1 **Camden County Board of Commissioners** 2 3 **BOC - Special Meeting** 4 March 20, 2017, 7:00 PM 5 Historic Courtroom, Courthouse Complex 6 **Camden**, North Carolina 7 8 **MINUTES** 9 A special meeting of the Camden County Board of Commissioners was held on March 20, 2017 in the Historic Courtroom, Camden, North Carolina. 10 11 WELCOME & CALL TO ORDER 12 13 Board Members Present: Attendee Name Title Status Arrived Garry Meiggs Vice Chairman 6:50 PM Present **Clayton Riggs** Chairman Present 6:50 PM Tom White Commissioner Present 6:50 PM **Randy Krainiak** Commissioner Present 6:50 PM Ross Munro Commissioner Present 6:50 PM 14 15 **Staff Members Present:** Attendee Name Title Status Arrived Michael Brillhart **County Manager** Present 6:50 PM John Morrison **County Attorney** Present 6:50 PM Assistant Clerk to the Board Amy Barnett Present 6:50 PM 16 Also present were the following: 17 Name Address Title Purpose Representing

INALLIE	Auuress	Representing	The	Turpose
Dan Porter	117 NC 343 N,	Camden County	Director	Present Info: Item
	Camden, NC 27921	Planning Dept		3.A.
Dave Parks	117 NC 343 N,	Camden County	Zoning	Present Info: Item
	Camden, NC 27921	Planning Dept	Officer	3.A.
Herbert Mullen	101 East Elizabeth St		Attorney At	Speak in Opposition
	Elizabeth City NC 27909		Law	to Item 3.A.
Mark Pearson	3104 Bandol Lane	Solar Access USA		Speak in Opposition
	Oakton, VA 22124			to Item 3.A.
Louis Matheus	Boco Ratan, Florida	TW Solar, based		Speak in Opposition
		out of Barcelona		to Item 3.A.
		Spain		
Linda Nwadike	129 Raceway Drive	Sun Energy 1		Speak in Opposition
	Morrisville, NC			to Item 3.A.

18

CAMDEN COUNTY BOARD OF COMMISSIONERS

BOC Special Meeting – March 20, 2017

19 INVOCATION & PLEDGE OF ALLEGIANCE

20 Commissioner Clayton Riggs led those present in the Invocation & Pledge of Allegiance.

21

22 PUBLIC COMMENTS

There were no public comments regarding issues other than those on the agenda.

25 CONSIDERATION OF AGENDA

- 26
- 27 *Motion to Approve Agenda as Presented.*

28	RESULT:	PASSED [UNANIMOUS]
29	MOVER:	Garry Meiggs, Vice Chairman
30	AYES:	Meiggs, Riggs, White, Krainiak, Munro

31

32 **PUBLIC HEARINGS**

33

34 Item A: Ordinance 2017-03-01 - Ordinance to Consider Placement of a Moratorium on Solar 35 Farms

- 36
- 37 Motion to Go Into Public Hearing for Ordinance 2017-03-01 Ordinance to Consider
- 38 Placement of a Moratorium on Solar Farms

)	RESULT:	PASSED [UNANIMOUS]
)	MOVER: AYES:	Tom White, Commissioner Meiggs, Riggs, White, Krainiak, Munro
	For text of Ord	inance 2017-03-01 & Letter from County Attorney, See Attachments A & B
	located at the e	nd of these minutes
	Discussion	
		cribed this ordinance. This ordinance places a moratorium on the acceptance, consideration of applications for solar arrays otherwise known as solar farms
	1 0,	neral Statute Section 153A-340(H). This would put a pause on the issuance or
	1	pplications for solar farms in the county for a period of 60 days. This will also
	give staff an op	portunity to look at related ordinances to determine if those ordinances need
	revision.	
		ey John Morrison addressed the board regarding the suggested procedure for this
	•	ggested asking a series of questions of staff regarding the facts of this matter, then ic present have their say in the matter. He reminded the board of the procedures
	• 1	atoriums, and also that this hearing is not a quasi-judicial hearing and that
	•	not be sworn in to speak as there are no rules of evidence or testimony for this
	hearing.	

- 62 At this time, County Attorney John Morrison asked a series of questions to which Mr. Porter
- 63 gave responses.

64 65	John Morrison: Mr. Porter would you state your current position.
66 67	<i>Dan Porter:</i> Director of Planning and Community Development for Camden County NC.
68	John Morrison: How long have you held that position?
69	Dan Porter: Since 2004
70	John Morrison: What are the duties of that position?
71 72 73 74	<i>Dan Porter:</i> Oversees the development of property in the county as well as looking into the future plans we might undertake to follow the policies that the commission sets. Day to day activities include building inspections, Zoning, applications, special use permits, and the like.
75 76 77	<i>John Morrison:</i> Are you familiar with the current status of the Camden County Unified Development Ordinance as it relates to the construction and operation of solar farms within Camden County?
78	Dan Porter: Yes
79 80	John Morrison: What is the current status of the ordinance? When was the ordinance last amended and when was it written approximately?
81 82 83 84 85 86 87	<i>Dan Porter:</i> Not sure of the exact date it was amended, want to say 4 or 5 years ago. At that time, Camden did not have any regulations with regard to solar farms. As these types of activities were occurring in neighboring counties and this part of the state, so staff looked into some rudimentary types of regulations related to solar farms at that time. There was not a model template available from the School of Government, so we adopted a set of regulations at that time that basically allow solar farms to be built in any zone in the county.
88 89	<i>John Morrison:</i> Currently a solar farm could be constructed in any location in the county that met certain specifications. Is that correct?
90	Dan Porter: That's correct.
91 92	<i>John Morrison:</i> And it's subject to a special use permit, meaning that approval would only be given by the Board of Commissioners.
93	Dan Porter: That's correct.
94 95	<i>John Morrison:</i> In terms of geography, theoretically, one could be built across from the courthouse, beside a high school, or a church, or what have you.
96	Dan Porter: If it met the 5 or 6 standards that are in place.
97	John Morrison: How many solar farms are currently in Camden County?
98 99	<i>Dan Porter:</i> None operating, but there is one that has been approved and I believe is under construction in the southern part of the county.
100	

101	John Morrison: How many acres does that consume?
102	Dan Porter: About 50 acres and is about 5 mega-watts.
103	John Morrison: So there is one approved that would utilize 50 acres is that correct?
104	Dan Porter: Correct.
105	John Morrison: Are there any other applications?
106	Dan Porter: Not complete applications in our office at this time.
107 108	<i>John Morrison:</i> Have there been any discussions with developers? Has there been any serious interest in further solar farms brought to your office?
109 110 111 112 113	<i>Dan Porter:</i> We're aware of two projects by one company that are pending submittal of their application, and another that we've had some discussions on and we've given them information regarding the requirements for application. We know generally where these want to locate. Those three are the ones we know about, and they represent about 300 acres.
114 115	John Morrison: So that's 300 additional acres over the 50 that has already been permitted?
116	Dan Porter: Correct.
117 118	<i>John Morrison:</i> Would you describe the corporate status of Camden County. There are no incorporated communities correct?
119	Dan Porter: Correct. Camden County operates under a Unified Government.
120 121	<i>John Morrison:</i> Is it a fair statement that the county is almost entirely rural and land use is devoted almost exclusively to agricultural and residential occupancy?
122	Dan Porter: Yes.
123	John Morrison: Is it also true that the land in Camden County is uniformly flat?
124	Dan Porter: Very flat.
125 126	<i>John Morrison:</i> Is it also true that in Camden County because of agricultural use many acres are already cleared?
127	Dan Porter: Yes.
128 129	<i>John Morrison:</i> I assume you're not an expert in solar farms, but would clear flat land appear to be attractive to solar farm developers?
130	Dan Porter: It would seem to be.
131 132	<i>John Morrison:</i> Our neighbor to the north, Currituck, has recently banned any further solar farm construction, is that your understanding?
133 134	<i>Dan Porter:</i> Yes. In fact I spoke with the Currituck Planning Director this morning to confirm that.
135	

136 137 138	<i>John Morrison:</i> Is it also true that very recently we've learned that Pasquotank County is also having some concerns and is going to be looking at some kind of prohibitions on further solar farm development in that county?
139	Dan Porter: I read an article on that this morning, and it would seem to be to that effect.
140 141 142	<i>John Morrison:</i> Are you familiar with the solar farm activity in the adjacent counties of Pasquotank, Gates, Perquimans, and Chowan in addition to Currituck which we just discussed?
143 144	<i>Dan Porter:</i> I don't know all the specifics, but I am aware of the one in Pasquotank and I've driven through Gates County and noticed 2 or 3 on the way to Suffolk, VA.
145 146	<i>John Morrison:</i> Is it a fair statement that solar farm construction appears to be increasing in the counties I mentioned?
147	Dan Porter: Yes.
148 149 150	<i>John Morrison:</i> At my request, you researched a report from the NC Department of Environmental Quality, formerly known as the Department of Environment and Natural Resources (DENR), under date of February 10th, 2016. Is that correct?
151	Dan Porter: Yes.
152	John Morrison: And did you make copies for the commissioners?
153	Dan Porter: Yes.
154	John Morrison: Please distribute those to the commissioners.
155	Dan Porter: (passed documentation out to the commissioners)
156 157	John Morrison: NC Department of Environmental Quality deals with what it's title implies, environmental quality throughout the state, is that correct?
158	Dan Porter: Yes, it governs any number of different activities ongoing.
159 160	John Morrison: Is it also true that they have on their staff many qualified experts in research and development and environmental development?
161	Dan Porter: I would assume they do as they write a lot of regulations.
162 163	<i>John Morrison:</i> Have you had the opportunity to review this document at my request [referring to that which was passed out to the commissioners]?
164	Dan Porter: Yes I have.
165	John Morrison: Would you please summarize it for us.
166 167	<i>Dan Porter:</i> The document is a printout of a PowerPoint presentation. The first thing it looks at is the growth of solar energy in North Carolina.
168 169 170 171 172	A member of the audience present at the meeting asked for a copy of the report, having no further copies, County Attorney John Morrison asked the Board for a 3 minute recess so that copies of the report could be made so the audience could follow along.

173 174 175	After the recess, John Morrison continued with his questions of Mr. Porter, specific to the summary of the aforementioned document.
176 177 178	<i>John Morrison:</i> Before the recess we were discussing a report dated 2-10-16 from the Department of Environmental Quality. Are you aware of any report more recent than this?
179	Dan Porter: No.
180 181	<i>John Morrison:</i> Please summarize for us things that stood out to you in your capacity as Planner for Camden County.
182 183 184 185 186 187 188 189 190 191 192	<i>Dan Porter:</i> On the first page, the report speaks of the growth up to 2015, and that North Carolina ranked 4th in the country in terms of Solar Power generation. Also the rate of growth in NC was the fastest in the nation. NC is 4th in the nation in terms of installed capacity at 1300 mega-watts with about 1600 mega-watts planned. Page 2 shows that NC is home to the largest solar facility east of the Mississippi, which is a Sun Energy One 80 mega-watt project on 1400 acres in Edgecombe County. Page 3 shows a cross section of what a solar panel looks like, with a frame, glass component, an encapsulating component, and then the solar cells, another encapsulating component layer beneath that, then what's called a back sheet, then a junction box. Basically it's a cut-a-way of what a solar panel is. They don't go into any further description of what those components are made of
193 194 195 196	<i>Dan Porter:</i> Page 4 looks at the end of life decommissioning. Typically the life span of a solar array is about 25 years. The report makes mention that there are about 250 million pounds of solar panel materials in NC today. The report also makes mention of toxic components contained in the makeup of solar panels.
197	John Morrison: Does the report specify what those toxic components are?
198	Dan Porter: No. And it doesn't give a source.
199	John Morrison: Does the report specify what kind of care to take if any?
200	Dan Porter: No.
201	John Morrison: Ok, continue.
202	Dan Porter: The report mentions that there is a limited recycling capacity.
203 204 205 206 207 208 209	Chairman Clayton Riggs interrupted so that Commissioner Meiggs could comment on the toxicity. Commissioner Meiggs asked for clarification that this report was from 2 years ago. Mr. Porter confirmed this. Commissioner Meiggs also stated that NC is 3rd in the nation in solar production behind California and Arizona. As far as the panels, there has been a lot of change in the construction of the panels as well as the amount of recyclable components.

