into its service districts, such as the New Baltimore Service District, and preserve Fauquier County’s rural areas.¹¹⁸⁸

Staff’s interpretation of the testimony of Fauquier County’s witnesses is that “there is no area in the entire County that is appropriate for power lines – power lines that are needed in part to support this load growth the County is cultivating.”¹¹⁸⁹ I disagree with Staff’s interpretation of the testimony of Fauquier County’s witnesses. In its brief, Fauquier County states that “[t]he factors to be considered by the County in adopting the plan overlap significantly with the environmental and other factors to be considered by the Commission when it makes a routing decision.”¹¹⁹⁰ In essence, Fauquier County asserts that Option A will be more damaging to the County’s Comprehensive Plan than Option C.

Public Input – In weighing the evidence to determine which route or option will reasonably minimize adverse impacts, input from the public can provide insights into the impacts of a proposed transmission line that may not be apparent from routing maps and routing statistics. For example, in this case, the potential negative impact of a transmission line on the Hermitage of Saint Mary of Magdalene and its Paws Awhile Pet Motel was brought to light through the testimony of Mother Eirene and the testimony of patrons such as Randolph Sutliff, Peter Onoszko, Garrett Nickle, Alice Steinemer, and Mary Haak.¹¹⁹¹

In addition, the formation and work conducted by the CAG provided another venue for community input and involvement.

¹¹⁸⁶ Staff Brief at 40 (footnote omitted).

¹¹⁸⁷ Fauquier County Brief at 2-7; Exhibit No. 41; Exhibit No. 46; Exhibit No. 47.

¹¹⁸⁸ Fauquier County Brief at 2-7.

¹¹⁸⁹ Staff Brief at 35.

¹¹⁹⁰ Fauquier County Brief at 3.

¹¹⁹¹ Exhibit No. 27; Sutliff, Tr. at 260; Onoszko, Tr. at 280; G. Nickle, Tr. at 785; Steinemer, Tr. at 838; Haak, Tr. at 878.

In this case, I find the overwhelming public opposition to Option A as expressed in public comments, public testimony, through the CAG, and by the respondents is consistent with and further supports that Option A would cause much greater adverse impacts than Option C. This is consistent with the measurable impacts and other impacts such as routing constraints, the relative impact of Option C on the Morris Farm subdivision, the risks to the Authority's water supply, and the Second DEQ Report. Once again, as stated above, all of the witnesses addressing routing issues sponsored by participants, including Staff witness McCoy, agree that Option C is the least impacting alignment.¹¹⁹²

3. Possible Future Projects – Staff offsets all of the above analysis by speculating that four possible future projects that may be required if Option C is undertaken will have greater adverse impacts than Option A. Staff witness McCoy testifies:

Based upon the [Staff] analysis, four additional projects whose impacts have yet to be identified will be required to supplement Option C-1.1c-Gainesville's long-term reliability as compared to Option A-2/3 Staff. The summation of the unidentified impacts from these additional projects and those known impacts from Option C-1.1c-Gainesville may render the Option C-1.1c-Gainesville option more impactful, but, inasmuch as these necessary additional projects have not yet been designed, there is no basis upon which to compare those impacts.¹¹⁹³

The four additional projects for Option C (and two additional projects for Option A, omitted by Mr. McCoy) are discussed above in the System Benefits and the Cost of Construction sections of the Needs discussion.¹¹⁹⁴ Company witness Gill was "fairly confident" that two of the additional projects for Option C, and one of the additional projects of Option A would be needed in 2018.¹¹⁹⁵ The two additional projects for Option C in 2018 are the swap of a transformer and wreck and rebuild of 1.26 miles of Line #569.¹¹⁹⁶ The additional project for Option A in 2018 is the reconductoring of 1.0 miles of Line #299.¹¹⁹⁷

Based on the discussion and findings above, the next project in terms of probability is the 2023+/- wreck and rebuild of approximately 11.8 miles of Line #2086 between the Remington CT Station and Warrenton Substation, to provide a double-circuit 230 MW Remington CT-Warrenton line for Option A.¹¹⁹⁸ That is, under Option A, the Remington CT-Warrenton Line #2086 will be reconductored.¹¹⁹⁹ However, local growth and loading on the Warrenton Substation may require the installation of a double circuit 230 kV transmission line between

¹¹⁹² McCoy, Tr. at 605.

¹¹⁹³ Exhibit No. 56, at 3 (emphasis in original).

