

**Albemarle County Planning Commission**  
**January 15, 2019**

The Albemarle County Planning Commission held a meeting on Tuesday, January 15, 2019, at 6:00 p.m., at the Albemarle County Office Building, Auditorium, Second Floor, 401 McIntire Road, Charlottesville, Virginia.

Members attending were Bruce Dotson, Karen Firehock, Tim Keller, Jennie More, Julian Bivins and Pam Riley. Absent were Daphne Spain and Luis Carrazana, University of Virginia (UVA) representative.

Other officials present were Scott Clark, Senior Planner; Andrew Gast-Bray, Assistant Director of CDD/Director of Planning, Stephanie Banton, Community Development Assistant, Marsha Alley, Zoning Assistant, David Benish, Chief of Planning and Andy Herrick, Deputy County Attorney.

**Call to Order and Establish Quorum:**

Mr. Gast-Bray, acting as temporary chair as this was the first meeting of the New Year, called the meeting to order at 6:00 p.m. and established a quorum.

**Public Hearing Items**

**SP-2018-00014 Cash Corner Transmission Line**

MAGISTERIAL DISTRICT: Rivanna

TAX MAP/PARCEL(S): 05000000004100; 050000000041A0; 050000000041B0;

050000000041B1; 050000000041C0; 050000000041D0; 05000000004500; 050000000045B0;

051000000014A0; 051000000014D0; 051000000016A0; 05100000001700; 051000000028A0;

06600000004300; 06600000004500; 06600000004800; 06700000000100; 06700000000200

LOCATION: From the Albemarle County – Louisa County boundary at a point 0.34 mile north of the intersection of Virginia Route 22 and Whitlock Road (Route 616) to an existing substation located 0.5 miles north of the intersection of Virginia Route 231 and Lindsay Road (Route 615), along an existing utility easement.

PROPOSAL: Replace existing 46kV electrical transmission line with pole heights of 55 to 70 feet with new 115kV electrical transmission line with pole heights of 65 to 90 feet along an existing utility easement approximately 2.7 miles long.

PETITION: Energy and communications transmission facilities under Section 10.2.2(6) of the zoning ordinance on 18 parcels totaling 897.35 acres. No dwelling units proposed.

ZONING: RA Rural Area - agricultural, forestal, and fishery uses; residential density (0.5 unit/acre in development lots)

COMPREHENSIVE PLAN: Rural Area – preserve and protect agricultural, forestal, open space, and natural, historic and scenic resources; residential (0.5 unit/ acre in development lots)  
(Scott Clark)

Mr. Clark presented the staff report in a PowerPoint presentation explaining that this is a special use permit request for the upgrade to an existing powerline that is in the northeast portion of the County. He noted as you can see in the slide the red parcels are the parcels crossed by the existing powerline right-of-way - in the closer view the heavy triple black line is the line of the existing easement for the powerline, and it is about a 2.7-mile existing corridor, which continues well past this point down into Louisa and beyond. He noted the other end here is at the Cash's Corner Substation. He said the proposal is to replace the existing 46kV electrical transmission

line with pole heights of 55 to 70 feet with new 115kV electrical transmission line with pole heights of 65 to 90 feet along an existing utility easement approximately 2.7 miles long.

Mr. Clark noted in photographs places along the corridor from Herrington Road looking south and from this point all the way to the County line is about 1.3 miles, a little less than half the overall corridor from this point. He said from this point all the way to the County line is not crossed or accessible by any public roads so that half of the corridor looks roughly like this, and this is a wooden monopole that is there now. He said there is one monopole that is braced by a second monopole holding each pole because it is right where the line crosses the railroad tracks and they must be extra careful about carrying a long span at that point. He said the applicant can say more but there are four poles like this of the 38 along this line that have that extra bracing pole. He said this is the line that crosses Lindsay Road east of Route 231; this is looking southeast from Route 231 and this is about a 65-foot pole here next to the road that would be replaced with an 85-foot pole just to give you a sense of the scale of what is there now and what is proposed. He noted that you can see the corridor going off in the distance there and looking northwest from Route 231 – this is a 55' existing pole - there are 5 or 6 poles along here and then you come to the substation which is the end of the line.

Mr. Clark said this is an example provided by the applicants of roughly what the new 115kV line would look like except that this is showing a galvanized pole and they are proposing to use brown weather seal rather than this lighter colored surface. He said just a quick summary of what is proposed – The need is occasioned by an upgrade to a larger system across Albemarle and surrounding counties to the 115kV system for system reliability and the ability to resist power losses in the area parable to just require taller poles for safety for ground clearance. He said the applicants have elected to replace poles in the existing right-of-way rather than creating a new right-of-way through the rural areas – the new poles will be monopoles except for those few H poles that he mentioned earlier rather than lattice towers or something more visible like that. He noted getting the applicants to propose brown weathering finish also reduces visibility and they are not proposing other structures or facilities – it is just a pole to pole replacement. He said again, the impacts on adjacent properties will be minimal because they are replacing the poles roughly in the same location, so it is not a great change in visibility or impacts on the surrounding parcels. He said the footprint of the utilities will be same and there would be some increase in visibility because the poles would be taller in the open area - the poles would be taller throughout but would be more visible in the open areas; however, the applicant has tried to reduce the visibility by sticking with monopoles and using the lower visibility finish.

