

AGENDA
CHESHIRE ENERGY COMMISSION
MONDAY, JULY 25, 2022, 7:00 PM
Via Zoom

*Public access made available through live streaming on YouTube at
https://www.youtube.com/channel/UC4_xey3QjJmwe57R_6K94Dw*

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I. CALL TO ORDER

II. DETERMINATION OF QUORUM

III. PLEDGE OF ALLEGIANCE

IV. APPROVAL OF MINUTES

A. June 27, 2022

V. COMMUNICATIONS

VI. OLD BUSINESS

A. Energy Efficiency Projects

1. CHP at Cheshire Community Pool - operating rate (utilization); letter to Sean Kimball

B. Benchmarking

1. Energy Star Portfolio Manager – database input and maintenance; Chris Smith meeting with Amy Thompson

C. Publicity/Education/Outreach

1. News articles and letters to the editor
2. Outreach advertisement – Chris Smith
3. Fall Festival – participation, theme, volunteers
4. Net-zero letter – Dan Knudsen

D. Clean Energy

1. New municipal energy efficiency/cost savings opportunities
2. Opportunities for additional solar car ports or PV arrays, charging stations
3. SAM/Virtual Net Metering Project – response to Dean Fiske

E. PBC Projects

F. Grants, Rebates, & Utility Programs

1. Early involvement of Eversource in all town building projects
2. Spreadsheet of important dates – programs and grants – Chris Smith

G. Energy Reliability Program

1. Update on tree trimming

H. Coalition for Sustainable Cheshire

1. Benchmark and Track Energy Use – Chris Smith to work with Amy Thompson on report for Silver Status for Sustainable CT

I. School Modernization – resources for high performance schools

1. Phase 2+ of Next Generation Schools plan – consider another ESPC?

VII. NEW BUSINESS

A. DOE: \$13 million for community geothermal - geogrids or clean thermal energy districts

CHESHIRE ENERGY COMMISSION
MEETING MINUTES
JUNE 27, 2022 - VIRTUAL ZOOM

I. CALL TO ORDER

Chairman Ogurick called the meeting to order at 7:01 p.m.

II. DETERMINATION OF QUORUM

A quorum was present.

Commission Members Present:

Mr. Rich Ogurick, Chairman
Mr. Chris Smith, Vice-Chairman
Mr. David Gavin
Mr. Dan Knudsen
Mr. Ryan O'Grady
Mr. George (Tucker) Deming

Staff Members Present: None

Others Present: None

III. PLEDGE OF ALLEGIANCE

All present pledged allegiance to the flag of the United States of America.

IV. APPROVAL OF MINUTES

(Note that the May Meeting was cancelled due to a lack of quorum).

MOTION by Mr. Gavin to approve the April 25, 2022 meeting minutes with the following correction:

- Reformat text for minutes dated April 25, 2022 so that roman numerals are in succession.

SECONDED by Mr. O'Grady

VOTE unanimous by all those present and voting

V. COMMUNICATIONS

There were no communications discussed.

VI. OLD BUSINESS

A. Energy Efficiency Projects

1. CHP at Cheshire Community Pool – operating rate (utilization)

Mr. Gavin shared that in March and April the unit was running at 90+ percent efficiency after Aegis installed a new pump. The group discussed how the efficiency of the unit can vary and they would like to ensure that the system is monitored. The group further discussed who has the responsibility of working with Aegis to make sure that the

unit is running at optimal efficiency. Chairman Ogurick will send a letter to the Town Manager for clarification.

2. Bartlem Park Concession Stand – energy waste

There was a brief discussion regarding the monthly utility cost for the unoccupied building.

B. Benchmarking

1. Energy Star Portfolio Manager- database input and maintenance

Mr. Smith shared that there are four (4) remaining properties that need to be entered into the system. Mr. Smith will contact Mr. Bombero to discuss.

C. Publicity/Education/Outreach

1. News Articles and Letters to the Editor

Chairman Ogurick had shared an email regarding Net Zero Schools which was shared with Commission members on 6/22/22.

