

Northumberland County Planning Commission
August 17, 2017
Minutes

The regular monthly meeting of the Northumberland County Planning Commission was held on August 17, 2017 at 7:00 p.m. in the Board Room of the Old Courthouse at Heathsville, VA with the following attendance:

Chris Cralle	Present	Garfield Parker	Present
Vivian Diggs	Present	Albert Penley, Jr.	Present
Alfred Fisher	Present	Wellington Shirley, Jr.	Present
Ed King	Absent	Heidi Wilkins	Present
Richard Haynie	Present	Charles Williams	Absent
Patrick O'Brien	Present		

Others in attendance:

Stuart McKenzie (County Planner)

Philip Marston (Zoning Administrator)

RE: CALL TO ORDER

The meeting was called to order by Mr. Alfred Fisher, Chairman.

Wellington Shirley led the Commission in the Pledge of Allegiance to the Flag.

Garfield Parker gave the invocation.

RE: AGENDA

The agenda was approved with a motion by Patrick O'Brien which was seconded by Albert Penley and approved by all.

RE: MINUTES- May 18, 2017

The minutes of the May 18, 2017 meeting were approved with a motion from Wellington Shirley which was seconded by Patrick O'Brien and approved by all.

RE: COMMISSIONERS' COMMENTS

There were no commission members comments.

RE: STAFF MEMBERS' COMMENTS

Staff had no comments.

RE: BOARD OF SUPERVISORS' LIASON COMMENTS

There were no comments from the Board of Supervisor's liaison.

RE: CITIZENS' COMMENTS

There were no citizen comments.

RE: PUBLIC HEARINGS

There were no Public Hearings scheduled.

RE: WORK SESSION ITEMS

There were no Work Session Items scheduled.

RE: DISCUSSION ITEMS

Mr. Fisher noted that this meeting would be the preliminary discussion of adding zoning classifications for electric substation and solar farms. Mr. McKenzie stated that he had passed out copies of the Board of Supervisors resolution requesting the Planning Commission work on adding the two uses to the Northumberland County Zoning Ordinance. Mr. McKenzie stated that he focused his research and preparation on electric substations, as he had prior knowledge about this use that needed to be added, whereas the solar farm zoning addition request was new, from a BOS member and will likely be more complex. Staff added that there is interest for the Northern Neck Electric Cooperative (NNEC) in constructing an electric substation at the intersection of Avalon Road and Sydnor's Mill Pond Road. Mr. McKenzie stated that the NNEC has submitted a site plan and environmental impact statement for the proposed substation. Mr. Fisher asked if the site that the NNEC was considering was zoned agriculture, Mr. McKenzie replied that yes, it was zoned for agriculture. Mr. Shirley noted that all of the electrical substations in the County that he can think of are in agricultural zoned land, except for the one in Callao, on Rt. 202. Mr. McKenzie stated that he thought the best place to start would be to look at what Northumberland County has in the zoning ordinance. Mr. McKenzie distributed a printed copy of Northumberland County's Zoning Table of Uses to Planning Commission Members, then directed them to page four to examine the Public Utilities (involving water and sewer) row in the table that indicated that that is a permitted use in all zoning classifications in Northumberland County. Next, Mr. McKenzie distributed the Northumberland County Zoning Definition of Public Water and Sewer Systems, which is defined as "A water or sewer system owned and operated by a municipality or county or owned and operated by an individual or a corporation for public use." Mr. McKenzie noted that this is the only utility shown in the zoning definitions. Mr. McKenzie noted that in discussions with the Zoning Administrator, one course of action would be to add electric substations to the Public Utilities definition, and that would allow electric substations to be built in all zoning districts in the county as a by-right use. Mr. McKenzie added if they want to allow electric substations in some zoning classes and not others, then perhaps a standalone definition might be a better way to go about adding that use to the zoning ordinance. Mr. McKenzie noted that he printed

out the entire Zoning Table of Uses for Planning Commission member's use as a reference document into the future, although tonight all staff wanted Planning Commission members to see were the usages for Public Utilities. Mr. McKenzie then turned his discussion to how neighboring counties handle electric substations. Mr. McKenzie handed out a summary of how Lancaster, King George, Essex and Mathews Counties handle electric substations in their zoning ordinance. Mr. McKenzie began summarizing the document stating that Lancaster County allows electric substations by-right in R-4, M-1, and A-1 zoning districts, and by special exception in the remainder of zoning classes. Mr. McKenzie added that he put the language of the specific county uses for Planning Commission member reference. Mr. McKenzie continued the summation of the document by stating that King George County allows electric substations by right A-1, A-2, A-3, and was not sure if the other district allow it under special exception, or not. Mr. McKenzie continued stating that in Essex county, electric substations require a conditional use permit in all zoning districts. Planning Commission Chairman Fisher asked about Richmond County, and Mr. McKenzie stated he downloaded the Richmond County ordinance, but the only substations that are referred to in their ordinance have to do with water and sewer, not electricity. Chairman Fisher asked the Commission Members if everyone knew Mr. Marston (who was present at the meeting), stating that he was the Zoning Administrator for the county. Mr. Marston then introduced himself to the Commission members. Mr. Penley asked how much latitude would we have in doing this By-Right? Mr. Shirley replied that that is one way to add the use to the zoning ordinance, in whatever zoning districts you want it to be in. Mr. Penley clarified his question by adding, do they want some flexibility or specific enough where there isn't a question of what they can do. Mr. Shirley stated he couldn't see the power company putting a substation in a highly residential area, the proposed new substation is on a house lot surrounded by farm fields, he couldn't see them putting one in an area with a high concentration of residential use, but the county could require a conditional use permit in R-1, R-3, he would certainly think that it should be a permitted use in A-1. Mr. Obrien commented that the proposed site is in A-1, Mr. Shirley replied, yes, but he cautioned everyone that you need to look towards the future, and he feels that it should be by-right in A-1, and C-1, because that is usually wide-open space. Mr. Fisher asked what the zoning was the electric substation on Folly Road? Mr. Shirley stated that he thinks it is zoned A-1 and Mr. Marston agreed. Mr. Fisher stated that there are houses around it, and Mr. Shirley said he thinks the houses were built there after the substation was built. Mr. Parker stated that was the same scenario as the substation on Dodlyt Road. Mr. Cralle asked if the State requires setbacks of any certain distances. Mr. Shirley stated that not that he was aware. Mr. Fisher asked if there was any noise associated with the substations, and everyone agreed that little to no noise would be generated after construction. Mr. Obrien asked if staff happened to know why they want to put the substation at the corner of Avalon Road and Sydnors Mill Pond Rd. Mr. Shirley responded that they have had increased (electric) usage down that road, and beyond that towards Edwardville and Neumans Neck Road, new development and new houses built. Mr. Obrien referenced Mr. Shirley's suggestion of allow the use by right in A-1, we want accessible power, the use will be something of an eyesore wherever you put it, but I would think the impact in a agriculturally zoned area would be minimal. Mr. Shirley stated that the impact would be minimal in A-1, as well as C-1, now if you wanted to make it conditional use in the residentially zoned area, he said he has no problem with that, but he feels it should be by-right in A-1, C-1 and possibly M-1, the county doesn't

