Wakefield Municipal Gas and Light Department

Board of Commissioners

March 3, 2021

NOTICE OF MEETING
WAKEFIELD MUNICIPAL LIGHT & GAS DEPARTMENT
BOARD OF COMMISSIONERS

DATE: **March 3, 2021**
CALL TO ORDER: **6:30 P.M.**

Consistent with the Governor's orders suspending certain provisions of the Open Meeting Law and banning gatherings of more than 10 people, this meeting will be conducted by remote participation to the greatest extent possible. The public may not physically attend this meeting, but every effort will be made to allow the public to view and or listen to the meeting in real time. Persons who wish to do so are invited to click on the following link

Join Zoom Meeting

https://zoom.us/j/91986103502

Meeting ID: 919 8610 3502

Dial in
+1 646 876 9923
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Please only use dial in or computer and not both as feedback will distort the meeting.

WMGLD BOARD OF COMMISSIONERS MEETING
480 North Ave
Wakefield, Massachusetts 01880

March 3, 2021

AGENDA
6:30 PM

A. Call to Order

B. Opening Remarks

Chair's Remarks – Phil Courcy
Commissioners Reports
Town Council Liaison Comments
Public Comments

C. Secretary's Report

1 Approval of February 3, 2021 Minutes

D. Old Business

1 Project Updates
2 Electric Vehicle Charger Update

E. New Business

1 Texas Electric System Discussion

F. Any other matter not reasonably anticipated by the Chair

G. Executive Session – Collective Bargaining

H. Adjournment

WMGLD
P.O. BOX 190 480 North Ave.
Wakefield, MA 01880
Tel. (781) 246-6363 Fax (781) 246-0419

Peter D. Dion, General Manager

WAKEFIELD MUNICIPAL GAS & LIGHT DEPARTMENT

BOARD OF GAS & LIGHT COMMISSIONERS MEETING

February 3, 2021

MINUTES

IN ATTENDANCE:

Commrs. Phil Courcy, Chairman
Thomas Boettcher, Secretary
Jennifer Kallay
John J. Warchol

Peter Dion, General Manager, WMGLD

Mark Cousins, Financial Manager
Dave Polson, Engineering and Operations Manager
James Brown, Gas Superintendent
Raven Fournier, System Engineer
Joe Collins, WMGLD Contractor
Sylvia Vaccaro, Office Manager

Julie Smith-Galvin, Town Liaison

Members of the Public

Elton Prifti	18 Partridge Ln.
Anu Gerweck	17 Robert St
Robert Vogtli	157 Parker Rd.

PLACE: ZOOM MEETING

CALL TO ORDER:

Commr. Courcy called the meeting to order at 6:30 P.M. and informed the Board the meeting is being recorded.

Chair Remarks: No remarks.

Commissioner Remarks: No remarks.

Public Remarks:

Anu Gerweck expressed that she is interested in learning about what progress has been made in sourcing fuel in an environmentally responsible way.

Robert Vogtli commented that like Anu he is keen to hear the latest progress on our future plans to source energy.

Town Council Comments:

Julie Smith- Galvin noted that there will be a meeting tomorrow concerning the Green Communities Act. They will be submitting the application in the Fall. Pete will be involved in providing some base line information. She expressed her thanks in taking up the topic of the Peabody power plant tonight and looks forward to that discussion.

Secretary's Report

Approval of minutes from the January 6, 2021 meeting was before the Board for approval. There were no comments or corrections.

A motion was made by Commr. Boettcher to approve the January 6, 2021 Board minutes as presented and seconded by Commr. Courcy

Roll Call Vote:	Commr. Boettcher	Aye
	Commr. Courcy	Aye
	Commr. Kallay	Aye
	Commr. Warchol	Aye

The motion was approved unanimously.

Old Business:

Project Updates

Presentation of System Overview & New Salem Street Gas Regulator

Jim Brown, Gas Superintendent and Raven Fournier, System Engineer provided the Board with an overview of the Gas System and the New Salem Regulator Station upgrade.

Mains

Jim stated that currently 75% of the gas mains are plastic. We are in the process of replacing the cast iron mains with a completion date of 2022. Our goal is to reach 100% plastic in 8-10 years. He noted that gas leaks are the top priority. WMGLD hires a contractor that lays the dead main each Spring and then, the WMGLD crews go back and liven the main over the course of the year. The DPU approves of this process not only because we are able to replace mains at a faster rate, but the safety factor of having our own crews liven the lines. Throughout this process we are updating our GIS records. He also stated that we continue to work closely with the DPW on their paving priorities.

Services & Meters

Jim noted we have similar goals to become 100% plastic in this area. We are moving all meters outside which will provide for greater safety. We are also installing meter bars that allow us to bypass the meter, so we do not have to inconvenience the customer when performing meter changes. Pete stated that even with COVID restraints we were able to move 111 meters outside this past year. Commr. Boettcher inquired how these move outs were being prioritized. Jim stated that they are being performed along with the dead mains and leaks upgrade work, new services, or if a customer calls in with a concern. He also noted that we are required to survey a third of our system a year, so any issues in that survey are prioritized and added to the list. Commr. Boettcher also asked if the DPU was pushing us to move faster to get this work completed. Jim noted that the DPU is pleased we are being proactive and with the number of move outs that have already been completed. Commr. Kallay asked when all meters will be moved outside. Jim noted that this project should be completed in 10 years.

Leaks

The number of gas leaks have been improving. The number of Class 2 leaks have been reduced from 47 to 4 over the past 3 years. Of these leaks, 3 are on systems we are currently working, so the number will be down to 1 shortly. This will enable us to focus on the Class 3 leaks with the highest environmental impact. Three of these leaks are on systems we are currently working, so this number will be reduced further.

New Salem Street Regulator Station Replacement

Raven stated there were a few reasons this station was chosen to be replaced first. The first being its physical location. It was situated adjacent to a construction company, the Mill River, and the road.

She noted that the outdated underground sensor lines were replaced with the new industry best practice of being above ground and inside the new structure. To be proactive and ahead of potential requirements, it was built to accommodate relief valves. She stated that all the stations will be designed in the same manner to reduce the need for multiple procedures. Commr. Courcy asked for a brief description of a gas regulator. Raven noted that it is basically like an electrical transformer only for gas. The inlet takes higher pressure gas that comes in at 60 lbs. and reduces it to a lower pressure going out at maximum of 15 inches water column. A new SCADA box was installed next to the station. This will send low/high pressure alarms to the substation to monitor the pressures 24/7. The GIS system was also updated, which will provide accurate records for GIS mapping. The new station was put in service earlier, and the old station will be decommissioned in the coming weeks. Commr. Kallay inquired as to how many stations there are. Jim stated we have 6 stations with 2 more that need to be replaced. Lowell Street will be replaced next year followed by Farm Street the following year.

Project 2015 A

Pete Dion stated there were some questions concerning 2015A. There has been a handful of key issues raised since last meeting. It is important that we share accurate information. There has been some hearsay and inaccurate information. The project was approved in 2015 in a public meeting. There is a portion of it that has to be discussed in Executive session because of the market sensitivity of financial data. In 2017 when we were ready to fully subscribe and bid the proposed unit into the forward capacity market, the Board met again and took a ratification vote and voted

to bid into the forward capacity market. General Counsel was asked to review the process that was used. There are two reasons this process was used. The first is that the ISO market rules require that you do not disclose financial information that could inhibit the freedom of the market or negatively impact any market participant. The first step is to bid into the forward capacity market. This information cannot be shared publicly until we actually bid into the market. Following the Forward Capacity auction in 2018, information was publicly shared on the number we bid into the forward capacity market and the number we cleared at in 2018. The idea that this was done surreptitiously is not correct. In reviewing the agendas and minutes for this time period it was found that it was discussed in two public meetings in 2015 and in four other meetings since, for a total of 6 public meetings. It is important to note that the other participants had to abide by the same process and that the Open Meeting Laws were followed.

WMGLD General Council reviewed the process and agreed that the process that was used was what we were supposed to do and required to do. This project was not kept secret or hidden in any way. There are certain aspects that have to be kept confidential and that is why those were discussed in Executive session. Julie Smith-Galvin wanted to clarify that WMGLD has been transparent compared to other utilities and MMWEC. She mentioned that MMWEC does not have any information about this on their website and Peabody does post their meeting minutes. Pete stated that he assumed that they followed what processes they needed to follow.

Pete mentioned the second issue that was raised is that this is going to be an oil resource. It is not. It is going to be a natural gas resource more than 85% of the time. If we continue towards Roadmap 2030 & 2050 goals and are successful, we will be moving more heating load in buildings over the next 10 years to electric load and the natural gas constraints in the region should drop, allowing the unit to potentially run on natural gas 12 months of the year instead of 10 months before 2030.

It is a natural gas plant not oil fired. We have historical data that illustrates this will run about 85 percent of time on natural gas. It will only run on oil in the peak winter months, if we have to run at all. The reason these plants are being built with oil back up is when you bid into the forward capacity market you have to be able to provide that capacity year-round otherwise there are significant financial penalties. This is a capacity resource not an energy resource. It is only going to run if the Grid needs it to run for capacity reasons. We are not bidding this into the market as a merchant base load plant. It was designed to run as a peaking plant. If we continue down the path to meet our 2030 goals, then the capacity constraints in the winter months will be mitigated and the project should be able to run on

natural gas year-round. Historical data shows that on average these units run 85% of the time in the summer when gas prices are significantly lower.

Commr. Kallay wanted to clarify if the unit could run on any non-fossil fuel. Pete stated that the technology is not there yet, but after having a discussion with the vendor they noted that it would definitely be a possibility to convert to another fuel in the future.

Pete stated the third major issue is the value of the plant in terms of its role in the marketplace and its role to WMGLD. In 2015, municipal electric departments and MMWEC foresaw what was happening in the marketplace and decided that a unit like this could be a significant benefit. In the last 13 years, the Board has approved a half dozen major projects, which were tied to removing our carbon emitting resources. You need to have capacity backup for these renewables projects. Unfortunately, you cannot tell the sun to shine and the wind to blow. It is not a resource that you can just push a button to start, but load is load, so these peaking generators that you can just push a button to start are desperately needed to back up all the renewable growth. As one the originators of Berkshire Wind I and expanded Berkshire Wind II three years ago. We also have long-term contracts with Hancock Wind and Eagle Creek Hydro. Last year we voted to participate in Project 2020A, which is a large solar project out at MMWEC's campus in Ludlow, Massachusetts. Those are significant resources we are investing in over the next 25-30 years. These resources have very little capacity value assigned to them because they are intermittent resources. To continue to invest in these renewables we need to have capacity to back these up per our capacity obligation to the ISO. The more capacity you leave open to the GRID the more susceptible you are to the price fluctuations in that market. Two years ago, we liquidated our participation in an old oil-fired unit (Wyman) in Maine. We exited the contract as it was old and not being dispatched that often. It had been designed to be more of a base load plant. It will be shut down over the next few years. This represented 2.7 megawatts of capacity, so Project 2015A will be used to offset this.

There was a question raised about the cost of carbon which is shared in the Board book. This is calculated into the bid price when the unit is bid into the market on a daily basis. Currently it is .18 cents per kilowatt hour. There is a RGGI and Mass 310 CMR7.74 component to this. In the current Climate bill that is on the governor's desk, there are no additional costs to carbon. If that were to happen over next 10 years, it would not have a financial impact on this plant. If it were to run it would bid that all-inclusive price into it and if it is dispatched it is needed and not as a merchant plant driving up the cost in the marketplace. It will be covered by the market if it is dispatched and it is only going to be dispatched if needed.

Julie Smith Galvin asked if there is any need for pipeline expansion to operate. Pete explained that there is some investment in increasing the size of the pipe near the site and also a small compressor station being added to increase pressure to eliminate further investment in gas infrastructure. It is a very cost-effective approach to the gas investment.

Commr. Kallay inquired as to what happens if the plant is not dispatched. Would there be stranded costs and who would be responsible for those. Pete explained that we are receiving a capacity payment for the unit and capacity credit. We only bid and dispatch if needed. We would recover our costs if we are asked to run. It layers in all the resources needed on a given day based on the ISO forecast. Energy costs are a pass thru. It will never run when not needed. We are not bidding into the market just to run.

Pete stated that the final big piece is that 2015A works closely with the Climate plan for 2030 & 2050. It cites the need for units like this. We are moving from base load type of units over time to more larger scale renewable projects so those investments will take up a large portion of the base portfolio of the region, increasing the need for quick starting resources. Thereby, making this new more efficient plant more valuable. If you look at the market in California, this is what is needed.

Allan Prifti asked if WMGLD has plans to explore energy storage options to address future peak energy shaving needs. Pete explained that we were one of the first in the state to install a battery system. The installation of the 3-megawatt battery was made possible from a grant obtained from the DOER (Department of Energy Resources). We will be clearing space at the Wakefield Ave substation, so we could install a battery if it becomes feasible to do so. However, at the moment the economics are not there. One thing to remember is that battery technology requires a significant footprint. To replace the capacity value of 2015A plant you would need 40 3-megwatt batteries to obtain 3 hours of capacity.

Anu Gerweck inquired if the vendor will assure that we will be able to switch from fossil fuel to a renewable source when designing this plant. Pete said the plant is already designed and mostly procured, but in a meeting with the steering committee earlier tin the day, Commr. Kallay asked if it could be converted to hydrogen, if that technology advances and the vendor stated that it is a possibility.

Julie Smith Galvin asked how many megawatts we are buying and who are the other participants in this project. Pete was not certain of all the participants involved, but that WMGLD has a 9% share of the project, which equals 5 megawatts. Pete said that Peabody has the largest share. Chicopee and Holyoke have a larger share than WMGLD. He did not have a list of the

others and their shares. She inquired if that much is needed by WMGLD. Pete stated that more than 5 megawatts of non-capacity resources are in the projects that have been approved over the last 13 years. He noted that we need to have over 50 megawatts of capacity and being on the open market for that amount of capacity is a huge risk. He noted the price of capacity is volatile. The forward trend is that capacity is going to become more valuable because the resources we are going to rely on are non-dispatchable so you still will need to push the button when the load increases. This project has a net present value of a positive number in the tens of millions. This will account for about 10 percent of our capacity requirement.