¹¹⁹⁴ Supra at 103, 106.

¹¹⁹⁵ Gill, Tr. at 338.

¹¹⁹⁶ Exhibit No. 20; Exhibit No. 49.

¹¹⁹⁷ *Id.*; *Id.*

¹¹⁹⁸ *Id.*; *Id.*; Supra at 105.

¹¹⁹⁹ Exhibit No. 24, at 4; Exhibit No. 56, Attached WDM-1.

Remington CT and Warrenton, which is already provided by Option C.¹²⁰⁰ Thus, if this project is required for Option A, the discussion above concerning the added height of the transmission towers for the wreck and rebuild of the Remington CT-Warrenton line would apply equally to Option A and Option C.

The final two possible projects for Option C are projected for 2023 and include the construction of a third Loudoun-Mosby Line of approximately 0.25 to 0.5 mile in length, and the reconductoring of 24.56 miles of Line #2114.¹²⁰¹ Mr. Gill is less certain of the 2023 projects since the underlying analysis was based on the topology of the 2019 RTEP, and referred to the reconductoring of Line #2114 as a “worst case.”¹²⁰²

Company witness Lake provided an assessment of the environmentally-related impacts associated with the four additional projects that may be required for Option C as follows:

- 2018 transformer swap:

The work associated with completing this exchange would be primarily electrical and mechanical in nature and would take place entirely within the existing fence line of the Bristers Switching Station. Construction work, including earth disturbing activities, would not be required to take place outside of Dominion-owned properties that have already been developed.¹²⁰³

- 2018 wreck and rebuild of 1.26 miles of Line #569:

This would require the wreck and rebuild of approximately 1.26 miles of Line #569 and would occur entirely within the existing operational right-of-way currently used by Line #569. While some earth disturbing activities would occur associated with the wreck and rebuild in this section of existing right-of-way, it would represent the removal and replacement of existing structures and conductors within an existing utility corridor and replacing generally the same number of structures. Therefore encumbrance and existing use of lands would not change, nor would the visual aspect of the changed out facilities. Impact would be restricted to the actual construction activities and associated short-term disturbances.¹²⁰⁴

- 2023 construction of a third Loudoun-Mosby Line of approximately 0.25 to 0.5 mile:

¹²⁰⁰ *Id.* at 4-5; *Id.*; Gill, Tr. at 339.

¹²⁰¹ Exhibit No. 20; Exhibit No. 49; Exhibit No. 70.

¹²⁰² Gill, Tr. at 337-38.

¹²⁰³ Exhibit No. 70.

¹²⁰⁴ *Id.*

The addition of a third transmission line between Loudoun and Mosby switching stations would require the construction of a new line for a distance of approximately 0.25 to 0.5 mile in length and [the] Loudoun switching station would need to be expanded. The location of a route for this line would have to be engineered to fit within or adjacent to the numerous existing transmission lines that currently enter, exit or connect the two switching stations.¹²⁰⁵

- 2023 reconductoring of 24.56 miles of Line #2114:

Because the reconductoring of 24.56 miles of Line #2114 would entail the removal of the existing 3-phase conductors and replacing them with new, higher capacity conductors, some of the existing towers would need to be replaced with taller structures to increase ground clearance, where necessary. While the reconductoring takes place over a long distance (more than twice the length of A-2/3 Staff Route), and it would require some similar earth disturbing activities during foundation replacements, it would for the most part all take place on existing easements without the encumbrance of new lands and would not represent the creation of a new utility right-of-way or a new type of visual intrusion onto the existing landscape. New, previously undisturbed lands would not be cleared and graded or otherwise disturbed.¹²⁰⁶

Despite testifying that the four projects described above “will be required to supplement [Option C],” and that the “unidentified impacts from these additional projects” if added to the impacts of Option C, “may render [Option C] more impactful,”¹²⁰⁷ on cross-examination, Staff witness McCoy was unable to answer any questions regarding the four projects. Indeed, Mr. McCoy had made no attempt to analyze their impacts.

Q. Okay. Okay. Will you agree with me, based upon the testimony that you heard yesterday from Mr. Gill, that these are the projects that would be the four projects that could be required?

A. I would have to really defer this to Mr. Martin. This is not an area that I am confident testifying on. My understanding is that C has to be bolstered by additional projects.

