

ENERGY COMMITTEE
TOWN OF SOUTH WINDSOR

Minutes

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July 18, 2017

Madden Room – South Windsor Town Hall

1. Call Meeting to Order

The meeting was called to order at 4:30 p.m.

2. Roll Call

Members Present: Hank Cullinane, Resident
 Mike Gantick, Director of Public Works
 Patrick Hankard, Board of Education
 Athena Loukellis, Resident
 Deputy Mayor Janice Snyder, Town Council
 Richard Stahr, Board of Education
 Sherman Tarr, Resident
 Stephen Wagner, Resident

Members Absent: Larry Brown, Resident
 William Carroll, Town Council
 Councilor Edward Havens, Town Council

Others Present: Robert Dickinson, Resident

3. Approval of Minutes

Deputy Mayor Snyder made a motion to approve the May 16, 2017 and June 20, 2017 minutes with amendments. Mr. Gantick seconded the motion; and they were approved, unanimously.

4. Next Meeting

Deputy Mayor Snyder made a motion to cancel the August meeting. Mr. Tarr seconded the motion; and it was approved, unanimously.

The next meeting is scheduled for Tuesday, September 19, 2017 at 4:30 p.m. in the Madden Room.

ITEM:

5. Business

B. Zoning Changes Regarding Solar Height Limits

a. Letter to the Town Planner

Chairman Wagner informed the Committee that Michele Lipe will be looking at the Zoning Regulations that deal with height restrictions for ground mounted solar equipment systems. Mr. Hankard voiced his desire to enlarge the height for carports at school buildings. Chairperson Wagner stated that the regulations may not have any effect on carports because it may be considered a structure with solar on it. Mrs. Lipe will be reviewing this issue and after this issue is clarified, she will inform the Committee.

Chairman Wagner reviewed the letter to Mrs. Lipe explaining that the proposed changes would be for commercial and industrial zones. Committee members felt that additional language should be added to the letter regarding the height of carports for school buses. Chairman Wagner stated that after having discussions about structures that would use wind to produce energy, it was chose not to include anything about this item in the regulations.

Mr. Gantick suggested that any project proposed should include a fee which incorporates the cost for engineering services. Although this does not need to be put into the letter, it is something that should be considered in the regulations.

Deputy Mayor Snyder made a motion to submit a letter to the Town Planner, as shown in attached **Exhibit A.**, with additional language referencing the height of carports for school buses. Mr. Tarr seconded the motion; and it was approved, unanimously.

C. Solarize South Windsor Update

a. Metrics

Mr. Wagner informed the Committee that there have been 75 contacts, fifty-eight have confirmed their interest, twenty-five visits, eight contracts and 80.5 kilowatts of solar that has been done under this program.

ITEM:

5. Business (Continued)

C. Solarize South Windsor Update

b. Farmers Market and Concerts

Mr. Wagner explained that the Solarize South Windsor program has placed a table at the Farmers Market and at the Concert Series in order to publicize this program. There has not been a lot of activity at the concerts and if there is no activity at the next concert, then the Committee should discontinue setting up a table there. Mrs. Loukellis felt that a banner should be displayed to spark more interest.

Mr. Wagner stated that interest has been shown for the Solarize South Windsor program at the Farmers Market.

c. Lunchtime Workshops at Large Businesses

Mr. Tarr stated he will continue to work on contacting businesses to try to set up Workshops.

d. Workshop June 22 Results

Mr. Wagner stated that there was not a good response for this workshop.

e. Workshop August 1

There will be a Workshop held on August 1, 2017 at 7:00 p.m. in the Council Chambers at the Town Hall.

D. Energize South Windsor Update

a. Mailing and Other Publicity

Mrs. Loukellis informed the Committee that letters will be mailed throughout Town on July 19, 2017 informing residents of this program. Mrs. Loukellis then suggested contacting Better Connecticut to see if they would promote this program.