Commr. Kallay mentioned that Stoneybrook intermediate peaking is another capacity resource. She noted in the Board packet on page 66 it refers to Road Map 2030 & 2050, where it cites that existing intermediate plants may be used on a peaking basis. She asked if the Stoneybrook & the Peabody plant would be competing against each other, or how would they be used over time and as the market and resources shifts. Pete explained that it is all based on heat rate and efficiency and what they can bid into the market as. No peaking plant gets used unless needed. Our layered strategy is going to become more valuable as we increase our reliance on renewables.

Commr. Courcy added that prior to his retirement from National Grid he had retired 40 megawatts of diesel emergency generators that filled this capacity. Most being in larger combustion turbines. Most of all the emergency backup and capacity has been converted to natural gas.

Julie Smith-Galvin inquired as to how the natural gas peekers we have in town play a role in this. Pete stated that they play a key role on our projected peak days. We utilize the battery and natural gas generators to keep our base capacity requirement down. Commr. Boettcher asked if our capacity requirement was still on a rolling 3-year period. Pete said it was and that our capacity requirement used to be in the 60's and is now down to 55. The battery and the generators have had a significant impact on our capacity requirement. Pete also noted that Project 2015A compliments our investments.

Commr. Kallay inquired about the updated forward capacity market forecast. She noted that this may not be the lowest cost option, but we know the potential price we may get for this resource assures us we will not be raising rates one year and reducing rates the next. She wanted to confirm that this strategy is really about rate stability and there would be more fluctuations if we were to choose to leave this project or remain in the open market. She noted that the long-term is uncertain as to what resources will be in the market and what fuel source, we may be using for natural gas plants. She also wanted to confirm that if in the long-term we do not see an economic

benefit from this we will still be okay because we will still be realizing rate stability. Pete confirmed that this is correct. He also stated this is 2015A and it is now 2021. These projects take a long period of time to come to fruition. If the outer portions of the graph are true or worse, you cannot react quickly with a unit like this. He continued to say that this is a piece of our portfolio. He mentioned that Berkshire Wind is not the least cost resource in our portfolio. You have to look at it in terms of the entire portfolio. We need to lock in about 85 % of our capacity requirement and have 15% balance remaining open to the market to help balance the cost.

Commr. Kallay posed the hypothetical question of if we saw dramatically different economics this year are, we at a point where all the participants could change their mind. Pete stated there is already an EPC contract and we are already committed for 19 million dollars. We have paid almost 1 million dollars to date. You would be asking the participants to write-off 20 million dollars and we do not believe anyone is going to be willing to do this.

Julie Smith-Galvin asked Pete if he knew the status of all the permitting. Pete said there are various pieces of permitting. Julie said that there is still some permitting needed to be done at the DPU and in Peabody. She stated her concern is there are a lot of Peabody residents that are not aware of this project. She is concerned that Wakefield is associated with a project built near an environmental injustice area. She noted there are many ways to skin the capacity cat. Pete said it is not fair to say there are many other ways to skin the capacity cat. The renewables that we are investing in now and will be in the next 15 years have very little capacity allocation to them and this project is a piece of the pie that enables us to invest in these renewables. Julie Smith-Galvin asked how much has been spent on this project and what it is for. Pete said he shared what he can publicly in the Board book, anything else would have to be in Executive session.

Commr. Kallay commented that she liked the idea that this will not take away from our ability to invest in customer side resources. Such as batteries at customer sites or electric vehicle to Grid that could have capacity value if aggregated and allowed into the market over time.

Pete said he was glad he could share some of the information on this project. There are still some financials, proformas and contracts that still have to remain confidential.

Julie-Smith-Galvin stated that she really appreciates this conversation and openness. She does not like the outcome but appreciates the dialogue. Pete stated that you may want to look at an individual project, but if you look at a scoreboard for Wakefield you will see that we have not raised our base rates

in 13 years and the fuel charge is lower than 3 years ago. He noted that customers in Wakefield are paying less than they were 3 years ago. Julie said a lot of the capacity issues is how the market is structured. She noted that a lot of the capacity need is hardly ever used which favors having a lot of the fossils in there. Pete mentioned that you also do not want to be California where you need to shut people off on the peak days. He also stated that the ISO has a reliability component. It is a requirement that we have to keep the lights on. Julie stated that statewide everyone is struggling with that. ISO has their requirement and the State has their clean energy and somehow, we have to figure out how it all works together.

2020 Energy Efficiency Programs

Pete stated that WMGLD spent $64,000.00 of the $85,000.00 budget in 2020. This was affected by COVID. He noted that he is recommending holding the budget at $85,000.00. We are not recommending changing the conservation charge at this time. Commr. Kallay asked if we can roll over the $20,000.00. Mark Cousins stated that we can bring it forward. Pete noted that we will continue to monitor this budget closely. Commr. Boettcher thanked Pete for all the data. He noticed that Connected Homes had integrated Nest and Honeywell thermostats into their program and inquired if we will solicit those customers with Nest and Honeywell thermostats to participate in the Connected Homes program. Pete said we will continue to do that as well as promoting the Sense products.

Pete mentioned that he had a request to incorporate a heating consultant into our energy efficiency program. He noted that WMGLD has signed on with Abode, which is based out of Reading. They currently work with 7 other municipals. They will perform a pre-consultation, evaluation of proposal and cross check designs for customers. They will fill the role as coach and post audit analyst for us. It is important that the heat pump is designed properly and goes into an efficient building. Pete stated that we are in the process of executing the contract. Commr. Kallay commented that this is great news. She asked how we will be getting this information out to the public. Pete replied that we will have seminars this year for residents and contractors. Pete also mentioned that Abode has committed to 3 public and/or contractor informational seminars this this year.

Commr. Kallay asked Joe Collins to speak on the accuracy of the savings data on the heat pumps and if there are any key issues, we need to be aware of as we review this. Joe said because heat pumps are a new rebate and people are not necessarily replacing old heat pumps it may be hard to determine, but he is looking at the meter data to see if the gas consumption

has gone down and electric usage has increased for these customers. He stated he is confident that the data on the other rebates is accurate.

Commr. Boettcher inquired if there was an update on the load management portion of Sense. Pete stated that we are working on a more uniformed way to present requested dashboards. There will be a new customer portal, which will also allow us to customize and pull data automatically into dashboards. Commr. Kallay asked how many customers took advantage of the connected Homes and Sense products. Pete stated that there was a total of 10 customers. Commr. Boettcher stated that he had a request not of WMGLD, but of MMWEC to provide the data around how many devices are enrolled, how many of those customers with Sense products participated in the peaks, how many qualified for the monthly credits, and what was the energy savings. Pete stated that we will work on this in the enhanced dashboard.

New Business

2020 Goals and Objectives-Year end results

General Manager, Pete Dion reviewed the 2020 Goals and Objectives with the Board. He noted that we remained task focused throughout the year to accomplish these goals and deliver what we committed to while keeping everyone safe during the COVID environment.

Executive Session

A motion to enter executive session at 8:31 PM to discuss General Manager, Peter Dion's evaluation, returning to open session at its conclusion to report on the vote and for adjournment was made by Commr. Courcy and seconded by Commr. Boettcher.

Roll Call Vote:	Commr. Boettcher	Aye
	Commr. Courcy	Aye
	Commr. Kallay	Aye
	Commr. Warchol	Aye

The motion was approved unanimously.

The Board of Commissioners reviewed and discussed the General Manager's 2020 Performance Goals and Objectives.

The Board returned to open session at 9:01pm. Commr. Courcy noted the following areas General Manager, Pete Dion was evaluated on and the corresponding rating that he received:

Safety	5.0
Operational	5.0
Customer Service & Website	4.8
Financial	5.0
Leadership	4.8
Total	99.0%

The Board decide that in light of operating during the COVID environment they would give a bonus point of 1.0% to his total rating, bringing it up to 100.00%. Commr. Courcy commented that the department had an awesome year accomplishing these achievements during the COVID environment. Commr. Boettcher extended his thanks and gratitude to Pete for achieving these goals and in some instances having gone beyond. Commr. Kallay noted that this was a stellar year and Pete hit it out of the park during what was an impossible year. Commr. Warchol stated it was a great job all around.

A motion was made by Commr. Warchol and seconded by Commr. Courcy to increase the General Manager's base salary by 2.5% and the associated bonus and contribution to retirement that go along with that rating.

Roll Call Vote:	Commr. Boettcher	Aye
	Commr. Courcy	Aye
	Commr. Kallay	Aye
	Commr. Warchol	Aye

The motion was approved unanimously.

A motion to adjourn was made at 9:09 pm by Commr. Warchol and seconded by Commr. Courcy.

Roll Call Vote:	Commr. Boettcher	Aye
	Commr. Courcy	Aye
	Commr. Kallay	Aye
	Commr. Warchol	Aye

The motion was approved unanimously.

WMGLD
P.O. BOX 190 480 North Ave.
Wakefield, MA 01880
Tel. (781) 246-6364 Fax (781) 246-0419
Peter D. Dion, General Manager

FEBRUARY 2021 WMGLD COMMISSIONER'S DASHBOARD

Outages (Elec)

	SAIFI	CAIDI
Nov	0.57	54
Dec	0.56	56
Jan	0.55	51
Cal YTD	0.55	51

FYTD WMGLD Generation - January

	Salem St.	Battery	Total
RNS Benefit	$ 382,104	$ 180,476	$ 562,580
Capacity Benefit	403,731	200,479	604,210
Debt Service	(53,151)	(143,773)	(196,924)
Net Benefit	$ 732,684	$ 237,182	$ 969,866

CYTD Pipe Replacement

	Replaced	System Total
4"	44	178,403
6"	-	146,802
8"	-	79,555

CONSERVATION BUDGET

YTD FY21 Conservation Fees Billed	$	76,526
YTD FY21 Paid out to Customers	$	(128,072)
(Under) / Over Collected	$	(51,546)

PV Under Contract	310.625 kW
PV In Service	223.080 kW

Includes DOER rebate funding & WMGLD self-funded

New Services on the System

	Electric	Gas
Nov	4	4
Dec	2	1
Jan	1	-

Natural Gas Peak Usage

Current Year Peak (Nov '20 → May '21)	1,018,323 CCF
Prior Year Peak (Nov '19 → May '20)	1,020,971 CCF
All-Time Peak - Jan '18	1,370,554 CCF

Solar Generation 58 Customers

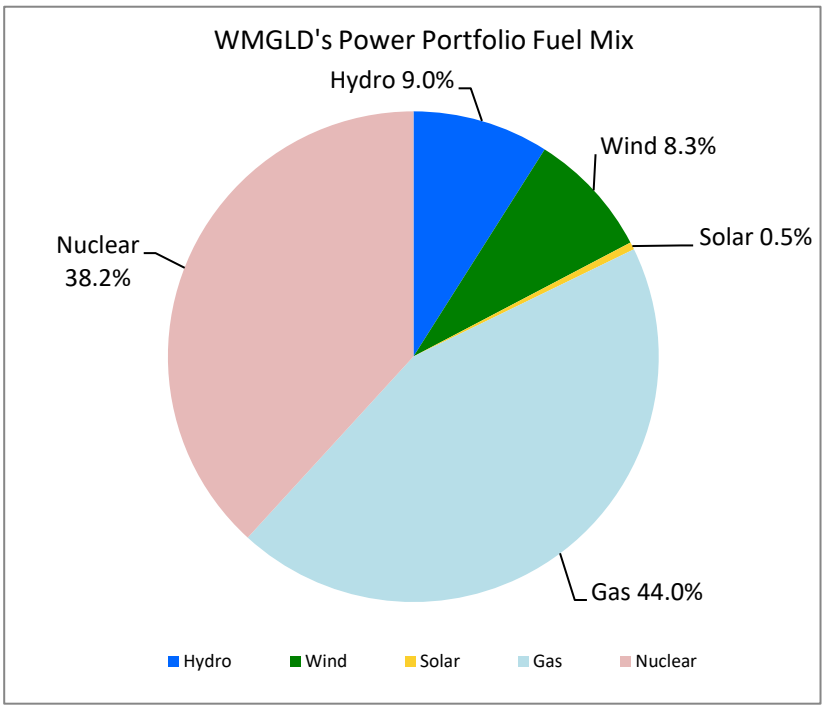
	Generated	Back to WMGLD
CYTD	63,590	13,254
Comm'l	5,334,960	1,023,400
Res	1,283,368	676,711
Inception	6,618,328	1,700,111

FYTD Sales 7 Mos. → 1/31/21

	Electric	Gas	Total
$$	$16,265,895	$4,455,122	$ 20,721,017
kWh/CCF	99,413,543	2,662,633	

Monthly & Annual Peaks

	Prior Year	Current Year
Nov	24.8 Mw	25.1 Mw
Dec	28.6 Mw	27.9 Mw
Jan	27.0 Mw	28.0 Mw



