

**TOWN OF BOONE
BOONE TOWN COUNCIL AND THE BOONE SUSTAINABILITY, ECONOMICS AND
ENVIRONMENT COMMITTEE JOINT MEETING
THURSDAY, DECEMBER 13, 2018
5:30 P.M.**

Council Members Present:	Loretta Clawson – Mayor Pro Tem, Lynne Mason, Connie Ulmer, Sam Furguele and Marshall Ashcraft
Members Present:	Chairperson Quint David, Vice-Chairperson Harvard Ayers, Benjamin Scarboro, Nicolas Stover, Lee Ball and Nancy LaPlaca
Staff Members Present:	Jane Shook – Director of Planning & Inspections, Marty Little – Planner and Marlene Crosby-Committee Secretary

Call to Order

Mayor Pro-Tem Loretta Clawson called to order the joint-meeting of the Boone Town Council and the Boone Sustainability, Economics and Environment committee, held in the Town Council Chambers Room located at 1500 Blowing Rock Road at 5:39 p.m.

Adoption of Agenda

Member Scarboro made a motion, seconded by Member Ball to approve the agenda as written.

Vote:

Aye – All
Nay – None

The motion passed.

Approval of Minutes

Vice-Chairperson Ayers made a motion, seconded by Member Scarboro to approve the November 8, 2018 meeting minutes as written.

Vote:

Aye – (Ayers, David, Prickett, Scarboro)
Nay – None
Abstain – (Ball, Stover)

The motion passed.

Discussion of the Energy Action Plan

Chairperson David began discussion on the energy action plan. He said the Sustainability, Economics and Environment committee have been following the EPA community energy strategic plan book. He said the Town is in stage seven of the strategic plan which is identifying financing, and now they can create a proposed implementation timeline and final plan.

Chairperson David noted that at the SEEC meeting in October of 2018, Mr. Ed Miller, General Manager of New River Light and Power, gave a presentation on the proposed solar project on Blowing Rock Road, which included using partnership opportunities that could help the Town achieve their solar goals. Chairperson David noted that it would be a good thing to consider other financing options that might save tax payer dollars. Chairperson David noted that the Town of Boone has set a goal to have 100 percent clean energy by 2050. Discussion was held later in this meeting regarding whether the goal date should be 2030 or 2050.

Member LaPlaca arrived at the meeting at approximately 5:45 p.m.

Mr. John Ward, Boone Town Manager, began his presentation on the Council-approved recommendation from the SEEC regarding Staff and the Town Manager working on budget numbers for the potential local solar project with Appalachian State University, Watauga County and NTE, a vendor for solar power. Mr. Ward said he has prepared some budget numbers for Council's review.

Mr. Ward explained that if the Town can move forward fairly quickly in the beginning of the New Year 2019, along with locking in the price and the commitment on behalf of the Town of Boone, he said he is fairly certain there could be movement in constructing the community solar facility.

Mr. Ward explained that the new community solar facility would initially create 200 KW of power that is expandable to 500 KW of power (permanently attached). He said the 200 KW solar garden would generate 300 KW hours. It would be about 700 solar panels on two acres for the maximum site. It would be a 250 percent increase in everything at ASU and the Town of Boone currently.

Mr. Ward said in order for NTE to construct said facility, the Town would need to purchase the solar power that is generated from it. He said it is a 20-year commitment. He said if the Town commits to the 200 KW hours, there is a potential to get NTE to go ahead with the most cost-efficient method of potentially constructing the entire 500 KW at one time. He said it depends on what the Town is willing to commit to. Mr. Ward said by purchasing of solar power, it would move the Town further ahead with their solar goals. He said we can offset right under 300,000 KW between 12 and 15 thousand per year which would be a supplement for existing energy costs. He noted there is a possibility that during the switch from Duke Power to NTE, there may be a rate reduction to further offset and make it more financially attainable.

Mr. Ward said instead of setting aside \$100,000.00 that was designated for the solar goals, we could work toward a goal of incorporating this money into the overall energy budget of the Town and still have some options for this money.

Member Furguele asked if there was an initial outlay. Mr. Ward said the main thing that would be required is the commitment from the Town.

Mr. Ward said in 2022, when New River switches over from Duke Power to NTE, the Town would be ready to start making the payment. Member Ball noted that per the contract, ASU has to own the solar garden first before it can go to the Town.

