



February 25, 2019

Mr. Robert Stein, Chairman  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

Dear Mr. Stein:

The Connecticut Municipal Electric Energy Cooperative (CMEEC) herewith submits an original and fifteen (15) copies to the Connecticut Siting Council of our Forecast of Electric Loads and Resources for 2019-2028 Report as required by Section 16-50R of the Connecticut General Statutes.

Should you require any additional information, please contact me.

Very truly yours,

CONNECTICUT MUNICIPAL ELECTRIC  
ENERGY COOPERATIVE

A handwritten signature in black ink, appearing to read "Michael Lane", is written over the printed name.

Michael Lane  
Interim Chief Executive Officer

CJC/

Enclosures

Cc: Service List



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FORECAST OF ELECTRIC LOADS AND RESOURCES 2019-2028

March 1, 2019

Connecticut Municipal Electric Energy Cooperative  
30 Stott Avenue  
Norwich, Connecticut 06360

## **Introduction and Background**

The Connecticut Municipal Electric Energy Cooperative ("CMEEC") is a not-for-profit joint-action power supply agency empowered to finance, plan, acquire, construct, operate, repair, extend, or improve electric generation and transmission facilities and sell power at wholesale and other markets to serve the needs of the Connecticut municipal electric utilities ("MEUs") and other electric utility systems and customers.

The CMEEC Member utilities (collectively, the "Members") are (1) Norwalk's Third Taxing District Electrical Department ("East Norwalk"), (2) Groton Utilities ("Groton"), (3) Jewett City Department of Public Utilities ("Jewett City"), (4) Norwich Public Utilities ("Norwich"), (5) South Norwalk Electric & Water ("South Norwalk"), and (6) Borah Power & Light Company ("Borah"). The Mohegan Tribal Utility Authority ("MTUA") is also a full-requirements wholesale customer of CMEEC. The loads of the CMEEC Members, and the MTUA are represented on an integrated, single-system basis for purposes of ISO-New England ("ISO-NE") operations.

The joint power supply established by CMEEC is intended to meet the diversified power supply needs of all CMEEC's Members and customers. CMEEC's mission is to meet these requirements reliably and at the lowest possible cost over the long-term. Today, CMEEC's portfolio consists of CMEEC and member-owned generation, unit entitlement contracts, long-term contracts, intermediate and short-term system contracts, financial instruments, and ISO New England (ISO-NE) market purchases.

The enclosed forecast for 2019-2027 shows negative or flat load growth for CMEEC's Members while its special contract customers show flat or slightly positive load growth in Connecticut. CMEEC's projections for the 2019-2027 period reflect an average compound growth rate of -0.10% for total system energy requirements and -0.05% for annual summer coincident peak demand. Some of the negative impact on the Groton Utilities load has been due to the installation of rooftop solar at the U.S. Submarine Navy housing complex.

Future growth is further modulated by reductions in usage rates resulting from the conservation programs planned and implemented by the municipal electric distribution utilities (MEUs). These programs remain very active and are popular with all sectors of MEU end users. The long-term forecasts of electric demand and the energy of the CMEEC Member and customer utilities are the primary tools used to ascertain future CMEEC power needs. These forecasts utilize regression techniques using 13 years of historical weather data to normalize the load history and model the peak loads. Member and customer normalized data are used to produce probabilistic models; these models are adjusted to account for changing dynamics in each member territory, and take into consideration residential customer attrition where applicable. When the primary 50<sup>th</sup> percentile individual forecasts are combined, the result is a CMEEC system-wide energy, peak demand and capacity requirements forecast, which is filed with the Council herein and used to make power supply decisions.

The new Fitch Substation in East Norwalk is expected to meet the needs of that community for several decades and the similar SNEW South Norwalk 115 kV to 13.8 kV SONO substation

which opened in 2014 likewise sets the stage for meeting future load growth with improved reliability over the previous 27.6 kV supply system. Corresponding with this major supply route change SNEW has upgraded its distribution system to 13.8 kV, reducing losses and improving distribution level reliability. With respect to grid related issues, CMEEC participates in NEPOOL studies which include delivery capability review for MEU points of receipt. A current such study is the Southeastern Connecticut Area Study, which looks out to 2022.