Summer YTD Peak

7/31/19	7/28/20
42.5 Mw	44.0 Mw

Winter YTD Peak

12/17/19	1/29/21
28.6 Mw	28.0 Mw

All Time Peak

1/2/14	8/2/06
36.5 Mw	50.7 Mw

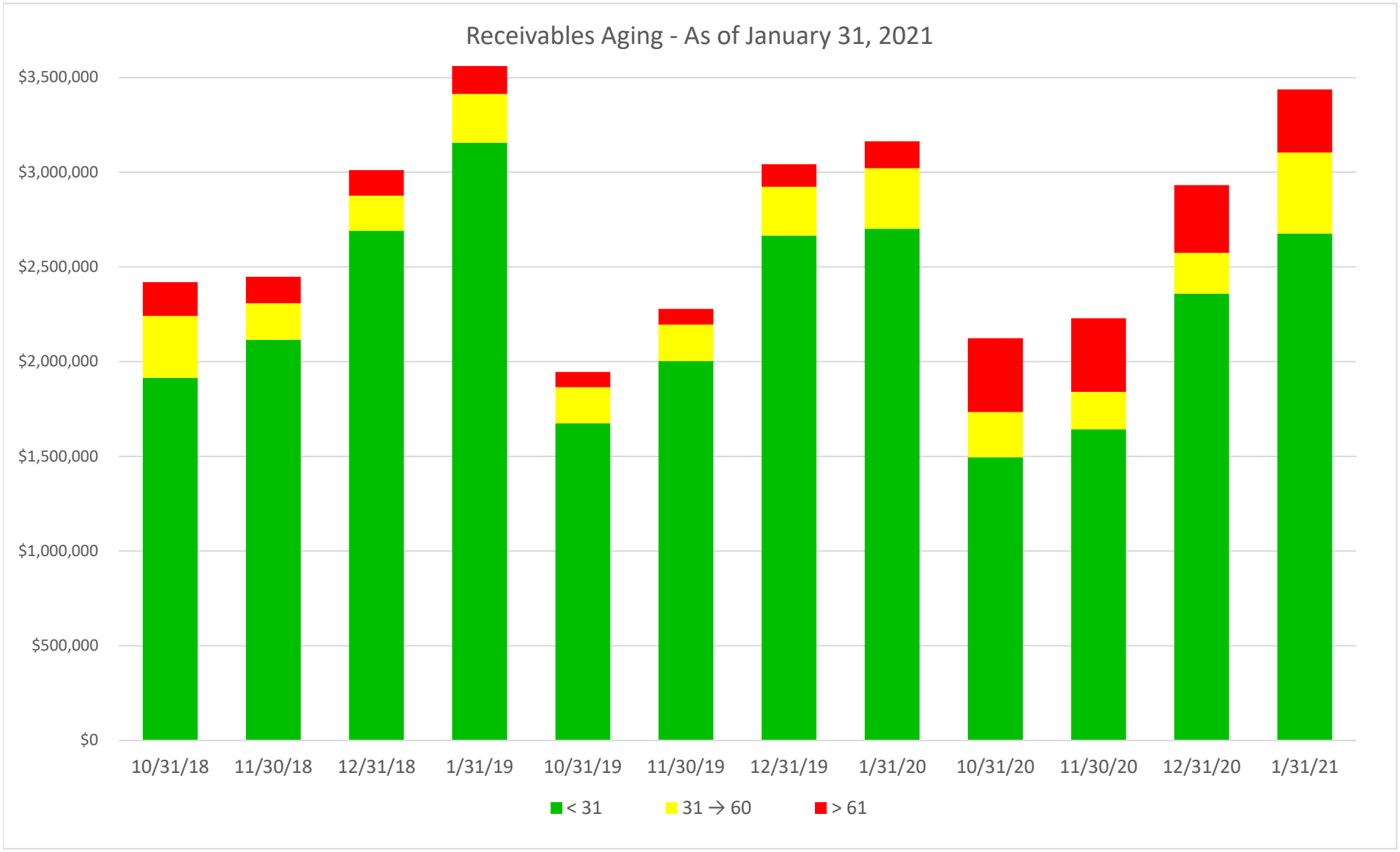
Wakefield Municipal Gas & Light Department
Customer Issues Log

Date	Issue	Resolution
December 15, 2020	Question regarding answering service / office calls not being returned in a timely manner for a real estate agent / property sale / final bill	Realtor was given an office single point of contact.
August 24, 2020	Customer called indicating that during storm clean-up our contracted tree crew had damaged a retaining wall & customers driveway	WMGLD's E & O Manager along with representative from tree company met with the customer at his home and explained the damage was caused by erosion during the storm, not tree crew
July 2, 2020	Customer requested billing name change on account to reflect the name of a close relative who did not own & did not lease the property	Explained that the customer of record can only be the owner or lessor of the property
3/16/20 to 5/1/20	Slow down in posting payments to customer accounts due to continued Century Bank LockBox processing delays	Currently in communications with Century Bank & have re-tooled to process additional payments in-house with clean environment
January 16, 2020	Customer claimed move out in November but did not notify WMGLD until January. Disputed Nov - Jan billings. Posted on social media	Discussed with customer the responsibility of timely notification of move out
November 5, 2019	Customer requested service termination on account in his name, not living at service location anymore due to divorce	Explained service termination process involving move in / move out and spousal rights & responsibilities as it relates to the customer of record
October 8, 2019	Collections & payment plan. Customer contacted the DPU regarding protection from service termination	Service was terminated on customer account due to non payment and non response
August 23, 2019	Collections & payment plan. Customer contacted the DPU regarding payment plan, liens and protection from serivce termination	This customer has been on the December & April issue logs. Lein process, collections & termination process and protections process explained
August 19, 2019	Customer complained that his mother's home health aid could not reach her due to gas main replacement on Salem Street.	Gas Superintendent gave his cell phone number to customer and offered to escort the health aid to mom's house through the construction

COMMISSI0NER REQUESTS LOG	Requested By	Request Date	Completion Date	NOTES
Review net metering policy	JK	12/5/2018	1/9/2019	
Add completion dates to this form	JW	12/5/2018	1/9/2019	
Remove identifying information on customer requests	JW	12/5/2018	1/9/2019	
Add solar to supply mix	JK	12/5/2018	1/9/2019	
Streetlight conversions to be added to Dashboard	JW	2/1/2018	2/26/2018	
Dashboard to reflect KWH demand	JW	2/1/2018	2/26/2018	
3 double poles on Nahant Street	KC	3/1/2018	3/2/2018	VZ
Review Employee handbook	KH	3/1/2018	4/11/2018	
Subcommittee of JW and JK on survey development	JW	5/24/2018	6/20/2018	
Update Gas service Request List	KC/JK	5/24/2018	6/20/2018	
Berkshire Pro-Formas to Board	JW	3/1/2018	4/11/2018	
Access to be provided to website under construction	JK	6/20/2018	6/27/2018	
Minutes to webpage	JK	9/12/2018	9/19/2018	
Review Energy audit format	WT	11/1/2018	12/5/2018	
Progress made fixing gas leaks	JW	continuing		
Copy of Ngrid 345 KV contract	JK	2/13/2019	when available	
Share Strategic Planning dates with Town Administrator	JK	2/13/2019	2/14/2019	
Provide Board with size of solar projects	TB	6/5/2019	9/4/2019	

COMMISSI0NER REQUESTS LOG	Requested By	Request Date	Completion Date	NOTES
Provide Board with additional information for EE proposal	JK, JW, TB	7/7/2019	9/4/2019	
Updates to EE proposal including rates hearing	JK, JW, TB	9/4/2019	10/2/2019	
Meet to discuss goal setting with Manager	JW - PC & KC	10/2/2019	10/15/2019	
Next year's goal setting meet with GM	PC & KC	11/13/2019	11/22/2019	
Provide pricing on Renewable Energy Credits = 15%	JK	11/13/2019	11/20/2019	
Provide detailed data on gas leaks	TB	11/13/2019	11/27/2019	
Provide information on data structures and fields in Customer Informtion System (Cogsdale)	JK	12/4/2019	1/8/2020	
Rework solar consumption as presented on solar bills	TB	1/8/2020	1/31/2020	
Update Electric Vehicle Dashboard to include cost data	TB	5/6/2020	6/3/2020	
Revise 2020 General Manager Goals due to COVID-19	PC	6/3/2020	7/15/2020	
Mission statatement development	JK	7/15/2020	9/2/2020	
Rebates - Sense Rebate to Webform & Add WIFI Thermostats to Connected Homes Program	TB, JK	9/2/2020	10/7/2020	
Provide additional details on Customer Accounts Receivable / Collections	JW	12/2/2020	1/6/2021	
EV Charger - Year 1 summary data reporting	TB	2/3/2021	3/3/2021	


Receivables Aging - As of January 31, 2021
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
10/31/18
11/30/18
12/31/18
1/31/19
10/31/19
11/30/19
12/31/19
1/31/20
10/31/20
11/30/20
12/31/20
1/31/21
< 31
31 → 60
> 61


Receivables Aging - As of January 31, 2021
$3,500,000
$3,000,000
$2,500,000
$2,000,000
$1,500,000
$1,000,000
$500,000
$0
10/31/18
11/30/18
12/31/18
1/31/19
10/31/19
11/30/19
12/31/19
1/31/20
10/31/20
11/30/20
12/31/20
1/31/21
< 31
31 → 60
> 61

RAW DATA - RECEIVABLES GRAPHS

	10/31/20		11/30/20		12/31/20		1/31/21	
< 31	$1,494,430	70.4%	$1,641,955	73.7%	$2,359,318	80.5%	$2,675,178	77.8%
31 → 60	239,807	11.3%	198,433	8.9%	214,933	7.3%	429,369	12.5%
> 61	389,667	18.3%	388,949	17.4%	357,115	12.2%	333,062	9.7%
Total	$2,123,904	**21.5**	$2,229,337	**22.9**	$2,931,366	**29.8**	$3,437,609	**26.3**

	10/31/19		11/30/19		12/31/19		1/31/20	
< 31	$1,674,196	86.1%	$2,002,204	87.8%	$2,666,003	87.6%	$2,701,115	85.4%
31 → 60	190,857	9.8%	193,084	8.5%	257,475	8.5%	320,144	10.1%
> 61	80,148	4.1%	83,460	3.7%	118,851	3.9%	141,767	4.5%
Total	$1,945,201	**17.9**	$2,278,748	**21.3**	$3,042,329	**28.1**	$3,163,026	**23.4**

	10/31/18		11/30/18		12/31/18		1/31/19	
< 31	$1,914,705	79.1%	$2,114,864	86.4%	$2,690,440	89.3%	$3,156,118	88.7%
31 → 60	326,388	13.5%	193,806	7.9%	186,320	6.2%	256,792	7.2%
> 61	177,791	7.4%	139,289	5.7%	134,367	4.5%	147,726	4.1%
Total	$2,418,884	**21.2**	$2,447,959	**21.7**	$3,011,127	**26.5**	$3,560,636	**24.7**

Notes: Gross Receivables from customer accounts are aged at month-end.
At 1/31/21, the >61 day balance of $333,062 was analyzed in detail - results include 151 unique accounts which make up $237,860 of the $333,062 balance with >61 day account balances ranging from $19,091 to $500
DSO Ratio is also presented in **RED**

REVENUES

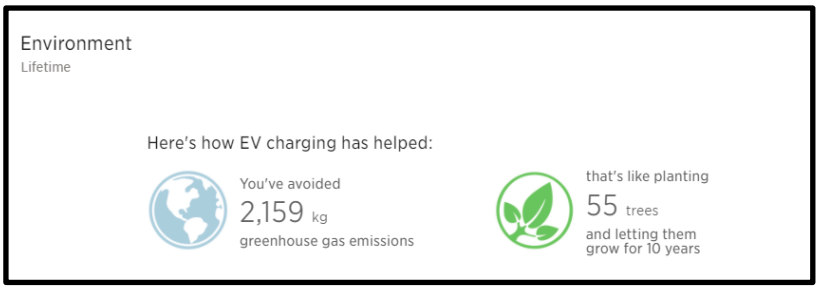
	10/31/20	11/30/20	12/31/20	1/31/21
ELECTRIC	1,974,107	1,867,315	2,081,417	2,278,999
GAS	306,311	654,714	1,146,741	1,643,351
TOTAL	$2,280,418	$2,522,029	$3,228,158	$3,922,350

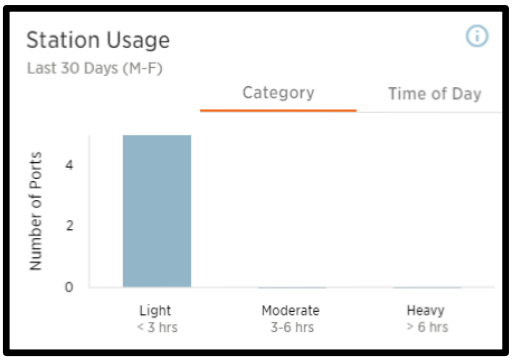
	10/31/19	11/30/19	12/31/19	1/31/20
ELECTRIC	2,095,661	1,998,241	2,162,098	2,386,420
GAS	324,669	728,498	1,424,227	1,666,969
TOTAL	$2,420,330	$2,726,739	$3,586,325	$4,053,389

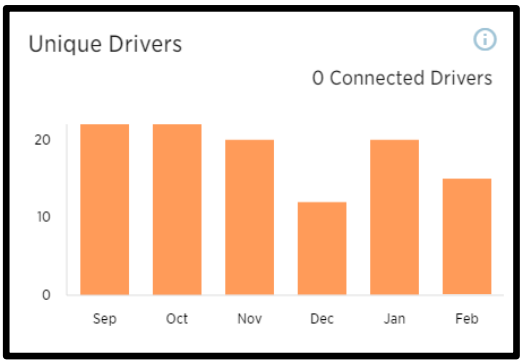
	10/31/18	11/30/18	12/31/18	1/31/19
ELECTRIC	2,239,877	2,132,876	2,354,015	2,580,869
GAS	313,391	792,239	1,371,370	1,738,574
TOTAL	$2,553,268	$2,925,115	$3,725,385	$4,319,443

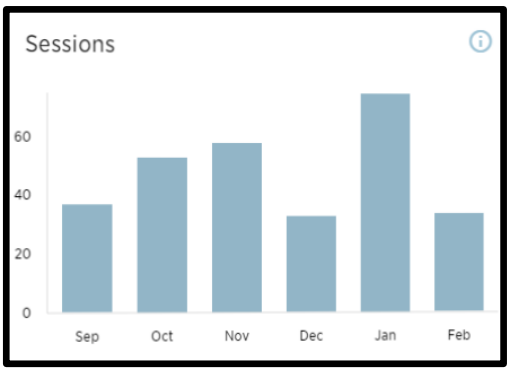
Electric Vehicle Public Charging Stations Dashboard – 2/26/2021

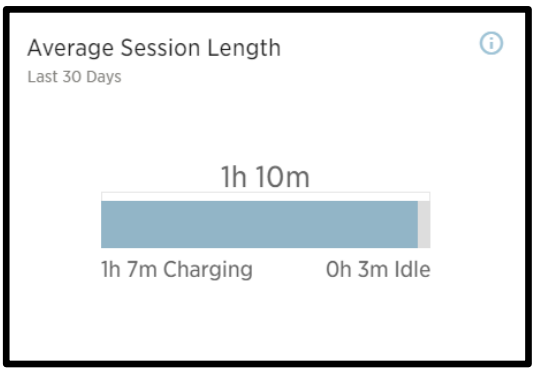
EV Charging Stations Utility Billing and Town Revenue Feb-21				
Locations	Utility Billing	KWh	Town Revenue From Charge Point	KWh
Vets Field	$65.37	357	$60.00	351
Civic Center	$5.28	32	$5.85	32
Public Parking Lot	$65.33	358	$74.07	329
Totals	**$135.98**	**747**	**$139.92**	**713**

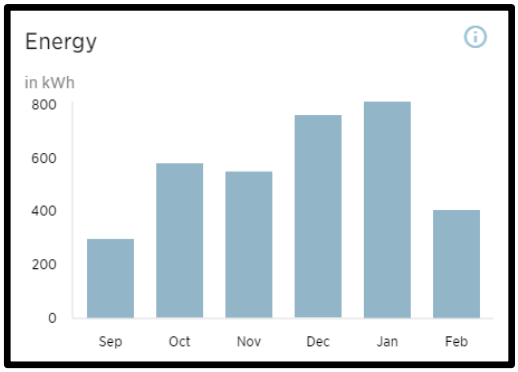












General Manager's Report

The following is the General Managers Report for March, 2021

Engineering and Operations Report

Major New Customer Projects: (1,035 new residential housing units)

Harvard Mills – convert portion of building to 190 apartments – Project under construction
Convert building from 4kv ckt 397-03 to 13.8kv ckt 0005 (customer cost). Ductbank and switch installed, customer working on transformer foundation and mainline cable installed. ***Transformer installed on 12/15/2020 – waiting on customer to finalize easement agreement before we energize.***

Water St. at Delcarmine - New 23 unit building residential - ***Working on the foundation***

581-583 Salem St. – New 19 unit apartment build – ***Permitting Phase***

525-527 Salem St – New 22 unit building – ***Permitting Phase***

404 Lowell St. – 8 Residential units – ***Permitting Phase***

610 Salem St – 20 Residential units – ***Permitting Phase***

Foundry Street phase 2 – 58 unit condo complex and commercial space – ***Permitting Phase***

Hopkins Street @ Tarrant Lane - Project approved by the town 173 apartments 4 buildings proposed – ***Planning and Permitting***

200 Quannapowitt – 485 Apartments / 4-5 buildings / parking garage – **Permitting and Planning Phase**

127 Nahant St. – 26 Residential units proposed – ***Planning stage***

1000 Main Street – 30 Residential units proposed – ***Planning stage***

Gas Department

- The main, services and tie overs on Forrester, Drury were completed. Brewster and Beebe are underway.