2. Outreach Advertisement – Chris Smith

3. Life Cycle Cost Letter – Cheshire Forum (5/3/22) and Cheshire Herald (5/12/22)

(Items #2 and #3 were discussed)

The advertisement was forwarded to the Cheshire Herald and the article was run in the May 12, 2022 edition, in the editorial section.

Mr. O'Grady reported that he put a link to the advertisement on the Cheshire Forum and received eighteen "likes" and no responses. The group discussed the level of understanding the general public has regarding "Net Zero" schools and how this may impact the November referendum. They also discussed how to increase understanding and promote pro-activity towards Net Zero Schools in Cheshire. The group concluded that a grass roots approach may be the best way to actively engage residents in hopes that the School Modernization Committee is considering Net Zero Schools. It was noted that this information may be contained within the State grant application. Mr. Deming commented that there was a June 30th deadline for the grant application.

The group also discussed the survey that Jeff Solan posted regarding the School Modernization Subcommittee recommendations and public survey results. Mr. O'Grady forwarded the link to the report to members of the Energy Commission: https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_8580856/File/Government/School%20Modernization%20Committee/SMC%20Final%20Report.pdf?mibextid=vqW32m&fs=e&s=cl

D. Clean Energy

1. New Municipal Energy Efficiency/Cost Savings Opportunities

Mr. Gavin shared that roof top units at the Waste Water Treatment Plant are a good opportunity to explore. The group discussed consulting with people who have an expertise in this area to look into possible solar installation on municipal and school rooftops.

2. Opportunities for Additional Solar Car Ports or PV Arrays, Charging Stations

This item was not discussed.

3. Net-Zero Pilot Program

Mr. Gavin will identify possible grants that may enable a town building such as the Yellow House to be upgraded to a Net Zero facility. This could then serve as a model for possible future upgrades to other Town buildings.

4. SAM/Virtual Net Metering Project – response to Dean Fiske

There was a brief discussion about this item. Mr. Smith will add deadlines for the program to the spreadsheet of important dates that he is creating.

E. PBC Projects

There was no discussion on this item.

F. Grants, Rebates & Utility Programs

1. Early Involvement of Eversource in all Town Building Projects

There was no discussion on this item.

2. Spreadsheet of Important Dates – programs and grants

This item was discussed under C.4. SAM/Virtual Net Metering Project. Deadlines for the program can added to the spreadsheet of important dates created by Mr. Smith.

G. Energy Reliability Program

1. Update on Tree Trimming

Tree trimming is in progress.

H. Coalition for Sustainable Cheshire

1. Benchmark and Track Energy Use – information on Portfolio Manager for Silver Status for Sustainable CT

2. Response from Amy Thompson of UCONN

(Items #1 and #2 were discussed simultaneously)

It was reported that Professor Amy Thompson from UCONN can assist in generating the report which is required for Sustainable CT to achieve Silver status. Mr. Smith will work with Amy Thompson in order to obtain the report at the same time he works with her to update the four (4) remaining properties discussed under item B.1 – database input and maintenance.

It was noted that Sustainable CT has until August to obtain Silver status.

I. School Modernization

1. Communication with Chuck Warrington of Colliers

Chairman Ogurick shared that he wrote to Mr. Masciana and Mr. Perugini regarding Net Zero schools and has not received a response to date. He also noted that Colliers is familiar with Net Zero schools due to the fact that they are the same firm who worked with Mansfield Schools on their modernization initiative.

VII. NEW BUSINESS

A. Appointment of New Commissioner

Mr. Tucker Deming has been officially sworn in as the newest member of the Energy Commission.

B. New School IAQ legislation

Mr. Smith briefed the group on recent State legislation and reimbursement pertaining to Indoor Air Quality for schools.

C. Fall Festival – participation, theme, volunteers

Chairman Ogurick polled the group on their availability to volunteer at the Fall Festival as well as the opportunity to educate and inform the public about Net Zero schools. The group also discussed the theme/hand-out they would like present to the public.