Mr. Clark said the original recommended action that you saw in your staff report was for a single condition that was in line with a previous project up near the Orange County line that we brought before you about three or four years ago which was just imposing the restriction that the lines would have to remain within the existing right-of-way, which they are. He said however having heard some concern from the community we wanted to make sure that the visibility impacts were minimized and have brought a couple of additional conditions for it for your consideration tonight. He said the additional condition 2, which would specify that all the supporting structures within 2,000 feet of Route 231 must be monopoles, and so any of those additional H-poles, as shown before, could not be within 2,000 feet and he would show on the map why they were recommending that number. Mr. Clark said for condition 3 – all supporting structures must consist of weathering steel, which was to avoid those shining galvanized structures. He said originally it was the applicant's proposal, so we are sticking with their ideas for minimizing visibility of these structures.

Mr. Clark noted the black line in the middle of the map is Route 231, Earlysville Road, and the parcels in the black cross-hatch are in the Southwest Mountains Rural Historic District. He noted the green dots are the existing poles along this right-of-way and the transparent green overlay is the 2,000 foot distance on either side of Route 231 – and he would note on the west side 2,000 feet goes all the way to the existing substation at the end of the line and gets us past most of the open areas where the poles are visible on the east side – and it also gets us beyond the boundaries of the Historic District. He said that was the reason we went with the 2,000 foot recommendation for condition 2 so that in this area only monopoles could be used and beyond this area monopoles or H-poles could be used and it still would not allow lattice towers or anything like that anywhere along the right-of-way and it would just allow the applicants the flexibility to use those H-poles for spanning things like the railroad outside of the more visually sensitive area of the Historic District and the Virginia Byway on Route 231. He said those are the recommended conditions of approval and he would be happy to answer any questions and was sure the applicant could answer more technical questions.

Mr. Keller invited questions for staff.

Mr. Dotson asked if weathered steel would look like what he would describe as a rust color, and Mr. Clark replied yes it does and he does not know at what point in the weathering after installation for a range in time it goes to a fairly dark brown color that is relatively comparable to the dark poles that are out there now.

Hearing no further questions, Mr. Keller opened the public hearing and invited the applicant to address the Commission.

Mr. Bruce Moreoff, with Central Virginia Electric Cooperative, said he was the Senior Vice-President and Chief Operating Officer for the company. He said this project is part of a 32-mile transmission line which we own that originates in Columbia in Fluvanna County near the James River that extends 32 miles and terminates at Cash's Corner Substation. He said it has been part of a 20-year plan to convert this transmission line from 46,000kV to 115,000kV and the original part of that plan was to meet capacity requirements that were along Interstate 64 and over into Albemarle County. He said this is the last section of that line to be converted to one 115,000kV and when that is complete that will provide the Coop a feed from two different directions. He said we have had several outages which is served from Dominion that have extended for 8 hours and some lengthy outages and with this capacity it would allow us to do some switching and reduce the outage time substantially being able to feed from two different directions.

Mr. Moreoff said the poles are going to effectively be replaced in the same location and the new poles will be placed adjacent to the existing poles and then the existing poles will be retired and removed. He said as stated we elected to specify a self-weathering steel structure to minimize visibility and so that there is a brown color versus the galvanized steel type of surface that is very visible and much more visible than the brown surface. He said the reason the Coop has invested in this is for reliability in the areas of Albemarle, Louisa, Fluvanna and Goochland Counties. He said this is not part of the bulk electric system or the transmission line that is feeding power from one side of the state to the other – the benefit for this is the 20 percent of our customers that transmission line serves so that is the benefit and the purpose of why we are doing this work.

Mr. Morehoff said the project is a total of 60 structures and 38 of those are in Albemarle County and as Scott mentioned 4 of those structures are what we call H-frame structures where we have two poles and a cross-arm that spans between them – the purpose of those structures are to add

additional strength capacity to that structure and they are only used for very long spans where we need that strength to meet the codes of design. He said one of the types of the crossings that are specifically mentioned for increase strength is when we cross railroad tracks and there is one railroad crossing in this project. He said that the structures on either side of that crossing will be the H-frame type structure, but they also will be the self-weathering steel type structures. He said beyond those 4 structures there will be a monopole type facility, which we provided in the picture. He said that is pretty much the information that he wanted to share, and he would answer questions.

Mr. Keller said that after public comment the Commission would ask questions of the applicant, and invited the first person signed up, Sean Tubbs, to come forward.

Sean Tubbs, with Piedmont Environmental Council, said he sent written comments to the Commission earlier and those are now out-of-date because the two conditions that have been added this evening are now what we had asked for in that. He said however, he would mention a third which is basically the height of the poles and you might consider a condition just to basically guarantee that these are at 90 feet or below and preferably even shorter where possible just to continue to minimize the impacts on the Historic District and of course specifically where it connects and where it is going to be visible from the journey through the national and scenic byway. Mr. Tubbs asked the Commission to consider his comments.