County Attorney John Morrison asked Commissioner Meiggs, for the record, what his source of
 information was for the information he stated. Commissioner Meiggs stated his source was the
 NC Association of Electrical Cooperatives.

213 214

John Morrison: Mr. Porter, please continue.

- 215 Dan Porter: The report states that there is not much recycling value in the components. The report also states that one of the key elements of decommissioning is the re-216 217 vegetation of the land and also the stabilization of the soils. Page 5 of the report 218 outlines environmental and health impacts. One of the impacts is the 219 transformation of the land use. Solar farms and solar panels take up a good deal 220 of land, typically being located on farm land which reduces the amount of crop 221 land in production. Also because such areas are fenced, it has an effect on 222 wildlife habitat. The report mentions a few health concerns for humans with 223 regard to the toxicity, pollutants, and emissions. The report states that solar is not 224 completely carbon free, that some carbon based energy goes into the construction. 225 Page 6 of the report goes into the kinds of requirements that California has with 226 regard to solar farms. California requires an environmental analysis, soil 227 management and restoration plans, and a bond for decommissioning. This page of the report also mentions the requirements in place in Europe. Europe regulates 228 229 the collection, transport, and treatment of any recycling of any kind of 230 photovoltaic components and materials. The US Bureau of Land Management 231 requires a bond if any of these facilities are located on Federal lands, and they 232 also require proper disposal at decommissioning and bonds for the reclamation of 233 the land
- *John Morrison:* These are procedures that are followed in other states and countries.
- 235 Dan Porter: Correct
- 236 John Morrison: In fairness, you've not formed any opinion yet. Is that correct?
- 237 *Dan Porter:* That is correct.
- *John Morrison:* Nor have you formed an opinion as to how accurate this report is. Is
 that correct?
- 240 *Dan Porter:* That is correct.
- *John Morrison:* If the Commissioners do see fit to grant a moratorium, would you receive other information with an open mind?
- 243 Dan Porter: Yes.
- *John Morrison:* You've mentioned various specifications for decommissioning and toxic
 waste, if any there is, etc. Is the current ordinance that specific?
- Dan Porter: The current ordinance does require a decommissioning plan, and it does
 require a bond, it is not that specific except that the land must be restored to its
 original condition.

249

250	John Morrison: How is the bond specified as the ordinance is currently drawn?
251	Dan Porter: The cost of decommissioning is developed by the applicant through their
252	engineering firm. Camden's ordinance allows the amount of the bond to be
253	decreased by the salvage value of the installed equipment. We also require that
254	the salvage value be certified by someone other than the applicant themselves.
255	Our experience is that most applicants feel the salvage value is higher than the
256	cost of decommissioning.
257	John Morrison: Are you satisfied with that or does that cause you some concern?
258	Dan Porter: I'm not satisfied that is the way we should be treating it. I don't really know
259	whether it's a higher value or not. The way the ordinance is written, it gives the
260	County very little enforcement leverage over the decommissioning.
261	John Morrison: Are you aware of Camden County residents having raised concerns
262	about the further development of solar farms in Camden County?
263	Dan Porter: I am. There have been several people who have come to the Planning
264	Office to ask questions. One applicant held some meetings that were required by
265	the Utilities Commission with regard to a couple of projects that are being
266	considered or may be considered. Dave Parks, Zoning Officer and Floodplain
267	Manager, attended those meetings and can speak about those.
268	
269	Commissioner Randy Krainiak asked Mr. Porter how many acres were in Camden County. Mr.
270	Porter stated he did not know right off hand, but that there are about 250 square miles in the
271	County. Commissioner Krainiak asked how many of those square miles were farmland. Mr.
272	Porter stated that he did not know that number. Commissioner Krainiak stated that the county
273	does not tell a farmer what they can plant, and expressed an opinion that the county should not
274 275	be telling a farmer he can't lease out his land for a solar farm. Commissioner Krainiak also
275 276	questioned the validity of the statement made by the report that there is not much recyclable value in solar panels. Mr. Porter stated he did not know the source from which that statement
270	was derived for the report.
277	was derived for the report.
278	Commissioner Krainiak asked Mr. Porter to find out how much of the acreage of the county is in
280	farmland. Mr. Porter replied that he can do that. Mr. Porter added that land in the county is
281	zoned in order to control the use of land as far as what can go on a piece of land and what it can
282	be used for, but that doesn't mean the county will tell a farmer what to plant.
202	

283

284 Commissioner Clayton Riggs commented that "those types of analysis are what happens during
285 the 60-days that we have a moratorium on. That 60-day moratorium gives you a chance to
286 research some of that information that you are trying to compare with".

287

288 County Attorney John Morrison addressed the Board: "Since this is an informal hearing, and I'm 289 sure we have some folks who will have some very meritorious points to speak to you about as to 290 why there should not be a moratorium, and I will commend your attention to them. I think it is 291 important to emphasize the points raised by Commissioner Krainiak. I am presenting facts, that 292 if you wanted to impose a moratorium, would support it. As we have discussed previously, 293 moratoriums are not favored in the law. They are legal, but they are very carefully defined, and 294 you have to cross all your t's and dot all your i's. One of the reasons the legislature saw fit to do 295 that is because of the protection of private property rights. About 95% of your job, it seems to 296 me, is this balancing act between the health, safety, and welfare of the county on one hand and 297 your constitutional obligation to protect private property rights on the other. And finding that 298 sweet spot is sometimes difficult. I would also like to point out to the board, I have no opinion as 299 to whether you should impose a moratorium, and if I did have such an opinion it would be irresponsible of me to suggest which way you should go and my opinion would be irrelevant. 300

- 301 only to make sure you comply with the law."
- 302

308

At this time, Dave Parks came to the podium and presented the following: "Several years ago the Public Utilities Commission held public hearings. Once they receive letter from adjacent property owner of a proposed site they are required to conduct a public hearing. They take all the neighbors inputs to these applications. Some of the concerns include the following, and these are just the highlights:

- Will the proposed use have an effect on wildlife
- Some of the sites are considered historical, what impact would there be on any burial grounds or artifacts and so on
- Some say it is an eyesore, that it takes away from the rural nature of the area
- Some say solar farms will lower property values
- Some residents want to keep the county as rural as possible
- What are the benefits to the county as far as taxes and employment
- Are the residents getting a reduction in electric rates
- Do they plan to utilize county residents for employment
- Noise levels during construction
- Hours of operation
- Reflection from the panels and its effect on birds
- Stormwater runoff
- Will it be built to withstand hurricane force winds
- Environmental concerns with regard to storage and use of chemicals
- Emergency access to the site after completion of construction in case of emergency, fire,
 or natural disaster
- Will Camden County Volunteer Fire Department be able to handle a fire emergency at sites such as this
- Impact on farming and the amount of land in the county that will be taken out of farming
- Buffering, landscaping, etc.
- 329

CAMDEN COUNTY BOARD OF COMMISSIONERS

BOC Special Meeting – March 20, 2017

330	 Notification to residents on the proposed to use
331	Decommissioning plan
332	Maintenance of the facility
333	• Use not compatible with residential zoning
334	• Electromagnetic interference on people and homes and what are the health effects on the
335	human body if living adjacent or near a solar farm
336 337	• The utilization of land after decommissioning, can it be farmed again These are several of the concerns that the neighbors and adjacent property owners had at that
338	meeting."
339	County Attorney John Morrison asked Mr. Parks the following questions:
340 341	John Morrison: When did the Public Utilities Commission hold that meeting.
342 343	<i>Dave Parks:</i> That meeting was held about three or four years ago, Commissioner Meiggs was at that meeting.
344	John Morrison: Was that meeting advertised?
345	Dave Parks: It was advertised by the Public Utilities Commission.
346 347 348	<i>John Morrison:</i> The concerns expressed there, you have no opinion as to whether they are valid or not valid, but you do have an opinion that these are the types of concerns the citizens of the county have raised, is that correct?
349	Dave Parks: Yes sir.
350	John Morrison: Approximately how many citizens participated in this meeting?
351	Dave Parks: There were around 20 at the meeting.
352	John Morrison: Thank you.
353	
354	County Attorney John Morrison asked the board if there were any questions for Mr. Parks.
355 356	Hearing none, he requested Dan Porter to return to the podium.
357	County Attorney John Morrison continued his questioning of Mr. Porter.
358	County Attorney John Morrison continued his questioning of Wr. 1 orter.
359	John Morrison: Mr. Porter in your professional capacity in light of what we've talked
360	about thus far do you have a professional opinion as to whether a moratorium
361	should be granted or not for a brief period of time?
362	Dan Porter: I believe there should be. I think there are enough questions and concerns as
363	Dave Parks mentioned a minute ago, some of them are valid points. I think the
364	commissioners have questions with regard to the percentage of farms versus solar
365	panels. I think there are a lot of questions that we don't address in our ordinances
366	right now. What we have right now is very rudimentary.
367	John Morrison: With regards to things you would study if there was a moratorium, would
368	it be advisable to do a comprehensive zoning study to review relevant ordinances
369	from other locales and model ordinances regarding solar Farms?
370	

371	Dan Porter: Yes sir, that would be part of our study.
372	John Morrison: Why would you want to do that?
373 374 375 376	<i>Dan Porter:</i> I'm sure there are a lot of people that have more experience than we have, and we would like to see what the state of the regulatory nature across this part of the state as well as other parts of the state are. It's a growing land use activity that we are having more and more questions about.
377 378 379	<i>John Morrison:</i> Would you also want to study whether it would be beneficial or not to the citizens of Camden County to authorize solar farms in some parts of the county and prohibit them in others?
380 381 382	<i>Dan Porter:</i> Yes sir, I think that as the notes that Dave Parks just read from, the citizens have some concerns that are related to location not necessarily just the presence of them but more so their location relative to other land uses.
383 384 385	<i>John Morrison:</i> Do you have an opinion as to whether you could conduct this study that you have just outlined regardless of a moratorium? If the commissioners elected not to impose a moratorium could you still go forward with the study?
386 387 388 389 390 391	<i>Dan Porter:</i> We could. What would happen is as we gain more information we would want to make more changes, so the state of the regulation would be in flux for a long period of time, either that or we would approve projects under our current regulations even though we are continuing to find more information about them and come in at a later date and revise the ordinance, which would be kind of like closing the barn doors after the cows got out, more or less.
392 393 394 395 396	<i>John Morrison:</i> I asked if you had an opinion on this. If ultimately, at some time in the future, but not now, you conduct this study immediately and then come back with suggestions, do you have an opinion as to whether that would be fair or unfair to potential solar farm developers who made plans for investment based upon the current ordinance only to get here and find out they have been changed?
397	Dan Porter: Yes sir, that definitely would have an impact on their development plans.
398 399 400	<i>John Morrison:</i> So is it your recommendation that the citizens of the county would be best served by a moratorium while you do your studies, and then come back and make your recommendations?
401	Dan Porter: Yes sir.
402 403 404 405	<i>John Morrison:</i> Now, tell us what you would do and when you would do it and how much time it would take for a moratorium to allow you to accomplish your purposes.
100	