- Removal of old regulator station on New Salem Street was completed.

- Services and mains including on Broadway and the corners of Foundry and North Ave were completed. This included the repair of three Class 3 leaks

- 93 meters have been replaced so far this year with a target of 1041 for the year.

- There are currently 2213 inside gas services and 2896 outside services. 28 services have been moved outside this year.

- Leaks Class 1 – 0* Class 2 – 6 Class 3 –71

  *(1- Class 1 Leaks this month)

Financial Reports

Monthly Financials for through December and Consumption Reports through January are enclosed.

Project Updates

COVID 19

Customer service personnel are split up with some working from home and some coming in on limited days. Gas and Electric crews have been separated with focus on responding to emergencies and planned work they are able to complete based on DPU guidelines. Workers that are exposed to someone who has tested positive or have flown are being quarantined for up to two weeks. We are monitoring the guidance from the Town's Health Department and the State on when we may be able to get vaccines.

NGrid 345kv Project Update NGRID

NGRID/United Civil project – DPW implemented Winter moratorium restrictions on 11/20, project is on-hold until the Spring

McGrail Substation Upgrades

All new switchgear and (2) 3750kva transformers were energized on 9/30/2020. 4Kv cutovers completed as the end of 2020;

- Circuits 6 & 9 cutover to new equipment – ***COMPLETE***
- Circuit 11 load cutover to 126-W27 – ***COMPLETE***
- Circuit 4 load cutover to the new equipment – ***COMPLETE***
- Circuit 3 load cutover to the new equipment – ***COMPLETE***
- Circuits 3 and 4 tie – ***COMPLETE***
- Old 4 KV switchgear de-energized – ***COMPLETE***
- Old Transformers "F" and "H" de-energized and disconnected on both the 13.8kv and 4kv sides, also oil drained from both units. These transformers were 65-70 years old, equipment liability eliminated. - ***COMPLETE Removed for the site***
- 13.8Kv Cutovers scheduled in 2021 Lines 1386 **(complete**), *1301* ***(complete**), 1302, 0005, 126-W27, 1718 & 1920*

4kv to 13.8kv conversions - Converting portions of ckt 9 on Water to ckt 443-W32 – ***COMPLETE***

West Water St, Richardson and Foster St area – Preparing to convert from 4kv to 13.8 KV

Legislative Update

The Climate Bill was vetoed by the Governor and back with the legislature. A committee is reviewing the Governor's concerns and the hope is that there will be agreement new language in a few key areas. The MLP language is not among the items at issue.

No votes required at this time - Discussion only

Board of Commissioners
March 3, 2021
Agenda Item No. D-2

Electric Vehicle Charger Update

Attached is a summary for discussion of the Public EV Charging Stations and the residential charging stations that are part of our load control program.

No votes required at this time - Discussion only

Board of Commissioners
March 3, 2021
Agenda Item No. E-1

Texas Power Situation

The Board will discuss the various similarities and differences between the Power Supply situation in Texas. Similarities include diversity of power supply and centralized control. Major differences include the capacity market and interconnection to other regions.

Executive Session
Collective Bargaining

APPENDICIES

Wakefield Municipal Gas and Light Department
Comparative Balance Sheet - Electric Fund

	12/31/2019		12/31/2020	
ASSETS				
Sinking Fund - Self Insurance	$ 178,616.64		$ 179,871.83	
Depreciation Fund	182,707.00		182,844.45	
Consumer Deposits	870,727.76		878,996.85	
Total Investments	***1,232,051.40***		***1,241,713.13***	
Operating Cash	12,746,981.89		14,392,386.13	
Depreciation Fund	2,719.42		2,722.06	
Consumer Deposits	344,913.81		306,090.04	
Petty Cash	525.00		525.00	
Total Cash	***13,095,140.12***		***14,701,723.23***	
Accounts Receivable-Rates	3,278,256.81		3,561,182.86	
Accounts Receivable-Other	2,277,946.35		2,037,111.96	
Inventory	472,904.91		701,348.45	
Prepayments Miscellaneous	752,682.44		752,336.13	
Prepayments Power	3,689,305.05		3,684,313.94	
Other Deferred Debits	1,108,819.78		1,570,634.64	
Total Other Assets	***11,579,915.34***		***12,306,927.98***	
Total Current Assets		***25,907,106.86***		***28,250,364.34***
Distribution Plant	20,883,681.40		20,210,702.68	
General Plant	1,474,711.12		1,545,182.72	
Net Fixed Assets		***22,358,392.52***		***21,755,885.40***
Total Assets		***$ 48,265,499.38***		***$ 50,006,249.74***
LIABILITIES AND EQUITY				
Accounts Payable	$ 10,983.40		$ 1,176,367.71	
Consumer Deposits	1,215,641.57		1,185,086.89	
Other Accrued Liabilities	-		(3,004.52)	
Reserve for Uncollectable Accounts	108,563.84		218,397.21	
Total Current Liabilities	***1,335,188.81***		***2,576,847.29***	
Compensated Absences	460,003.07		467,256.96	
MMWEC Pooled Loan Debt	15,015,368.62		12,898,168.95	
OPEB Liability	1,915,566.25		1,936,702.25	
Pension Liability	7,948,500.00		7,948,500.00	
Total Long Term Liabilities	***25,339,437.94***		***23,250,628.16***	
Total Liabilities		***26,674,626.75***		***25,827,475.45***
Retained Earnings	8,619,962.70		10,630,846.32	
Year to Date Income	1,834,568.25		1,610,661.10	
Sinking Fund Reserve-Self Ins	178,616.64		179,871.83	
Contribution in Aid of Construction	3,705,337.66		3,705,337.66	
Investment in Fixed Assets	7,252,387.38		8,052,057.38	
Total Equity		***21,590,872.63***		***24,178,774.29***
Total Liabilities and Equity		***$ 48,265,499.38***		***$ 50,006,249.74***

Wakefield Municipal Gas and Light Department
Income Statement - Electric Fund
For the Six Months Ending, December 31, 2020

	CURRENT MONTH		YEAR TO DATE	
	FY 2020	FY 2021	FY 2020	FY 2021
Energy Revenue (Net of Discounts)				
Residential Sales	$ 1,003,458.15	$ 1,063,990.12	$ 6,725,237.37	$ 7,281,827.49
Commercial Sales	1,043,571.16	920,612.27	6,433,808.74	5,652,086.15
Street Lighting	15,678.00	15,678.00	94,063.00	94,063.00
Municipal Sales	91,898.09	89,451.87	581,892.84	535,640.67
Private Area Lighting	7,493.00	7,363.00	44,933.07	44,215.63
Total Energy Revenue	***2,162,098.40***	***2,097,095.26***	***13,879,935.02***	***13,607,832.94***
Other Revenues				
Unbilled Revenue	-	-	-	-
Interest Income-Consumer Deposits	1,012.63	436.21	7,764.26	3,102.55
Interest Income-Depreciation Fund	12.12	11.77	71.83	69.81
Interest Income-Self Ins Sinking Fund	282.34	26.09	1,936.90	222.13
Interest Income-MMWEC	912.30	1,829.96	17,431.68	8,537.07
Income from Merchandise & Jobbing	(16,580.04)	(46,708.75)	(155,537.60)	(107,742.29)
Other Revenues	-	(1,465.38)	(190.01)	(1,395.84)
Sales Tax	55,983.63	49,789.63	346,817.68	313,318.17
Conservation Charge	3,875.10	8,915.91	23,285.72	59,505.65
Reconnect Fees	-	100.00	4,225.00	450.00
Comcast & RCN Pole Fees	-	16,978.70	-	86,479.90
Insurance Reimbursements	-	-	5,605.18	-
Other Electric Revenue	228.21	277.01	2,689.37	1,162.06
Total Other Revenue	***45,726.29***	***30,191.15***	***254,100.01***	***363,709.21***
Total Revenue	***2,207,824.69***	***2,127,286.41***	***14,134,035.03***	***13,971,542.15***
Power Costs				
Purchased Power	(1,342,363.91)	(1,172,361.44)	(7,513,215.79)	(6,999,046.33)
Power Expense Generation	(11,050.03)	(9,765.30)	(68,213.47)	(60,214.59)
Power Expense Battery	(8,333.75)	(6,903.28)	(52,653.35)	(41,963.55)
Total Power Costs	***(1,361,747.69)***	***(1,189,030.02)***	***(7,634,082.61)***	***(7,101,224.47)***
Gross Profit	***$ 846,077.00***	***$ 938,256.39***	***$ 6,499,952.42***	***$ 6,870,317.68***
Operating Expenses				
Miscellaneous Operating Expenses				
Depreciation Expense	(220,824.76)	(240,435.27)	(1,324,948.61)	(1,442,613.22)
Sales Tax	-	(49,789.63)	(290,834.05)	(313,318.17)
Interest Expense-Consumer Deposits	(11,124.63)	(2,026.41)	(22,623.89)	(12,071.90)
Interest Expense-MMWEC	(21,756.11)	(24,035.28)	(137,182.51)	(128,621.50)
Total Misc Operating Expenses	***(253,705.50)***	***(316,286.59)***	***(1,775,589.06)***	***(1,896,624.79)***
Distribution Expenses				
Operations Supervision and Engineering	(19,840.13)	(28,759.67)	(110,283.98)	(100,292.15)
Operations Labor	(2,445.23)	8,353.69	(3,301.60)	13,924.64
Substation Salaries and Expense	(38,396.75)	(84,711.16)	(263,037.07)	(300,731.11)
Customer Installation Expenses	(123.54)	343.50	(1,909.94)	(20,432.15)
Miscellaneous Distribution Expenses	(48,372.26)	(52,543.26)	(369,373.37)	(321,642.99)
Total Distribution Expenses	***(109,177.91)***	***(157,316.90)***	***(747,905.96)***	***(729,173.76)***

Wakefield Municipal Gas and Light Department
Income Statement - Electric Fund
For the Six Months Ending, December 31, 2020

	CURRENT MONTH		YEAR TO DATE	
	FY 2020	FY 2021	FY 2020	FY 2021
Maintenance Expenses				
Maintenance Supervision and Engineering	(16,373.75)	(28,155.89)	(98,008.34)	(110,996.74)
Maintenance of Station Equipment	(221.75)	-	(367.95)	(1,534.84)
Maintenance of Other Equipment	-	-	(6,580.04)	(3,877.02)
Maintenance of Overhead Lines	(9,732.74)	(74,925.84)	(235,417.37)	(324,326.39)
Maintenance of Underground Lines	(366.62)	-	(6,088.35)	(8,081.63)
Maintenance of Line Transformers	-	-	(877.50)	-
Maintenance of Street Lighting	(11,610.34)	-	(23,459.31)	(201.25)
Maintenance of Meters	(123.54)	343.50	(34,623.14)	1,065.85
Maintenance of Misc Distribution Plant	(4,651.84)	(5,370.91)	(31,361.42)	(26,474.87)
Total Maintenance Expenses	***(43,080.58)***	***(108,109.14)***	***(436,783.42)***	***(474,426.89)***
Customer Account Expense				
Meter Reading Expense	(4,055.78)	(5,474.94)	(21,252.82)	(46,432.92)
Customer Records & Collection Exp	(48,046.38)	(74,958.00)	(365,975.99)	(343,897.06)
Total Customer Account Exp	***(52,102.16)***	***(80,432.94)***	***(387,228.81)***	***(390,329.98)***
Administrative and General Expenses				
Community Relations & Advertising	(27,012.55)	(16,206.87)	(44,635.62)	(23,358.58)
Administrative Salaries and Expense	(14,220.52)	(21,286.11)	(113,040.04)	(98,246.34)
Business Mgr and Accting Salaries and Exp	(10,364.31)	(19,171.78)	(76,323.02)	(88,096.69)
MIS Salaries and Expense	(5,483.97)	(12,167.48)	(165,945.34)	(108,031.08)
Outside Services	-	-	(15,000.00)	(16,125.00)
Conservation & Rebates	(24,340.71)	(22,105.14)	(78,640.06)	(115,487.75)
Property Insurance	(4,740.25)	(5,375.08)	(28,441.50)	(32,250.52)
Injuries and Damages	(5,959.81)	(4,032.16)	(34,043.75)	(27,752.54)
Employee Pensions and Benefits	(143,165.12)	(132,209.49)	(840,046.13)	(869,778.92)
Miscellaneous General Expenses	(1,445.09)	(4,986.72)	(37,436.12)	(38,454.60)
Maintenance of General Plant	(14,989.99)	(15,668.00)	(63,419.35)	(70,379.06)
Total Admin & General Expenses	***(251,722.32)***	***(253,208.83)***	***(1,496,970.93)***	***(1,487,961.08)***
Net Income (Loss) Before Surplus Adjustments	***$ 136,288.53***	***$ 22,901.99***	***$ 1,655,474.24***	***$ 1,891,801.18***
Surplus Adjustments				
Additions				
Sale of Scrap	7,028.74	-	7,028.74	17,018.70
MMWEC Refund	-	-	534,347.98	46,343.35
Total Additions to Surplus	***7,028.74***	***-***	***541,376.72***	***63,362.05***
Subtractions				
Interest on Sinking Fund	282.34	26.09	1,936.90	222.13
Payment in Lieu of Taxes	56,532.00	57,380.00	339,192.00	344,280.00
Plant Removal Costs	21,153.81	-	21,153.81	-
Total Subtractions from Surplus	***77,968.15***	***57,406.09***	***362,282.71***	***344,502.13***
Net Income (Loss)	***$ 65,349.12***	***$ (34,504.10)***	***$ 1,834,568.25***	***$ 1,610,661.10***

