

**DRAFT**  
**AVON CLEAN ENERGY COMMISSION**  
**AVON ROOM BLDG. #1 TOWN HALL**  
**MINUTES**  
**OCTOBER 19, 2016**

**I. CALL MEETING TO ORDER**

The meeting was called to order at 7:00 PM by Chairman Bernard Zahren in the Avon Room, Building 1 Town Hall. Members present: Chairman Bernard Zahren, Marty Kaplan, Joseph Gentile, Jeffrey Macel, Don Phelan and new member William Shea. Member absent: Richard Kretz. Advisory member absent: Jonathan Craig. Staff members Town Manager Brandon Robertson and Assistant to the Town Manager Grace Tiezzi were also in attendance.

**II. APPROVAL OF THE PRECEDING MEETING MINUTES – August 24th**

Mr. Zahren asked if there were any comments or changes regarding the August 24<sup>th</sup> minutes. **VOTE:** Mr. Kaplan motioned, Mr. Macel seconded and all agreed to accept the August 24<sup>th</sup>, 2016 minutes as presented. None opposed. Mr. Shea abstained as he was not present at the meeting.

Mr. Zahren welcomed new member William Shea. Mr. Shea said it was a pleasure to be here. Mr. Zahren continued that he was happy to have him given his deep history in politics and policy and has been a great member of the Council.

**III. COMMUNICATIONS FROM THE AUDIENCE**

None.

**IV. OLD BUSINESS: a. Review the Charge, b. Micro Grid discussion**

Mr. Zahren reported that the charge was approved and that it included things we had asked for at the last meeting such as reaching out to the residents more, doing more to educate our students and community, trying to get everyone involved, continuing with the Clean Communities' program to reduce our carbon emissions and the new town center project. Mr. Zahren asked Mr. Robertson if there were any other steps or goals left that needed to be done in relation to the Comprehensive Energy plan.

Mr. Robertson said no, that we've done the last benchmarking report that brought us all the way through to the last reporting period. He continued that we'd need to get a couple more months under our belt before we'd have enough history to go back and analyze trends to see if we're making progress. Mr. Robertson said in relation to the plan, we were in good shape and might want to think about different priorities such as what was discussed about the micro grid today. Mr. Kaplan asked if we were using the Portfolio Manager program. Mr. Robertson said yes and that Public Works manages it and we were reporting it as we needed to but did not know about the BOE. Mr. Zahren noted that he had met with Mr. Mala and was told the new Facilities Manager would help him and added that they should already be doing the monitoring. Mr.

Zahren asked Mr. Robertson who we should go to to find out. Mr. Robertson said he would be happy to talk to Mr. Mala and would get back to the Commission.

Mr. Shea suggested Mr. Zahren send an email to Mr. Altimus, cc'ing Mr. Mala and Mr. Robertson, inviting him to a future meeting as he thinks it burdensome for the Town Manager and Assistant to the Town Manager to get someone to respond. He continued that the formality would mean someone would have to respond and change the date of the meeting if necessary to accommodate them. Mr. Zahren agreed. Mr. Kaplan asked if Mr. Robertson knew if there was currently a major update going on with Portfolio Manager. Mr. Robertson said no and it should be being handled in the Public Works department and is sure they are on top of it. Mr. Zahren was sure the BOE was on top of it as well. Mr. Shea asked if Mr. Robertson concurred. Mr. Robertson said Mr. Altimus would be the best person to contact.

Mr. Zahren noted the meeting he, Mr. Macel, Mr. Kretz, Ms. Tiezzi, Mr. Peck and Mr. Robertson just had with two gentlemen one from PACE University group and the other from the University of Massachusetts. He continued that PACE Law School Energy & Climate Center has an extensive program of support for various types of sustainability, renewable energy, and was very engaged in all the new things that are going on in the State of New York, revitalizing the way utilities do business there. Mr. Zahren asked Mr. Macel to continue describing the discussion.

Mr. Macel noted they discussed the potential to implement a mirco grid at the newly proposed town center here and we were tasked to get back to them with information. He continued that there was grant money available in the State of Connecticut for a study to be done and potentially for some of the equipment. He noted that we need to do some research to see if that money is still available, part of an RFP, round 3. Mr. Macel said he had emailed the DEEP and is waiting for a response. He continued the focus was on heating and cooling and the waste produced based on commercial and residential uses of the center. Mr. Macel sees the potential for it to be a trend setting policy and be great in terms of attracting businesses, setting an example for other towns.