$\begin{array}{c} 406\\ 407\\ 408\\ 409\\ 410\\ 411\\ 412\\ 413\\ 414\\ 415\\ 416\\ 417\\ 418\\ 419\\ 420\\ 421\\ 422 \end{array}$	<i>Dan Porter:</i> We would look at the surrounding counties and what their regulations are. If they are making changes, what their regulations are moving towards. We would also look at the state organizations model template for solar farm regulations. We would look at those parts, as I said earlier solar farms are allowed in any zoning district in the county, which makes it pretty wide open. We would try to look at geographic areas that might be less impactful on the current residents and the development patterns in the area. Some of the questions that were brought up, I would like to get more information on and I'm not sure how long it would like to think we could do some other research as well, but the question of pollutants and toxic materials I think is something I would like to get a more definitive idea about what is being talked about. And we would certainly look at the decommissioning plan, we hear from applicants that these things will be in operation forever, but everything has its life and so would like to look at more information about how we can make sure that if they are not in operation that they would be decommissioned in a way that would restore the land to its original state.
423 424 425 426 427 428	<i>John Morrison:</i> Ok, let me see if I can sum up what you would do then if a moratorium was granted. You would undertake a comprehensive study to address all the concerns we talked about tonight. You would review model ordinances and existing ordinances of other locales. You would then make proposed amendments to the Unified Development Ordinance if you thought they were in the best interests of the people of the county.
429 430 431 432	<i>Dan Porter:</i> Yes sir, we would. If I could add to that, if there are other items that are specific that the Commissioners would like us to look into we certainly would do that, we want to go in the direction that the Commissioners would like the policies to go.
433 434 435	<i>John Morrison:</i> Then, if you did determine amendments to the current UDO were mandated, you would begin processing them through the various agencies of the county such as the Planning Board, conduct public hearings, and so on.
436 437 438 439 440 441 442 443 444 445 444 445 446 447 448 449	<i>Dan Porter:</i> Yes, typically we would make a set of conclusions and recommendations that we would take to the Planning Board for their consideration, and then once they held their meeting they would make a recommendation to the Board of Commissioners. Typically with ordinances, the first time you hear it you would set a public hearing date, the second time you hear it would be the actual holding of the public hearing on any revisions to the regulations. I would like to revise that a little bit tonight because as a 60-day moratorium we have until May 20th to get this information back to the Board of Commissioners and without extending it we would need to hold that public hearing sometime prior to May 20th. So we would not have time to bring it to the Board of Commissioners for setting a public hearing date and then hold the public hearing the following meeting. I would like for the Board to set a date for the public hearing tonight so that we will know what that public hearing date is.

450	John Morrison: You mentioned 60 days, is that enough time for you to do the work?
451 452 453 454 455	Dan Porter: That is the ideal amount of time, and is the shortest period of time that we can do it in. Simply because by the Board of Commissioners meeting once a month, we have to go to the Planning Board, we would have to have our information to the Planning Board in April in order to get a report to the Board of Commissioners for a public hearing sometime before May 20th.
456 457 458	<i>John Morrison:</i> Would you be prepared to make reports at every meeting of the Board of Commissioners between now and May 20th on the progress or lack thereof you have made?
459	Dan Porter: Yes sir, we could give a status report.
460 461 462 463	<i>John Morrison:</i> And you are prepared to have a to-do list that would set a certain amount of time for study, a certain amount of time for proposed amendments, a certain amount of time to get it to the Planning Board, and to come back to the Board of Commissioners?
464	Dan Porter: I would have that for the next time we met.
465 466	<i>John Morrison:</i> That concludes my questions for you, the Commissioners may have some questions for you.
467	At this time, the Commissioners posed the following questions of Mr. Porter:
468 469 470 471 472	<i>Commissioner Garry Meiggs:</i> Mine is not so much a question as just a comment. Concerns about this data have already been raised in multiple areas. Me personally, it would not be hard for me to make any decisions using this data as to make it by. Seems to me this is really driven by, when do these tax credits run out? 2018?
473 474 475	<i>Dan Porter:</i> I do not know, I know that there are tax credits for this type of renewable energy and I'm not sure, there are federal tax credits and I believe state tax credits as well.
476 477	<i>Commissioner Garry Meiggs:</i> I read where the tax credits will go to 26% sometime in 2019 or 2020, and then 22%. The state has already cut theirs out.
478	Commissioner Randy Krainiak: The state is already zero, right?
479 480	<i>Commissioner Clayton Riggs:</i> So North Carolina's credits are already zero and the federal plan cuts it several percentages every year.
481 482 483 484 485	<i>Commissioner Garry Meiggs:</i> I don't really think this counts as concerns so much as solar projects or renewable energy projects so much as it is maybe where they're placed and where they are allowed. Does that deserve maybe more looking at, probably so because I expect first thing that went into that UDO was just a plain 'carte blanche' deal.
486 487	Dan Porter: Yes sir.
- /	

488 Commissioner Garry Meiggs: We were not thinking about the location of these projects 489 here, not back then. 490 Commissioner Clayton Riggs: And we did not have any definitive information on what 491 setbacks or what type of barriers we should use for visibility. What are they going 492 to do to the residents that are 50 feet away from them or 100 feet away from 493 them? So, those setbacks and types of barriers will impact greatly on where they 494 can be located. Personally, I drove over to Gates County to look, I was not 495 pleased at some of the projects... how close to the road they are and on two of 496 them there was no buffer. I think some of that stems from the fact that they were 497 not regulated very well and that developers wanted to make a quick buck and get 498 them in the ground as fast as they could, and they knew that Gates County did not 499 have anything in their UDO to regulate it at the time. That almost happened to 500 Camden, because our UDO like you said a few minutes ago was kind of basic and 501 vague, we did not know what we were up against so we did not dwell very long 502 on any of the restrictions against it. 503 Commissioner Clayton Riggs: I do want to know, Mr. Porter, we do not intend on having to hire an outside group to study this, right? This is going to be a staff project isn't 504 505 it? 506 Dan Porter: Yes sir. We are not going to hire anyone to do it. We would not be able to 507 get them hired within 60 days. 508 Commissioner Clayton Riggs: The cost of hiring consultants can be exorbitant 509 sometimes. 510 Dan Porter: No, and that may limit how much detail we go into in terms of the makeup 511 of solar panels. We may have to rely on other reports rather than independent 512 research. 513 *Commissioner Clayton Riggs:* I would like to ask County Attorney Morrison a question: 514 The way I understand it, 60 days is the maximum we can go at one time... 515 John Morrison: No sir, you can go more been 60 days but I would caution you not to do 516 that because then you begin to raised eyebrows. If you were to find at the end of 517 60 days, after diligent efforts, Mr. Porter had not been able to complete the 518 project, you can extend a moratorium but you have to go back through the same 519 safeguards we are doing tonight and he would have to explain why he couldn't get 520 it done and what yet remains to be done and when he is going to get it done. And 521 then you could extend it, say in 30-day increments or something like that. My 522 recommendation is to try to keep the heat on everybody and let's get this done in 523 60 days. The law is stern for a reason. Commissioner Krainiak has already 524 addressed it in park - private property rights. The legislature thought, 'well we 525 can't damaged people but so much with 60 days'. Try to get it done in 60 days, 526 and if you can't then we will talk about it then. That would be my 527 recommendation, 60 days if you are so inclined. 528

529 530 531 532 533	<i>Dan Porter:</i> If I could add just one thing to that. If you were to extend it we would have to have another public hearing, and we would have to advertise it. You can implement a moratorium for 60 days by having one advertisement and one public hearing, in order to go longer than 60 days you have to advertise more frequently and there would have to be another public hearing to extend it.
534 535 536 537 538	<i>John Morrison:</i> That is an important point, I neglected to tell you that, thank you Mr. Porter. When Mr. Porter and I were researching this we were aware that the most you can do tonight if you are inclined is 60 days because we did not advertise this twice. If you are going to go more than 60 days it has to be advertised on two successive weeks.
539 540 541	<i>Commissioner Clayton Riggs:</i> I guess one of the questions that the people in the audience want to know is that one special use permit that we have already granted would not be affected by the moratorium.
542	John Morrison: It will not, they have vested property rights.
543 544	<i>Commissioner Clayton Riggs:</i> So, if you already have your permit in hand, you are not affected by the moratorium.
545	Dan Porter: That is correct.
546 547	Commissioner Randy Krainiak: And the other two, did you say there were two more coming up?
548 549 550 551	<i>Dan Porter:</i> No sir, we do not have their applications, we just know that they are out there. We have had a couple of conversations with a company regarding a couple of sites, and we have had inquiries from another relatively serious person and I have heard rumor of two or three others.
552 553 554	<i>Commissioner Randy Krainiak:</i> Since there is nobody breaking our doors down, is there any advantage to having a moratorium or are you just going to go ahead and do your due diligence come tomorrow morning and start investigating it?
555 556 557 558	<i>Dan Porter:</i> I would suspect that after this discussion, if somebody is out there contemplating they would bring an application in as soon as possible. And that is the reason for having a moratorium is that we have the time to look into the regulations and not have to process that application under our current rules.
559 560 561 562 563 564 565	<i>Commissioner Clayton Riggs:</i> I think one of the key points that I am interested in us knowing about, and I am sure that the developers have already studied this very hard but maybe they have not shared all of the information or maybe it has not been researched very well, the levels of heavy metals and the mercury content - this older environmental impact study mentions the fact that mercury is used in the manufacturing of the solar panels and then I am come to understand that be more modern solar panels eliminate that mercury.
566 567	Commissioner Garry Meiggs: And the more modern is a re-buildable panel.

568 569 570	<i>Commissioner Clayton Riggs:</i> So I think that maybe part of our moratorium may address the limitations of what type of materials will be used and the less toxic will be favored in each instance for permits going forward.
571	Dan Porter: I have no information on that, that is information I would have to find.
572 573 574 575 576 577 578	<i>Commissioner Clayton Riggs:</i> That would be one of your 'to-do' things as we move forward. I am not going to live long enough to be poisoned by a solar panel in Camden County but it is very possible that some of these younger folks or our future populations may have that problem cropping up around them. So we want to prevent rather than have to remediate afterwards, and if requiring particular types of building materials and particular locations aids in that then that would be part of the new UDO.
579 580 581 582 583	<i>Commissioner Garry Meiggs:</i> My suggestion on that, Mr. Chairman, would be to be very careful with that because the technology in this is changing so rapidly you are liable to name something that will knock your self right out of being able to use the best and brightest and most efficient that has come out. You have to be careful with that.
584 585 586	<i>Commissioner Randy Krainiak:</i> We just covered that 2 months ago when we approved the special use permit for the one that is under construction. They showed us that there are no hazardous materials.
587 588 589 590 591 592	At this time, Mr. Porter asked if the board had any further questions for him. Hearing none, the floor was opened to public comment. Public Hearing - Public Comments Section
593	Herbert Mullin, Attorney at Law, 101 East Elizabeth Street, Elizabeth City, NC, 27909
594 595 596 597 598 599 600 601 602 603 604 605 606 607 608	 Herbert Mullin: I have two particular people here who are experts in this field. But first, let me tell you of a lady of some years who called me last week and said "Herbert Taylor, I need you to help me". And I said I would be glad to and I said what's it about? She said "I have got a contract to place my 50 acres in a solar farm, and they are going to pay me some awfully good rent, and I really need that money. I'm older, I have limited income, and I really need it. Would you go to the Board of Commissioners and let them know of my need, let them know I am not trying to hurt anybody. This is my land, I did not buy it, I inherited it from my mama and my daddy. And I look to this money to cause me to have an opportunity for a reasonable lifestyle from here on to the rest of my life". She said "Please ask that Board of Commissioners not to put a moratorium, not to stop what I have been offered, not to have me run the chance of not having to have this money". She said "Please". And so I bring you that from the lady.
609	<i>Herbert Mullin:</i> I will let these experts speak, I am not an expert, I do not know much about solar farms but these men do.
610	