Mr. Ward explained the process for the additional solar power to become available for the community. He said there would be an option for the community to purchase green energy on their utility bills. He further explained that NTE is looking to make strides in the community about renewable energy. He said now is the time to maximize the opportunity for renewable energy. He talked about the solar garden being located in a high visibility area and the tie-in of the hydro plant removal on Payne Branch Road becoming a solar location. He said both of these solar locations will encourage the community to purchase green energy.

Member LaPlaca asked Mr. Ward what the difference is between what we are paying now and the solar cost. Mr. Ward said three and one-half cents.

Chairperson David explained that there are two electric power companies servicing the Town of Boone. The power companies are Blue Ridge Electric Membership Corporation and New River Light and Power Company. He pointed out that the Town also uses fuel and propane.

Member Furguele asked about the power usage of the Town from Blue Ridge Electric Membership Corporation. Chairperson David said that the SEEC has not come to an exact conclusion of the power usage from BREMCO at this time.

Member Furguele asked if there was a way for the entire Town operation to be served by New River Light and Power and ultimately NTE. Mr. Ward said he does not think this is a possibility because of some of the jurisdictional service areas that are in place. Mr. Ward said there are some potential options being explored at the landfill. Chairperson David said there are some community solar farms that have been built in Ashe County.

Mr. Ward explained that there is a power easement already in place at the Payne Branch Road property owned by ASU. He said the solar panel array on Blowing Rock Road would be facing the highway causing, huge publicity to encourage green energy, and would be a great educational tool. He talked about installing a digital calculator to show the public how much power is being generated along with how much carbon is being offset.

Mr. Ward explained that at the location of the solar garden on Blowing Rock Road, some of the trees would need to be removed. He said that in one of the discussions with New River Light and Power, they would do a study and replace the trees that were removed and plant them on Town property, which will offset the carbon footprint.

Member Furguele asked if there is an actual contract or memorandum of understanding with New River Light and Power initially. Mr. Ward explained that there has been a presentation at the SEEC committee meeting, then discussed in general at this joint-meeting. Mr. Ward said with approval, he and the Staff would begin working with ASU on the documents that would be the Town commitment. Mr. Ward said the documents would not come with financing up front, it would just give ASU the feeling of moving forward to solidify everything with NTE to potentially facilitate construction.

Discussion ensued on the price of solar. Mr. Ward said that his intention is to lock in the price with ASU and New River Light and Power for twenty years. Member LaPlaca talked about the price possibly escalating over time. Vice-Chairperson Ayers noted that in the future the price of solar could be half the price that it is now. Mr. Ward said for this reason, he is suggesting to phase the project. He said if it is not phased out, the Town would need to set aside \$100,000 to offset the solar costs.

Mr. Ward explained that he has formulated the numbers to where there must be an additional subsidiary added to the existing energy bill. He said this is the way that this can be generated without having a possible \$3 to \$5 million capital project to install on land that the Town does not currently have.

Discussion ensued on offsetting the energy usage in the Town of Boone. Chairperson David referred to the October 2018 presentation, he pointed out that the Town is using \$750,000 in electricity, \$173,000 on propane, \$246,000 on diesel and gas, and \$500,000 on water and wastewater plant per year. Chairperson David said in the ten years since an energy plan was first part of the 2030 plan action items, Boone has spent nearly \$10 million dollars on energy (permanently attached).

Member Ball asked if most of the propane is used for space heating. Mr. Ward said there is a combination of electric and natural gas used for space heating. Mr. Ward explained that there is a dryer for the bio-solids at the waste treatment plant that uses the propane.

Chairperson David explained that the Town budget is broken down per Town owned building. Mr. Ward said he had the Town budget put in a format that the SEEC members could do calculations.

Discussion ensued on changing the 100 percent clean energy goal end date from 2050 to 2030. Member Furguele asked Mr. Ward if this proposed change is feasible. Mr. Ward said he can make the numbers work with the caveat that the Council could be putting the pressure on themselves to raise the funds to meet the goal. Members Furguele and Ball said they were in favor of having strong goals to meet the action items of the 2030 plan.

Mr. Ward pointed out that about \$125,000 total was spent on the solar array that was constructed on Depot Street in Downtown Boone. Chairperson David said that it cost \$10.00 per

watt installed. Chairperson David noted that there is the possibility that there could be a monetary donation for solar equipment for a solar project in the Town.