### **Conservation and Load Management**

The Connecticut Municipal Electric Energy Cooperative (CMEEC), a joint action supply and transmission agency established by the state’s municipal electric utilities (MEUs), is owned and governed by the cities of Groton and Norwich, the borough of Jewett City, Bozrah Light and Power Company, and the Second (South Norwalk) and Third (East Norwalk) Taxing Districts of Norwalk, Connecticut. In addition, CMEEC provides all power requirements to the Mohegan Tribal Utility Authority. In 2018, the MEUs provided a fully integrated portfolio of energy efficiency initiatives that resulted in 851 kW coincident summer peak demand reduction and 7,526 MWh in annual energy savings, at a cost of about 2.1 cents per lifetime kWh. Please refer to the additional detailed information below summarizing the total aggregate efforts of all of CMEEC’s MEUs.

<b>Municipal Electric Utilities</b>	<b>Assistance to Customers</b>
Bozrah Light and Power	\$18,995
Groton Utilities	\$337,660
Jewett City Department of Public Utilities	\$10,199
Norwich Public Utilities	\$850,509
Norwalk Third Taxing District	\$70,682
South Norwalk Electric and Water	\$164,111
<b>Total Assistance</b>	<b>\$1,452,157</b>

CO<sub>2</sub>  
Emissions  
Reduced  
**5,325  
Tons**

NO<sub>x</sub>  
Emissions  
Reduced  
**1.4 Tons**

SO<sub>x</sub>  
Emissions  
Reduced  
**2.1 Tons**

Savings  
**Annual:  
\$831,547**

kWh  
Savings  
**Annual:  
7.5 Million**

Customers  
Served  
**4,238**

**Lifetime:  
\$11,009,040**

**Lifetime:  
99.7 Million**

Program	Program Budget 2018	Actual Utility Costs 2018	% of Budget Spent	Proj. Annual Savings (kWh)	Annual Energy Savings (kWh)	% of Annual kWh Saved	Lifetime Savings (kWh)	2018 Proj. kW Impact	Actual kW Impact	% of kW Impact Achieved	Summary Peak kW Demand Reduction
<b>Residential</b>											
<b>Home Energy Savings Program</b>											
	\$637,200	\$301,472	47%	285,080	366,240	128%	5,271,944	171	220	128%	
<b>Efficient Products</b>											
Lighting	\$318,600	\$33,114	10%	1,468,040	325,875	22%	3,258,753	1,387	308	22%	
Other	\$ 318,600	\$59,691	19%	66,000	124,553	189%	2,031,127	25	47	189%	
<b>Subtotal - Residential</b>	<b>\$ 1,274,400</b>	<b>\$394,278</b>	<b>31%</b>	<b>1,819,120</b>	<b>816,668</b>	<b>45%</b>	<b>10,561,824</b>	<b>1,583</b>	<b>575</b>	<b>36%</b>	
<b>Commercial</b>											
<b>New Construction</b>											
Equipment Replacement	\$19,100	\$127,017	665%	0	642,550	0%	8,466,779	0	145	0%	1
C&I Existing Facility Retrofit	\$458,800	\$155,848	34%	1,088,920	765,454	70%	12,089,489	162	114	70%	
Administration	\$1,433,700	\$745,850	52%	3,286,810	5,301,069	161%	68,570,534	551	889	161%	5
<b>Subtotal - Commercial</b>	<b>\$ 1,911,600</b>	<b>\$1,028,715</b>	<b>54%</b>	<b>4,375,730</b>	<b>6,709,072</b>	<b>153%</b>	<b>89,126,802</b>	<b>713</b>	<b>1,148</b>	<b>161%</b>	<b>7</b>
Renewables	\$400,000	\$29,164	7%								
<b>Total - All Programs</b>	<b>\$3,586,000</b>	<b>\$2,044,817</b>	<b>57%</b>	<b>6,194,850</b>	<b>7,525,741</b>	<b>121%</b>	<b>99,688,627</b>	<b>2,296</b>	<b>1,724</b>	<b>75%</b>	<b>8</b>

The following material and tables are in the specific itemized requirements of Sec.16-50r of the General Statutes and provided on behalf of CMEEC and its Members and customers. Items (1) through (8) listed below correspond to the numbers included in that section.