have much land zoned M-1. Mr. Marston stated that he felt that by-right in M-1 would be appropriate. Mr. Parker asked if electric substations are old technology. Mr. Fisher stated that he guesses you could call it old technology, because they adding capacity because they have more demand. Mr. Shirley noted that it is not old, the stuff they are putting down is brand new, but the technology has been around for a while and is standard stuff. Mr. Obrien asked if what Mr. Shirley is proposing would be flexible enough for NNEC and their needs. Mr. Shirley stated that yes, that should be ok with them. Mr. Penley stated you need to look at the growth areas, and likely there won't be much growth in agricultural fields, and he doesn't see them being replaced by housing developments anytime soon. Mr. Shirley stated that Mr. Penley was correct, but that you position them not to serve the area right next to it, but rather an entire area. Mr. Fisher noted that the substation in Reedville serves Sunnybank, Blackberry, Reedville, and Fairport. Mr. Shirley asked if the Reedville substation was Dominion or Northern Neck Electric and Mr. Fisher responded he thought it was Dominion. Mr. Cralle noted that some of the definitions from other counties state public utility, do we need to differentiate between public and private utilities, or does that matter. Mr. McKenzie stated that the meaning of public to him means publicly owned, and these sites will be privately owned, well he continued that the NNEC is kind of publicly owned since it is a cooperative, but he stated he can't see an entrepreneur coming here and created a private electric company to compete with NNEC and Dominion. Mr. Obrien countered that they have done it with water, Mr. McKenzie agreed. Mr. Obrien stated that solar farms generate electricity and they are privately owned. Mr. Obrien stated what he thought of a public utility is the old common carrier, it is providing services to the general public, you are essentially given a monopoly by the local government to provide the service to the citizens, you thereby subject yourself to oversight by the governing body, and your rates are regulated, the concept behind this was because of the economy of scale, it makes sense that only one person does it. Historically it evolved from the stagecoach lines and the U.S. Postal Service. It could be private or publicly owned. Mr. Fisher stated that the State Corporation Commission would likely have a definition of it. Ms. Wilkins noted that Northumberland County Zoning Ordinance has provisions for a private sewer company, but we don't have a listing for a private water company. Ms. Wilkins noted that she knows they exist in the county, but it isn't listed in the zoning ordinance. Zoning Administrator Marston stated that that use falls under the current public utilities use, which involves water and sewer, and you could include electric in the same definition, that would make it a By-Right use in all zoning districts in the county, just like water and sewer. Mr. McKenzie noted that this is one option that the Planning Commission could consider, or if the Planning Commission would like, we could separate it out and make the use its own category. Mr. Shirley stated it was possible to have some discussion about the concern of a substation being built in a residential area, because it is all aboveground and it is certainly not pretty. Mr. Shirley noted that the difference with wells and certainly sewer is that most of that is installed underground. Mr. Shirley suggested that in the residential districts, it does require a public hearing, and a conditional use permit and allow the public to voice their opinion one way or another. Mr. McKenzie elaborated that by requiring a conditional use permit, that the BOS could put conditions such as a vegetated buffer around the substation or other reasonable requirement to reduce the impact of the use on surrounding landowners. Mr. Obrien noted that if they put one on 360 between here and Callao, it would probably be blocked by trees and you wouldn't see it. Mr. Fisher stated that in this county, in every residential area there is agriculturally

zoned land close by. Mr. Fisher stated that he feels there should be some control over electric substations, we have to have electricity, and we will work with them the best we can.