Mr. Zahren asked to include in the minutes clarification that many of the terms are interchangeable: micro grid, independent power producing unit, co-generation and CHP (combined heat and power) which is defined as capturing the heat lost in energy production and using the excess for heating in winter or running it through a heat exchanger for cooling in the summer. Mr. Zahren continued you have a 30 – 35% efficiency just burning natural gas to make electricity which could turn into a 60 – 70% efficiency just by capturing and utilizing the energy loss. Mr. Zahren said you'd need to have a clear demand in order to properly size the equipment to which Mr. Peck is tasked to get some basic data to the consultants. Mr. Zahren said it should be 1.2 million s.f. when we're done but what is the specific profile of the use. They liked that it was mixed use but commercial and residential energy demands vary throughout the day. Mr. Macel described a multi-sourced system fed by wind and solar for example and sees the future as towns generating their own power. He noted 2 aspects of the micro grid: 1) a higher efficiency, and 2) reliability.

Mr. Kaplan noted that cogeneration is not new and is being used all over the place and can get efficiencies of 83% but that it's not totally green. Mr. Zahren referred to a handout that showed a potential for 3,443 cogeneration systems in Connecticut with ones even up to greater than 20 megawatts. He continued that Mr. Robertson's viewpoint would be from energy security for the town in the event of a disaster.

Mr. Zahren asked Mr. Gentile what issues we'd face if we asked, say, for all south facing roofs for solar applications. Mr. Gentile said he wasn't sure and questioned how Mr. Peck would approach the Carpionato Group with this because it was a private development and not really municipal and whether grant money would be feasible to attract them to put the micro grid in the development. He continued that the P & Z Commission didn't have a problem with the solar panels and when approached the Carpionato Group was amenable to alternate energy like solar and conservation. Mr. Zahren said he did have this discussion with Mr. Peck and Carpionato several months ago saying the micro grid could a) save energy costs, b) be a superior marketing tool for tenants, and c) help with the image of sustainability and energy security, without writing a check. He continued that there were alternatives available such as 1) bonding by the town, 2) Carpionato could opt to do it themselves if they see the savings and 3) the most prevalent would be to bring in big manufacturers such as GE or Siemens having them do the install while you get a reduction on your power costs. Mr. Kaplan referred to the 4 megawatt solar pilot project currently being developed in Simsbury on the landfill. Mr. Zahren said there were 4 of these pilot programs and that none were available now. Mr. Gentile asked how large the micro grid would be here. Mr. Macel said it would be small but did not have actual square footage. Mr. Gentile said as long as it didn't shake up the balance between residential and commercial too much that he guessed the Commission would be alright with it. Mr. Zahren noted the difficulty of running distribution pipes too far would suggest a more central location of the micro grid. Mr. Macel reminded that we were in a good position now to lay in any infrastructure before building construction begins.

Mr. Phelan asked if Mr. Zahren would speak more about the large companies coming in and the economic impacts, sensing that it would be too good to be true. Mr. Zahren said historically cogeneration was growing very rapidly 30 years ago when the utilities squeezed them out of existence, not wanting independent power producers in the middle of their grid. He continued that natural gas is very inexpensive now and would probably be for a long time. He noted solar is different with getting tax credits that these systems do not. Mr. Zahren noted the presenters said the bigger you can make these things the cheaper they are to run. He discussed going across Rt. 44, at least to the fire station, and sees an opportunity to go to Avon Park South to bring in those entities to create a bigger base load. He noted the power generation would be easy but locating for the thermal part would be a challenge, here or across the street. Mr. Zahren posed this to the group to see if they wanted to go bigger or just stay with the new town center.

Mr. Shea noted that though the technology is not new, it would be new to Avon and therefore he'd like to see some successes first and see it managed in such a way that you'd have the ability to expand. He continued that he'd like to start small, get some successes, and try to build on that, try to get the buy-in from the community and other developers. He noted the developer from Rhode Island is savvy and probably has had green experience. Mr. Zahren said he didn't think it was much and added that once you build a 3 megawatt system you're pretty much stuck with a 3

megawatt system. Mr. Shea continued that this is so new with all the pieces like a jigsaw puzzle. Mr. Shea asked for Mr. Robertson's input.