- (1) Provide a tabulation of estimated peak loads, resources and margins for each year (of the forecast period):

Table I shows forecasted energy and demand for the period as well as data on summer and winter peak demands. Table II reflects the forecasted annual peak demands for the 2019-2028 periods for both the 50/50 forecast as well as the 90/10 extreme condition forecast.

CMEEC is a participant in ISO NE and meets its net power needs through the ISO-NE market system. CMEEC also maintains power and related resources delivered to the Markets. Market resources over the forecast period include NYPA and Hydro Quebec ICAP credits (20 - 30 MW), Conservation & Load Response ICAP Credits (5 MW), A.L. Pierce (75 – 95 MW), Norwich Jet (15 - 18 MW). CMEEC maintains distributed generator resources (50 - 70 MW), an increase from years past incorporating our combined project with the Navy and State of Connecticut to further secure the energy future of the Submarine Base and to help attain local reliability goals.

- (2) Provide data on energy use and peak loads for the five preceding calendar years:

Historical aggregated energy use and peak loads for the six-member CMEEC system and the Mohegan Tribal Utility Authority (MTUA), are provided in Table III.

- (3) Provide a list of existing generating facilities in service:

Generating facilities owned by CMEEC and CMEEC Members are listed in Table IV. The mix of existing generating facilities and system power agreements that serve the CMEEC system are listed in Table V. Anticipated retirement dates of CMEEC and Member generating facilities are listed in Table VI.

- (4) Provide a list of scheduled generating facilities for which property has been acquired, for which certificates have been issued, and for which certificate applications have been filed:

CMEEC executed a lease in 2014 with the United States Navy for use of an approximately 1 acre federally owned site located at the Naval Submarine Base in Groton. CMEEC is currently developing a 7.4 MW fuel cell generating facility to be located at the Naval Submarine Base. The project is expected to be completed by December 31, 2019.

- (5) Provide a list of planned generating units at plant locations for which property has been acquired or at plant locations not yet acquired that will be needed to provide estimated additional electric requirements:

There are no planned CMEEC owned generating units responsive to this question.

CMEEC has entered into a Power Purchase Agreement (“PPA”) with Fuel Cell Energy (FCE) for purchase of all output and products of a nominally rated 7.4 MW dual unit fuel cell being built on Navy owned property at SUBASE New London in Groton CT and leased by CMEEC. FCE will develop, construct, own and operate the plant which is expected to be in service in early 2020. Power will be delivered to the Groton Utilities distribution system and can be made capable to support the operation of a proposed SUBASE microgrid.

- (6) Provide a list of planned transmission lines on which proposed route reviews are being undertaken or for which certificate applications have already been filed.

There are no planned transmission lines.

- (7) Provide a description of the steps taken to upgrade existing facilities and to eliminate overhead transmission and distribution lines in accordance with the regulations and standards described in Section 16-50t.

Several projects are recently completed, underway or in various stages of completion in the CMEEC Member service territories, which are summarized below.

**South Norwalk (SNEW)** has seen the most growth on our electric system then in the past ten years. We are expecting a ten percent growth in electric sales by the end of 2019. A new million square foot mall, hotel and commercial developments are driving the redevelopment of South Norwalk. From this new growth, SNEW has an opportunity to make significant improvements in the underground electric system. Three of our main underground feeders are being “hardened” to provide redundancy into the mall project. Twenty-five year old cables, connectors and switches are being replaced. Our Elastimold electronic switches will improve reliability and provide early warning signs of a pending load problems. Ultimately, these will be connected to our SCADA system for remote monitoring at the SNEW Engineering Office. SNEW continues on inspecting our underground vaults and make improvements as needed. Forty- Six sections of overhead three phase wire along with poles, transformers, and other associated equipment have been removed from the system. The removed overhead equipment has been replaced with new underground wire, switchgear, and pad mounted transformers. SNEW is in the process of installing three phase switchgear to the existing overhead and underground system along with adding additional system distribution protection to both the overhead and underground equipment. The reduced exposure of the distribution overhead equipment to adverse weather, trees, and vehicles along with adding additional switchgear and system protection will further improve system reliability. The overhead electric system was recently

inspected and potential tree impacts have been identified. SNEW will begin a tree trimming program in early 2019. SNEW has seen several significant storms events in 2018 and our system has been very resilient given the system improvements over the past few years.