Q. All right.

¹²⁰⁵ *Id.*

¹²⁰⁶ *Id.* As shown on the maps provided as Attachment 1 to this Report, Line #2114 is located near other transmission lines, including 500 kV transmission lines.

¹²⁰⁷ Exhibit No. 56, at 3.

A. But they are not really part of this - - this case as of yet. And so I can't evaluate what those impacts are.

. . . .

Q. If, hypothetically, these were the cases that were those four unidentified cases that you were talking about, would you be able to, looking at this . . . [Exhibit No. 49] and understand what "swapping with Chickahominy transformer" means, would you be able to identify and describe the impacts?

A. I would not.¹²⁰⁸

In its brief, Staff noted that Company witness Lake maintained that "The environmentally-related impacts associated with the construction and operation of the four projects . . . would be substantially less than the type and magnitude of impact associated with the construction and operation of Option A Gainesville using the A-2/3 Staff route."¹²⁰⁹ Staff contended that Dominion Virginia Power "fails to make the correct comparison, that of Option A to Option C *plus* the four additional projects."¹²¹⁰

I disagree that the correct comparison is Option A to Option C *plus* the four additional projects. As discussed previously, there are two additional Option A projects, and the projects are subject to different probabilities. Thus, the most likely "correct" comparison would be Option A *plus* one additional 2018 project to Option C *plus* two additional 2018 projects. The next most likely "correct" comparison would be Option A *plus* one additional 2018 project *plus* one additional 2023+/- project to Option C *plus* two additional 2018 projects. The final, and least likely "correct" comparison would be Option A *plus* one additional 2018 project *plus* one additional 2023+/- project to Option C *plus* two additional 2018 projects *plus* two additional 2023 projects.

Nonetheless, under Staff's proposed comparison of Option A to Option C *plus* four additional projects, Option A would continue to introduce 9.2 miles of new transmission line to areas with no existing transmission, while Option C *plus* four additional projects would introduce only 3.4 miles of new transmission to areas with no existing transmission.¹²¹¹ That is, none of the four additional projects for Option C require new rights-of-way, create new utility corridors, create new land uses, or impact homes or businesses that are currently not impacted by transmission facilities.¹²¹²

Therefore, I find that Staff has failed to show that Option C *plus* the four possible future projects that may be required if Option C is undertaken will have greater adverse impacts than

¹²⁰⁸ McCoy, Tr. at 608.

¹²⁰⁹ Staff Brief at 33; Exhibit No. 70; Lake, Tr. at 744 (reading from Exhibit No. 70).

¹²¹⁰ Staff Brief at 33.

¹²¹¹ See, Supra at 109-111.

¹²¹² See, Exhibit No. 70.

Option A *without* considering the two possible future projects that may be required if Option A is undertaken.

4. McCoy's Adjustments – In supplemental testimony filed on July 8, 2015, Staff witness McCoy offered six adjustments to Route A-2/3 Staff in an attempt to reduce negative impacts.¹²¹³ However, as explained in the rebuttal testimony of Company witness Lake, and as examined in Neighbors Brief, arguably most of Mr. McCoy's proposed adjustments caused more, rather than less, impacts.¹²¹⁴ In its brief, Staff "proposes that if the Commission approves Option A, the route chosen, Alternative A 2/3 Staff Route, include the changes Staff witness McCoy offered and Company witness Lake accepted in this proceeding."¹²¹⁵ In its brief, the Company states:

At the hearing, Staff [w]itness McCoy acknowledged that, in proposing these adjustments to Option A, it was not his intention to "fully . . . vet" the changes, nor was his role in the process to "generate routing for the [Commission]," but rather as "a reviewer" of routes proposed by the Company.¹²¹⁶ As such, and based on the impacts identified by the Company, Respondents and public witnesses, Staff's proposed alignment adjustments to Option A should be rejected.¹²¹⁷

I believe that Mr. Lake was careful not to accept any of Mr. McCoy's proposed alignment adjustments. On the other hand, Mr. Lake indicated that he did not identify any routing impediment to a few of Mr. McCoy's proposed alignment adjustments, especially where small adjustments were proposed to move the right-of-way more than 60 feet from an impacted home.¹²¹⁸ Nevertheless, Neighbor contended that § 56-49¹²¹⁹ gives certain rights to the owners of homes within 60 feet of the right-of-way, which would be lost if the right-of-way is moved slightly farther away. As Neighbor witness Beckner testified:

And, frankly, you can move . . . a route 61 feet away from the house, still have the same effect of destroying the property and

¹²¹³ Exhibit No. 56, at 4-7.