Mr. Penley asked how does staff want to treat solar farms. Chairman Fisher stated that the Planning Commission should discuss one use and move to the other, so as not to confuse the two uses, and noted that we could be at that point now. Ms. Wilkins stated that likely the solar farm is going to be privately owned. Mr. McKenzie stated that currently the county allows solar arrays to be mounted on structures, and Mr. Marston added that the county also allows free standing solar panels as a residential use. Mr. McKenzie explained that the existing allowable use is small scale and what the planning Commission needs to define and discuss is large scale solar farms. Staff indicated that we will need to determine the cutoff point between small scale residential solar facilities and commercial for profit large scale solar facilities, and that most of the ordinance language for other counties uses megawatts as the determinant between the two. Mr. Shirley mentioned that you are going to have more and more people interested in this because he got a questionnaire in the mail last week that wanted to know if my brother and I would be interested in renting our property for a solar farm at \$1,200 per acre for 20 years, Mr. Shirley stated that that was big money, compared to what farmers pay per acre to lease farmland. Mr. Shirley stated he did not want to do it at this time so he pitched the correspondence, but others may want to reap those benefits. Mr. Fisher asked if he would sell the land, and Mr. Shirley responded he couldn't afford to sell it at that lease rate price. Ms. Wilkins stated that in Indiana, Iowa and Illinois, where she just got back from visiting, had acres and acres of solar farms, all private facilities, and it is causing problems for the electric companies because now they have to jack their rates up because there is so much free solar power they can't cover their expenses. Mr. O'Brien stated that many states have laws that require electric companies to take the power and put it on the grid. Ms. Wilkins stated that the solar farms we are going to have deal with private and public, she thinks we are going to have both entities involved in that. Chairman Fisher asked Mr. Shirley what is the basic difference between what his recommendation for the electric substation zoning and Lancaster County's zoning ordinance regarding electric substations. Mr. Shirley noted there was not much difference, except that Lancaster County has more zoning districts in conditional than Northumberland County has. Mr. O'Brien stated he was concerned about someone putting a substation across the road from a residential subdivision. Mr. Shirley noted that if we permit substations by-right in A-1 and the property across the road is zoned A-1, then there would be nothing the county could do about it. Mr. O'Brien asked if you could add a provision that if the use is within so many feet of a residentially zoned parcel that they would have to provide a vegetative buffer. Mr. McKenzie stated that if you want control over where they put electric substations in the county, you can put it as a conditional use in all zoning districts. Mr. O'Brien explained that as an example, somewhere along US360, if you have houses in visual distance, could you require screening around the facility. Mr. Shirley stated that you can't make it visible from houses, because the house could be 1/2 mile away and zoned agricultural. Mr. O'Brien theorized that from a public relations standpoint, a company like NNEC would probably do it anyway, and put some shrubs around it. Mr. McKenzie noted that transformers need cooling, and Ms. Wilkins mentioned insurance requirements for the electric company. They have to be fenced, and they have to have gravel on the surface so there will never be puddles where employees could be

electrocuted. Mr. McKenzie asked if the Commissioners would like to see the site plan and environmental report that NNEC has submitted for the proposed substation at Avalon and Sydnors Mill Pond Road, and they responded in the affirmative. Mr. McKenzie returned with the report and passed it around for all members to examine. Mr. McKenzie stated he wanted commission members to not necessarily think about this site, but to look into the future to determine how they wish to proceed. Mr. McKenzie stated that he can't tell you whether their electrical grid needs a substation there or not, but that their job (the NNEC) is to provide reliable power to their customers and the cost of such facility would prohibit misplacement on the company's part. Mr. McKenzie noted that construction of substations in Northumberland County is not frequent, he asked Mr. Marston how many he has received as being the Zoning Administrator and he said none, and he asked the same question of Mr. Shirley and he stated none, so that is around 30 years at least without an electric substation being built in the county. Mr. McKenzie stated that this construction is an infrequently required use. Mr. McKenzie stated that if the county experienced a lot of growth we would have more (electric substations) built, but he does not foresee that happening anytime soon. The Commissioner's discussed the NNEC proposed site and recalled that this was Billy Dawson's farm. Chairman Fisher asked Mr. McKenzie what he wanted from the Commissioners tonight. Mr. McKenzie stated that he could send staff comments regarding the electric substation zoning language via email if the Commission wants to expedite it and consider having a public hearing in September, if not, at the September meeting we can give staff comments and draft language at the September meeting and then have the public hearing in October. Mr. McKenzie stated that he would research Richmond County's handling of electric substations, look into definitions from the State Corporation Commission, and send that out by email and then have the public hearing in September or if you would rather take some time, I can bring comments to the next meeting, and we could do the public hearing in October. Mr. Shirley asks if there was any kind of push from NNEC to get this done, is there? Mr. McKenzie noted that the NNEC has not filed a building permit application for the project as of yet. Mr. Marston stated that the NNEC site plan and environmental report came into the office about three or four months ago, and at that time the NNEC said that the project would be constructed this year. Mr. Shirley stated it is not like we are under the gun to do something. Mr. McKenzie agreed and said it was up to the Commission on how fast to proceed with the public hearing. Mr. Shirley proposed to have comments next time and have the public hearing in October. Mr. McKenzie stated that was fine. Mr. O'Brien asked whether we should solicit comments from the two electric companies that will be affected, and he assumes they have some idea of which counties are more business friendly and those that are not. Mr. McKenzie stated that he is sure that they would like for the Planning Commission to allow it By-Right in all zoning districts. Mr. O'Brien stated that he doesn't doubt that but wanted to know if any of the other county zoning ordinances created any unexpected problems. Mr. Shirley stated he can't see if they have any problems, in the counties we referenced, they are not being built that frequently, we are talking years if not decades between when these things are being built. Ms. Wilkins stated that the reality is that the public wants consistent and stable electricity just as much as they want water and sewer. Chairman Fisher stated that means we have to work with these people the best we possibly can. Ms. Wilkins and right now water and sewer can go anywhere in the county as a permitted use. Mr. Penley stated he felt like the solar farms are coming at a faster pace than substations. Mr. McKenzie stated they had an inquiry from a company interested in the zoning of three parcels for possible solar facilities, so it