**East Norwalk** (TTD) put in service a new PTF level substation in December 2013 (Fitch 47R) which is the subject of CSC DN 426. The project has been completed in accordance with the CT Siting Council and the City of Norwalk Planning and Zoning Commission. This project addresses reliability and replaces aging portions of the distribution system which posed unacceptable risks to TTD. In addition, it allows for TTD to satisfy additional load growth within their system and eliminates two underground supply cables owned by Eversource which were originally installed in 1946. These cables have been repaired continuously because of system faults. TTD's completed SCADA system monitors TTD's transmission system and allows for control of distribution substations. This system will allow for future expansion and will ensure compliance with NERC/NE-ISO regulations.

**Norwich Department of Public Utilities (NPU)** continues to upgrade its 4.8kV distribution system to 13.8kV with a number of benefits: increasing efficiency by reducing system losses; improving reliability through better voltage conditions and newer equipment; and reducing operating costs.

All NPU substations, generating stations and several distribution switches are monitored and controlled 24 hours a day, seven days a week via a Supervisory Control and Data Acquisition (SCADA) system in the utility's Control Room. All stations have been moved to NPU's fiber optic network for more reliable communication and monitoring. In 2018, NPU successfully completed all requirements of the Northeast Power Coordinating Council, Inc. (NPCC) Operations and Planning Compliance Audit.

The Greenville Dam and Occum Dam fish passages both operated successfully during 2018. NPU continues to work closely with DEEP on fish and eel passages, a pit tagging program as well as shad trucking to promote the migration of shad to new spawning grounds. The Occum Dam continues to pass American Shad with NPU's annual performance monitored by DEEP. In 2018, NPU's Greenville and Occum Dams were re-certified by the Low Impact Hydro Institute (LIHI) and continue to accrue renewable energy certificates (RECs).

In 2018 NPU began construction of a new on-site Control Room and Technology Center, which will provide increased operational efficiency of the electric distribution system during both routine and emergency situations.

Over the last several years, NPU has successfully installed 19,603 electric AMI meters as part of a multi-year project. The remaining 1,052 electric meters are expected to be installed during the first seven months of 2019.

In 2017, NPU integrated the AMI system with its upgraded Outage Management System providing Control Room Operators with real time information on customer outages

which further improved outage response and storm management. During 2018, this important upgrade enhanced internal and external communication efforts for NPU.

**Jewett City Department of Public Utilities (JCDPU)** is continuing the upgrading of its distribution network in an intended development of long-range system expansion and as part of this effort, any business or residential expansion would involve underground cable installation. All JCDPU customers are now served through smart meters. Jewett City recently completed the overhaul of their backup substation and this work will go towards increasing the reliability within their service territory. Jewett City DPU is beginning the task of correcting a Load Power Factor deficiency and this work will extend out in time for the next year (expected to be complete by end of 2019).

**Groton Utilities** installed 3,325 feet of underground primary and secondary cables that provides electric power to a housing complex on Military Highway in Groton CT. In addition, numerous underground services to residential customers have been installed throughout the year in the prior two years. Groton Utilities preferred construction standard is to place all power distribution facilities underground.

Groton Utilities and Bozrah have deployed about 15,000 electric meters onto its AMI System.

**Bozrah Light and Power** installed seven (7) underground services throughout the year in the prior two years. Bozrah's preferred construction method is to place all power distribution facilities underground.