611	Commissioner Ross Munro: The lady that you told the touching story of, how old is she?
612	Herbert Mullin: About 78 or 79.
613 614	<i>Commissioner Ross Munro:</i> So, she has survived 79 years so far? Is a 60 day moratorium out of the limit for this person?
615	Herbert Mullin: I don't know how the moratorium will affect her.
616 617	<i>Commissioner Ross Munro:</i> But 60 days is not too much to ask an entire population of a county to wait to make sure we do the right thing.
618 619 620	<i>Herbert Mullin:</i> And, should Mr. Porter, it's interesting to me as I understand it the last time you all looked at this ordinance was in 2015, and this is just barely 2017. There has got to be something said for that.
621 622	<i>Commissioner Ross Munro:</i> Back to my original question, 60 days is not too long to ask somebody to wait so the county can figure it out, correct sir?
623	Herbert Mullin: No, and of course, it may cause her project not to go forward.
624 625 626	<i>Commissioner Ross Munro:</i> I think if there is so much money in a project to go forward, 60 days is not too long to wait for a company to put a pause on it. We can put a pause on it, and they can come back in 60 days.
627 628	<i>Herbert Mullin:</i> Oh, I understand definitely, the possibility exists that it may end her opportunity to lease her property to the solar developer.
629 630	<i>Commissioner Ross Munro:</i> We would not want to do something that might hurt other citizens of the county either, would we sir?
631 632 633 634 635 636 637 638 639 640 641 642 643 644	 Herbert Mullin: Well, I know you would not and I know these gentlemen here who represent major solar farm people have not and would not do such because if it did it would cause them repercussions throughout Eastern North Carolina. And frankly, in Camden County the number of acres, I think you said it was a 50-acre permit issued, and the number of farm acres is far in excess of that. In Currituck, I mean, all we are doing is following the big dogs. Currituck has numerous solar farms and others under contract and so they stopped it after they already have it going. Pasquotank, I doubt there will be as large a solar farm in all of Camden County as there are one or two in Pasquotank. So, we are limited, our lands are limited, but more than that, a solar farm cannot be in existence unless they have connection lines and a power company to sell their solar energy to. They cannot just put them up where they want to. They have to implement them through the utilities, and they can only put them where the utilities can accept the current.
645 646	higher priced solar power generated from a solar farm and doesn't that raise the cost of electricity for everybody in the county?
647	Herbert Mullen: Utilities Commission regulates that, I do not.
648	

649 650	<i>Commissioner Ross Munro:</i> But, that is how it works, correct sir? So actually, we are forced to buy solar power at a higher right so costing a little bit more out of our
651	pockets for everybody in the county to pay their utility bills, isn't that correct?
652 653	<i>Herbert Mullin:</i> I am told it is cheaper than nuclear energy, and nuclear energy is by and large what you are buying now because coal is bad because of coal ash, and the
654	government supports what makes it possible for any of us to afford it. So I don't
655 656	think that the solar panel is an opportunity to have some cheaper current then we have had before, it is far cheaper to have solar panels I am told then it is to have
657	nuclear power plants.
658	<i>Commissioner Ross Munro:</i> I think that the cost of the solar panel per megawatt-hour is
659	\$231 of tax subsidies that makes it affordable, isn't that correct?
660	Herbert Mullin: I am not sure, these gentlemen would know and can tell you.
661	
662 663	At this time, County Attorney John Morrison asked Attorney Mullin if he would like to direct the questioning of the two gentlemen he referred to. Attorney Mullin indicated that County Attorney
664	John Morrison should direct the questioning.
665	
666	<u>Mark Pearson, 3104 Bandol Lane, Oakton, Virginia, 22124</u>
667 668	John Morrison: Mr. Pearson, I am going to ask you a few questions just to move the ball
669	along, background, and then you will have all the time you reasonably need to tell
670	us some interesting facts I'm sure we don't know about solar energy.
671	John Morrison: What is your occupation sir?
672	Mark Pearson: I am a solar developer, solar Farms.
673	John Morrison: What company are you associated with?
674	Mark Pearson: Solar Access USA.
675	John Morrison: Is that your firm, your company rather?
676	Mark Pearson: That is mine and my partner's company.
677	John Morrison: And you currently have an application pending in Camden County?
678	Mark Pearson: We have an incomplete application.
679	John Morrison: So it has not been submitted yet, is that correct?
680	Mark Pearson: That is correct.
681	John Morrison: So if a moratorium was granted, you would be affected by it?
682	Mark Pearson: Yes we would.
683	John Morrison: What is your educational background sir?
684	Mark Pearson: I have a double major in geology and computer cartography from Rutgers
685	College.
686	

John Marrison: Computer cortegraphy?
John Morrison: Computer cartography?
Mark Pearson: That is computerized map making.
John Morrison: And how many solar farm developments have you been involved in?
<i>Mark Pearson:</i> I am currently working on 4, and my partners, who are working with us on the one we are contemplating here have done in excess of 25.
John Morrison: Your company right now has no active solar farm, is that correct?
<i>Mark Pearson:</i> That is correct. Well, yes, Solar Access USA has none. But these companies, these LLC's are actually put together for a particular project.
<i>John Morrison:</i> Ok, I understand that. Do you have any special training or education in solar farm construction, operation, decommissioning, and environmental impacts?
<i>Mark Pearson:</i> Nothing other than what I have learned on the job and my academic background lends itself to finding good sites for solar farms and that's basically what I'm here to talk about today.
John Morrison: Would it be a fair statement that flat cleared land is conducive to solar farm development?
Mark Pearson: Yes.
John Morrison: And Camden has a lot of that.
Mark Pearson: It does.
<i>John Morrison:</i> Please feel free sir now to make your presentation, and this is not a formal court proceeding so you can bring in hearsay, you can address your comments however you want them. And the Commissioners may have some questions.
<i>Mark Pearson:</i> What I would like to do is, the old adage "a picture tells a thousand words", I have a map basically it's of Camden County, Currituck County, and Pasquotank County. It has a picture of substations, and I think it would be very enlightening for everybody here, because you would all look at it and go "wow, I am glad I got this information". So here we are, I don't know if you can all see this, but basically it is a satellite picture of Camden County in the middle with Pasquotank and Perquimans to the West and Currituck County to the east. There is also a transmission line, which you probably all know where it is, it bisects the county. There are only a few places in the county where you can put a solar farm. 95% of the county you cannot put a solar farm on economically. The reason is you need what is called three phase power, and we have all seen it. If you go out to 158, that comes across from Elizabeth City, or actually right out here you will see a pole and then you will see a cross on the top with 3 wires - that is three phase. And not only do you need that three phase, but you need the higher level of that which is 34000 volts, they call it a 34kv line. Now they emanate from substations. So you have to put a solar farm where that line goes.

726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746	 Mark Pearson (continued): Now, for Camden County, first of all Camden does not have any substations which is why it does not have any solar farms. And because it does not have substations, it will never have many solar farms at all. You just cannot put them here without a substation. So, what you have today is to the right in Currituck County is to substations one is called Sligo and the other is called Shawboro. Now, there is no more capacity in those substations, meaning if you wanted to you could not build a solar farm and hook it up there. So, everything to the east is out. At the intersection of Route 34 and 158, there is a transmission line running through there and right on that corner there you see three phase that comes down from the Sligo substation down 34. That line and the line coming across from Elizabeth City are the only two places in the county, and wherever those three phase goes that you can even hook a solar farm up to. All the land, which looks like at least 50% feel and that is north of 158 you cannot put a solar farm on. There is no transmission line, there is no three phase power. Maybe there's a little that runs up 343, but it is of too low voltage to put one on. So, not only is there very few places to put it but the two substations in Currituck County are already full, so they really have nothing to worry about over there. The Pasquotank substation is full and there is just a little bit of room left in the Elizabeth City substation. The two farms that are being contemplated are going to take the remaining capacity, so after these two farms are done, that is it for Camden County.
747 748 749 750	<i>Commissioner Clayton Riggs:</i> I live 13 miles from that transmission line, and one mile from my house there is a solar farm going to be. I live in the bottom end of this county and that gentleman sitting right back there in that corner has a 50-acre solar farm and they have already put steel in the ground.
751	Mark Pearson: And that is on 3 phase power correct?
752	Commissioner Clayton Riggs: That is on 3 phase power in Shiloh.
753 754 755 756 757	<i>Mark Pearson:</i> That goes up to, it would have to probably, to the Shawboro or Sligo substation. If you got on that line and started following it, they don't connect to transmission lines. Transmission lines go to substations, three phase power goes to substations, but the two don't connect. And, since those are already full, you could not put a second one on that line today. It's over.
758	A member of the audience asked who is it that says when the substations are full.
759	Mark Pearson: Dominion Power Company can tell you that information.
760 761 762	Chairman Clayton Riggs reminded the audience that if they want to speak, they will have an opportunity to address the Board and ask questions, but to let those at the podium give their presentations.
763 764 765 766	<i>Commissioner Clayton Riggs:</i> Even though we are not on the transmission line, the three phase power goes back to the Shawboro substation and it is entered into the grid at that point.

768 769 770

767

Mark Pearson: Yes.

- Commissioner Clayton Riggs: So, the first statement you said that the only place we could put one is on that three phase transmission line, was a little bit misleading because we can put it in other places but it has to be on one of those legs up that 771 three phase power coming off.
- 772 Mark Pearson: Yes, I forgot to use the word, if you say three phase it is a distribution 773 line. Transmission line is 230,000 volts, that is the one running through here. The 774 only way to hook one of those up is to get 1000 acres, build your own sub station, 775 and then go directly to the transmission line. Now if you follow the line out of 776 Elizabeth City cross to Shawboro, there is no land that is there. Frank Williams 777 has 175 acres, I believe the Browns have couple hundred acres, but you need 1000 778 acres all together, like the picture that Mr. Porter showed of the Sun Energy 1 779 which was about 1,400 acres, that does not exist here. So you will never have to 780 worry about the big ones either. So really what is left, unless, the only way this can change is if they add more big transformers in these substations, if they do, 781 782 that but in order to do that it makes the project economically unfeasible. Everything is very competitive out here. If they don't go for one here, in other 783 784 words to interconnect, you have to have a price of about \$1,000,000 or less to do 785 it. If you build a substation you are up in the 5 to 10 million dollar range. So therefore, it is just not going to make sense. So the only way, basically what's left 786 787 is really just a couple of spots that come across from Elizabeth City and then start 788 going down towards Shiloh, but not really even that far, really just outside of 789 Camden and at that point there is a step down transformer and so forth. Camden 790 County has really nothing to worry about being inundated with solar farms. That's 791 really it in a nutshell. And so just another couple more stats, I believe Camden 792 County has 306 square miles, is roughly 195,000 and change acres, the land we 793 are talking about for these two small solar farms and a midsize one is about three 794 hundred acres that represents about .1% of the land in Camden County. And that 795 might be the only solar farms ever. You just can't take thousands of acres 796 anywhere you want build a solar farm, it just does not happen. The other thing I 797 would like to mention as far as what you have seen throughout North Carolina is a 798 bunch of these 50-acre solar farms, 5 megawatts, you see them all over the place. 799 That game is over, the reason that they proliferated so much is that North Carolina 800 passed a law that guaranteed they would buy the power for up to a 5 megawatt 801 farm for up to 20 years, this was called a power purchase agreement or PPA. That 802 is done. It is now down to one megawatt over 10 years which means 10 acres, it just doesn't make any sense, it's just not economically feasible, nobody's going to 803 804 do it. So, unless you have already started a project over the past year, what you are going to see is in a couple of more years, solar is pretty much over in North 805 Carolina. Now, you still have wind, and some other things that you can potentially 806 807 do, but I don't see in the economic models that we have to work with to price 808 these things where you can ever build one based on this. I have just a couple of 809 other comments, there's no recycling because nobody has ever decommissioned 810 one.
- 811