is coming. How quick its comes has yet to be determined, Mr. McKenzie concluded. Mr. Penley asked if anyone heard of the solar power generators, what they are doing with them is amazing. Mr. Cralle stated that right now we have public and private utility providers (of water and sewer), and we could still move forward on the substation. Ms. Wilkins asked a clarifying question, are we trying to do public hearing for both solar farms and substations at the same time, is that your goal? Mr. McKenzie stated that his feeling was that solar farms is a lot more complicated and was hoping we could work on the substations first, but he was staff and he will do whatever the Planning Commission wants to do. Mr. Obrien stated that trying to do it at the same time will be like mixing apples with oranges. Mr. McKenzie added that the uses aren't related, but they are somewhat related, and he didn't know if you needed a substation in order to have a solar farm. Ms. Wilkins stated that it will take some time to determine the threshold between small, medium and large solar facilities, and we will likely have different discussions relating to the different size solar farms. Mr. McKenzie noted that the public probably has some opinions too. Mr. Obrien stated that having a solar panel on your house is not a big deal, but if you are going commercial with it, the bigger the better (return on investment for the company). Mr. Obrien stated that out West they have farms that are thousands of acres. Ms. Wilkins stated she saw them last week on the way to Chicago, and noted the glare on the vehicles on the interstate, there are a lot of issues with them. Mr. McKenzie stated that one of the things contained in the Patuxent Naval Air Station Joint Land Use Study was for localities in the flight test area require solar facilities to use non-reflective panels to reduce glare for pilots in the test range. Mr. McKenzie also mentioned that they have recently developed solar shingles, which would be mainly for new construction, he stated he did not know how wind resistant they are.

Ms. Wilkins brought the discussion back to electric substations, we haven't talked about B-1 zoning district, does anyone have a thought on whether in business areas should it be an allowed use, or should it be conditional? Ms. Wilkins stated we have talked about manufacturing, residential, agriculture and conservation, we are going to have to address if B-1 will be allowed or conditional. Mr. Parker stated that now we are starting to get closer to towns. Mr. Fisher stated that we already have them in some towns and if assigned to conditional use, the board would have the flexibility to say it is a good place for one or not. Ms. Wilkins stated that it seems as if they are all in agreement that A-1 and C-1 and possibly even M-1 should be permitted By-Right and that the others should be conditional rather than spin our wheels and delay this, if that is where we are headed, should we just do it, should we make a motion? Mr. Shirley stated that was what Stuart will present into September. Mr. McKenzie stated that the Planning Commission is not going to take action tonight, as we have not advertised properly to be able to have a public hearing. Mr. McKenzie stated that the commissioners need to mull over the discussion that occurred tonight, and the choices are which zoning districts should allow electric substations by right (if any) and which zoning districts should be conditional, which gives the county some control over the use. Mr. McKenzie stated he was not in a hurry, and until NNEC puts in a building application, the Planning Commission has time to work on this. Mr. McKenzie explained that if the NNEC came tomorrow for a building permit, since there is no current use in the zoning ordinance, it would have to come to the Planning Commission to decide how to integrate it into the zoning, just like we are doing here tonight. Mr. Penley pointed out that the BOS resolution wants the Planning Commission to define electric substations and solar farms, and then decide how it fits

into the zoning ordinance. Mr. Penley asked how we are going to define these uses. Mr. McKenzie stated that he has examined the neighboring counties zoning ordinance regarding electric substations, and none of them have defined the term, evidently it is a generic, easily understood term that everyone knows what an electric substation entails. Mr. Penley asked what the State Corporation Commission definition of a substation. Mr. McKenzie stated he would have to check that and get back to you. Mr. McKenzie stated that as he understands it, an electric substation steps down the power from long distance electric high voltage lines to distribute to homes where a final transformer on the telephone pole steps it down to 110V for use in a house. Mr. O'Brien stated that if you look at Essex County's language it states "facilities and structures necessary for delivering public utility service, including poles, wires, transformers", which pretty much could describe a substation. Mr. McKenzie noted that one Virginia county's zoning ordinance he looked at described electric transmission as well as electric distribution, electric transmission was defined as from the power plant to an electric substation, and then from the substation to end users would be the electric distribution part. Mr. McKenzie agreed that the commission would need to define both uses, and noted that the solar farm would need a threshold (either wattage or size of farm) that would be part of that definition.

Mr. McKenzie noted that he forgot one of the county zoning informational sheets regarding electric substations, that of Westmoreland County which has a table of uses, similar to what Northumberland County has and that shows that the majority of Westmoreland County needs a special exception permit to build electric substations, except for in R3, R4, and B2 where it is not allowed.

Mr. O'Brien clarified that the Planning Commission was planning on meeting in September to discuss electric substations and then have the public hearing on electric substations in October, which the members agreed. Mr. McKenzie agreed to get the Planning Commission Members information on how Richmond County's zoning ordinance handles electric substations, and definitions of electric substations from the State Corporation Commission before the September Planning Commission meeting. Chairman Fisher mentioned Mr. O'Brien's reference to having industry representatives present, it might be a good idea to invite them to the public hearing when we have it in October. Mr. Penley asked if the Commission was going to adopt zoning rules for both the electric substations and solar farms at the October meeting, and the Chairman noted that it might be confusing to the public, so we will work on the electric substations for a public hearing in October and proceed with the solar farm public hearing at a later date. Mr. Penley inquired if the commission would have the solar farm public hearing in November, and Mr. McKenzie noted that he was not very knowledgeable about solar power, and that there was no hurry to get the solar farm codified into the zoning ordinance until everyone has a sufficient understanding of the intricacies of what constitutes a solar power generating facility so that we can make informed decisions on how it should be regulated. Mr. Parker stated we need to hear about solar, and it is coming fast. Mr. McKenzie reiterated a point he made earlier, that if a solar farm applicant came to the county to apply for a building permit, that the County would send the request to the Planning Commission to establish a use for it, since the use does not exist in our current zoning ordinance. Mr. McKenzie noted that in the current zoning ordinance solar arrays for residential use are allowed, but commercial solar generating