- (8) For each private power producer having a facility generating more than one (1) megawatt, and from whom CMEEC has purchased electricity during the preceding calendar year, provide a statement including the name, location, size, and type of generating facility, the fuel consumed by the facility, and the by-product of the consumption:

Generally, the customers in CMEEC Members service areas who have generating capacity greater than 1 MW retain the power for ongoing internal utilization and/or load management. Table VII summarizes major on-site generation capability at customer locations within the municipal service territories. CMEEC does not have formal arrangements in place to purchase power from those facilities at this time. Many of these customers, however, are asked to generate power and/or shed load during high load or emergency conditions as defined in NEPOOL's Operating Procedure #4.

TABLE I  
 CONNECTICUT MUNICIPAL ELECTRIC ENERGY COOPERATIVE  
 10-YEAR FORECAST OF MEMBER AND CUSTOMER ENERGY REQUIREMENTS AND CMEEC PEAK DEMAND  
 2019-2028

YEAR	Groton MMWh	Norwich MMWh	Jewett City MMWh	East Norwalk MMWh	South Norwalk MMWh	Bozrah MMWh	Air Gas MMWh	Mohegan Tribal Utility Authority MMWh	CyrusOne MMWh	Systems Energy Requirements (Met by CMEEC MMWh [1])	CMEEC Summer Coincident Peak Demand MMWh [2]	CMEEC Winter Coincident Peak Demand MMWh [2]	Load Factor %
2018	397,461	318,081	24,895	62,725	95,295	49,905	164,457	140,251	2,675	1,255,745	221.57	189.89	64.7
2019	416,674	315,553	24,241	60,432	94,237	48,144	165,904	136,258	2,529	1,263,971	204.06	190.03	70.7
2020	418,554	316,525	24,319	60,418	96,062	48,353	166,342	136,598	2,509	1,269,680	204.03	190.02	70.8
2021	418,114	315,709	24,252	60,066	97,382	48,306	165,904	136,258	2,519	1,268,510	204.05	190.02	71.0
2022	418,842	315,788	24,258	59,885	99,037	48,387	165,904	136,258	2,514	1,270,872	204.04	190.02	71.1
2023	419,574	315,866	24,264	59,705	100,750	48,469	165,904	136,258	2,517	1,273,307	204.04	190.02	71.2
2024	419,574	315,866	24,264	59,705	100,750	48,469	165,904	136,258	2,517	1,273,307	204.04	190.02	71.0
2025	419,574	315,866	24,264	59,705	100,750	48,469	165,904	136,258	2,517	1,273,307	204.04	190.02	71.2
2026	419,574	315,866	24,264	59,705	100,750	48,469	165,904	136,258	2,517	1,273,307	204.04	190.02	71.2
2027	419,574	315,866	24,264	59,705	100,750	48,469	165,904	136,258	2,517	1,273,307	204.04	190.02	71.2
2028	419,574	315,866	24,264	59,705	100,750	48,469	165,904	136,258	2,517	1,273,307	204.04	190.02	71.0
AACGR % Increase 2018 - 2028	0.54	-0.07	-0.26	-0.49	0.56	-0.29	0.09	-0.29	-0.61	0.14	-0.82	0.01	

[1] Totals are the sum of kilowatthours rounded to the nearest megawatthour (MMWh).

[2] The forecasted CMEEC coincident peak demands were computed by summing the Groton, Norwich Jewett City, East Norwalk, South Norwalk, Bozrah, Air Gas, the Mohegan Tribal Utility Authority and CyrusOne noncoincident peak demands and multiplying by an average historical coincidence factor.

TABLE II

March 2019

**CONNECTICUT MUNICIPAL ELECTRIC ENERGY COOPERATIVE (CMEEC)**

**SUMMARY OF CMEEC PEAK FORECASTS (1)**

<u>Year</u>	<u>50/50 Peak Forecast</u>	<u>90/10 Peak Forecast</u>
2019	204.06	218.72
2020	204.03	218.68
2021	204.05	218.70
2022	204.04	218.69
2023	204.04	218.70
2024	204.04	218.71
2025	204.04	218.71
2026	204.04	218.71
2027	204.04	218.72
2028	204.04	218.72

(1) CMEEC developed its extreme weather forecast peak values by using the CMEEC summer peak forecast and applying an extreme weather scenario to arrive at the 90/10 forecast.