ITEM:

5. Business (Continued)

b. Tables at Events

Chairman Wagner suggested that a table be set up at the Wapping Fair as well as at the Apple Festival.

A. Solar on Town Facilities

a. Request for Information (discussion)

Chairman Wagner stated that in the past, the Committee has talked about sending out a Request for Information which would allow all interested companies the ability to participate.

Committee members discussed the different options of solar projects. One option is Virtual Net Metering projects and the other is for the Town to do their own solar project. Mr. Stahr explained that Dr. Carter is interested in looking into a solar project. Committee members discussed the establishment of solar at Orchard Hill Elementary School or at South Windsor High School. To do a project on one of the school roofs would allow for reimbursements. Answering questions from Committee members, Mr. Hankard stated that the roof at Timothy Edwards Middle School needs to be replaced. Chairman Wagner stated that other benefits that the Town could see in energy rates is to flatten the peak load at a certain time of the day by using battery power. Committee members discussed the procedures for going out for a Request for Information. Mr. Hankard suggested writing an RFI in order to hire a consultant who has knowledge regarding solar and then could help the Town with an RFP. After a lengthy discussion, Chairman Wagner summarized that the Committee would like to approach the Board of Education to request authorization to go out for an RFP on a solar project on one of the school buildings. Committee members discussed doing small projects first which would help the Town learn and develop. Mr. Stahr felt that a long range plan should be established. Committee members discussed drafting a five-year plan which would put a vision in place.

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ITEM:

5. Business (Continued)

A. Solar on Town Facilities

a. Request for Information (discussion)

Deputy Mayor Snyder made a motion that the Energy Committee request from the Board of Education, authorization to allow the Energy Committee to move forward with an RFP for a solar project at Orchard Hill Elementary School. Mrs. Loukellis seconded the motion; and it was approved, unanimously.

Committee member felt that a discussion item regarding an RFI be put on the next meeting agenda. It was felt that members of the Committee should attend the Board of Education meeting in September in order to support this proposal. Mr. Stahr will be there because he is a Board of Education member, Mr. Hankard will be attending and Chairperson Wagner would be attending to answer any questions the Board of Education may have.

E. Virtual Net Metering Update

Chairperson Wagner explained that Jaime Smith from Lodestar sent an update regarding the Virtual Net Metering project in East Windsor explaining that the solar panels are under construction, the panels are ordered and on their way, and Eversource is saying they will be ready to interconnect in October. Most likely you will start seeing credits by the end of the year. Lodestar will offer a tour late in the fall when there is more to see.

6. Miscellaneous

Chairperson Wagner informed the Committee that he included in the Committee packet, Residential Rate Comparisons and an article entitled, "Plugging Batteries into the Electrical Grid may be the Solution States are Looking for to meet their Renewable Energy Goals".

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ITEM:

6. Miscellaneous (Continued)

Mr. Gantick updated the Committee on the streetlight conversion to LED lights explaining that there is no standard for the orientation of the LED lights. When the Town receives complaints regarding the orientation of a light, the Town will forward those complaints to Eversource. Answering a question from Chairperson Wagner, Mr. Gantick stated he is not aware if LED's are being put into the decorative fixtures.

7. Adjournment

At 5:46 p.m. Deputy Mayor Snyder made a motion to adjourn the meeting. Mr. Cullinane seconded the motion; and it was approved, unanimously.

Respectfully submitted,



Deborah W. Reid
Clerk of the Council

includes

July 26, 2017

Michele Lipe
Town Planner
Town of South Windsor
1540 Sullivan Ave
South Windsor CT 06074

Exhibit A

Re: Suggested Changes to Solar-Related Zoning Regulations

The South Windsor Energy Committee greatly appreciates the efforts of the Planning Department and the Planning and Zoning Commission to adopt comprehensive regulations for solar power. Regulations for solar are primarily presented in Sections 7.20 and 7.21 with numerous references in other sections.