Wakefield Municipal Gas and Light Department
Comparative Balance Sheet - Gas Fund

	12/31/2019		12/31/2020	
ASSETS				
Sinking Fund - Self Insurance	$ 178,616.63		$ 179,871.82	
Consumer Deposits	95,616.48		96,535.30	
Total Investments	***274,233.11***		***276,407.12***	
Operating Cash	(15,939,631.36)		(15,342,099.18)	
Consumer Deposits	188,401.11		204,029.38	
Petty Cash	175.00		175.00	
Total Cash	***(15,751,055.25)***		***(15,137,894.80)***	
Accounts Receivable-Rates	1,306,451.27		1,157,471.91	
Accounts Receivable-Other	133,341.36		-	
Inventory	511,942.00		472,173.34	
Prepayments Miscellaneous	31,456.65		43,331.47	
Other Deferred Debits	428,314.23		519,695.20	
Total Other Assets	***2,411,505.51***		***2,192,671.92***	
Total Current Assets		***(13,065,316.63)***		***(12,668,815.76)***
Distribution Plant	22,893,094.87		23,850,562.78	
General Plant	499,801.93		472,754.70	
Net Fixed Assets		***23,392,896.80***		***24,323,317.48***
Total Assets		***$ 10,327,580.17***		***$ 11,654,501.72***
LIABILITIES AND EQUITY				
Accounts Payable	$ (26,202.41)		$ 651,706.48	
Consumer Deposits	284,017.59		295,484.68	
Other Accrued Liabilities	-		3,278.81	
Reserve for Uncollectable Accounts	108,563.83		218,397.21	
Total Current Liabilities	***366,379.01***		***1,168,867.18***	
Compensated Absences	235,784.91		267,026.80	
OPEB Liability	537,034.75		544,080.75	
Pension Liability	2,649,500.00		2,649,500.00	
Total Long Term Liabilities	***3,422,319.66***		***3,460,607.55***	
Total Liabilities		***3,788,698.67***		***4,629,474.73***
Retained Earnings	(15,599,805.12)		(16,024,248.00)	
Year to Date Income (Loss)	(971,234.68)		(896,618.50)	
Sinking Fund Reserve-Self Ins	178,616.63		179,871.82	
Contribution in Aid of Construction	13,600.00		13,600.00	
Investment in Fixed Assets	22,917,704.67		23,752,421.67	
Total Equity		***6,538,881.50***		***7,025,026.99***
Total Liabilities and Equity		***$ 10,327,580.17***		***$ 11,654,501.72***

Wakefield Municipal Gas and Light Department
Income Statement - Gas Fund
For the Six Months Ending, December 31, 2020

	CURRENT MONTH		YEAR TO DATE	
	FY 2020	FY 2021	FY 2020	FY 2021
Energy Revenue (Net of Discounts)				
Residential Sales	$1,006,227.73	$797,605.55	$2,232,919.91	$1,946,611.34
Commercial Sales	298,657.91	237,001.79	681,986.69	565,095.24
Municipal Sales	119,341.51	112,133.82	221,951.79	211,083.20
Total Energy Revenue	***1,424,227.15***	***1,146,741.16***	***3,136,858.39***	***2,722,789.78***
Other Revenues				
Unbilled Revenue	-	-	-	-
Interest Income-Consumer Deposits	112.51	48.47	862.72	344.76
Interest Income-Self Ins Sinking Fund	282.34	26.09	1,936.89	222.11
Income from Merchandise & Jobbing	(65,666.06)	(3,122.19)	(268,643.49)	41,008.67
Special Gas Charges	600.90	579.58	2,887.62	1,304.21
Sales Tax	13,961.00	11,507.31	32,013.00	27,584.97
Reconnect Fees	-	-	-	-
Insurance Reimbursements	-	-	-	-
Other Gas Revenue	14,512.23	74.03	14,512.23	(45.27)
Total Other Revenue	***(36,197.08)***	***9,113.29***	***(216,431.03)***	***70,419.45***
Total Revenue	***1,388,030.07***	***1,155,854.45***	***2,920,427.36***	***2,793,209.23***
Gas Purchased	***(841,644.24)***	***(735,902.21)***	***(1,984,652.43)***	***(1,573,997.58)***
Gross Profit	***$ 546,385.83***	***$ 419,952.24***	***$ 935,774.93***	***$ 1,219,211.65***
Operating Expenses				
Miscellaneous Operating Expenses				
Depreciation Expense	(115,169.47)	(156,760.09)	(691,017.92)	(940,562.44)
Sales Tax	-	(11,507.31)	(18,052.00)	(27,584.97)
Interest Expense-Consumer Deposits	(22.85)	(506.60)	(2,897.66)	(3,017.97)
Interest Expense-MMWEC	374.87	-	(2,925.80)	-
Total Misc Operating Expenses	***(114,817.45)***	***(168,774.00)***	***(714,893.38)***	***(971,165.38)***
Distribution Expenses				
Operations Supervision and Engineering	(15,971.68)	(23,851.43)	(84,793.14)	(103,367.59)
Station Labor and Expenses	(14,359.21)	(11,357.80)	(102,792.63)	(86,785.58)
Mains and Service	(5,445.22)	(6,466.33)	(3,969.53)	(24,222.44)
Customer Installation Expenses	(19,694.00)	(11,736.15)	(91,552.47)	(58,747.83)
Miscellaneous Plant Expenses	(43,615.89)	(9,838.68)	(63,259.56)	(58,936.16)
Total Distribution Expenses	***(99,086.00)***	***(63,250.39)***	***(346,367.33)***	***(332,059.60)***
Maintenance Expenses				
Maintenance of Mains	(32,747.66)	(41,176.65)	(122,682.67)	(152,076.63)
Maintenance of Meters and House Regulators	(720.00)	(1,630.00)	(9,857.43)	(6,973.21)
Maintenance of Other Equipment	(73.92)	(254.26)	(11,954.19)	(18,192.41)
Total Maintenance Expenses	***(33,541.58)***	***(43,060.91)***	***(144,494.29)***	***(177,242.25)***
Customer Account Expense				
Meter Reading Expense	(1,351.93)	(1,824.98)	(7,084.30)	(15,477.63)
Customer Record and Collection Expenses	(18,026.55)	(28,093.96)	(133,461.05)	(126,849.72)
Total Customer Account Expenses	***(19,378.48)***	***(29,918.94)***	***(140,545.35)***	***(142,327.35)***

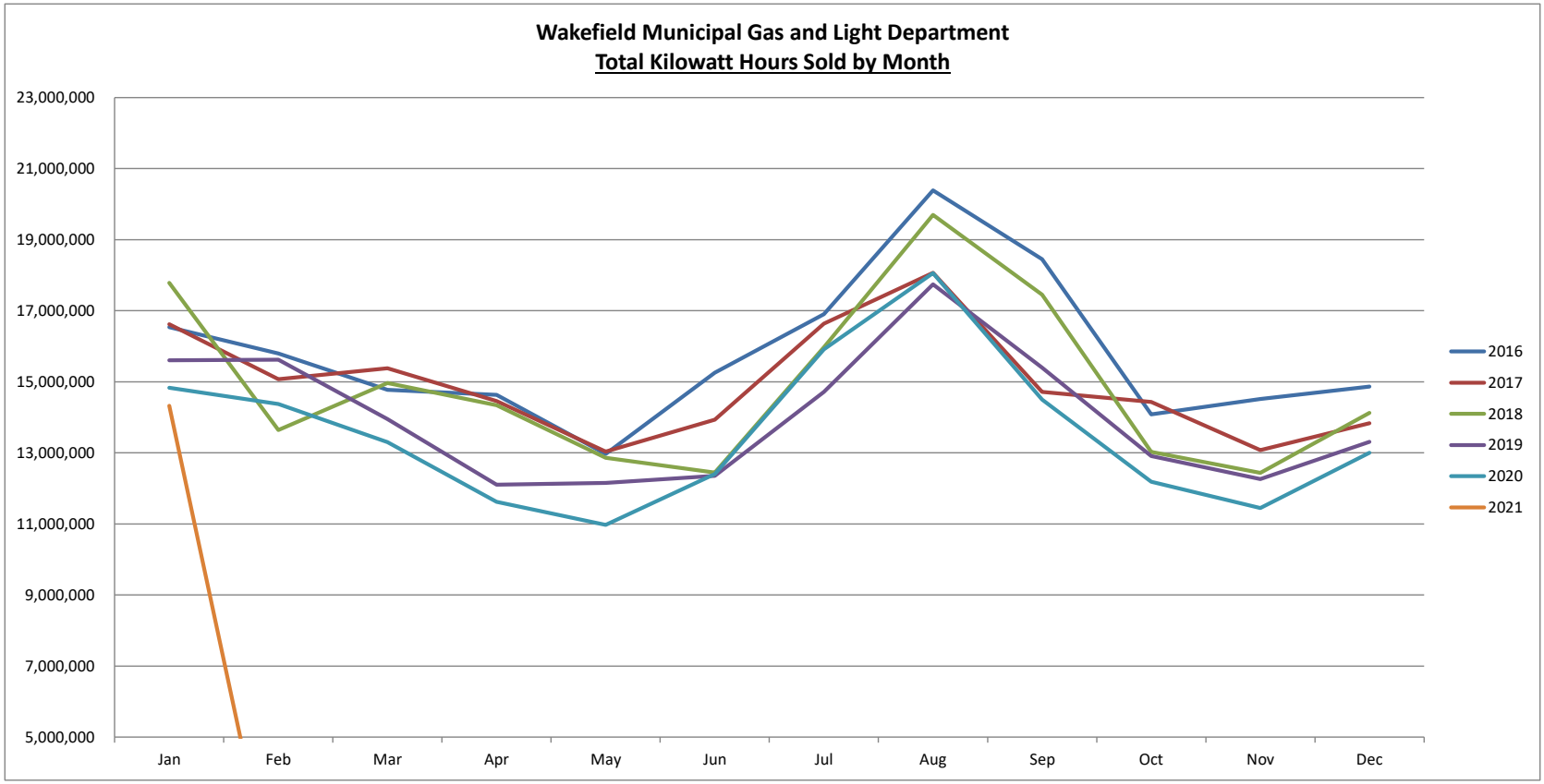
Wakefield Municipal Gas and Light Department
Income Statement - Gas Fund
For the Six Months Ending, December 31, 2020

	CURRENT MONTH		YEAR TO DATE	
	FY 2020	FY 2021	FY 2020	FY 2021
Administrative and General Expenses				
Advertising	(1,698.00)	(4,217.41)	(2,451.11)	(5,524.56)
Administrative Salaries and Expense	(4,540.18)	(6,895.37)	(47,450.07)	(31,548.75)
Business Mgr and Accting Salaries and Exp	(3,400.79)	(6,520.63)	(22,534.01)	(30,289.84)
MIS Salaries and Expense	(1,827.98)	(4,055.83)	(55,315.07)	(36,010.36)
Outside Services	-	-	(13,408.55)	(6,975.00)
Property Insurance	(300.67)	(329.08)	(1,803.98)	(1,974.52)
Injuries and Damages	(1,412.00)	(1,042.43)	(6,365.96)	(8,258.12)
Employee Pensions and Benefits	(45,558.85)	(32,516.41)	(206,871.54)	(233,069.52)
Miscellaneous General Expenses	(56.13)	(524.45)	(20,193.20)	(12,709.48)
Maintenance of General Plant	(7,436.37)	(1,401.36)	(23,784.65)	(11,693.33)
Total Admin & General Expenses	***(66,230.97)***	***(57,502.97)***	***(400,178.14)***	***(378,053.48)***
Net Income (Loss) Before Surplus Adjustments	***$213,331.35***	***$57,445.03***	***($810,703.56)***	***($781,636.41)***
Surplus Adjustments				
Additions	-	-	-	-
	-	-	-	-
Subtractions				
Interest on sinking fund investment	282.34	26.09	1,936.89	222.11
Payment in Lieu of Taxes	18,844.00	19,126.67	113,064.00	114,759.98
Plant Removal Costs	45,530.23	-	45,530.23	-
Total Subtractions from Surplus	***64,656.57***	***19,152.76***	***160,531.12***	***114,982.09***
Net Income (Loss)	***$148,674.78***	***$38,292.27***	***($971,234.68)***	***($896,618.50)***