¹²¹⁴ Exhibit No. 69, at 11-15, Attached Rebuttal Schedule 2; Neighbors Brief at 31-43.

¹²¹⁵ Staff Brief at 3, n.4.

¹²¹⁶ McCoy, Tr. at 592, 593 (footnote in original).

¹²¹⁷ Company Brief at 59.

¹²¹⁸ Exhibit No. 69, at 11-15, Attached Rebuttal Schedule 2.

¹²¹⁹ Section 56-49 of the Code states that "the corporation shall not take by condemnation proceedings a strip of land for a right-of-way within 60 feet of the dwelling house of any person except (i) when the court having jurisdiction of the condemnation proceeding finds, after notice of motion to be granted authority to do so to the owner of such dwelling house, given in the manner provided in §§ 25.1-209, 25.1-210, and 25.1-212, and a hearing thereon, that it would otherwise be impractical, without unreasonable expense, to construct the proposed works of the corporation at another location;"

destroying the quality of life for that person, and thereby, give them no rights from an eminent domain point of view.¹²²⁰

Based on the lack of acceptance by the Company and the failure of Mr. McCoy to demonstrate any benefits associated with his proposed alignment adjustments, I agree with the Company and Neighbors that if Option A is ultimately chosen by the Commission, none of Mr. McCoy's proposed alignment adjustments should be made.

Routing Conclusion

As stated above, all of the witnesses addressing routing issues sponsored by participants, including Staff witness McCoy, agree that Option C is the least impacting alignment.¹²²¹ The key factor in the routing analysis is that Option A would introduce 9.2 miles of new transmission line to heavily populated and developed areas with no existing transmission, while Option C would introduce only 3.4 miles of new transmission line to a more open area with no existing transmission. Consequently, consideration of measurable impacts and other qualitative impacts, including public input, concerning Option A and Option C show that Option C is the least impacting alignment. Staff attempts to offset all of the evidence supporting Option C by raising the specter of four future projects. This attempt fails because its witness makes assertions unsupported by knowledge or analysis, and because evidence concerning the four possible projects shows that they require no new rights-of-way, create no new utility corridors, create no new land uses, and do not impact homes or businesses that are currently not impacted by transmission facilities. Therefore, I find that Option C will reasonably minimize adverse impacts on the scenic assets, historic districts, and environment of the area concerned.

FINDINGS AND RECOMMENDATIONS

In conclusion, based on the evidence and for the reasons set forth above, I find that:

1. The Company's proposed Projects best meet the needs identified in this proceeding concerning loading at the Warrenton Substation and loading at the Gainesville Substation;
2. Construction of the proposed Projects is required by the public convenience and necessity for the reasons discussed herein;
3. The Company's proposed Option C, following Route C-1.1c will reasonably minimize adverse impact on the scenic assets, historic districts, and environment of the area concerned;
4. Existing rights-of-way cannot adequately serve all of the needs of the Company; and
5. Recommendations contained in the DEQ Report, should be adopted by the Commission as conditions of approval.

¹²²⁰ Beckner, Tr. at 416.

¹²²¹ McCoy, Tr. at 605.

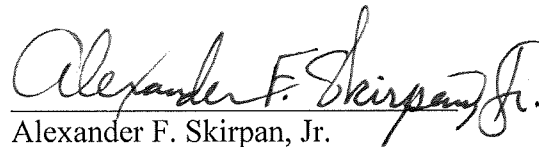
In accordance with the above findings, ***I RECOMMEND*** that the Commission enter an order that:

1. ***ADOPTS*** the findings in this Report;
2. ***GRANTS*** the Company's Application to construct the proposed transmission facilities;
3. ***AMENDS*** the Company's current certificates of public convenience and necessity to authorize construction of the proposed transmission facilities; and
4. ***DISMISSES*** these cases from the Commission's docket of active cases.

COMMENTS

The parties are advised that pursuant to Rule 5 VAC 5-20-120 C of the Commission's Rules of Practice and Procedure, any comments to this Report must be filed with the Clerk of the Commission in writing, in an original and fifteen copies, within twenty-eight days from the date hereof. The mailing address to which any such filing must be sent is Document Control Center, P.O. Box 2118, Richmond, Virginia 23218. Any party filing such comments shall attach a certificate to the foot of such document that copies have been mailed or delivered to all other counsel of record and to any party not represented by counsel.