facilities are not. Mr. Haynie asked if a homeowner wanted to put an acre of solar arrays on his property for his use, that would be acceptable, right Mr. Marston? Zoning Administrator Philip Marston stated he would interpret that to be a residential use and would be allowed under the current zoning rules. Mr. Allain noted that at that level the homeowner would not be able to connect to the grid, because 10 kilowatts is the maximum level that power companies will allow to be connected.

Mr. McKenzie switched the discussion, after agreement by Commission Members, to solar farm zoning. Mr. McKenzie noted that Richmond County had adopted a solar farm ordinance, which they adopted in January of last year (2016) and distributed copies of that portion of the Richmond County zoning ordinance to those present. Mr. Penley asked if they have any of these (solar farms). Mr. McKenzie replied, no, not that he was aware, Mr. McKenzie added the closest county that does have solar farms is Gloucester County. Mr. Obrien asked how big the solar facility was in Gloucester. Mr. McKenzie stated he did not know the size, but had been following the situation in Gloucester, noting that they were very lenient at first, but now are facing pushback from citizens and are looking to tighten their zoning regulations. Ms. Wilkins inquired as to what kind of issues where the citizens complaining about, Mr. McKenzie replied not in my backyard, I don't want to have to see it every day when I drive to and from work, etc. Ms. Wilkins summarized, mostly the appearance of the facility, and Mr. McKenzie responded in the affirmative. Staff indicated that Richmond County's definition of a solar farm may be appropriate, we will have to see, and compare to other county's definitions of solar farms. Questions arise like what is the size of a 100 kilowatt facility? Mr. Allain noted as a example, in the front lawn of the elementary school he had proposed a 300 kilowatt solar facility that would fit into that little area, but the school board has not gotten back to him regarding his proposal. Mr. McKenzie summarized what Mr. Allain stated that 100 kilowatts (which is the threshold for Richmond County zoning solar farm definition) is pretty small, Mr. Allain replied yes, and added that you get about 20 watts per square foot from the sun. Mr. Allain stated that he is an engineer with a pretty good grasp of solar technology and offered his expertise to the staff in the future. Ms. Wilkins asked about the proposed 300 kilowatt solar facility, would that run the school? Mr. Allain stated that it would supply most of the school's needs, but not all. Mr. McKenzie discussed the Richmond County solar farm zoning ordinance, noting that it had setbacks, safety, bonding and permitting, and even more conditions if you are going to put this in a zoning district that only allows special exceptions. Mr. McKenzie stated that the Richmond County solar farm zoning ordinance is something to consider, he could not say it was good or bad, and would have to do more research. Staff continued, if what Mr. Allain says is true, then it looks like Richmond County erred on the small side of solar farms. Mr. McKenzie noted that these facilities have to be a certain size to provide return on investment, and due to economies of scale, there is a break even point, and likely 100 kilowatts is not big enough for a return on investment. Mr. Allain added that for a commercial facility, the break even point is near 3 megawatts, but that doesn't mean that an entrepreneur won't try to construct a smaller sized solar farm. Chairman Fisher asked is solar power is a storage based system, or do you have to use the power right then. Mr. McKenzie stated that from what he understands, it has to be used or you have to have batteries to store the power. Mr. Allain stated that typically you use the power during the day when the sun is out, or send it to the electrical grid, and at night you draw power back from the grid, and you pay for the net power that you use. Mr. Parker stated that you hear people talking about the

infrastructure of the power grids, and how they are deteriorating, and that's why solar is gaining in popularity. Mr. McKenzie noted that one thing a lot of people don't know about electricity in the Northern Neck is that in Indian Fields on US360 near Warsaw is a substation looking facility that is actually a peak power generating station. Staff explained further that on the days with high electric usage in the Northern Neck, that there are turbine engines that run to generate electricity to meet the local demand. These engines run on kerosene and is a very expensive way to generate electricity, so the price of electricity goes up when these generation stations are operating. When these peak power station turbines are running, it affects local air quality as well. Chairman Fisher noted that if you ever have to run a generator to produce electricity for 24 hours or 48 hours straight, then you realize what a bargain Dominion or Northern Neck Electric Cooperative power is, and you will be wishing you to be back on the grid real soon. Mr. McKenzie elaborated that for this reason, the Northern Neck Electric Cooperative offers the beat the peak service that you can sign up for that will reduce the power you have for your hot water heater and heating and cooling system that reduces the demand during hours when there is peak demand. What the Cooperative is trying to do is reduce the time that these low efficiency and high price power generators are operating, thus keeping electric costs low for its customers. Solar power would also help reduce the peak power demand especially for cooling in the Summer. Mr. McKenzie noted we are moving from a centralized power structure to a more decentralized power grid, and most times a decentralized option is more resilient and robust. Mr. McKenzie noted that the solar panel cost is going down and will likely be more popular than wind as a sustainable power source. Mr. Obrien stated that the real problem up to now has been storage, and that Elon Musk is building a huge battery plant to store electricity. Mr. McKenzie quipped "back to Edison days". Mr. Obrien stated what is interesting about it is that peak power is the first thing in the morning, and when everyone comes home from work and turns on the appliances at home. The time between these two peaks, we have all this extra generation capacity that you can't really use. Mr. Obrien continued that his theory (Elon Musk's) is that you build these storage facilities, fill them up during non-peak hours, and put it back in the system during peak hours and the electric utilities will pay him so that they don't have to build or run peak power generating facilities. Mr. McKenzie brought the discussion back to the Richmond County Solar Farm zoning ordinance and noted that it had noise as a condition, and staff did not think that noise would ever be an issue at a solar farm, other than initial construction. Mr. Allain stated there might be some inverter hum. Mr. Obrien commented that 60 decibels is not very loud (which is the value not to exceed in the Richmond County solar farm zoning ordinance). Ms. Wilkins stated that wind turbines are much louder, and even though she lived across the street from one, she said it was not that bad. Chairman Fisher noted that a solar farm would not kill any birds. Chairman Fisher asked Mr. Allain about how much current the wind turbine in Heathsville puts out. Mr. Allain clarified, the one at the school, Mr. Fisher said yes, Mr. Allain said about 1 kilowatt, but that it doesn't put out that much because it only turns above 10 mph wind speeds that doesn't happen very often at that site. Mr. Penley noted that it was interesting that the Richmond County solar farm zoning ordinance has a clause in it that if the property is sold or lease changes, it returns back to the Planning Commission and Board of Supervisors if the use of the solar farm is to continue, and it sounds a little like a HOA. Mr. Penley commented on why a privately owned facility would have to come back to the Board, he stated he doesn't understand why they have this in the ordinance. Mr. Obrien stated that you see this a lot with when an entity wants