Wakefield Municipal Gas and Light Department

Total Kilowatt Hours Sold by Month

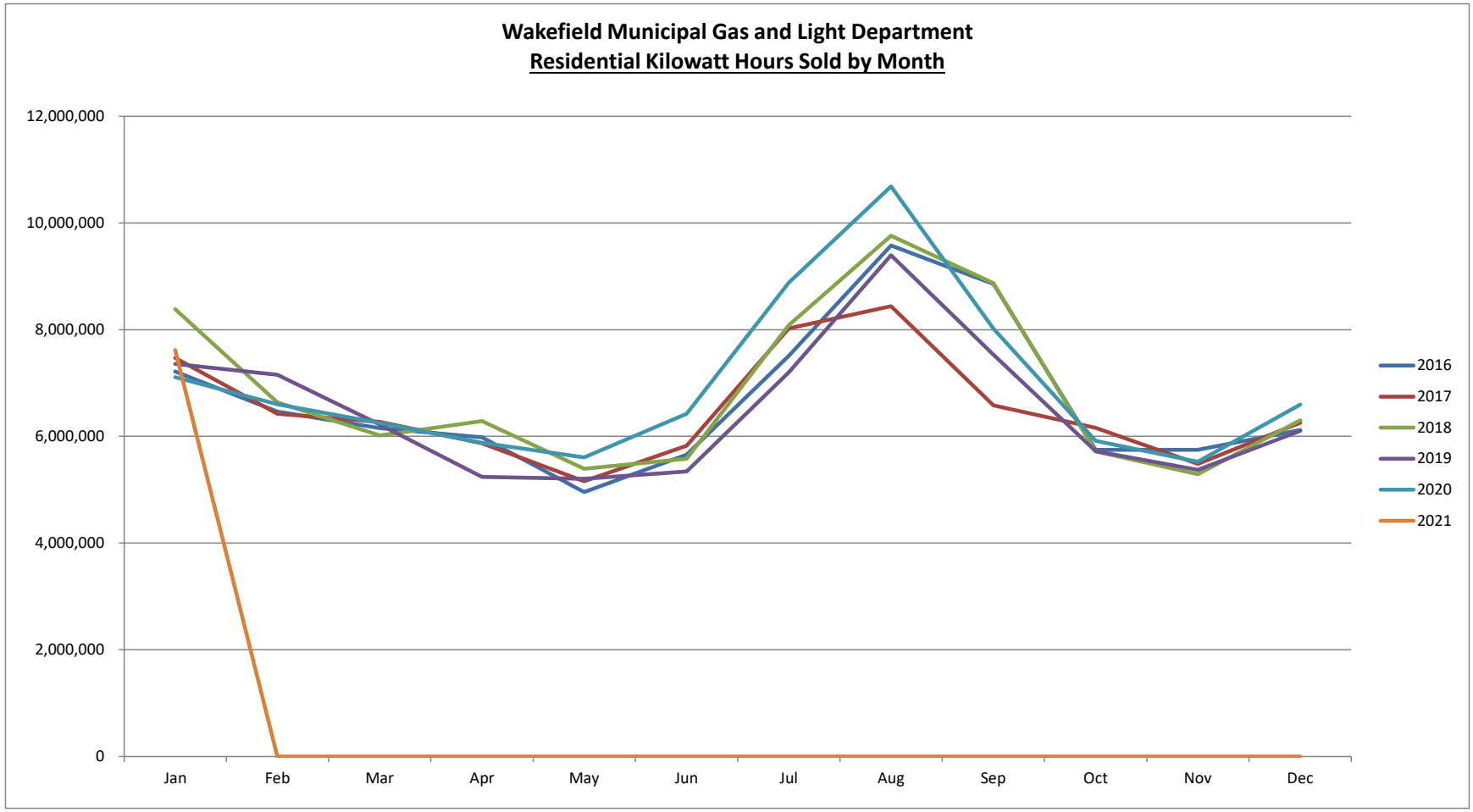
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date Thru Jan	Annual Total
2015	18,740,892	17,690,022	16,080,730	15,466,811	14,598,701	14,223,390	17,889,206	18,246,969	20,317,312	14,434,902	13,189,867	14,852,037	18,740,892	195,730,839
2016	16,533,974	15,797,950	14,772,758	14,634,278	12,966,436	15,255,131	16,901,222	20,390,535	18,447,864	14,084,731	14,517,900	14,862,522	16,533,974	189,165,301
2017	16,621,327	15,070,229	15,380,671	14,453,301	13,037,016	13,930,871	16,639,208	18,069,872	14,713,966	14,432,674	13,077,414	13,830,767	16,621,327	179,257,316
2018	17,781,658	13,643,198	14,968,016	14,337,800	12,863,470	12,441,286	15,974,013	19,698,047	17,452,170	13,030,487	12,439,795	14,124,456	17,781,658	178,754,396
2019	15,603,457	15,622,295	13,945,735	12,101,427	12,149,665	12,351,319	14,712,024	17,745,521	15,394,404	12,913,523	12,257,655	13,307,183	15,603,457	168,104,208
2020	14,828,122	14,373,838	13,299,621	11,620,258	10,978,443	12,406,390	15,909,116	18,062,379	14,494,332	12,189,623	11,444,845	12,998,123	14,828,122	162,605,090
2021	14,328,289	0	0	0	0	0	0	0	0	0	0	0	14,328,289	14,328,289



Wakefield Municipal Gas and Light Department

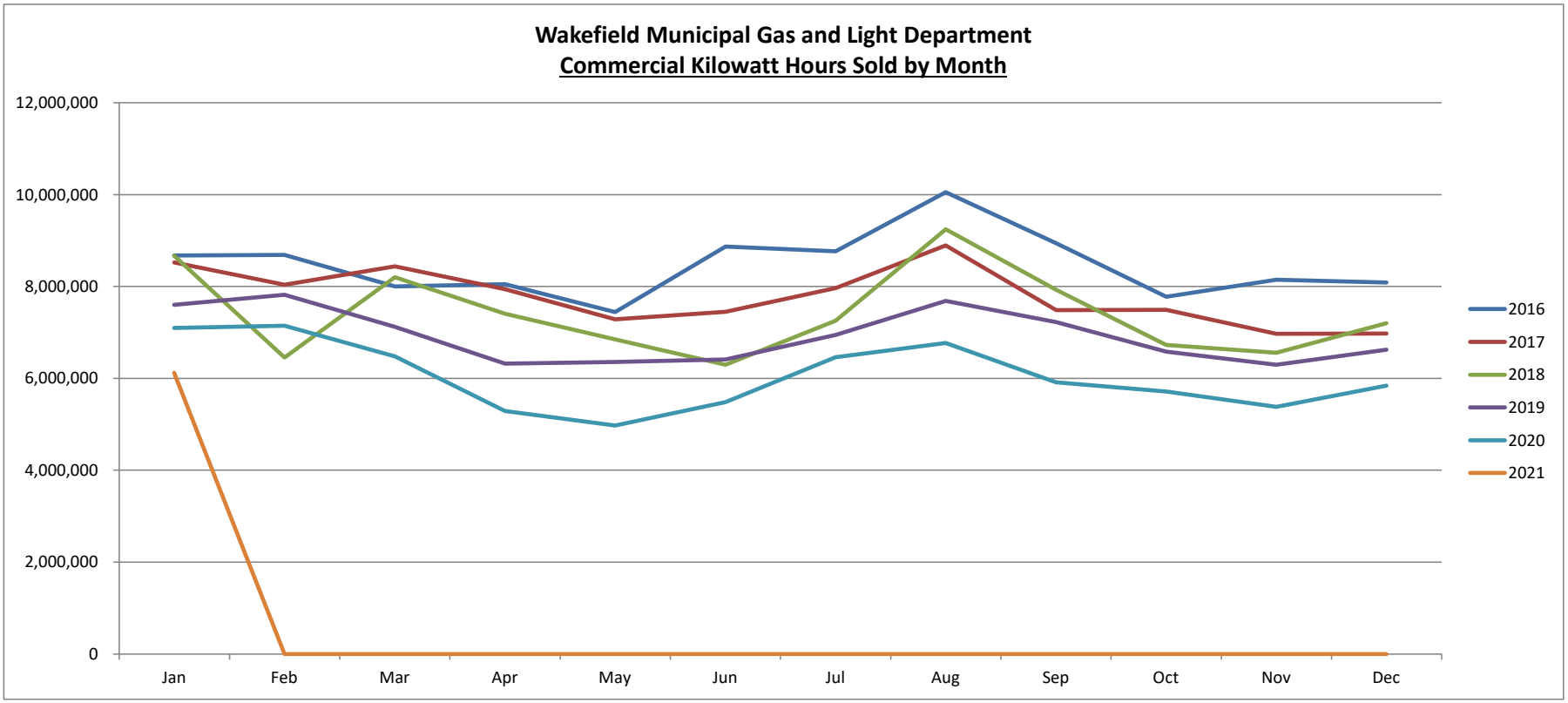
Residential Kilowatt Hours Sold by Month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date Thru Jan	Annual Total
2015	8,178,424	7,676,232	6,887,656	6,114,348	5,604,983	5,522,641	7,546,631	8,356,952	9,266,873	6,082,228	5,246,984	5,899,584	8,178,424	82,383,536
2016	7,213,246	6,462,572	6,152,141	5,983,207	4,954,943	5,656,308	7,510,425	9,575,466	8,857,734	5,745,728	5,748,680	6,120,760	7,213,246	79,981,210
2017	7,467,150	6,424,129	6,270,260	5,869,151	5,160,098	5,826,264	8,024,557	8,439,346	6,581,965	6,158,377	5,483,264	6,253,864	7,467,150	77,958,425
2018	8,381,831	6,634,709	6,019,617	6,286,768	5,394,451	5,580,611	8,081,951	9,761,016	8,872,178	5,715,595	5,291,009	6,301,934	8,381,831	82,321,670
2019	7,355,946	7,154,845	6,221,898	5,239,541	5,205,792	5,339,985	7,199,576	9,395,819	7,528,296	5,721,653	5,370,353	6,105,033	7,355,946	77,838,737
2020	7,106,825	6,598,732	6,252,606	5,879,621	5,608,073	6,424,574	8,879,896	10,682,850	8,020,241	5,915,271	5,522,660	6,595,284	7,106,825	83,486,633
2021	7,615,309	0	0	0	0	0	0	0	0	0	0	0	7,615,309	7,615,309



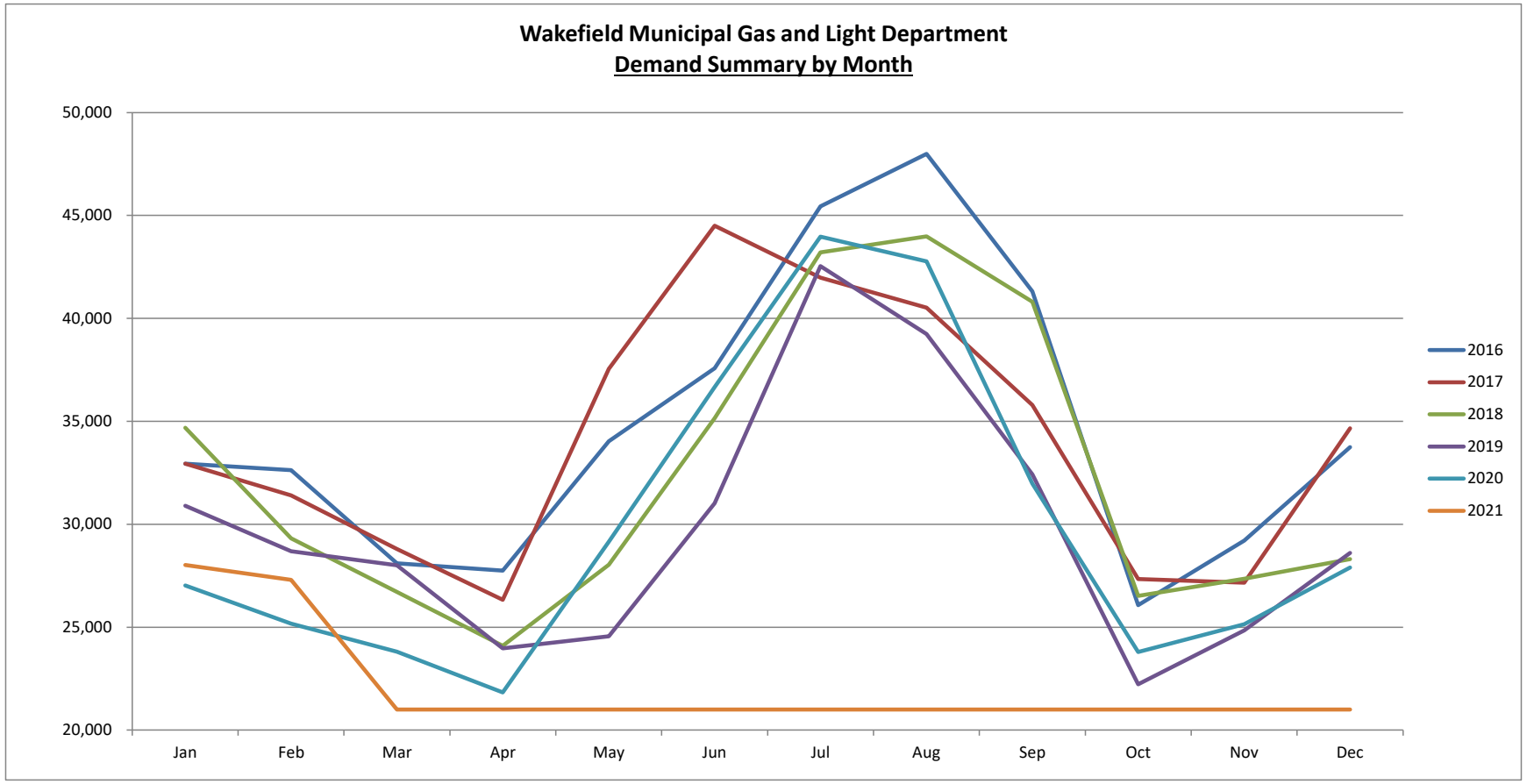
Wakefield Municipal Gas and Light Department
Commercial Kilowatt Hours Sold by Month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date Thru Jan	Annual Total
2015	9,967,369	9,469,303	8,613,429	8,821,582	8,262,753	8,094,609	9,621,561	9,232,271	10,201,316	7,791,890	7,309,757	8,355,668	9,967,369	105,741,508
2016	8,673,865	8,689,011	7,999,923	8,051,075	7,445,033	8,872,760	8,766,522	10,055,972	8,941,165	7,779,242	8,150,450	8,087,516	8,673,865	101,512,534
2017	8,523,398	8,036,867	8,440,054	7,944,183	7,284,920	7,449,910	7,967,311	8,893,548	7,485,167	7,489,927	6,972,575	6,974,940	8,523,398	93,462,800
2018	8,672,072	6,454,777	8,202,783	7,408,045	6,850,856	6,298,357	7,254,302	9,246,878	7,926,678	6,730,578	6,558,328	7,202,785	8,672,072	88,806,439
2019	7,598,845	7,821,861	7,121,215	6,321,095	6,359,892	6,410,293	6,948,166	7,687,622	7,224,317	6,582,051	6,298,066	6,622,414	7,598,845	82,995,837
2020	7,099,814	7,145,647	6,479,516	5,287,598	4,976,694	5,480,761	6,462,708	6,769,061	5,912,086	5,713,612	5,380,420	5,840,667	7,099,814	72,548,584
2021	6,120,226	0	0	0	0	0	0	0	0	0	0	0	6,120,226	6,120,226