D. Phase 2+ of Next Generation Schools Plans – consider another ESPC (Energy Savings Performance Contract)?

The group discussed the phases of the Next Generation Schools Plans. Although Phase 2 + has not been formally discussed, Chairman Ogurick noted that an energy savings performance contract may be a viable option to consider when determining energy efficiency upgrades at the additional schools not included in Phase 1 of the plan.

VIII. ADJOURNMENT

Mr. O'Grady motioned to adjourn the meeting at 8:28 PM, seconded by Mr. Smith and the meeting was adjourned.

ATTEST:

A handwritten signature in blue ink, appearing to read "Anne McBain". The signature is fluid and cursive, with a large initial "A" and "M".

Anne McBain, Acting Secretary

Lower Initial Construction Costs Could Translate into Higher Taxes

As Cheshire residents may be aware, the town has been working on a school modernization plan called "Next Generation Schools," which will require a referendum for resident approval of what is expected to be a very significant investment. The Cheshire Energy Commission, an advisory body to the Town Council, comprised of appointed volunteers, wants to ensure that planning for the new school buildings in the initial phase, and the renovation of existing school buildings in subsequent phases takes a close look at the operational energy costs that our tax dollars will be committed to pay for in the foreseeable future. The proper way to think about a long term investment such as this is to consider its Life Cycle Cost.

Life Cycle Cost is the total cost of ownership over the life of an asset. So, while one may think that our taxes will be less if we go with the cheapest design and the lowest bid, the opposite is more likely to be true. The Operations and Maintenance cost of a municipal building over its estimated useful life, generally 50 years, could easily total 3 - 4 times that of the initial construction cost. Energy consumption represents the second highest operational expense to schools, second only to salaries. Each year, a significant portion of taxpayer dollars is spent on school utility expenses such as electricity, natural gas, fuel oil, water, etc. Therefore, it is vitally important to consider these potential costs in the initial design phase, and not as an afterthought.

The Energy Commission has recommended to the BOE and the Town Council that net-zero energy construction be considered for its new school buildings. Several CT towns have built net zero energy schools recently, which use technologies that consume between 65%–80% less energy than conventionally-constructed schools, and generate the remaining energy required onsite using renewable energy sources like solar power. While these more energy-efficient technologies do increase the initial construction cost, the incremental amount can often be paid back through energy savings in a matter of just a few years, and then save the town money for 30 or more years, thereby reducing residents' property taxes.

Some energy technologies that the town should carefully consider are:

- Heating and cooling using ground source heat pumps, which are not only energy efficient, but also eliminate the use of fossil fuels and reduce our carbon footprint. We will be taking the environmentally responsible path by reducing our greenhouse gas output. Also, in the future, there will be a trend toward increased electrification of buildings, including their heating systems. We don't want to build something now that will be obsolete in 5 years
- Consider roof-mounted solar panels and solar carports in the design phase, so they can be added later, if they are not installed during the initial construction
- Maximize Indoor Air Quality (IAQ) by installing appropriate sensors and controls, plus include heat recovery on the ventilation systems
- Install LED lighting and associated controls (occupancy sensors and dimming). Lighting should be accessible by a ladder and not require special equipment for maintenance
- Take advantage of daylighting to the greatest extent possible. but not at the expense of having excessive glass surfaces that might look modern from the outside, but can cause large heat losses and difficulty cleaning
- Install maximum R-value insulation and highly rated windows
- Include a Building Automation System (BAS), which is web accessible and integrated with other BAS installations in town

- Equip exterior lighting with photocells or timers, and use step-dimming technology that keeps them from running at their full brightness at night when it is not necessary
- Install efficient water technologies such as low flow electronic valves on toilets and sinks, and tankless hot water heaters
- Install energy efficient equipment in kitchens and cafeterias (heating, cooling, and refrigeration)
- Integrate energy security and resiliency technologies into future school buildings
- Assure that a Computerized Maintenance Management System (CMMS) is implemented

It is important that these concerns, which are both important to our quality of life and cost of living in Cheshire be considered and implemented to the extent possible in the Next Generation School plan.

Cheshire Energy Commission