to retain some control over who the acquiring party is. Mr. O'Brien stated that his thought is that Richmond County was thinking of some kind of partnership that may form between Dominion and Northern Neck Electric Cooperative. Mr. McKenzie brought to the attention of the Planning Commission that the language in the Richmond County solar farm zoning ordinance states that the Application will go back to the Planning Commission and Board of Supervisors, not the facility itself. Mr. O'Brien stated that the new owner will still have to go through the approval process again, it may be a bit of overkill on their part. Ms. Wilkins stated that nobody knows how this new technology will turn out, so they (Richmond County) is trying to protect themselves and the county. Mr. Shirley stated that he does see the purpose of this clause when the property is sold, but cannot understand it when the property is leased to another leaseholder. Mr. Shirley gave the example of fictitious Joe Jones signing a lease for a solar farm on his property. Mr. Jones dies and his heirs gain ownership of the property, the property is transferred, why would the Planning Commission want to revisit the application in this instance, for something that has already been approved? Mr. McKenzie noted that the clause we are discussing is under the additional special exception criteria of the solar farm zoning ordinance, so these are the places where the county doesn't really want this use, so they want to be able to have as much control as they can of the use if it is disturbing other nearby land owners. Mr. McKenzie read the requirements for a special exception permit, and they amount to an environmental impact report, which are not cheap to produce. Referencing the Richmond County solar farm zoning ordinance document, Mr. McKenzie recommended Commission members look at general standards 1-7 and maybe 8 to see whether these are standards that Northumberland County wants to consider. Mr. Penley asked Chairman Fisher what do we do next, and stated he thought that Staff wants the Commission to treat this just like the electric substation, this is preliminary information for Commission Members to digest, formulate thoughts, and staff will do more research and become comfortable with the technology and terminology of solar power. Mr. McKenzie stated if he found information that he feels is pertinent to the discussion, he will forward along to Planning Commissioners by email. Mr. McKenzie noted that he was new to zoning ordinance changes, and that fellow staff member Mr. Marston was gracious enough to attend the meeting tonight to lend his expertise, and that Mr. McKenzie is learning as this process goes along. Chairman Fisher stated he learns something new every time he comes to one of these meetings.

Mr. McKenzie stated that Chairman Fisher asked that staff bring a couple of Northumberland County ordinances to the upcoming Planning Commission meetings so that members can become more familiar with the existing ordinances that are already in place in the county, for future reference, if we are ready to transition from solar farms. Chairman Fisher asked Commission Members if there was any more discussion regarding solar farms, and confirmed with staff that if staff comes across any more information, staff will send it out to Commission Members via email before the next meeting, and staff acknowledged the request. Staff indicated he would do research on surrounding counties zoning ordinances with regard to solar power, including Gloucester County. Mr. O'Brien commented that you have Richmond County on one end and Gloucester County on the other end, and we try to end up somewhere in the middle. Staff indicated that if that is the will of the Planning Commission, yes. Mr. Cralle noted that there is a solar facility being built in Broadus Flats, so King William County would be a good county to look at for zoning language.

Chairman Fisher stated that what this is, in meetings when we do not have a Public Hearing, he had asked staff to bring ordinances for the Planning Commission members because he feels that Planning Commissioners need to be familiar with the county ordinances, he implored members to look the ordinances over, if they have questions ask, he theorized that if citizens inquire to commission members about various subjects regarding how the county regulates this or that, that hopefully with this information members will be able respond to the hypothetical question. Chairman Fisher noted that even he does not know all of the county ordinances. Chairman Fisher stated that you will get a printed copy of the ordinance, you can take it home and file it or dispose of as you see fit. These ordinances are here to look at, to discuss, not to take a whole lot of time on, but hopefully will make us a little more familiar with the county we live in, and what the regulations are. Chairman Fisher stated that he is going to ask that the ordinance get read aloud, if you have any questions or comments, good, bad or indifferent, let us know, if not he will move on to the next one. Mr. McKenzie stated the first ordinance was the county Noise Ordinance and read the ordinance:

“§ 99-1 Playing of a radio, phonograph, tape or musical instrument. The playing of any radio, phonograph, tape or any musical instrument in such a manner or with such volume or at such hour of the day or night as to annoy or disturb the quiet, comfort or repose of any person shall be unlawful.