TABLE III

March 2019

**CONNECTICUT MUNICIPAL ELECTRIC ENERGY COOPERATIVE (CMEEC)**

**HISTORICAL ENERGY USE AND PEAK LOAD  
2014-2018**

<u>Year</u>	<u>CMEEC Coincident Peak Load (MW) [1]</u>	<u>CMEEC Energy (MWh) [1]</u>
2014	230.68	1,342,000
2015	219.85	1,329,940
2016	230.77	1,284,532
2017	222.32	1,229,277
2018	221.57	1,255,745

[1] Reflects CMEEC Member loads inclusive of Bozrah and the Mohegan Tribal Utility Authority (MTUA) for 2014-2018. These values also include AirGas an interruptible customer located in Bozrah, CT.

TABLE IV

**CONNECTICUT MUNICIPAL ELECTRIC ENERGY COOPERATIVE (CMEEC)**

**EXISTING GENERATION FACILITIES OWNED BY  
CMEEC AND ITS MEMBERS**

As of March 1, 2019

<u>Generating Facility</u>	<u>Winter Rating (MW)</u>	<u>Summer Rating (MW)</u>
Norwich Combustion Turbine (Oil-Fired) [1]	18.800	15.255
Pierce Generating Unit (Oil/Gas-Fired) [2]	97.000	77.500
Norwich Waste Water Treatment (Oil-Fired)	2.00	2.00
Norden 1 (Oil-Fired)	2.00	2.00
Norden 2 (Oil-Fired)	2.00	2.00
Norden 3 (Oil-Fired)	2.00	2.00
Norwich Second Street (Hydro)	[3]	[3]
Norwich Tenth Street (Hydro)	[3]	[3]
Norwich Occum (Hydro)	[3]	[3]

[1] Represents CMEEC current joint-ownership share. The full capability of the Norwich combustion turbine unit is under contract to CMEEC.

[2] Represents CMEEC current sole ownership share. The full capability of the Pierce generating unit is under contract to CMEEC.

[3] Winter and summer ratings are based on average river flow conditions. The nameplate rating for the Second Street hydro station is 0.95 MW. The nameplate rating for the Tenth Street hydro station is 1.00 MW. The nameplate rating for the Occum hydro station is 0.80 MW. These hydro units remain a resource of the Norwich Department of Public Utilities. The generations of these hydro units are used by Norwich to directly offset Norwich load.

TABLE V

As of March 1, 2019

**MIX OF EXISTING GENERATION - CMEEC RESOURCES**

<u>Unit Designation</u>	<u>In-Service Date</u>	<u>Net Winter Capacity (In MW) [1]</u>	<u>CMEEC Share (MW)</u>	<u>Net Summer Capacity (In MW) [2]</u>	<u>CMEEC Share (MW)</u>	<u>CMEEC Percent of Unit (%)</u>
<u>Long-Term System &amp; Asset Contracts [3]</u>						
Base System Purchase		77.88	77.88	70.25	70.25	
On-Peak System Purchase		17.75	17.75	15.00	15.00	
<b>Total System Contracts</b>		<b>95.63</b>	<b>95.63</b>	<b>85.25</b>	<b>85.25</b>	
<u>Municipal Generation</u>						
Norwich Combustion Turbine	1972	18.80	18.80	15.25	15.25	100.00
Norwich Waste Water Treatment	2008	2.00	2.00	2.00	2.00	100.00
Pierce Generation Unit	2007	97.00	97.00	77.50	77.50	100.00
Norden 1	2009	2.00	2.00	2.00	2.00	100.00
Norden 2	2009	2.00	2.00	2.00	2.00	100.00
Norden 3	2009	2.00	2.00	2.00	2.00	100.00
<b>Total Municipal Generation</b>		<b>123.80</b>	<b>123.80</b>	<b>100.75</b>	<b>100.75</b>	
<b>TOTAL CMEEC CAPACITY RESOURCES</b>			<b>219.43</b>		<b>186.00</b>	
<u>Other Resources</u>						
PA Hydro (Firm & Peaking) [4]			13.30		13.30	NA
Short-Term Purchases [5]			Varies		Varies	NA
CMEEC's Microgen Units [6]			50.00		50.00	

[1] Represents NEPOOL Winter Maximum Claimed Capability.