Mr. Ward talked about the possibility of the Town using LEED-type construction, when constructing buildings on the Bolick property. Member Ball pointed out that LEED-type construction will be necessary when insulation is upgraded in buildings and in new construction.

Mr. Ward asked for direction from Council for him to work on the draft document to bring back before them for discussion and possible approval.

Discussion ensued on the Town hiring a person to handle Sustainable topics. Mr. Ward said the money he would spend on a person for that position could be spent on, for example, the things needed from New River Light and Power.

Member LaPlaca informed the members that when you talk about carbon, the coal use is going down, but natural gas use is going up. She said the multiplier that is being used for the CO2 equivalent is about 25x or 30x whereas the IPCC's is 86x. She noted that this information was reported in 2014. She explained that when the utility companies talk about carbon they are only talking about the carbon that is coming out of the stack.

It was the consensus of the Council members and the SEEC members for Mr. Ward to move forward with working on a draft document to formalize the process for the proposed solar garden. Mr. Ward said he will report to Mr. Miller at New River Light and Power to discuss the draft document.

Member Furguele said that he thinks the 2030 and 2050 plan years warrant more discussion. Mr. Ward offered to put this topic on the January 2019 Council agenda.

Vice-Chairperson Ayers began discussion on electric and hybrid vehicles. He said that electric vehicles are three times as efficient as gasoline. He said that he researched electric buses and he referred to a twelve-page document that was emailed to the SEEC members (permanently attached). He went to a bus company located in South Carolina called Proterra to gain information on the electric buses. He said a regular bus costs around \$450,000 and an electric bus costs about \$100,000 more. He said there is some concern that the electric buses are not as powerful as regular buses. He noted that there are leasing opportunities for the electric buses.

Vice-Chairperson Ayers began discussion on electric and hybrid cars. He went to Shelby, North Carolina to test drive an electric car. He said that 40 of 50 vehicles that need to be replaced in the Town of Boone are police cars. He said that Boone Ford can order the electric and hybrid vehicles. Mr. Ward stated that he was going to propose a hybrid vehicle for the Police Department to use as a test vehicle which would replace an older SUV. Mr. Ward said at this time the hybrid vehicle only comes in two-wheel drive and the police officers would not have been able to make it to work in deeper snows like the Town of Boone recently had. Mr. Ward noted a concern for officers who take vehicles home and how will they charge them at their

homes. Mr. Ward said that vehicle chargers would need to be added to the officer's homes to charge the vehicles which would impact the officer's electric usage.

Member Furgiuele suggested that the Council discuss creating incentives for police officers to live in the Town. He said the police officers that live in Town should be driving the electric vehicles. He talked about an exchange of vehicles. Mr. Ward said there can be an exchange of vehicles. Mr. Ward noted the Toyota Prius is now made in all wheel drive. Mr. Ward noted that the technology will catch up over time.

Chairperson David talked about the importance of solar storage. He said if you can store the power for peak times, you would not have to run the natural gas power plant.

Discussion ensued on replacing Town vehicles. Member Scarboro asked what types of vehicles that the Town currently has in its fleet. Mr. Ward named a Ford Explorer, GMC Sierra, Dodge pickup and Chevrolet Tahoe. Mr. Ward explained the use of these vehicles. Member Scarboro suggested working up what the gains would be by replacing these vehicles would be helpful. Mr. Ward agreed that this is a smart model to research. Mr. Ward talked about the Ford Fusion police package being a viable option; but you need to factor in the super charged alternator that runs the electrical equipment in the vehicle such as the computer and lighting system.

Chairperson David said he was in favor of the Town purchasing the Ford Fusion vehicle. He was in favor of reviewing each vehicle in the Town fleet and calculating the mileage and creating an estimated savings plan in fossil fuels and carbon. Mr. Ward suggested involving the Town departments to set up a game plan to get this savings information.

Vice-Chairperson Ayers noted that the cost of his vehicle charger was about \$600.00 or \$700.00. He said he can charge his Chevrolet Volt in four hours. He said every time he charges his electric vehicle, it costs \$1.50 for 15 kilowatt hours and he charges his vehicle twice a week for a total of 30 kilowatt hours and \$3.00 a week.