§ 99-2 Violations and penalties.

Any person convicted of a violation of this chapter shall be guilty of a Class 3 misdemeanor. A violation of this chapter may be prepaid to the Clerk of the General District Court or Clerk of the Juvenile and Domestic Relations District Court. The fine shall be \$50 for the first violation of this chapter and \$100 for a second violation.”

Chairman Fisher stated to keep in mind that this is not a “noise” ordinance per se, it is not someone out there revving up their motorcycle engine, or beating and banging a hammer at 5 o’clock in the morning, this is not that noise. This is strictly music, I have heard some that I don’t call music, but the ordinance pertains strictly to music. Yes, we have an ordinance, but it is only music not all noise, per se. Chairman Fisher stated God bless whoever put this ordinance in effect, because if you go to Lancaster County they don’t have it, and you will be sitting in the parking lot and somebody comes by with music so loud you can’t concentrate, but we don’t have that problem in Northumberland County, because of this ordinance. Someone might call and complain about the neighbors having a party with a live band, violating the ordinance, and we try to go out there and ask them to turn it down some or stop at midnight, we try to work with people. Mr. Parker concluded that regarding the noise ordinance, it just depends on if my neighbor likes me or not. Chairman Fisher stated that that plays a big part in it. Mr. Obrien noted that the law is very subjective. Chairman Fisher added that what you may think is loud may not be loud to me, it is interpretation. Mr. Parker followed up that if my dog is outside barking, it has nothing to do with the noise ordinance. Mr. Obrien stated you would be fine as long as your dog is not signing. Mr. Parker stated that if the noise ordinance had a decibel level, then it would be more enforceable. Chairman Fisher asked the hypothetical question, how close do you get to the source, how high is the measuring device from the ground, and other specifics that need to be incorporated for it to be more of a noise ordinance. Chairman Fisher asked if he could give an example. Chairman Fisher (when he was a county deputy) stated he was sitting at the Wicomico Church Post Office, at 2:30 am when a car comes up from the intersection from Cross Hills Road, and he was

inside his car with the windows up writing up paperwork, with the heat on, and the car was running, and his car started vibrating. The car was still at the intersection, what more evidence would you need for that type of sound at two thirty in the morning, the car came by, he issued a citation, but the case got dismissed because the defendant's lawyer inquired as to what was the actual level of the noise. My interpretation was that it was shaking me in my car, but the case got dismissed. Mr. Parker stated that there are scientific studies that give you a decibel level that can determine that. Chairman Fisher reiterated that you have to place the measuring device at the proper distance and height for the measurement to be admissible in court. Mr. McKenzie noted that you would also have to have documentation that your instrument was calibrated periodically so that its reading would be accurate, and stated he has seen noise ordinances that say at the property line measure at six feet above ground level. Chairman Fisher noted that our noise ordinance is guidance and interpretation only.

Mr. McKenzie stated the next ordinance was the Beaches and Pier Ordinance, and noted that the BOS had recently passed a Boat Ramp Ordinance, and that was not in the Beaches and Pier Ordinance that we are discussing tonight. Mr. McKenzie then read the Beaches and Pier Ordinance:

“Article I: Vir-Mar Beach

[Adopted 8-11-1994; amended in its entirety 7-10-2014]

§ 38-1 Regulations for use of Vir-Mar Beach.

The following regulations for use of the public beach at the end of State Highway 643 on the Potomac River known as "Vir-Mar Beach" are hereby adopted:

- A. Beach and parking area will be open from 7:00 a.m. to sunset each day. Persons occupying any area while this facility is closed will be trespassing.
- B. No alcoholic beverages or drugs are allowed on the beach or parking area.
- C. No abusive language is allowed.
- D. No nudity is allowed.
- E. Persons using this area shall properly dispose of their trash. Only that trash generated from permitted activities at this site shall be deposited in the provided trash receptacle. There shall be no dumping of household, commercial, or other types of trash not associated with this facility.
- F. No littering. Persons using the beach area and parking area must be responsible for their own trash and take it with them when they leave.
- G. Toilet facilities are not available and persons must go elsewhere to use them.
- H. No loud music or excessive noise is allowed.

§ 38-2 Violations and penalties.

Any person who violates § 38-1A of this chapter shall, upon conviction, be punished as a Class 1 misdemeanor, and the remaining provisions, § 38-1B through H shall, upon conviction, be punished as a violation of this chapter at \$100 for the first violation and \$250 for the second offense.

Article II: Great Wicomico Fishing Pier

[Adopted 8-9-2001; amended in its entirety 7-10-2014]

§ 38-3 Regulations for use of Great Wicomico Fishing Pier.

The following regulations for use of the fishing pier located on the southern side of the Glebe Point Bridge on US Highway 200 are hereby adopted:

- A. The pier and grounds are opened to public from sunrise to sunset. Persons occupying any area while this facility is closed will be trespassing.
- B. Persons using this area must not trespass on adjoining properties.
- C. No alcohol, drugs, or profanity of any kind will be allowed.
- D. No loud music or noise.
- E. Persons using this area shall properly dispose of their trash. Only that trash generated from permitted activities at this site shall be deposited in the provided trash receptacle. There shall be no dumping of household, commercial, or other types of trash not associated with this facility.
- F. No swimming, sunbathing, or nudity will be allowed.
- G. No vessels to be moored to pier.
- H. No loitering.
- I. No person under the age of 12 unless accompanied by an adult.
- J. A Virginia saltwater fishing license is required and all applicable laws.

