

# ENERGY COMMITTEE

## TOWN OF SOUTH WINDSOR

Minutes

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September 8, 2020

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### Madden Room – South Windsor Town Hall Regular Meeting

#### 1. Call Meeting to Order

The meeting was called to order at 4:34 p.m.

#### 2. Roll Call

Members Present: Larry Brown, Resident  
Hank Cullinane, Resident  
Marek Kozikowski, Board of Education  
Andy Paterna, Town Council  
Stephen Wagner, Resident

Members Absent: Darrell Crowley, Board of Education  
Councilor Cesar Lopez, Town Council  
Athena Loukellis, Resident  
Councilor Janice Snyder, Town Council  
Sherman Tarr, Resident

#### 4. Public Input

None

#### 5. Next Meeting – October 13, 2020 or November 10, 2020 (Virtual Meeting)

#### 6. Business

##### B. Police Station Solar Canopies (Chief Custer and Adam Teff, Titan Energy attending)

- a. Project management contract with Titan Energy
- b. Proposed layout (discussion)

Mr. Adam Teff explained to the Committee that he had done a site walk at the Police Station to review the preliminary layout for solar canopies. There is plenty of space in the lot, and with the proposed layout, there will be improvements that will allow more space to be used.

**(Discussion Continued on Next Page)**

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**ITEM:**

**6. B. (Continued)**

The developer will cover the costs of the solar canopies, and an agreement will be through a Power Purchase Agreement. The proposed project will be keeping the costs neutral with some operational costs to the Police Department. There are no time constraints at this time. The ZREC from the last round still has to be announced, and the next ZREC application will not be for another six months. Mr. Teff reviewed the layout further, as shown in attached **Exhibit A**. The parking lot will be pushed out to make room for fencing and an impound lot. It is anticipated that there will be some tree work associated with this project, but do not foresee any issues with visibility or aesthetics. The layout is what would be used to go out for an RFP. The design represents close to 100% of the energy consumption of the building but will not impact future energy measures.

Answering questions from the Committee, Mr. Teff stated that there should be plenty of room for emergency vehicles to navigate this area. This project will have to go through the Planning & Zoning Commission, as well as receiving approval from the Fire Marshal.

Deputy Chief Lindstrom explained that the Police Department has been looking at covered parking for department vehicles and personally owned vehicles that come in for shift for a few years. The only concern for the Police Department is that there is vertical clearance for the tanker truck that comes in to refuel the cruisers and for fire apparatus. Deputy Chief Lindstrom also mentioned that there is a tentative plan to have the parking lot resurfaced, so he would like it coordinated that the parking lot be resurfaced before the solar carports are installed.

Chief Custer spoke in favor of the solar canopies, which will protect the Police Department vehicles.

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**ITEM:**

**6. B. (Continued)**

Mr. Teff informed the Committee that this project would be a third party owned system, which means the winning bidder would own and operate this asset. They would sell energy back to the Town with zero capital upfront, and the Town would not have any cost for maintenance. This project would be a one to one match with the energy that is produced and the energy that is consumed, which means, the current costs and the future costs would stay right about even.

Answering further questions, Mr. Teff recommended a 0% escalator on the Power Purchase Agreement price.

Chairman Wagner informed the Committee that the Police Station currently benefits from the Virtual Net Metering project in East Windsor. These credits would be moved to another Town facility once the solar canopies are installed and running. Mr. Teff added that you would not want to get rid of all of the credits, but you would want to assess how many credits would make the project the right size. Mr. Teff offered to help with this.

Mayor Paterna said he feels this is a positive project and likes the idea of transferring some of the virtual net metering to another facility in Town.

Mr. Cullinane questioned if the Community Grant program that is up to \$100,000 could be used to offset the cost of the solar carport at the Police Department? Mr. Teff explained that this system would be third party owned, and he does not believe that the third party would be able to use those funds to help offset the costs of the project and felt that the money would need to be spent directly by the Town. Mr. Teff stated he would look into it.

Mr. Teff then went on to explain that the layout that was put together is a maximum extent of the opportunity, and the Town would not want to build this any larger. There will be a loss of approximately half a percent each year in energy production capability from the arrays, so in ten years, the Town may have an opportunity to become more efficient through another technology.