Respectfully submitted,

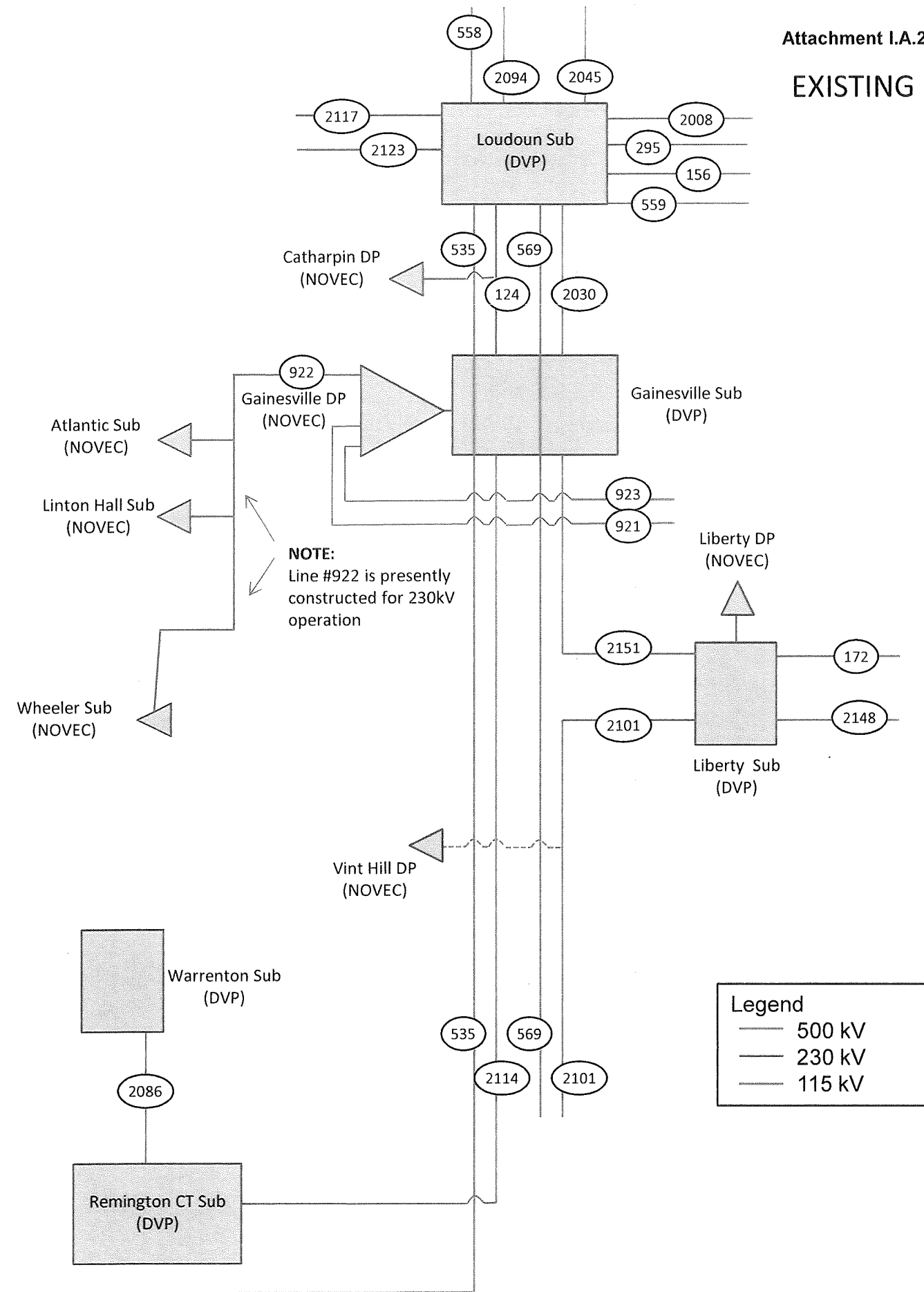


Alexander F. Skirpan, Jr.
Senior Hearing Examiner

A copy hereof shall be sent by the Clerk of the Commission to all persons on the official Service List in this matter. The Service List is available from the Clerk of the State Corporation Commission, c/o Document Control Center, 1300 East Main Street, First Floor, Tyler Building, Richmond, VA 23219.

ATTACHMENT 1

EXISTING



Existing Transmission System