Mr. Robertson said he has several reactions. In the day's meeting he was very candid that he was very new to this and comes in as a layman. He reminded that the solar panels were a very straightforward transaction compared to this. He continued that when one of the proposals came back they wanted to take advantage of every square inch of roof space on just about every building in town. He agreed with Mr. Shea that we need to scale this back some, get some success, get it down to a manageable project that we can implement, understanding both the downside and upside risk. Mr. Robertson suggested staying with the smaller footprint, keeping it confined to Avon Village Center and not expanding to Avon Park South. He noted that getting the solar project up to speed involved many moving parts – optical issues and some heavy technical issues that we didn't anticipate - legal when working out the contracts, warranties on the roof, loading plans, hire structural engineers – all of which had an effect on the final PPA's they had to negotiate because of the level of the array that a roof would support. Mr. Robertson continued that with all that in mind he thinks we should start smaller. He would agree to allow Mr. Peck to start a preliminary conversation with the guys they had today find out what they need to at least to see if it's worth our time to go forward. He continued we'd have to 1) find out from the developer what their level of commitment is in this process and 2) we're going to have to go through an RFP process to get professional consultant services on board with this because of the complexity and lack of our time or expertise available. Mr. Robertson said to start small, very preliminary and is there a project there even to be had. He is concerned about their level of commitment, what risk or exposure to the town this will present, emphasizing that an RFP would be absolutely necessary for consulting on a contingency basis where they'd get paid if the town in its sole discretion decided to move forward with it. Mr. Zahren described a micro grid as anything that can generate power on its own. Mr. Robertson regarded it as a very significant undertaking. Mr. Zahren agreed but offered that what you have here is a clean slate with no buildings on it so if you have the right experts you have the ability to eliminate those later concerns by doing it right to begin with. Mr. Zahren continued that this was a system with moving parts unlike the solar panels and is more analogous to the issues with the geothermal system at the library. Mr. Robertson said you are talking about looping in existing infrastructure, seeing it as being very complicated process. Mr. Shea reminded you'd need a cooperative developer to which Mr. Zahren agreed Carpiato would have to buy in 100%. Mr. Phelan agreed that this was enormously complicated and cautioned that things could go sideways so quickly so find a piece you can manage. Mr. Kaplan concurred that you take small steps, mentioning his own work with NRG. Mr. Zahren was glad to have the discussion and suggested getting a basic footprint of what Carpiato is proposing to give to the consultants to say what the average consumption would be for retail or anchor tenants, and perhaps a grocery store. Mr. Robertson agreed that all we had is boxes on a piece of paper and some ratios, not knowing how much would be commercial or residential. Mr. Macel noted that you size this without the grid and that you can undersize it because you still have grid power if the energy needs are greater, explaining that net "0" means you generate all of your needs on site. Mr. Kaplan noted NRG is having a webinar the 27<sup>th</sup> on micro grids for towns.

Mr. Macel suggested asking Carpiato what they think the breakdown will be, agreeing with Mr. Shea and Mr. Robertson and the things that can be done and what is feasible, what can be

phased. Mr. Shea reminded that governments move slowly, trying to get some wins and then go from there. He'd like to see the contractor do more because they will benefit. Mr. Macel asked how we could get Siemens or Ameresco in contact with Carpionato. Mr. Robertson reminded that Carpionato is an umbrella developer that may have green contractors under them. Mr. Shea clarified that he didn't hear them jump up and say they had done this before and we can take the lead.

Mr. Zahren continued that this could be a small unit, maybe a half megawatt unit that in the event of an emergency non-essential things could be turned off in order to keep the police or other essential entity running. Mr. Zahren felt that it should be a long term plan for the town to be energy secure. Mr. Macel asked if we were in contact with the towns that were in round one and two to get information from them about their experiences to help with the town's proposals.

Mr. Robertson reminded that Mr. Peck is a conduit with the developer but that what we are discussing technically is way out of many of our ballparks. He continued that part of this is bringing it to the developer's attention, as something worthy of their time, something to look at, perhaps doing some of this groundwork on a very preliminary basis, to begin to make that business case for them and at some point they may recognize that it is in their interest from a business perspective. We can help to facilitate that as a government entity through the regulatory approval process and perhaps loop into it for an energy security point of view would be great for both the town and the developer. Mr. Robertson said the key was to prevail on the developer to make them understand that it would be in their best interest and have them contact the Siemens or Hitachi. Mr. Zahren noted that the presenters at the meeting said the Northeast was now the place targeted for this technology precipitated by Hurricane Sandy – the new proving ground for this type of technology and the need for it. Mr. Shea noted that it would be an economic win for the Town Manager to attract and retain people to live and work in Avon.

V. NEW BUSINESS: a. Approve the 2017 meeting schedule

The members discussed and agreed to accept the 2017 meeting schedule as follows: the third Wednesday of every other month beginning February 15, 2017.

VI. ADJOURN

**VOTE:** Mr. Shea motioned, Mr. Phelan seconded and all agreed to adjourn the meeting at 8:20PM. None opposed.

*Respectfully submitted:*  
Chairman Bernard Zahren

*Attest:* Susan Gatcomb, Clerk