812	Commissioner Clayton Riggs: Is your project the 200 acre project?
813	Mark Pearson: Yes sir.
814 815 816	<i>Commissioner Clayton Riggs:</i> So what you have told me in the last seven minutes while you were talking is "let me build mine, and nobody else will come". Is that what I heard?
817	Mark Pearson: That is a good way to put it.
818 819	<i>Commissioner Ross Munro:</i> Also I have heard that it is not commercially viable to build them without the taxpayer subsidies.
820 821 822	<i>Mark Pearson:</i> Well, it is not commercially viable because there is no more room left in the substations. It's like trying to book a hotel room when there is no vacancy. You are just not going to get a room.
823 824 825 826 827	<i>Commissioner Clayton Riggs:</i> Ok, let's talk about how easy substations are. That little blue substation that is way up there on US HWY 17 that is on your map, that little blue substation, I don't know how long it took them to plan it, but it only took a couple of incentives and the fact that there was an opportunity to make money and for growth of the county for that thing to just pop up in the middle of South Mills.
828 829 830	<i>Mark Pearson:</i> And that is a switching station, it is not a substation with transformers. If you go there, there are none of those big boxes that basically take the high electricity down
831	Commissioner Garry Meiggs: Oh yes it is.
832 833	Commissioner Clayton Riggs: It is his substation (referring to Commissioner Garry Meiggs).
834 835 836	<i>Mark Pearson:</i> I just drove by it today and all I saw were the switches. I am not arguing. There may be, if they added one up there, but as of last year when we did this planning there was no more.
837 838 839 840 841 842 843 844 845 846 847 848	<i>Commissioner Clayton Riggs:</i> And part of what we are thinking about there is a lot of very commercial developable land up there that we have to consider in this whole plan that we are talking about. So, when we say 50 or 100 acre, whatever the wattage you have on them is, solar farms, technically speaking somebody could go up there and put one like a quarter of a mile from it and wire to it. If there's as much money in this business as some people portray, because you've got to be making money in order to pay a farmer a high-dollar amount per acre. Somebody out there is making money if the farmer is getting a couple of hundred dollars an acre to raise corn and then a solar developer comes in and gives him for example \$750 to stop raising corn so they can put a solar panel there, there are people making money at it because you don't pay the landowner that kind of money and not make money yourself.
849 850	Mark Pearson: We would not be in it to lose money.

851 852 853 854 855 856 857 858 859 860 861 862 863	<i>Commissioner Clayton Riggs:</i> Exactly what I am saying. So now, what we are trying to do with this 2 month moratorium is give us an opportunity to study this so that setbacks and local regulations can be put in place so that when I drive from my house to this Courthouse I don't drive by your solar farm glaring at my face. If there are some beautiful trees, shrubbery, or something and a nice little buffer around it so that it does not distract from the beauty that people come here for. There are two things that we have, quality of life and we have farmland. You guys want to use the farmland. So if you want to use the farmland, you are going to have to do it within a set of parameters that we are going to work on setting up, or then the other alternative Currituck County just said, we are going to prohibit them all together. That is what the guy told me on the phone today, Currituck County prohibited them. There are three choices, we could go like we are going, we could do a moratorium, or we can prohibit.
864 865 866 867 868 869 870 871 872 873 874	<i>Mark Pearson:</i> And I'm not arguing that and let's talk about Currituck County. Their transmission lines don't bisect in the short, they run north and south the long way of the land. So you can grab 1,000 acres in a bunch of different places there and build a substation and do that. You can't really do that here today, unless you want to all of a sudden kick everybody off their land and rezone it back to agriculture, which is not going to happen. It's all about the devil is in the details. Camden County itself, for example when you say, there's that huge chunk of Camden County that is just completely square, literally north of the courthouse, if you went right North I think it even has a little airstrip there because there are no transmission lines or anything even running anywhere near there that would never even be a candidate. Unless for some reason
875	Commissioner Clayton Riggs: You would have to fight with the Navy over that.
876 877 878 879 880 881 882 883 884 885 886 887 886 887 888 889 890 891 891 892 893 894 895	<i>Mark Pearson:</i> I'm just telling you the economics. What I am really trying to do is share with you the economics, and my job is to find good sites. There's only one good site or two and all of Camden County and I will never look again because I have already looked over it with a fine-tooth comb. It has to be on big three phase commercial power, and it has to have access to an open substation. There is only one open substation left and that is Elizabeth City, and they only have a little bit of capacity left. After these two, and I would recommend you jumping on it because if you don't someone else will take them and then you won't have any. I would guess that the County probably just wants a few but they don't want to be overrun with them. My point is that I want to alleviate any fears that somehow these things can get blanketed and they can not. Also there are some very good points brought up about toxicity and reflective and so forth, these higher efficiency panels really absorb the sunlight. They are really matte kind of colored, you are not going to see a reflection. You will see them if you look for them, but it's not going to be like a skyscraper that you can just see the reflection. The more light that is reflected back the less that is absorbed. And the way they build them today, there is almost no toxic or heavy metals in there at all. And if you compare it with burning coal, coal puts way more mercury in the atmosphere then a solar field would. You can't even compare it.

 896 897 898 899 900 901 902 903 904 905 906 907 	<i>Mark Pearson</i> (continued): As a matter of fact, tuna today is better to eat because there has been less coal-burning and that has been the number one way in which coal got into the atmosphere which is mercury would get in the water and the tuna would eat it through the food chain. So it is, it uses maybe 1% of the carbon compared to coal, and it probably uses 2-3% of the carbon compared to natural gas. There is more money for the county, environmentally friendly, take the same piece of land, no pesticides no fertilizers, no herbicides, for 30 years. No plowing, no dust. There is always 18 inches of ground cover, no bare dirt once it is in place.
908 909	John Morrison: Sir, if you could would you speak to the increase in the tax base, if any, and jobs this would create.
910 911 912 913 914 915 916 917 918 919 920 921 922 923	 Mark Pearson: Yes, it will, but what I would really like to do is get you hard numbers as opposed to me just saying 'yes it is better economically'. At any one time when they are building this, you will have at least 100 temporary workers working in the surrounding communities, so it is restaurants, it's everything. Perfect example, I am doing a project in Culpeper County, and I am talking to a land owner who grows hay and he said 'You know what? I just got a call yesterday from the one that Dominion is building in Remington for Microsoft and they just ordered a ton of hay from me. I had no idea this order was going to come, came out of the blue.' here is a farmer who just got a great big order that he never would have got to help build this thing. So it is good for the economy and the tax base is going to be better because first of all it comes right out of land use so that just bumped it up too. I am just saying that if you go through environmentally, culturally, and economically, it is a win on all three. Thank you very much. Commissioner Clayton Riggs: We have another gentlemen who wants to talk. And then,
924 925 926	Miss Linda Nwadike wants to talk. <u>Louis Matheus, of Boco Raton Florida, representing TW Solar, an International Solar Developer</u>
927 928 929 930	 <u>based out of Barcelona Spain.</u> Louis Matheus: TW Solar already has some projects in the ground here in North Carolina and a number of active projects under development.
931 932	John Morrison: Before you go any farther sir, would you give us your educational background and your expertise?
933 934 935	<i>Louis Matheus:</i> I am a civil engineer by training, I have a masters degree in business out of Colorado University, and I have, I think I am going on 10 years now on solar and renewable energy field in general.
936	John Morrison: Are you a licensed engineer sir?
937 938	Louis Matheus: I do not have a professional engineer license, no.

939	John Morrison: But you did take a degree in engineering?
940	Louis Matheus: Yes
941	John Morrison: And how many solar farms have you worked on?
942 943 944	<i>Louis Matheus:</i> Personally, I have over three hundred megawatts of renewable energy having been developed as solar and wind. The company I am representing, TW Solar, has a track record of one gigawatt of solar projects worldwide.
945	John Morrison: But how many have YOU worked on personally?
946	Louis Matheus: 300.
947	John Morrison: Ok, thank you.
947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977	 John Morrison: Ok, thank you. Louis Matheus: So, there are a number of points to address as well as other points throughout the conversation tonight, I want to address some of them. I agree with Mr. Pearson on there are limitations and how much solar you can put in Camden County. These stem from two basic points. What Mr. Pearson mentioned was access to transmission. There are only so many places that you can connect a solar plant to the grid economically. A developer always has the option to upgrade the system so that more solar can be brought online, but at that point they have to pay for the upgrades themselves. The second limitation comes from load. How much power is the system demanding? You cannot produce more power then the system needs. At that point you have to curtail production by taking your plant offline and you are losing the power you are producing. That hurts the economics really fast. So you always size the project so that it only provides as much power as the system can take at any given point in time. Further you have the limitation that the grid here operated by the city municipality and also Albemarle EMC interconnect with Dominion Power, I believe, and Dominion being part of the PJM network up in Virginia, they have stringent regulations. Nobody that is not part of the PJM system can feed power into the PJM grid. So effectively, Dominion will put a constraint that systems cannot produce more power then the system is handling because then the power would flow into their system and they won't allow that. So it is true that there are limitations in the grid. I have not studied the entire grid and the county to assert how many points you can actually put or how many megawatts. We have not conducted our study for the project that we are interested in putting here in Camden County. However, we do have to have a technical study done on the interconnection request to make sure that the substation, and transmission line, can handle the output of a solar system. That will be our go
978 979	the infrastructure, seven being the load that the system is holding. So somewhere in between, we think, is the size our project will be.
980	