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**ITEM:**

**6. B. (Continued)**

Mr. Kozikowski stated that he feels it is a great project which will add value to the Town. Mr. Kozikowski expressed his concerns with the project. The lower array extends pretty far over the lawn, and he does not want the grass or vegetation impacted. He also voiced concern about creating a negative visual view from the adjacent condominiums as well as any type of glare that could be reflected off of the panels. Mr. Teff explained that it is being proposed to have gravel under the area of the array that is extending out, so there should not be any impact to the grass or vegetation in that area. Mr. Teff then commented that there are fairly tall trees in the area of concern, so he feels the view of the condos to the Police Department is very limited. In terms of the glare, every panel now is anti-glare. Chairman Wagner added that if there is any concern with a visual impact from the condominiums, this could be addressed through the Planning & Zoning Commission by adding some low-level bushes. Chief Custer informed the Committee that a six-foot chain link black vinyl wrap fence is being put up, and if there is concern about a visual impact, black nylon could be used as a visual barrier.

**3. Approval of Minutes (March 10, 2020)**

Mr. Brown made a motion to approve the March 10, 2020 minutes. Mayor Paterna seconded the motion, and it was approved unanimously.

**6. Business (Continued)**

**A. Free, Fuel-Blind Home Energy Solutions (HES) through 2020**

Chairman Wagner informed the Committee that the Home Energy Solution Program is free through the end of the year.

**C. Zoning for Electric Vehicle Charging (Discussion)**

- a. Projected growth over next ten years
- b. Possible requirement for charging facilities in new retail and multi-family site plans

Chairman Wagner told the Committee that the Planning & Zoning

**(Discussion Continued on Next Page)**

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**ITEM:**

**6. C. (Continued)**

Commission recently had an application for retail and office development, and they required the applicant to have 10% of the parking spaces to have electric vehicle charging capability. Chairman Wagner questioned if anyone on the Commission would be interested in doing some research on electric vehicle charging stations and what should be required with new construction in various situations. This information could be brought back to the Planning & Zoning Commission for the drafting of regulations in the future.

Mayor Paterna suggested that the Committee contact Steve Lewis, who knows a lot about this subject.

Mr. Kozikowski explained that in Middletown, there is an existing zoning regulation where any development with 25 or more parking spaces is required to have at a minimum one charging station, and up to 3% of all required parking has to have an electric charging station.

Chairman Wagner felt that the Town might want to require at least the wiring in new apartment development and not necessarily the charging and billing capability. Also, in apartments, if there is reserved parking, electric vehicles charging stations could be put in that area, so if anybody moves into an apartment that has an electric vehicle, they will have the capability to charge their vehicle.

Mr. Brown felt that there should be electric charging stations in the multi-use developments.

Mr. Cullinane explained to the Committee that in the 2021 building codes, there might be a requirement to wire new houses for electric vehicles. Mr. Cullinane stated he would look for this information and send it to Chairman Wagner so it can be shared with the Planning & Zoning Commission.

Chairman Wagner suggested that Mr. Cullinane, Mr. Lewis, and he meet to get information that could be brought back to the Committee for discussion. After review by the Committee, the information could be shared with the Planning & Zoning Commission.

**(Discussion Continued on Next Page)**

**ITEM:**

6. C. **(Continued)**

Mr. Brown felt that being able to charge an electric vehicle would be an advantage in an apartment complex, even if it were a stand-alone parking space somewhere in the development. Mr. Kozikowski stated that if the Town could construct a group of charging stations, it will reduce the overall cost of installation. Mr. Kozikowski then stated that 10% is a lot, but if you can spread charging stations out, then people will not have to drive as far to find one.

Chairman Wagner explained that the units pay for themselves. The person using the unit gets billed for their use.

**D. Zoning for Electric Vehicle Charging (Discussion)**

- a. Negotiated lower minimum payments
- b. Powder Hill Enfield project
  - Contract signed
  - Rough Schedule
- c. Platt Hill, Winchester project
  - Contracts signed
  - Rough Schedule

Chairman Wagner explained that early in the pandemic, it occurred to him that the Town might see electric rates go down because of the pandemic. Chairman Wagner explained further that he brought this concern to the Town Council's attention and then went back into negotiations with Lodestar. Chairman Wagner reviewed the impact of energy price changes on savings from Virtual Net Metering Projects, as shown in attached **Exhibit B**.