We would like to bring your attention to two situations where current regulations may unnecessarily restrict types of solar photovoltaic equipment that have desirable efficiency, multi-use, size and cost properties. In particular, Paragraphs 7.20.4(A) and 7.21.8(C) have a 12-foot height restriction for ground mounted systems:

- Tracking solar systems. Tracking systems mount solar panels on a grid which is in turn mounted on a pole. They have mechanisms and electronic controls to ensure that the panels are always pointed directly at the sun. This has obvious advantages with respect to efficiency that may offset the higher per-panel installation cost or may make it possible to install solar on a site where roof or fixed ground-mounted systems aren't workable. Systems of a size of interest in commercial, government and industrial sites can be almost 40 feet tall. Installations that support farming activities may also benefit from tracking solar if the farm buildings cannot support the added weight of solar panels. While a large tracking system might be esthetically undesirable in a residential community, the Energy Committee feels that relaxation of the restrictions would be appropriate in other settings where taller structures are routinely permitted. Taller fixed mounted accessory systems may also be appropriate in some settings.
- Solar carports. Solar carports capture solar energy while shielding parked vehicles from rain, snow and sun. The Energy Committee has discussed installing solar carports as accessory structures at police station and school parking lots; businesses may also consider this option. It is possible to design carports that park smaller vehicles – such as sedans, SUVs and pickup trucks – under 12-foot high canopies with a 7-foot lower edge. However, jurisdictions around the country have found that such a design has safety implications that come to light when fire and building officials are consulted. In particular, depending on the installation, it may be necessary for emergency vehicles to fit under the canopy. In these situations, the lowest edge may need to be 12 feet high with an overall height of 17 feet. Other jurisdictions have had to install sprinklers if the height of the system would not allow access to emergency vehicles. The Energy Committee feels that somewhat taller solar carports should be allowed.

The remedy for both of these situations may be to remove the first sentence in Paragraph 7.20.4(A), which limits the height of small ground-mounted solar systems and expand (and retitle) Section 7.20.3

to cover both setbacks and height. In Paragraph 7.20.3(A), state the 12-foot limit as applicable to residential districts. Permit accessory solar power structures associated with agricultural use and parking lots by Special Exception with due consideration of the esthetic impact on nearby residences. In Paragraph 7.20.3(B), apply height restrictions for accessory structures in industrial and commercial zones to ground mounted small solar energy systems by Special Exception to consider placement and esthetics. Placement concerns could include potential shading by an abutter's trees or structures, whether immediately or at some time in the future.

No change is suggested to Paragraph 7.21.8(C), which limits the height of large scale ground mounted systems. If at some point in the future, an applicant proposes to build a large scale system using taller structures, we feel they should make the case for necessary changes to the regulations at that time.

While reviewing the current regulations, we noticed some minor issues regarding definitions in Article 10:

- The definition of Solar Energy, Small, includes the phrase, "used generally in residential settings." Yet Paragraph 7.20.2 (B) provides details for small-scale solar energy systems in Commercial and Industrial Zones. The phrase in the definition isn't necessary.
- In the definition of Solar Energy System, Roof-Mounted, the reference to carports and covered parking structures could be interpreted to treat solar carports as roof mounted systems. While the intent of this letter is to ask for solar carports higher than 12 feet, we suggest that the definitions be reviewed to ensure that these structures are appropriately addressed in the various zones. It may be sufficient to state that solar carports are considered roof mounted systems.
- In the definition of Solar Photovoltaic (PV) System, a comma is needed between inversion and storage. Inversion refers to the conversion of direct current to alternating current. Storage refers to batteries.

The Energy Committee would appreciate your review of these suggestions and drafting of changes for the Planning and Zoning Commission to sponsor. The Committee would support the Commission during both preliminary discussions and public hearings.

Stephen Wagner
South Windsor Energy Committee Chairperson