 <i>Matheus:</i> Addressing the topic of toxicity <i>Dommissioner Tom White:</i> How many acres are you talking about putting in? <i>Matheus:</i> If we go for a system of 20 megawatts, that is the biggest we consider we can do, it would be at most 160 acres. And it can go down from there, it can be down to 100 depending on the size of the parcel. <i>Dommissioner Ross Munro:</i> And do you agree with the other gentleman that there is only a couple of viable places in Camden County that you can actually put a solar farm? <i>Matheus:</i> Intuitively, yes. But I have not done a comprehensive study of the entire grid. But yes, just by the limitation of load you cannot put too many megawatts. You would need something to actually use that power, if in the future you have a lot of consumption here, you put an industrial park, you put a paper mill, something to that effect that can actually draw a lot of power from the grid, that opens up capacity for more development. But up until that happens the power does not have anywhere to go so it would be restricted.
 <i>Matheus:</i> If we go for a system of 20 megawatts, that is the biggest we consider we can do, it would be at most 160 acres. And it can go down from there, it can be down to 100 depending on the size of the parcel. <i>Immissioner Ross Munro:</i> And do you agree with the other gentleman that there is only a couple of viable places in Camden County that you can actually put a solar farm? <i>Matheus:</i> Intuitively, yes. But I have not done a comprehensive study of the entire grid. But yes, just by the limitation of load you cannot put too many megawatts. You would need something to actually use that power, if in the future you have a lot of consumption here, you put an industrial park, you put a paper mill, something to that effect that can actually draw a lot of power from the grid, that opens up capacity for more development. But up until that happens the power
 can do, it would be at most 160 acres. And it can go down from there, it can be down to 100 depending on the size of the parcel. <i>ommissioner Ross Munro:</i> And do you agree with the other gentleman that there is only a couple of viable places in Camden County that you can actually put a solar farm? <i>muis Matheus:</i> Intuitively, yes. But I have not done a comprehensive study of the entire grid. But yes, just by the limitation of load you cannot put too many megawatts. You would need something to actually use that power, if in the future you have a lot of consumption here, you put an industrial park, you put a paper mill, something to that effect that can actually draw a lot of power from the grid, that opens up capacity for more development. But up until that happens the power
 a couple of viable places in Camden County that you can actually put a solar farm? <i>Matheus:</i> Intuitively, yes. But I have not done a comprehensive study of the entire grid. But yes, just by the limitation of load you cannot put too many megawatts. You would need something to actually use that power, if in the future you have a lot of consumption here, you put an industrial park, you put a paper mill, something to that effect that can actually draw a lot of power from the grid, that opens up capacity for more development. But up until that happens the power
grid. But yes, just by the limitation of load you cannot put too many megawatts. You would need something to actually use that power, if in the future you have a lot of consumption here, you put an industrial park, you put a paper mill, something to that effect that can actually draw a lot of power from the grid, that opens up capacity for more development. But up until that happens the power
<i>nuis Matheus:</i> On the topic of toxicity, the panels are sealed. They are meant to sustain being put out there for 25 to 30 years without breaking down. If there are any heavy metals, they would be contained inside. As soon as one of those panels breaks or stops functioning it has to be replaced. There would be a potential problem if they were let to sit there at the site broken for many many years. That is the only scenario I can picture. For them to release any heavy metals, they would have to burn upwards of 1000 degrees Fahrenheit, and I do not think that a wildfire on agricultural land would ever reach that. I have not seen the concerns of toxicity come up anywhere else, and I have worked in projects in several states in the US including North Carolina, Colorado, California, Texas, and the toxicity has never really come up as a concern, and also in other countries we have worked in such as Central and South America as well. The toxicity of the panels themselves has never really been a concern. In terms of electromagnetism, there is no equipment that puts out excess of electromagnetic fields. A refrigerator or television in your home would put out as much as the inverter, and the inverter is just by definition of where it is located is sufficiently distant from any permanent structure. That would not affect anyone. And anyway, the negative health effects of electromagnetism have never been able to be proven. So you are no worse off having a solar system than you are with having power lines for your TV in your bedroom. On the topic of the cost of solar, the legislation that allows development of solar in North Carolina that has accounted for this boom is based on a piece of Federal legislation called PURPA (Public Utility Regulatory Policies Act). The way PURPA works is, it says that as long as a renewable energy generator or a co-generation facility can produce power at or below the utilities avoided cost then the utility is forced to buy it. That is the way it works, so, the only way the solar system can g

1024 Louis Matheus (continued): The idea is that the more solar that you put in the system the 1025 cost for everyone starts coming down. Every time you put a request for a large 1026 solar system above, it used to be 5 mega watts now it's one megawatt, before you 1027 can get a power purchase agreement with the utility, the utility will do a study to 1028 see what is their avoided cost and that is the power purchase agreement they will 1029 offer. If you can, in fact, as a developer, produce power cheaper than that then 1030 you have a deal. If your cost of generation is higher you wouldn't sign the PPA 1031 and you do not have a project. So, just by the concept of the legislation this is 1032 supported by the construction of more solar systems can not negatively affect the 1033 rates in the state. Now, what brought me out here today, I flew in just for this 1034 public hearing, when I read the proposed moratorium, my concern was mostly on 1035 the language that was using, seeking before the public hearing. I understand the concept of revising the ordinance but it seems like the end of the moratorium was 1036 to limit or prohibit the development of solar in the county. There is a particular 1037 1038 phrase in the document I saw that raised that concern. I want to express that as a 1039 developer, we work with the county, we work with land owners to do solar projects right, we do not want any enemies if we can make everybody happy with 1040 1041 our solar system our work is all the easier. So I would encourage the county to 1042 look at putting an ordinance in place that would allow everybody to be happy with 1043 development. There is a suggested template ordinance already prepared by the 1044 NC Sustainable Energy Association, I brought a copy of that with me. I've been 1045 in contact with them and they provided some documentation that you might find 1046 useful. I would be happy to share that with you. Again, this is not our product, this is mostly from the NC Sustainable Energy Association. So, as long as the 1047 1048 moratorium is put in place for the sole purpose of revising whether your 1049 ordinance is sufficient to allow for sustainable development of solar projects in 1050 harmony with the community, with the environment, with the alternative uses of 1051 the land, we are ok with that. We would encourage you to not consider limiting 1052 because market and technical factors will do that for you and also you are 1053 depriving the community of a lot of the benefits that solar can bring. I have some 1054 figures here on the solar benefits, again these are not prepared by me, but by the 1055 NC Sustainable Energy Association. Up to now, they can attribute almost 5,500 full time equivalent jobs in North Carolina because of the solar industry. In 2016 1056 1057 alone, solar revenue from NC came up to 1.4 billion dollars. The agricultural land 1058 taken out of farming because of solar developments statewide is just .2% of the 1059 entire NC cropland. Again, these are numbers that are readily available, and I'll be happy to share them with you if you need them. A solar system of about 10 1060 1061 mega watts would cost somewhere between 20 and 50 million dollars, depending 1062 on the technology that is put in place. I'm not too sure how the county taxes developments, but I'm sure it has to be over that number on the capital expense of 1063 1064 the solar system. So, just think about the tax revenue increase by bringing in a 1065 solar system that is also not bringing any burden on the county elsewhere. You don't need additional services, you don't need to change anything, the solar 1066 1067 developer will bear all the cost and the community will benefit at large from the 1068 tax revenue. With that, I'll take any questions you may have for me.

1070 1071 1072 1073 1074 1075 1076 1077 1078	<i>John Morrison:</i> If I may make a comment sir. I wrote a letter to the commissioners with a model of a moratorium for 60 days. That letter is a public record. You are welcome to it, I went to great lengths and the commissioners are very aware that they should not have formed an opinion before tonight, that there would be additional evidence and the question before them is to impose a moratorium or not on my recommendation of no more than 60 days. So there is, I can assure you, the fix is not in. Everybody was told to keep an open mind. I have not heard anybody talk about a complete prohibition of solar farms. You would be available to consult with our Planner if a moratorium was granted for 60 days, correct?
1079	Louis Matheus: I believe so, yes.
1080 1081	<i>John Morrison:</i> As to give input, to suggest research materials, model ordinances, and answer questions?
1082	Louis Matheus: As a matter of fact, I plan on meeting with Mr. Parks tomorrow.
1083 1084	<i>John Morrison:</i> That would be one of the purposes of a moratorium. Alright. Thank you.
1085 1086 1087	<i>Commissioner Tom White:</i> Lets say, 10 or 15 years down the road, maintenance, do you all retain ownership or do you sell once its built and finished? Will you sell that project?
1088	Louis Matheus: There are several factors that come into play there.
1089 1090	Commissioner Tom White: Who is going to continue the maintenance, I guess is my concern.
1091 1092 1093 1094 1095 1096 1097 1098 1099 1100 1101 1102 1103 1104	<i>Louis Matheus:</i> The way the company I represent, TW Solar, works, they usually do the early development when they have all their licenses / permits in place, they bring a partner that will be the ultimate owner of the system. Usually there is a transfer of ownership when the plant reaches what they call commercial operation date, the formal day when you have the ribbon cutting and power starts flowing into the grid. At that point, we would transfer ownership to the long term owner of the system. There are developers who keep ownership of the project throughout their life. There are some that develop because there is a tax play here, because of the production tax credits, federal incentives, some people come in with the intent of pulling out the tax equity. So after the tax benefits are exhausted, usually within 3-5 years, they move out and they sell the project to somebody else. Now the licenses are fixed for the plant, so the economics of the project and the permits are fixed once the project begins operation. If there is a bond required on the system, whoever buys the system has to maintain the bond.
1105 1106 1107 1108 1109	<i>Commissioner Tom White:</i> So, basically whoever the ownership, it could keep moving, and they are going to be responsible, whoever that might be, to continue maintenance and then at the end of the 20 or 25 years to dismantle and get rid of it, if it's no longer in use.

1110	Louis Matheus: Correct.
1111 1112	<i>Commissioner Tom White:</i> So it wouldn't be you, it would be a successor of a successor of a successor probably.
1113	Louis Matheus: It is potentially so.
1114 1115 1116 1117	<i>Commissioner Clayton Riggs:</i> So this is kind of like bank mortgages, home mortgages. You could build it, get the tax money off of it, sell it to the first owner, he could find someone that could pay him a profit off of it and he would sell it to the next guy, by the end of the 24 years, we could be the 5 th or 6 th owner.
1118 1119 1120 1121 1122	<i>Louis Matheus:</i> Even the utility company sometimes is the ultimate owner. If you look at big utility players in the US like NextEra, which is Florida Power and Light, or Xcel Energy in the mid west, or even Duke or Dominion, they tend to be the long time owners of some of the systems that are built by somebody else, connected into their system and then they take them over.
1123 1124 1125	<i>John Morrison:</i> Sir, if you could, if I may, Mr. Chairman, I know it would be of interest to the board here, what kind of jobs would this produce for locals, how long would that last, and what kind of salaries would it pay?
1126 1127 1128 1129 1130 1131	<i>Louis Matheus:</i> The biggest impact on jobs is mostly during construction, which is when you need the most labor. After construction, there is limited need. You do have to do some maintenance, you always need people on the ground. You want to be checking the panels and inverters regularly. Also, you need to do some cleaning, one or two cleanings, depending on the area. The panels have to be free of dust and other debris in order to be producing.
1132 1133	<i>John Morrison:</i> Would there be any regular full time employment for Camden County residents?
1134 1135 1136 1137 1138	<i>Louis Matheus:</i> There has to be, not necessarily Camden in all honesty, it is a job that takes regular maintenance tasks, so one person could serve several systems. They don't necessarily have to be based out of here. I don't have all that expertise in asset management, my job has been more on the development side but I'm sure the other entities in the state can attest to that.
1139 1140 1141	<i>Commissioner Clayton Riggs:</i> So, permanent full time employment for one solar farm, lets say a 5 mega watt system, you have one employee that does the daily checks or weekly checks on this thing?
1142 1143	Louis Matheus: You have 2 or 3, you need several skill sets. You need an electrician, for cleaning it doesn't have to be a skilled labor.
1144 1145 1146	<i>Commissioner Clayton Riggs:</i> Some of the guys who clean them are just contract guys, they go drive down through the middle of them with power washers and wash them down.
1147	

1148	Louis Matheus: Yes.
1149 1150 1151	<i>Commissioner Clayton Riggs:</i> So that guy is a twice a year employee. I guess what we want to know is how many full time employees are going to be there every day? Just one or two?
1152 1153 1154 1155	<i>Louis Matheus:</i> Yes, and it's hard to say, but yes, and I can find you better statistics to attest to that. I'm sure I can consult with the NC Sustainable Energy Association. Again, my work centers on the development and not on the operation of the solar farm. Perhaps someone else later can provide some information about that.
1156	At this time, Chairman Clayton Riggs asked if there were any further questions for Mr. Matheus.
1157 1158	<i>Commissioner Ross Munro:</i> If a 60 day moratorium was enacted, would you still be pursuing building a solar farm in Camden after that 60 days?
1159 1160 1161 1162	<i>Louis Matheus:</i> It would certainly impose a 60 day delay on us. The next step for us is to begin the interconnection studies, the system impact study, we have to go talk to the utility company and put a formal request with them to allow interconnection of a solar plant where we want it.
1163 1164	<i>Commissioner Clayton Riggs:</i> 60-day moratorium, while we are studying the ordinance, doesn't affect any of that work at all.
1165 1166	<i>Louis Matheus:</i> We wouldn't start our work up until the moratorium has lapsed, so it essentially pushes us 60 days, because we don't want to start that study
1167 1168	<i>Commissioner Clayton Riggs:</i> No one is going to starve to death while we wait those 60 days, though are they?
1169 1170 1171	<i>Louis Matheus:</i> Granted. My concern is more that the moratorium would lead to a permanent limitation or prohibition of solar, more than the concern about the moratorium itself. Thank you.
1172 1173	At this time, Chairman Riggs recognized the representative from Sun Energy 1, Ms. Linda Nwadike.
1174	Linda Nwadike, of Morrisville NC, representing solar developer Sun Energy 1
1175 1176	<i>Linda Nwadike:</i> I'm representing Sun Energy 1. My degree is in chemical engineering. I also have a professional management certification.
1177	John Morrison: Would you give the clerk your address please.
1178	Linda Nwadike: I can be reached at 192 Raceway Drive, Morrisville, NC.
1179	John Morrison: Thank you. Go ahead and tell us what you like please.
1180	