Answering questions from the Council, Chairman Wagner explained that Eversource gives the Town a credit, which is dollar credits on our bill. The Town can use those dollars for anything and uses the credit to pay the delivery charge. The Town also pays Lodestar for the right to get those credits.

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7. Miscellaneous

None

8. Adjournment

At 5:34 p.m. Mr. Brown made a motion to adjourn the meeting. Mr. Cullinane seconded the motion, and it was approved unanimously.

Respectfully submitted,

A handwritten signature in cursive script, reading "Deborah W. Reid", is written over a horizontal line.

Deborah W. Reid  
Clerk of the Council





# Potential Impact of Energy Price Changes on Savings from Virtual Net Metering Projects

Stephen Wagner  
Chair, South Windsor Energy Committee

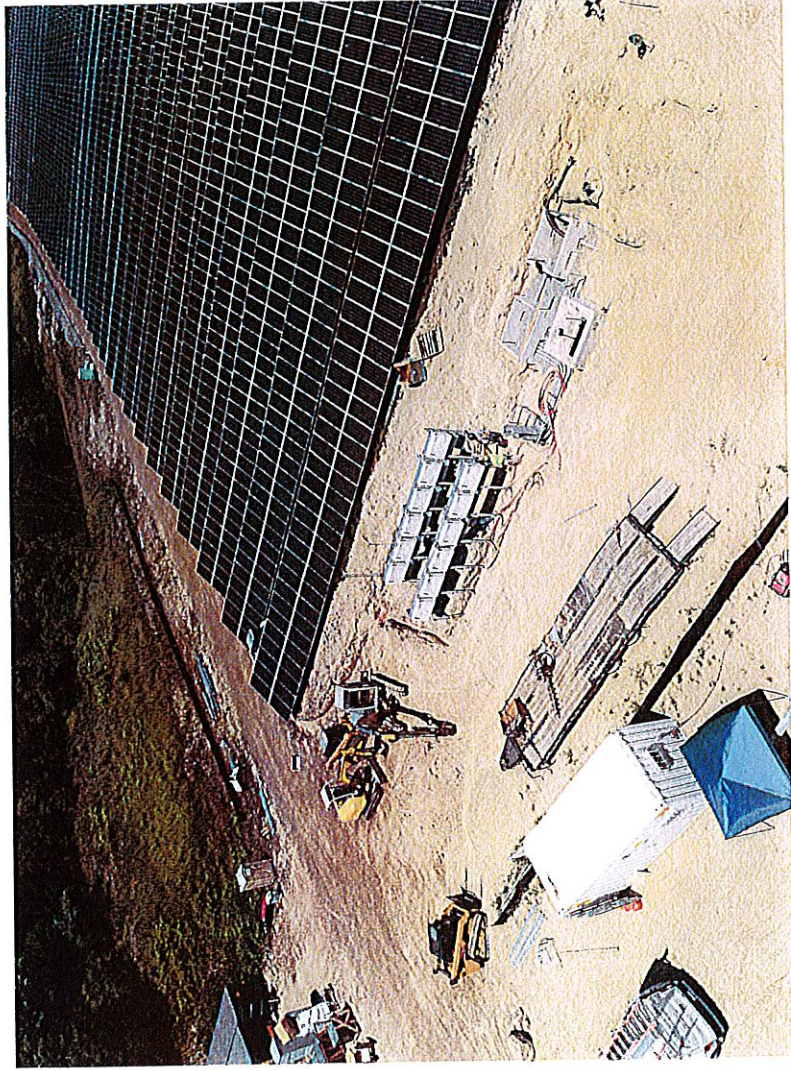
## Purpose of Discussion

- Inform the Council how changes in electric rates due primarily to COVID-19 pandemic affect current and future VNM projects
- Report on contract discussions to date
- Discuss possible negotiations with Lodestar Energy (the supplier)
- Assign a negotiation team for pricing aspects of contracts (Attorneys deal with the legal aspects)