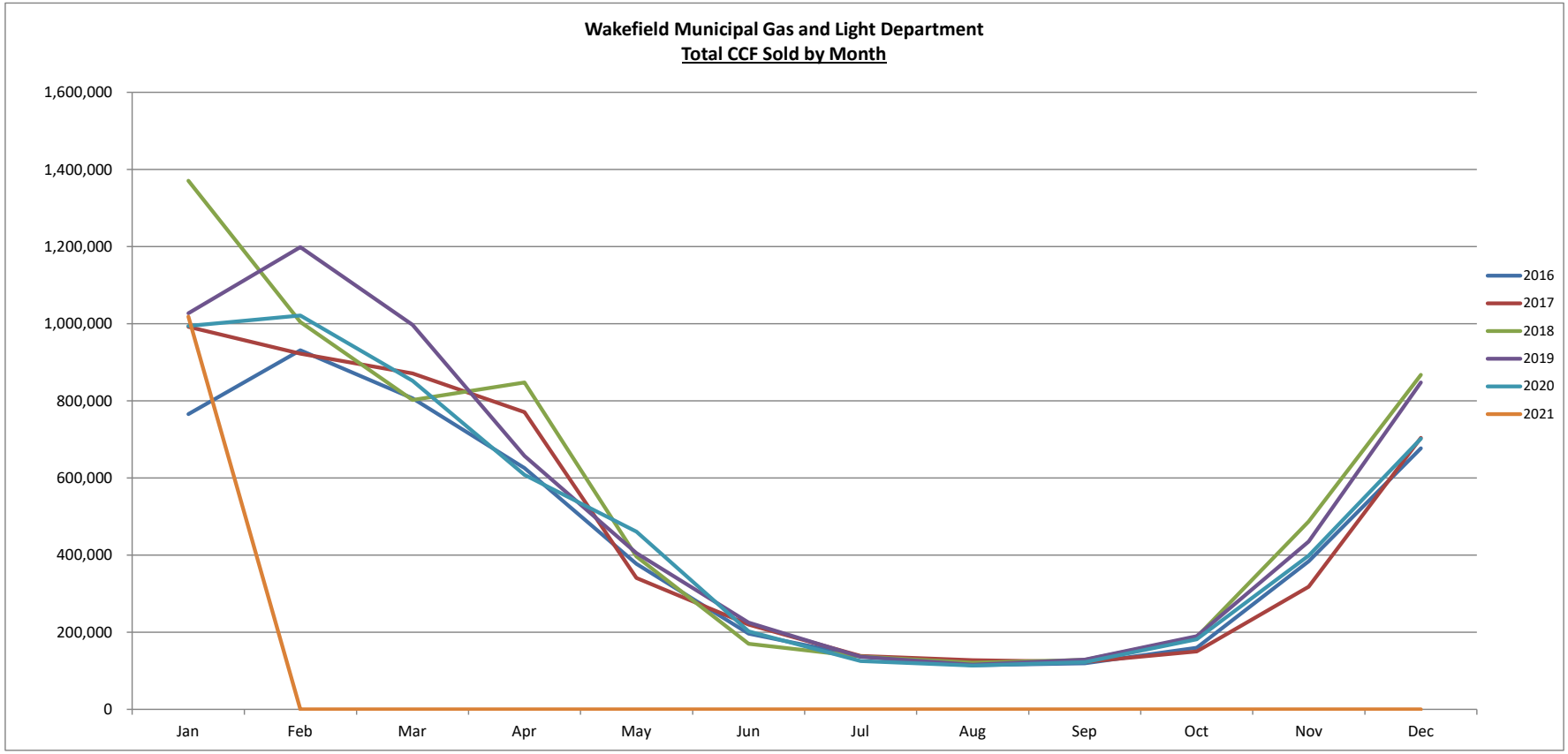
Wakefield Municipal Gas and Light Department
Demand Summary by Month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date Thru Jan	Annual Total
2016	32,943	32,626	28,103	27,751	34,030	37,581	45,442	47,999	41,318	26,069	29,200	33,750	32,943	416,812
2017	32,945	31,399	28,795	26,326	37,549	44,504	41,984	40,522	35,784	27,334	27,166	34,658	32,945	408,966
2018	34,692	29,316	26,712	24,091	28,039	35,145	43,210	43,982	40,807	26,527	27,350	28,308	34,692	388,179
2019	30,896	28,694	28,005	23,973	24,561	31,013	42,538	39,245	32,423	22,226	24,847	28,610	30,896	357,031
2020	27,031	25,166	23,806	21,823	29,147	36,658	43,966	42,773	31,971	23,789	25,149	27,898	27,031	359,177
2021	28,023	27,300	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	28,023	265,323



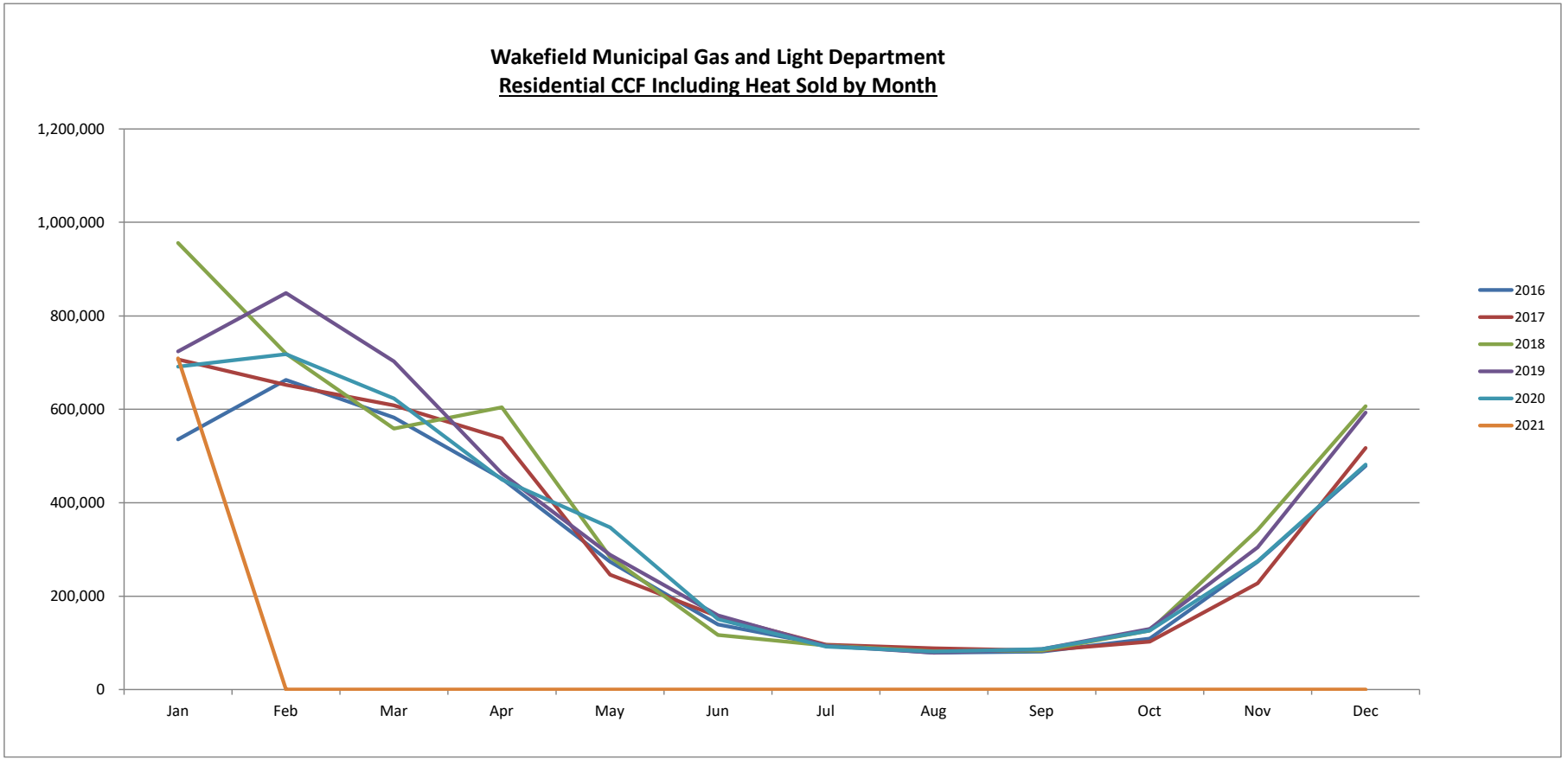
Wakefield Municipal Gas and Light Department
Total CCF Sold by Month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date Thru Jan	Annual Total
2015	1,009,763	1,262,240	1,132,746	790,303	376,704	162,785	143,849	113,013	124,003	165,477	321,060	533,054	1,009,763	6,134,997
2016	765,531	931,089	806,477	625,895	377,396	196,282	137,576	114,295	119,858	159,642	383,967	676,788	765,531	5,294,796
2017	992,147	922,194	871,001	770,881	341,035	219,847	138,513	127,619	122,846	150,433	318,338	704,061	992,147	5,678,915
2018	1,370,550	1,004,477	802,171	848,137	396,183	170,309	137,249	120,845	127,950	187,532	487,660	867,528	1,370,550	6,520,591
2019	1,027,554	1,198,806	997,533	657,267	405,201	224,983	136,083	116,142	129,215	189,712	435,624	847,819	1,027,554	6,365,939
2020	994,568	1,020,971	852,440	608,122	461,181	202,283	125,139	113,927	122,475	182,071	398,894	701,805	994,568	5,783,876
2021	1,018,323	0	0	0	0	0	0	0	0	0	0	0	1,018,323	1,018,323



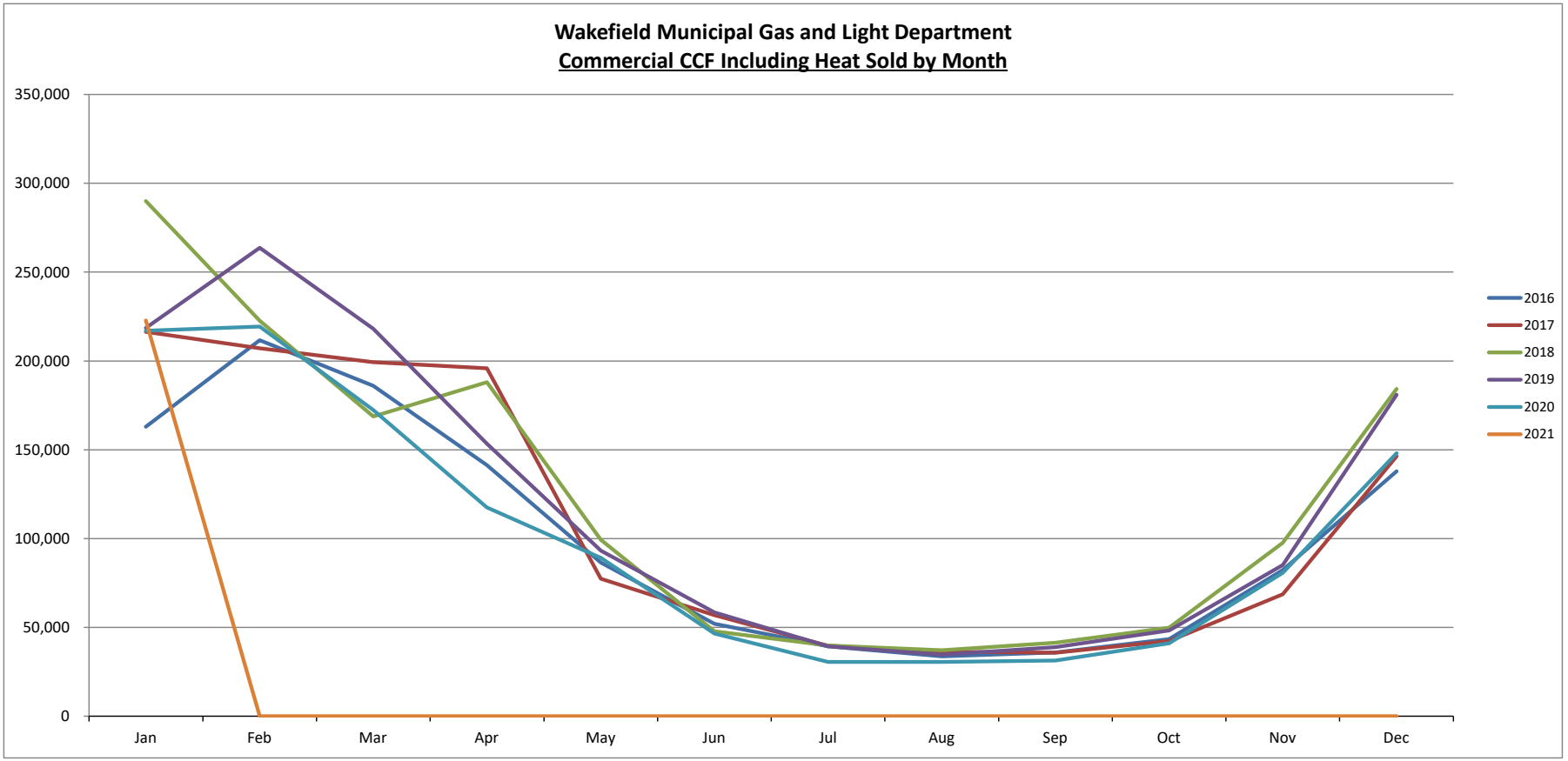
Wakefield Municipal Gas and Light Department
Residential CCF Including Heat Sold by Month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date Thru Jan	Annual Total
2015	709,258	882,366	804,314	567,283	271,108	114,243	102,782	78,644	86,567	113,195	226,095	377,416	709,258	4,333,271
2016	535,549	662,659	582,337	451,806	273,729	139,457	95,766	78,465	81,548	109,253	273,630	478,948	535,549	3,763,147
2017	706,641	652,293	608,703	537,827	246,194	156,746	96,121	88,308	83,699	102,620	227,364	517,605	706,641	4,024,121
2018	955,996	719,247	559,069	604,296	284,006	117,101	94,578	81,483	83,489	126,051	341,704	606,524	955,996	4,573,544
2019	723,933	849,023	702,875	462,667	288,440	158,602	93,767	78,965	86,479	129,638	304,511	593,201	723,933	4,472,101
2020	691,648	718,153	623,618	449,871	347,517	150,699	92,145	81,363	86,869	126,324	274,836	481,957	691,648	4,125,000
2021	708,777	0	0	0	0	0	0	0	0	0	0	0	708,777	708,777