1181 1182 1183 1184 1185 1186 1187 1188 1189	<i>Linda Nwadike:</i> First, I want to thank you guys this evening, and as a developer with Sun Energy 1, we love ordinances, don't get me wrong. Those are the rules put in place for us to follow. And we don't have to second guess anything. So, in regards to the ordinance, we love that idea, we don't mind the ridged rules you might be placing on us, however I just have a couple of concerns that I'd like to discuss this evening. One of the things mentioned earlier by Mr. Porter, was in regards to the DEQ [Department of Environmental Quality]. And of course, Sun Energy 1's site was also mentioned, so I have to at least go through it and discuss, so give me a moment.
1190 1191 1192 1193 1194 1195	<i>Linda Nwadike:</i> One of the things mentioned was that panels contain toxic components. And this is incorrect in regards to Sun Energy 1, we usually utilize a silicon based panels, and when I was up here in January, I brought a sample of the panel for you guys to take a look at, which all of you guys touched. There's really nothing in it, it's made of sand, enclosed with glass on it. So the panels that we utilize are not toxic at all.
1196 1197 1198 1199 1200 1201	<i>Linda Nwadike:</i> In regards to, I'm looking through this documentation, it also states that there is a negative recycling value. That is again incorrect, like Commissioner Meiggs mentioned, this article, I think it was 2015 when it was written, technology changes as you all know, and again this is incorrect, because the panels have a lot of salvage values in them. They can be recycled. Even in the land fill, the panels that we utilize. So I just want to touch base on that a little bit.
1202 1203 1204 1205	<i>Linda Nwadike:</i> There was mentioned a loss of wildlife habitat, and that is the same thing if you have a subdivision coming in. The wildlife, there isn't any loss of it, wildlife, the path of it, has to move to a different pathway, so we have to consider that as well.
1206 1207 1208 1209 1210 1211 1212 1213 1214 1215 1216 1217 1218 1219 1220 1221	<i>Linda Nwadike:</i> In regards to affects on human health concerns, toxic substances including mercury from manufacturing, again, I would love to give you guys some data on that, so you guys take a look at. And also, while you guys are doing your study, so you can definitely take a look at that. So, these are a few things I wanted to mention, and keep in mind this article was written by the NC Department of Environmental Quality. Before a solar facility can be built, the state also reviews our application. And the state, the utility company, the CPCM process goes through various environmental studies that we have to do. The Department of Agriculture takes a look at our application and makes their judgements as to water quality, they take a look at so there are various departments in the state that reviews our application. I can also provide that list for you guys to take a look at. So my concern with this article is just don't base your judgement on this article. Please look at the facts. Look at the rules and regulations, look at the various departments that reviews it before we can build.

1223 1224 1225 1226 1227 1228 1229	<i>Linda Nwadike:</i> I want to talk a little bit about, Mr. Krainiak made a comment in regards to how many acres of farm land are in Camden County. A quick google search found that there are over 49,310 acres of land in farms here in Camden County. And we are just talking about 300 acres out of 49,310. This is from the 2012 Census of Agriculture numbers. In North Carolina there are 4.75 million acres of cropland. For solar, there are just .2% being utilized right now out of 4.75 million acres. Just to make sure you guys realize that.
1230 1231 1232 1233 1234 1235	<i>Linda Nwadike:</i> We talked about cost, you need to understand this, I'm not saying solar is the all and all for energy, I think there should be a mixture of energy. Again, like I mentioned my background is in energy sector, I have been in nuclear, I have done oil and gas, and I think the best is renewable. And that is what I'm working on right now. This range of energy reduces the dependence on foreign oil, so we have to make sure we understand that as well as we move forward.
1236 1237 1238	<i>Linda Nwadike:</i> Solar farms offer a level of financial security to the property owners for 20-30 years. This is income that they know is coming every single year for 20-30 years.
1239 1240 1241 1242 1243 1244 1245 1246 1247 1248	<i>Linda Nwadike:</i> And then, of course as you guys know, per my presentation here a couple of months ago, once decommission comes, we revert the land back to its original form. And I'm going to touch base a little bit on decommissioning, because that's one thing that was mentioned earlier as well. As most people know, there's various recyclable materials in solar. Not only the copper, the solar panels themselves. Studies have been done, from independent engineers (and we've provided an independent engineer in our documentation for our application for the one that you guys approved in January), and this shows that the salvage value of the solar facilities outweighs the cost of decommissioning solar facilities. So again, think about it and take a look at it.
1249 1250 1251 1252 1253 1254 1255 1256 1257 1258 1259 1260 1261	<i>Linda Nwadike:</i> I understand that our neighbors, Currituck, put a ban on it a month ago. I was at that meeting actually, and I spoke at that meeting. And I just want to make sure that you guys understand that yes Currituck put a ban, but it is a temporary ban right now. At the same time, Currituck is still reviewing theirs as well. So it's not a permanent ban on solar in Currituck, which was mentioned earlier, they are going to revert it, they are discussing it right now and they are definitely making changes to their ordinance. Which again, as a developer for Sun Energy 1, we love ordinances. If you would like to make changes, please go ahead and make changes, but please do not ban solar because it doesn't just affect Sun Energy 1, or the other developers in here, it affects the land owners, it affects jobs, local economy through the restaurants we eat in, hotels we stay in when we come into town, the gas stations that we utilize, so it's not just the developer that this affects.
1262 1263 1264	<i>Commissioner Clayton Riggs:</i> What is the total time it takes you to build a 50 acre solar farm? About 3 months, 4 months?

Linda Nwadike: It varies depending on the number of employees that we get, we like to
hire locally, so the more people that are hired, the duration of time it will take. And if you hire less people, it will be a longer duration of time to build. For a 5 megawatt facility, I would think probably 3 to 5 months for that project.
<i>Linda Nwadike:</i> I would like to kindly request that you don't just blindly make changes to your ordinances, following Currituck or whoever else is making changes, that you do your research and not only just follow what the big dogs are doing, kind of like what someone else mentioned here, but please research this and look at various other counties, not only Currituck, while you're making your decisions. I would love to give you guys templates from various other counties, in addition, I'm open to giving you guys a tour of our facilities so you guys can at least take a look at these facilities and see what exactly it consists of. Not just talking about it but you guys take a walk into our facility whenever you have time. You have my contact information. Feel free to contact me and let me know what day you would like to take a tour of our facility. I would love to give you a tour. That's all I have, if you have any questions, I'll be glad to answer whatever questions you have.
<i>Commissioner Garry Meiggs:</i> Do you have your power purchase agreement for your project?
<i>Linda Nwadike:</i> Yes, we have ours for our project. And to add to this, I know you're saying a 60 day moratorium, that affects us as well, because we do have other applications as well that we're considering placing here and in Currituck, just to let you know, so that affects us as well.
At this time, Chairman Riggs asked if there were any further public comments.
John Morrison: If I can address some of the comments that have been made, I've heard no discussion about a permanent prohibition, although that would be your option. I would caution you not to do that. I have some questions about the legality of that. And I want to assure everybody that this board came here with an open mind, that they were advised by me not to form an opinion until they had heard comments tonight, that there would certainly be qualified individuals with relevant information in opposition to a moratorium and that they should pay close attention to that. This was not a foregone conclusion before we got here. I think the presentation has been sufficient to give you findings of fact and to make a determination. As we discussed, if you are inclined toward a moratorium it cannot exceed 60 days at this point. It has to be very specific, which you could follow the draft I gave you as to what will be done during that period and when it will be done. You are under no obligation to impose a moratorium of any kind, you can just say 'we're not convinced as to the need'. It's an open decision for you to exercise your discretion.

1304	Commissioner Clayton Riggs: I think it would be appropriate if we made an announcement to
1305	the citizens or to the gentlemen who spoke this evening, if you have some pertinent
1306	information that will help or some website that will help in the research of Mr. Porter's
1307	ordinances like you offered to share, if you would please send the links to Mr. Porter in
1308	an email or send the information in bullet point form of things you want to emphasize,
1309	that will give him the opportunity to work on it during the time frame.

At this time, hearing no further public comments or questions from board or staff, ChairmanRiggs called for a motion to come out of public hearing.

1312

Motion to Come Out of Public Hearing for Ordinance 2017-03-01 - Ordinance to Consider
Placement of a Moratorium on Solar Farms

1315	RESULT:	PASSED [UNANIMOUS]
1316	MOVER:	Garry Meiggs, Vice Chairman
1317	AYES:	Meiggs, Riggs, White, Krainiak, Munro

1318

Motion to amend the agenda to add "Ordinance 2017-03-01 - Ordinance to consider placement
of a Moratorium on Solar Farms" to the agenda as New Business Item 4-B

1321	RESULT:	PASSED [UNANIMOUS]
1322	MOVER:	Tom White, Commissioner
1323	AYES:	Meiggs, Riggs, White, Krainiak, Munro

1324

1325 **NEW BUSINESS**

1326

1327 Item A: Resolution 2017-03-01 Resolution of Support for the Dismal Swamp Canal and 1328 Funding Request for Dredging Operations Due to Impacts of Hurricane Matthew 1329

Motion to Approve Resolution 2017-03-01 Resolution of Support for the Dismal Swamp Canal
and Funding Request for Dredging Operations Due to Impacts of Hurricane Matthew

1332	RESULT:	ADOPTED [UNANIMOUS]	
1333	MOVER:	Garry Meiggs, Vice Chairman	
1334	AYES:	Meiggs, Riggs, White, Krainiak, Munro	

1335

1336Item B: Ordinance 2017-03-01 - Ordinance to consider placement of a Moratorium on Solar1337Farms

1338

1339Motion to Approve "Ordinance 2017-03-01 - Ordinance to consider placement of a Moratorium1340on Solar Farms" to place a 60 day Moratorium on the placement of Solar Farms in Camden

- 1341 *County, in order to allow staff to review current ordinance, with the following provisions:*
- 1342 • A study shall be made on areas where Solar Farms would be undesirable. 1343 • A Public Hearing shall take place prior to May 20, 2017 to consider passing or not 1344 passing an amended Solar Farm Ordinance • Planning Director Dan Porter shall provide a report on ordinance research efforts at 1345 each Board of Commissioners meeting during the period of the moratorium 1346 • Moratorium Ordinance document shall contain the Findings of Fact as submitted by 1347 1348 County Attorney John Morrison 1349 1350 A roll call vote was taken, below are the results of the vote:

1351	RESULT:	PASSED [4 TO 1]
1352	MOVER:	Tom White, Commissioner
1353	AYES:	Meiggs, Riggs, White, Munro
1354	NAYS:	Krainiak
1355		

1356

1357 Motion to Amend previous motion to alter date of Public Hearing to Monday, May 15, 2017

1358

1359 (As clarification at his request, Commissioner Randy Krainiak voted aye as shown herein below

ONLY to approve the amending of the motion regarding the alteration of the date of the PublicHearing for the revised ordinance to be brought before the Board near the end of the moratorium,

1362 not to approve the ordinance for the moratorium.)