§ 38-4 Violation and penalties.

Any person who violates § 38-3A of this chapter shall, upon conviction, be punished as a Class 1 misdemeanor, and the remaining provisions, § 38-3B through J shall, upon conviction, be punished as a violation of this chapter at \$100 for the first violation and \$250 for the second offense.”

Mr. Penley noted that this ordinance was amended in 2014, did something come up? Chairman Fisher noted that he does not recall anything. Mr. Penley noted it had to be something that caused the amendment. Chairman Fisher stated he has been keeping a very close eye on it (Glebe Point Fishing Pier) since it was put in there. Chairman Fisher stated he can't remember a problem, but that we did have two drowning fatalities, from swimming and it clearly states no swimming. Mr. Penley asked if had been used a lot, and Chairman Fisher stated yes. The facility is small but it gets used, the Boy Scouts go there, people come down after work in the afternoon, the convalescent facility has people who are mobile come down to the pier to fish. The trespassing part of the regulations are regularly monitored, if the Vepco man goes down there during the day, we don't bother him, but if a bunch of kids go down there and are waxing cars and playing music, we run them off. We have had very few violations, the Game Commission works it, VMRC works it, the Sheriff's Department works it and the State Police works it, we have it on our activity reports, and it is right on a main road with easy access, unlike Vir-Mar beach that is way off the main road and hard to patrol, see violations and maintain it, the fishing pier is monitored constantly. Mr. Penley asked how long the pier was, Chairman Fisher responded 43 feet when first built, then we added the extension of 12 feet so it is 55 feet long now, with a dedicated crabbing platform that is closer to the water. Mr. Penley asked how deep the water was, and Chairman Fisher responded 17 feet at the end of the pier, with all of the bridge abutments along the one side of it. Chairman Fisher added we have toilet and trash facilities there, one of the only public toilets we have on the road in Northumberland County. Chairman Fisher summarized by saying the fishing pier has been a highly successful endeavor, part of it is because of these rules and regulations. We have boat ramps all over, but this is the only place we have for the public to go fishing. The public boat ramps are in a lot of rivers, but they don't have clean deep water to go fishing in, like at the Great Wicomico Fishing Pier. Chairman Fisher asked if there are any comments, any clarifications, anything we need to ask the Board about? Chairman

Fisher noted that in “D” it states no loud music or noise, so we got them on that. Mr. Obrien stated that “J” doesn’t make any sense. Chairman Fisher read the “J” condition, “A Virginia saltwater fishing license is required and all applicable laws.” Mr. Obrien stated the problem was with “all applicable laws”. Chairman Fisher noted that one time a year Virginia has Free Fishing Days, when a fishing license is not needed. Mr. Obrien reread “J” A Virginia saltwater fishing license is required *and* all applicable laws. Chairman Fisher stated the applicable laws are the species, minimum size limits, size of crabs. Mr. Obrien though a better way to phrase would be “and all other applicable laws”. Furthering his point, Mr. Obrien stated all applicable laws, does that include the tax code? Chairman Fisher stated the inference is fisheries laws. Mr. McKenzie explained that the county received some funding from the Virginia Saltwater Recreational Fishing Development Fund (VSRFDF), they are funded through saltwater fishing license purchases. Mr. McKenzie further explained that some fishing piers have a saltwater fishing license for the pier itself, like a boat license, if anyone is on the pier fishing they are covered by the pier license. The VSRFDF encouraged us not to license the pier so that more people would buy saltwater fishing licenses which translated to more funds into the future for the Fund. Mr. Obrien stated he wanted to make the point about all applicable laws, Chairman Fisher noted that he could see Mr. Obrien’s point, but the average person that comes down won’t pay much attention to it. Chairman Fisher added that even though it says fishing pier, it is also a crabbing pier, with a lowered section just for crabbing. Mr. Obrien stated you bring your crab cage down there, and Chairman Fisher said chicken neckers, catch a crab put him in a basket and take him home. Chairman Fisher stated there are very few problems, and he noted that he does not know of any documented court cases that resulted from the Great Wicomico Fishing Pier. Mr. Williams mentioned the sunset closing time and noted he like to fish at night, and he know there are neighbors close by. Mr. Fisher stated that at one time they had talked about lighting the pier, to allow night fishing. Chairman Fisher noted that the site is patrolled night and day, probably more at night than day, and there are some people that come down to watch the submarine races and such, but we run them off. Chairman Fisher asked if there were any more questions regarding this ordinance, hearing none, he explained he wanted the members to know these ordinances exist and how they are interpreted. Chairman Fisher asked if he had anything more for us, and Mr. McKenzie stated that was all he had for tonight. Mr. Penley asked if we are having a meeting in September and staff replied in the affirmative. Chairman Fisher noted that members will be here on a regular basis from now on.

RE: PUBLIC COMMENTS

Mr. Lee Allain commented on the Electric Substation zoning addition, that since these facilities are so few not and probable not many more built into the future, it would not be a whole lot of work for the Board to go to a conditional permit in all zoning districts. Because of the fact Northumberland County is more an integrated culture of agriculture and homes, making the use of conditional permits might not be a bad idea. Chairman Fisher thanked Mr. Allain for that comment and stated we will put that in the minutes of the meeting.

RE: PUBLIC HEARING

There were no public hearings at this meeting.

RE: ADJOURNMENT

With a motion from Patrick O'Brien, seconded by Garfield Parker, and approved by all, the meeting was adjourned at 8:26 pm.