Mr. Ward talked about the Town's fuel and repair and maintenance budget lines being affected and he said he believes that the savings of using hybrid vehicles will help pay for the repair and maintenance of the hybrid system.

Member Ball asked Mr. Ward how many police vehicles can be purchased in the regular market. Mr. Ward explained that in the police fleet there are administrative vehicles, with the largest amount being patrol vehicles. Mr. Ward said a decision has to be made on whether to purchase a patrol vehicle that is large enough to transport or have another source to transport when needed. Mr. Ward said computer mounts and cages for K-9 units need to be factored in.

Member Ball asked about potential gas shortages in the Town and if there is a tracking mechanism in place. Mr. Ward explained that there is a tracking mechanism in place for gasoline usage for the police vehicle fleet. Mr. Ward also added that there is a reserve of gasoline in place at the Speedway stations for Town vehicles to be used for public safety.

It was the consensus of the Council and the SEEC for Mr. Ward to move forward with working on the budget numbers for the potential purchase of a Ford Fusion hybrid police vehicle.

Council Member Mason said that she would like to see an inventory of the Town vehicles. She also noted that she would like to see the departments of the Town involved in providing information on ways to save Town dollars. Member Furguele agreed with Council Member Mason on this topic.

Discussion ensued on electric vehicle chargers in the Town. Member Ball said that vehicle chargers are located at Legends parking lot and at the River Street parking deck both located on the University property and on Depot Street in Downtown Boone.

Mr. Ward noted that he would have some draft documents prepared for the Council and SEEC to review very soon on the proposed solar project and hybrid vehicles.

Discussion of Earth Day 2019

Chairperson David noted that Earth Day is on Monday, April 22, 2019. He suggested having Earth month and having activities every week.

Mr. Marty Little, Planner for Town of Boone, explained that there was a lack of publicity at the last Earth Day event in September of 2018. He presented to Council that if an Earth Day date could be set the publicity could begin right away for said event. Mr. Ward said in addition to Town of Boone Cultural Resources Department publicizing the event, Ms. Lane Weiss, Downtown Boone Development Coordinator could also begin to publicize the event with the Downtown Boone Development Association.

Member Furguele suggested the Town investing in a banner to advertise the event at the King Street level. Mr. Ward agreed with Member Furguele on the Town investing in a banner, he also mentioned that having the event at a time when the University population can be a part of the event. Mr. Ward suggested having Earth Day activities around a time, when there are other events going on in the Town for example during the Jones House summer concerts.

Discussion ensued on closing Depot Street between King Street and Queen Street. Ms. Jane Shook, Director of Planning and Inspections, explained that the budget for closing the street would be a lot different for Council to consider than just holding the Earth Day events at the Jones House.

Ms. Shook explained that at the last Earth Day event, there were complaints about the loudness of the band music, when trying to communicate at the event tables.

Council Member Mason suggested having the Earth Day events all month long and do a variety of sustainable things. Member Ball noted that a lot of things are happening in April of each year. Chairperson David suggested asking the Cultural Resource Department for their

recommendations on the proposed date and budget for the event. Mr. Ward agreed with Chairperson David on including the thoughts of the Cultural Resources Department for said event. Member Ball suggested the possibility of including an Earth Day event on the first Friday in April. Member Furgiuele was in agreement of closing the street. Council Member Mason talked about the educational component of having the event on Depot Street near the solar array and having the university solar vehicle at the event.

Mr. Ward noted that he would have some draft documents prepared for the Council and SEEC to review very soon on the proposed solar project and hybrid vehicles.

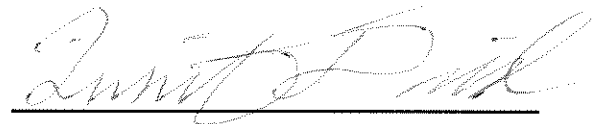
Other Matters by Committee Members or Staff

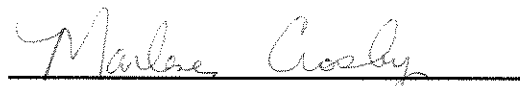
There were no other topics discussed at this meeting.

Adjournment

Mayor Pro-Tem Clawson adjourned the meeting at 7:32 p.m.


Loretta Clawson, Mayor Pro-Tem


Quint David, SEEC Chairperson


Marlene Crosby, Committee Secretary