1363	RESULT:	PASSED [UNANIMOUS]
1364	MOVER:	Clayton Riggs, Chairman
1365	AYES:	Meiggs, Riggs, White, Krainiak, Munro

1366

1367 COMMISSIONER'S REPORT

1368

78 79 There were no Commissioner's Reports at this time.

1369 1370

1372

- 1371 COUNTY MANAGER'S REPORT
- 1373 There were no reports from the County Manager at this time.1374

1375 OTHER MATTERS

- 1376
- 1377 There were no Other Matters at this time.

CAMDEN COUNTY BOARD OF COMMISSIONERS

BOC Special Meeting - March 20, 2017

ADJOURN The Camden County Board of Commissioners adjourned the March 20, 2017 Special Meeting at 9:07 PM. Chairman Clayton Riggs Camden County Board of Commissioners ATTEST: Amy Barnett Assistant Clerk to the Board

Page 36 of 36

Ordinance No. 2017-03-01 AN ORDINANCE OF THE CAMDEN COUNTY BOARD OF COMMISSIONERS IMPOSING A MORATORIUM ON THE ACCEPTANCE, PROCESSING OR CONSIDERATION OF APPLICATIONS FOR SOLAR ARRAYS (SOLAR FARMS) PURSUANT TO N.C. GEN. STAT. SECTION 153A-340(h)

The Board of Commissioners for the County of Camden, North Carolina, at a specially scheduled, single item agenda, held on March 20th, 2017, after due advertisement as by law required, conducted a public hearing as mandated by law and heard from interested members of the public as well as County officials for the purpose of gathering information and thereafter taking appropriate action regarding the imposition, or not, of a moratorium on the acceptance, processing or consideration of applications for solar farms. As a result of this meeting and in accord with the information produced therein, the Board of Commissioners makes the following findings of fact, conclusions and legislative remedy:

I. FINDINGS OF FACT - STATEMENT OF THE PROBLEM NECESSITATING A MORATORIUM; THE COURSES OF ACTION ALTERNATIVE TO A MORATORIUM CONSIDERED AND THEIR INDADEQUACY-NCGS 153A-340(h)(1)

- A. The current Camden County Unified Development Ordnance permits solar farms pursuant to a special use permit, without other restriction as to location within the County.
- B. There is currently one solar farm in Camden County with a total of 50 acres dedicated to such use.
- C. The planning department is in discussion with three additional parties for solar farms which would consume approximately 300 acres of farmland.
- D. Camden County is almost entirely rural with no incorporated community. Most of its acreage is devoted to agricultural production and residential use.
- E. Moreover, Camden County land is uniformly flat. As a result of agricultural use, many acres are already cleared. Accordingly, the County appears a desirable site for the construction of future solar farms.
- F. Currituck County, immediately adjacent to the north, has recently banned further construction of solar farms increasing the likelihood solar farm developers will look to Camden as a desirable location.

- G. Other nearby counties, in particular Pasquotank, Gates, Perquimans and Chowan, have seen increased applications for, and development of, solar farms. Like Camden, they are largely rural with a completely flat terrain.
- H. In a February 10t^h, 2016, report to the North Carolina General Assembly, the North Carolina Department of Environmental Quality expressed concern for the loss of agricultural land and jobs resulting from a conversion of agricultural property to solar farm arrays and the consequent loss of wildlife habitat.
- I. County residents have reported concerns arising from solar farm construction and operation including, but not limited to, adverse aesthetic impacts, potential diminution in value of properties' adjacent, and change in the agricultural nature of the County which its residents desire to retain. The County planning staff has also noted solar farms take land out of any other contemplated use for great lengths of time in that the average life of a solar farm is at least twenty years.
- J. Staff further related their concerns: a comprehensive zoning study is necessary to review relevant ordinances from other locales and to determine whether the County's citizens would be better served by restricting solar farm locations to certain areas of the County and prohibiting them in others. Further, staffed opined a moratorium should be issued while the study is underway. Failure to do so would run the risk of increasing applications with the necessity of acting upon those applications under the current ordinance when the same may not be adequate for the protection of the health, safety and welfare of the Camden community.
- K. A period of time is required to contemplate the necessity, or not, of amendment to the Camden County Unified Development Ordinance to properly reflect land development patterns with regard to solar farms.
- L. It is of immediate and manifest concern to the Board of Commissioners, the use of land for solar farms requires attentive, prompt, and comprehensive review to consider an amendment, or not, to existing ordinances to protect the best interest of the community.
- M. In the event modification of existing ordinances will be mandated, it would be unfair to potential solar farm developers to make plans for development while the law is uncertain. It would likewise be, at the least, a partial frustration of the purpose of the study to receive further solar farm applications during the study period.

II. STATEMENT OF DEVELOPMENT APPORVAL SUBJECT TO THE MORATORIUM AND HOW SUCH MORATORIUM WILL ADDRESS THE EXISTING PROBLEMS-NCGS 153A-340(h)(2)

- A. Imposition of a moratorium on the acceptance, processing or consideration of solar farm applications will temporarily prevent the approval of solar farms as a permitted use of land.
- B. Immediately thereafter, the County will undertake a comprehensive study to address the concerns cited herein by proposed amendments to the Unified Development Ordinance or based upon this study, make a determination no amendments are required.

III. DATE FOR TERMINATION AND THE REASONABLE NECESSITY FOR ITS LENGTH TO ADDRESS THE PROBLEMS GIVING RISE TO THE IMPOSITION OF A MORATORIUM-NCGS 153A-340(h)(3)

- A. Regulation to restrict or prohibit the use of land for solar farms will require amendment of the Camden County Unified Development Ordinance. Therefore, time is required to review existing ordinances, draft proposed amendments and process the same through relevant County boards or agencies. It is anticipated that a minimum 60 days is necessary.
- B. A public hearing will be held prior to May 20, 2017, to consider proposed changes to existing ordinance language on solar farms.

IV. STATEMENT OF ACTIONS AND SCHEDULE FOR THOSE ACTIONS PROPOSED TO BE TAKEN DURING THE EXISTANCE OF A MORATORIUM REASONABLY NECESSARY TO ADDRESS THE PROBLEMS AND CONDITIONS LEADING TO THE IMPOSITION OF THE MORATORIUM-NCGS 153A-340(h)(4)

- A. Thereof during the existence of this moratorium, the appropriate Camden county staff shall:
 - Review the Camden County Unified Development Ordinance and current Land Use Plan to determine if the appropriateness of amendment to the same is advisable to meet and preserve the stated goals established by the existing Camden County Land Use Plan.
 - Process any land use amendments through the Camden County Planning Board to allow a public hearing on requisite amendments prior to the expiration of this ordinance.
- B. The Board of Commissioners shall require at each scheduled Board meeting a report from staff on its progress and thereafter schedule a public hearing to review staff's suggestions and potentially alter existing ordinances.

V. IMPOSITION OF MORATORIUMS

A. NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COMMISSIONERS FOR THE COUNTY OF CAMDEN, after careful, deliberate and studied contemplation of the above, the Camden County Board of Commissioners does hereby implement and impose, effective from the date and time of the adoption of this ordinance, up to and including the end of May 20, 2017, a moratorium prohibiting the acceptance, processing or consideration by any County employee, appointed or elected official, an application for land use within the County for a solar array or solar farm.

ADOPTED THIS THE 20TH DAY OF MARCH, 2017 AT ______ O'CLOCK PM.

County of Camden

Clayton Riggs, Chairman Board of Commissioners

ATTEST:

Amy Barnett Acting Clerk to the Board

BOC Minutes 3-20-17, Attachment B

The Twiford Law Firm, P.C.

Russell E. Twiford (Retired) John S. Morrison Edward A. O'Neal H.P. Williams, Jr. R. Mark Warren Courtney S. Hull Lauren Arizaga-Womble Megan Morgan Whitney A. Young

Attorneys At Law

P.O. Box 669 111 Currituek Commercial Drive Moyock, North Carolina 27958-0669 Telephone (252) 435-2811 Facsimile: (252) 435-9974

March 13, 2017

203 North Road Street Elizabeth City, NC 27907-0099 Telephone (252) 338-4151 Telecopier (252) 338-8546

> WEBSITE: www.twifordlaw.com

Elizabeth City Office

Please Respond To: Movock

Camden County Board of Commissioners VIA EMAIL

RE: Solar Farm Moratorium Hearing on March 20th

Dear Board of Commissioners:

Pursuant to my recent instruction, please accept this document as a brief primer on moratoriums, and in particular the possibility of imposition of a solar farm moratorium.

It is important that you form no opinion until after the hearing as to whether a moratorium should or should not be imposed. Pleased do not interpret anything in this as a recommendation from me as to what your vote should be. There may well be evidence that occurs at the hearing from sources I have not consulted. Therefore, keep an open mind.

That being said, I offer some bullet points for your consideration as well as a draft of a moratorium, if you are so inclined at the conclusion of the hearing. This draft almost surely will be amended based upon what occurs on the 20th. It is simply a place at which to begin the conversation and is illustrative of the moratorium format.

Moratorium Bullet Points

 A moratorium is now a creature of state legislation that allows a Board of Commissioners to halt land use development for a finite period of time under certain detailed conditions. A moratorium takes the form of an ordinance and can occur only after a public hearing. The hearing is not a quasi-judicial proceeding. It is, however, open to the public and must be advertised and the comments elicited at the public hearing must be considered by you.

1

- Moratoriums are legal, but they are not favored in the law. That is to say, there must be strict statutory compliance.
- The current moratorium statute was passed by the general assembly in, I believe, 2007. Up to that time a moratorium was looked upon as an inherent common law power of the Board of Commissioners subject only to its discretion. The General Assembly determined that discretion had been repeatedly violated by lengthy moratoriums which were in effect amounting to a prohibition of legitimate land development. Hence, the statute.
- NCGS 153A-340 now carefully controls the procedure for not only the passage of a moratorium but its length as well.
- You will be engaged in a classic local government decision which requires you to legislate for the health, safety and welfare of the community on the one hand, and to protect private property rights on the other.
- You must determine, from facts presented and believed by you, the need for moratorium exists. You must then articulate why that need exists. Next, you must explain why other less onerous methods are not available. Further, you must state what will be done during the moratorium, who will do it, and deadlines must be established for completion. Finally, the determination as to whether impose a moratorium must be taken in public session after due advertisement as is required for any other county ordinance.
- The moratorium may be extended, but only after another hearing explaining why the necessary work was not completed within the original moratorium, how much time it will take to complete this work, etc. The statute strongly implies 60 days is a reasonable amount of time. The longer we surpass 60 days, the more vulnerable the County is to legal challenge.
- In the event a developer was to sue, the matter will be scheduled at the next available session of Camden Superior Court. It will be given priority and that court date cannot be continued except for the most extraordinary reasons.

In addition to the proposed moratorium, you will also find a blog from the School of Government which I strongly commend to your study. If you are feeling particularly scholarly, you may go online and review NCGS 153A-340(h) *et seq*. Finally, I again bring to your attention, the proposed draft contains only information I am aware of. It does not contain any information which may come from opponents of the moratorium that will be presented the night of the hearing. This information, will be judged by you not in the exercise of your discretion and could result in a finding that moratorium is required. Again, make no decision until you have heard all evidence. The credibility of all evidence, from any source, is for you alone to decide.

I am available to discuss this with you individually, by phone or email, prior to the hearing. My cell phone, which is usually the best way to get me quickly, is 252-333-9398. My email is <u>imorrision@twifordlaw.com</u>.

Thank you for your kind and deliberate consideration of this important matter.

Warmest Personal Regards,

John S. Morrison