[2] Represents NEPOOL Summer Maximum Claimed Capability.

[3] System Purchases, Contract Purchases & Unit Entitlement Purchases from several counterparties.

[4] Represents maximum hourly contract deliveries to CMEEC. New York Power Authority (NYPA) hydro purchases began July 1, 1985. Energy contributions from NYPA are considered to be firm contracts and used to reduce electric requirements thereby reducing CMEEC Capability Responsibility in NEPOOL.

[5] The MW amounts shown for Short-Term Purchases vary from month to month from 0 MW to 25 MW through December 2019.

[6] Represents the CMEEC MicroGen Units which are currently commercially operating. Seven (7) 2.50 MW units are located in Groton, two (2) 2.50 MW units are located in Norwich, one (1) 2.50 MW unit is located in Jewett City, two (2) 2.50 MW units are located in Lebanon, CT, four (4) 2.50 MW units are located at the Mohegan Tribal Utility Authority and (4) 2.5 MW units located at Backus Hospital in Norwich. These resources will be used for demand reduction purposes and are not anticipated to be enrolled in the ISO New England markets.

TABLE VI

CONNECTICUT MUNICIPAL ELECTRIC ENERGY COOPERATIVE

March 1, 2019

Anticipated Unit Retirement Dates

**Retirement Date**

**Conventional Hydro**

Norwich Tenth Street Hydro	Not Scheduled
Norwich Second Street Hydro	Not Scheduled
Norwich Occum Hydro	Not Scheduled

**Peaking**

Norwich Combustion Turbine	Not Scheduled
Pierce Generating Unit	Not Scheduled
Norwich Waste Water Treatment	Not Scheduled
Norden 1	Not Scheduled
Norden 2	Not Scheduled
Norden 3	Not Scheduled

Table VII

**Connecticut Municipal Electric Energy Cooperative (CMEEC)**

**COGENERATION & SMALL POWER PRODUCTION FACILITIES  
GREATER THAN 1 MW IN TOTAL SIZE [1]**

**Groton Utilities  
March 2019**

<u>Facility Name</u>	<u>Facility Type</u>	<u>Facility Location</u>	<u>No. Of Units</u>	<u>Prime Mover</u>	<u>Type Fuel</u>	<u>Summer &amp; Winter Capacity</u>	<u>Years Installed</u>
<b>Pfizer, Inc.</b>	Cogeneration	Groton CT	4	Steam Turbine	Turbine Fuel	36,335 kW	1950 1993 2001 2009
			2	Fuel Cell	Natural Gas	2,800 kW each	& 1993 2017
<b>U.S. Naval Sub Base</b>	Cogeneration	Groton CT	1	Steam Turbine	Duel Fuel	5,000 kW	1996
			2	Diesel Engine	#2 oil	750 kW	2015

[1] The customer retains power from each of these facilities.

[2] This diesel generator is used to provide black start capability.

<b>Tesla's Pelican Farm</b>	Solar Farm	Groton CT		Solar Panels	Solar	3,500 kW	2017
<b>Tesla's Trident Farm</b>	Solar Farm	Groton CT		Solar Panels	Solar	1,000 kW	2017
<b>Tesla's Polaris Farm</b>	Solar Farm	Groton CT		Solar Panels	Solar	3,500 kW	2018

**Bozrah Light and Power  
March 2019**

<b>Tesla's Brush Solar Farm</b>	Solar Farm	Bozrah CT	Solar Panels	Solar	2,500 kW	2016
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**Norwich Public Utilities  
March 2019**

<b>Tesla's Stott Avenue Solar Farm</b>	Solar Farm	Norwich CT	Solar Panels	Solar	3,500 kW	2017
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<b>Tesla's Rogers Road Landfill Solar Farm</b>	Solar Farm	Norwich CT	Solar Panels	Solar	1,500 kW	2017
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<b>Tesla's Rogers Road Greenfield Solar Farm</b>	Solar Farm	Norwich CT	Solar Panels	Solar	1,000 kW	2017
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