There being no further public comments, Mr. Keller invited the applicant to come back. He asked if there were questions for the applicant.

Mr. Dotson asked if you would object to a condition that set the maximum height at 90 feet and would that cause you any operational problems.

Mr. Morehoff replied that he did not believe so, but not having the plan profiles he recalls the maximum height of the poles included there were 90 feet. He said if there was one that was 95 feet or 92 feet or something that he can't recall if there are ones taller than that.

Mr. Dotson said from the illustrative images that were shown it looked like there was a line on the tiptop of the poles rather than just on the side arms – and asked if that was the case that there is a line at the very top.

Mr. Morehoff replied yes, there is basically a lightening protection line, a wire that runs across the top of those structures and then three conductors that run which are on insulators that stick out from the structure.

Mr. Dotson asked would that mean if the case should ever come up that because you have that line at the top it would not be technically possible to fit a cell tower antenna on there.

Mr. Morehoff replied that we would prefer not to put cell towers and those type of structures or facilities on our structure; it creates a number of difficulties when you are operating in 115,000kV to have that type of equipment installed and for somebody to safely operate and maintain it. He pointed out if you do that you almost have to take an outage on a structure for somebody to climb up through there and actually work on communication facilities that are not electrically trained.

Ms. More said my main question was about collocation of anything on the sides or top of the tower.

Mr. Morehoff replied that we have no plans, any intent or any preference to add anything to the structures.

Ms. More asked if you have other structures similar to this that have that, and Mr. Moreoff replied that we don't have any of our structures that have other attachments on it except for wired communications basically telephone lines and that is attached below our facilities and it is not antennas or anything like that on the structure.

Ms. Firehock said you mentioned needing to increase the reliability of power service and talked about long outages – being a rural resident not on that line but certainly have experienced the fun of that and was just wondering if you have any estimates of the sort of percent reduction in outages that you might experience by putting in this more reliable line that will allow service use in from both ends. She asked would it reduce the service reductions 80 percent, or have you done those kinds of calculations.

Mr. Moreoff replied that it will significantly impact the length of the interruptions and so if a tree falls in the line serving Dominion or our transmission line where we had one source and one source only we would be required to make the effort to remove that tree from the line or remove the fault before we could energize the line – or we would be in a position to wait on Dominion to energize their line before we could restore power to our customers. He said with this capability we can actually spend much less time to open the switch and feed power from another direction isolating the section that has the problem, so we would reduce and aid our outage to maybe 30 minutes or an hour or less with that capability.

Mr. Bivins said with your modifications that you have brought before us is there any connection to your extension of rural broadbands and so would that area benefit in any way from these changes that you have brought before us.

Mr. Moreoff replied that these are transmission poles and some of these transmission poles have distribution level service attached underneath them and our intent will be on those poles to add the fiber that we are installing – and it would be attached to these poles.

Mr. Bivins said if he was to understand that part of the county then might at some point in the future that area benefit from your fiber project.

Mr. Moreoff replied yes, although the customers that we serve in that county will have the benefit of fiber.

Mr. Bivins asked if that would be a year or six-months from now.

Mr. Moreoff replied that the only thing we have planned right now is phase one which is basically the first year of the construction and we have announced an area in Appomattox, an area in Nelson County and then an area in Fluvanna County and that area would stretch into eastern Albemarle County – then this area would be in one of four future years to install that Broadband.

Mr. Keller said we hear from the public on every one of these projects that come through the question of what about undergrounding – and just for the record could you speak to that alternative.

Mr. Moreoff replied yes, underground transmission is typically limited to very particular situations because the cost is five times or more in doing the overhead line. He said our estimated cost of this is about \$425,000 per mile and we are looking at about 2.5 million dollars per mile if we would look at underground of 115,000kV line. He said the basis that go along with that is that the cable is very large and to splice it you basically have to build a room in the ground about every 900 to 1,200 feet in order to have enough space to turn the cable, make your splice and then turn and continue along the route – those rooms are typically 10' X 20' X 8' tall where people can actually enter through manholes from the top so the impact of digging a hole or trench that is 7' deep and installing those rooms every 1,200 feet would be significance as well as the cost.

Mr. Keller thanked Mr. Moreoff and asked if there was anything else he would like to say.

Mr. Moreoff said that he appreciates the effort of Scott's help through the process and that he has done a great job.

Mr. Keller closed the public hearing to bring it back to the Commission for discussion and action.

Ms. Riley moved to recommend approval of SP-2018-00014 Cash's Corner Transmission line with the conditions outlined in the staff report, as amended with the additional conditions presented this evening by staff and with the additional condition proposed by Commissioner Dotson limiting the monopole to 90 feet.

Ms. More seconded the motion.

Mr. Keller invited further discussion. Hearing none, he asked for a roll call.

The motion was approved by a vote of 6:0 (Spain absent). Mr. Keller thanked staff and noted that this would be going on to the Board of Supervisors at a date to be determined.

The meeting moved to the next item.