# Three Virtual Net Metering Projects

- NorCap South – East Windsor (Operating)
  - 2833 kWDC – Credits to Municipal and Sewer System facilities
  - Online: December 2017
  - Savings to date: \$147,474 (on target to forecast)
  - Projected 20-year savings: \$1.4M
- Powder Hill – Enfield (Under construction)
  - 2833 kWDC – Credits to Schools
  - Signed contract
  - Under construction, Anticipated Online: Fall 2020
  - VNM Savings will supplement rooftop solar savings
  - Projected 20-year savings: \$1.4M
- 33% of Sand Hill – ~~N Canaan~~ Platt Hill Winchester (In development)
  - 1000 kWDC – Credits to Sewer Plant
  - Signed contract, going before Siting Council
  - Anticipated online: Early 2021
  - Projected 20-year savings: \$0.5M

# Powder Hill as of July 31



9/8/2020

## How Virtual Net Metering Works

- Eversource provides South Windsor a cash credit for solar plant production based on their standard generation, transmission and distribution rates
- South Windsor pays Lodestar for credits: Greater of ...
  - 85% of Eversource Credit, or
  - Original pricing: Floor of \$0.1050/kWh years 1-5; \$0.1100/kWh years 6-10; \$0.1150/kWh years 11-15; \$0.1200/kWh years 16-20
- Original projections based on long-term rate trends and historic weather
- Eversource rates dropped significantly for July-Dec 2020 due to pandemic and geopolitical effects on natural gas prices. Future rates TBD.
- Hence our credits may not always be enough to generate 15% savings and could even be lower than the floor at times.

# Potential Scenarios

	6 months starting ...	Norcap South			Powder Hill		
		Credit (¢/kWh)	Lodestar Price (¢/kWh)	Savings %	Credit (¢/kWh)	Lodestar Price (¢/kWh)	Savings %
History thru 12/2020	Jan-18	14.931¢	12.692¢	15.0%	13.493¢	11.47¢	15.0%
	Jul-18	15.432¢	13.118¢	15.0%			
	Jan-19	15.359¢	13.055¢	15.0%			
	Jul-19	13.304¢	11.308¢	15.0%			
	Jan-20	12.541¢	10.660¢	15.0%			
	Jul-20	10.457¢	10.500¢	-0.4%			
Pessimistic Future	Jan-21	11.128¢	10.500¢	5.6%	14.153¢	12.030¢	15.0%
	Jul-21	10.492¢	10.500¢	-0.1%	12.027¢	10.500¢	12.7%
	Jan-22	12.030¢	10.500¢	12.7%	13.588¢	11.550¢	15.0%
	Jul-22	11.327¢	10.500¢	7.3%	11.327¢	10.500¢	7.3%
	Jan-23	12.302¢	11.000¢	10.6%	12.302¢	10.500¢	14.6%
	Jul-23	11.585¢	11.000¢	9.4%	11.585¢	10.500¢	9.4%
Optimistic Future	Jan-21	12.971¢	11.026¢	15.0%	16.023¢	13.620¢	15.0%
	Jul-21	12.220¢	10.500¢	14.1%	13.776¢	11.710¢	15.0%
	Jan-22	13.290¢	11.296¢	15.0%	14.876¢	12.645¢	15.0%
	Jul-22	12.525¢	10.646¢	15.0%	12.525¢	10.646¢	15.0%
	Jan-23	13.617¢	11.575¢	15.0%	13.617¢	11.575¢	15.0%
	Jul-23	12.838¢	11.000¢	14.3%	12.838¢	10.912¢	15.0%

## Renegotiated Floors

- . 85% of the Eversource credit based on R30 rates.
- . A floor of
  - . \$0.1000/kWh years 1-5;
  - . \$0.1050/kWh years 6-10;
  - . \$0.1100/kWh years 11-16;
  - . No floor years 17-20.



# Revised Scenarios

Exhibit B

	6 months starting ...	Norcap South (no change)			Powder Hill		
		Credit (¢/kWh)	Lodestar Price (¢/kWh)	Savings %	Credit (¢/kWh)	Lodestar Price (¢/kWh)	Savings %
History thru 12/2020	Jan-18	14.931¢	12.692¢	15.0%	13.493¢	11.47¢	15.0%
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	Jul-23	11.585¢	11.000¢	9.4%	11.585¢	10.000¢	13.7%
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	Jul-22	12.525¢	10.646¢	15.0%	12.525¢	10.646¢	15.0%
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