Wakefield Municipal Gas and Light Department
Commercial CCF Including Heat Sold by Month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date Thru Jan	Annual Total
2015	211,670	280,348	255,703	184,532	88,149	42,594	37,791	32,329	34,412	42,841	69,578	114,429	211,670	1,394,376
2016	163,042	211,741	186,069	141,396	86,581	52,156	39,363	33,659	36,024	43,452	82,379	138,006	163,042	1,213,868
2017	216,460	207,247	199,361	195,882	77,406	56,935	39,707	36,467	35,684	42,359	68,622	146,446	216,460	1,322,576
2018	290,000	222,668	168,757	188,150	99,393	47,799	39,904	37,080	41,507	49,921	97,681	184,325	290,000	1,467,185
2019	218,646	263,667	218,111	153,398	93,310	58,477	39,440	34,670	38,851	48,314	85,137	181,045	218,646	1,433,066
2020	217,069	219,428	172,432	117,609	89,169	46,614	30,586	30,645	31,361	41,120	80,742	148,067	217,069	1,224,842
2021	222,839	0	0	0	0	0	0	0	0	0	0	0	222,839	222,839



Electric Vehicle Municipal Public Chargers 2020 Report

Program Summary

In 2019, the Wakefield Municipal Gas and Light Department Board of Commisioners approved a study of electric vehicle charging stations for the Town of Wakefield. The WMGLD partnered with electric vehicle experts, Voltrek, to complete an analysis of potential locations for the charing stations in Wakefiled. Following the study of several potential public EV charging station locations, the Board approved the installation of three charging stations. The first would be a Chargepoint Level 2 Electric Vehicle Charger at Vets Field. The charge would be fed by a padmounted transformer in the park area adjacent to the parking lot and would have two charging cords for public use. The second was a Chargepoint Level 3 charger with a single charging cord that would be mounted in the public parking lot on Lincoln Street. The charger would be fed from a pole on Lincoln Street. The third charger was a Level 2 charger with two charging cords mounted on the Americal Civic Center and fed by the building itself. The Board approved funding of the purchase and installation of all equipment for all three locations. The new meters for the Vets Field and Lincoln St chargers would be added to the towns accounts. The Town Council approved the installations and construction began at the end of 2019.

Installations were completed in early 2020 just as the COVID-19 Pandemic was starting. Traditional customer driving and charging habits came to a grinding halt in March as the Commonwealth shifted to a work from home economy with minimal opportunities for social gatherings and activities outside the home. While we have seen some aspects of the economy recover and reopen, driving habits have still not rebounded fully.

Electric Vehicle Charger Installation and Cost

The three public charger installations were completed in the first quarter of 2020. All three were in service just as Covid-19 was beginning to to have significant impacts in Massachusetts.

Capital Cost

2020 costs for the installation of the 3 charging stations:

Installation costs:

- Civic Center $ 1,540.00
- Vets Field $ 5,180.00
- Lincoln St $18,406.00

Equipment Costs:

- Civic Center $ 6,660.40
- Vets Field $ 7,104.80
- Lincoln St $36,012.00

Total **$74,903.20**

Operations and Maintenance Costs

Chargepoint Extemded Warranty Plan (Assure) *

- Civic Center $ 500/ year
- Vets Field $ 500/ year
- Lincoln St $ 3,100/ year

Total **$4100/ year based on 5 year commitment**

Annual Chargepoint Network Connection Fee **:

- Civic Center $ 280.00 X 2 = $560 / year
- Vets $ 280.00 X 2 = $560 / year
- Lincoln St. $ 560 / year

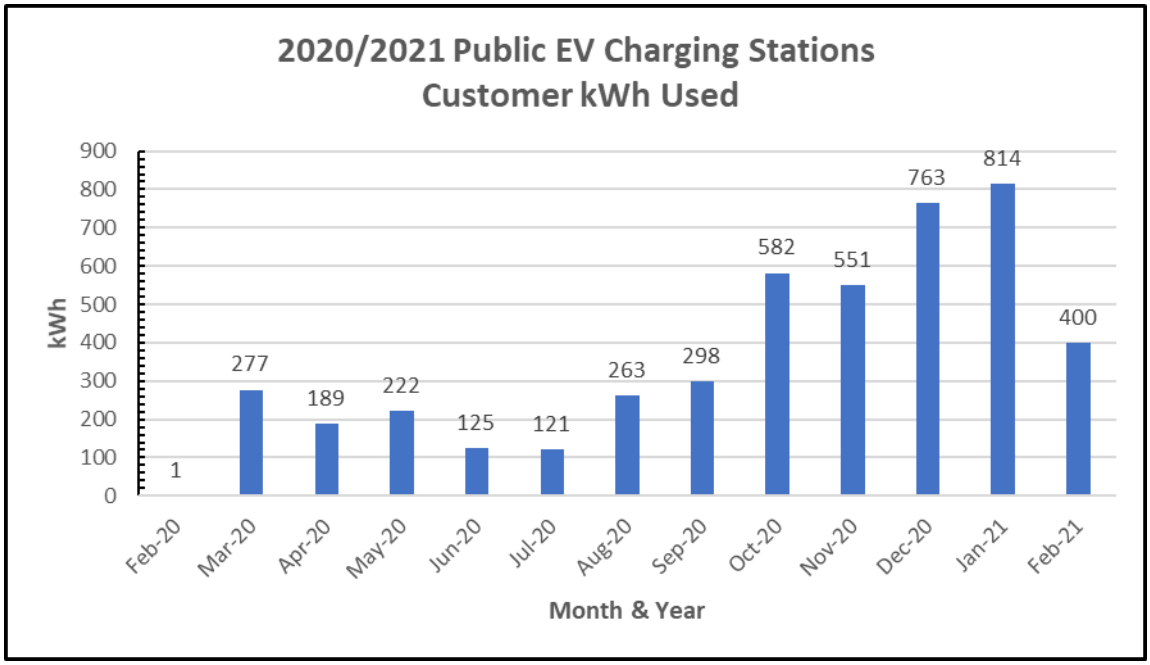
Total **$1680/ year**

*WMGLD to pay

** Town to pay

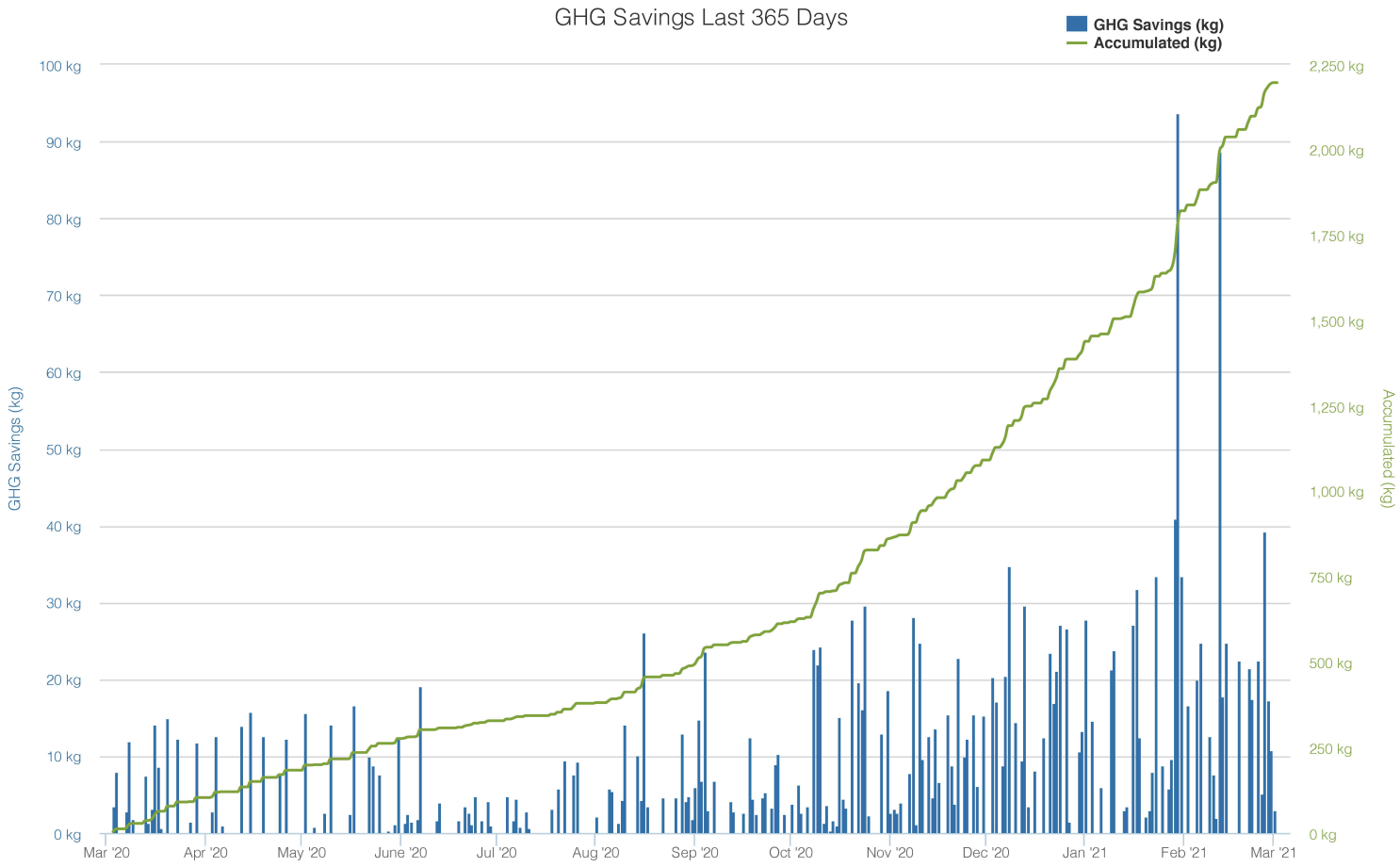
Key Metrics

Customer kWh Usage:



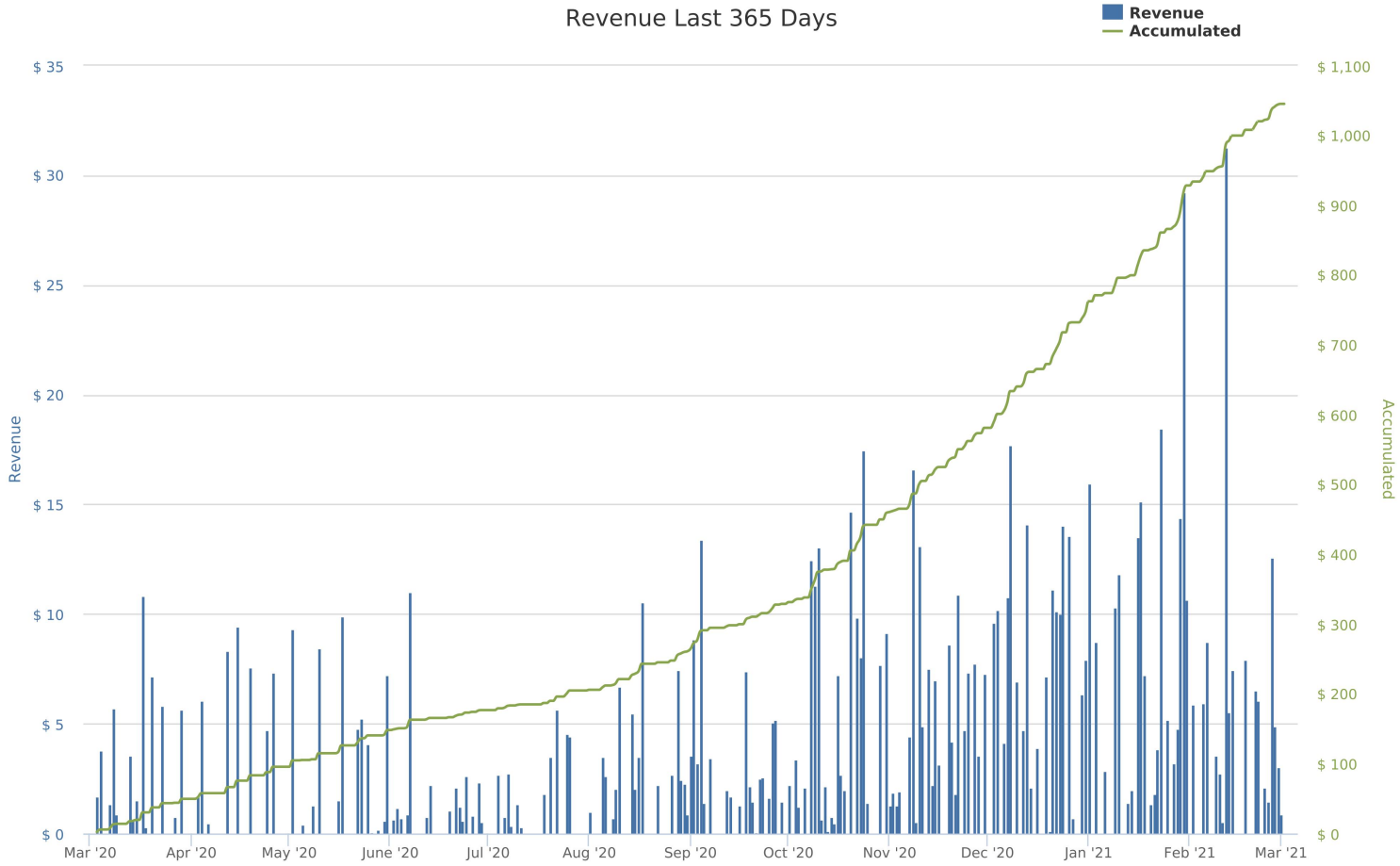
Town kWh Usage														
Lincoln St	0	0	37	257	193	120	137	140	223	337	294	414	358	**2,510**
Vets Field	0	30	41	9	41	53	47	177	131	298	311	408	357	**1,903**
CIVIC	1	229	27	24	0	2	25	5	18	43	82	53	0	**509**
Total	**1**	**259**	**105**	**290**	**234**	**175**	**209**	**322**	**372**	**678**	**687**	**875**	**715**	**4,922**

GHG Savings:

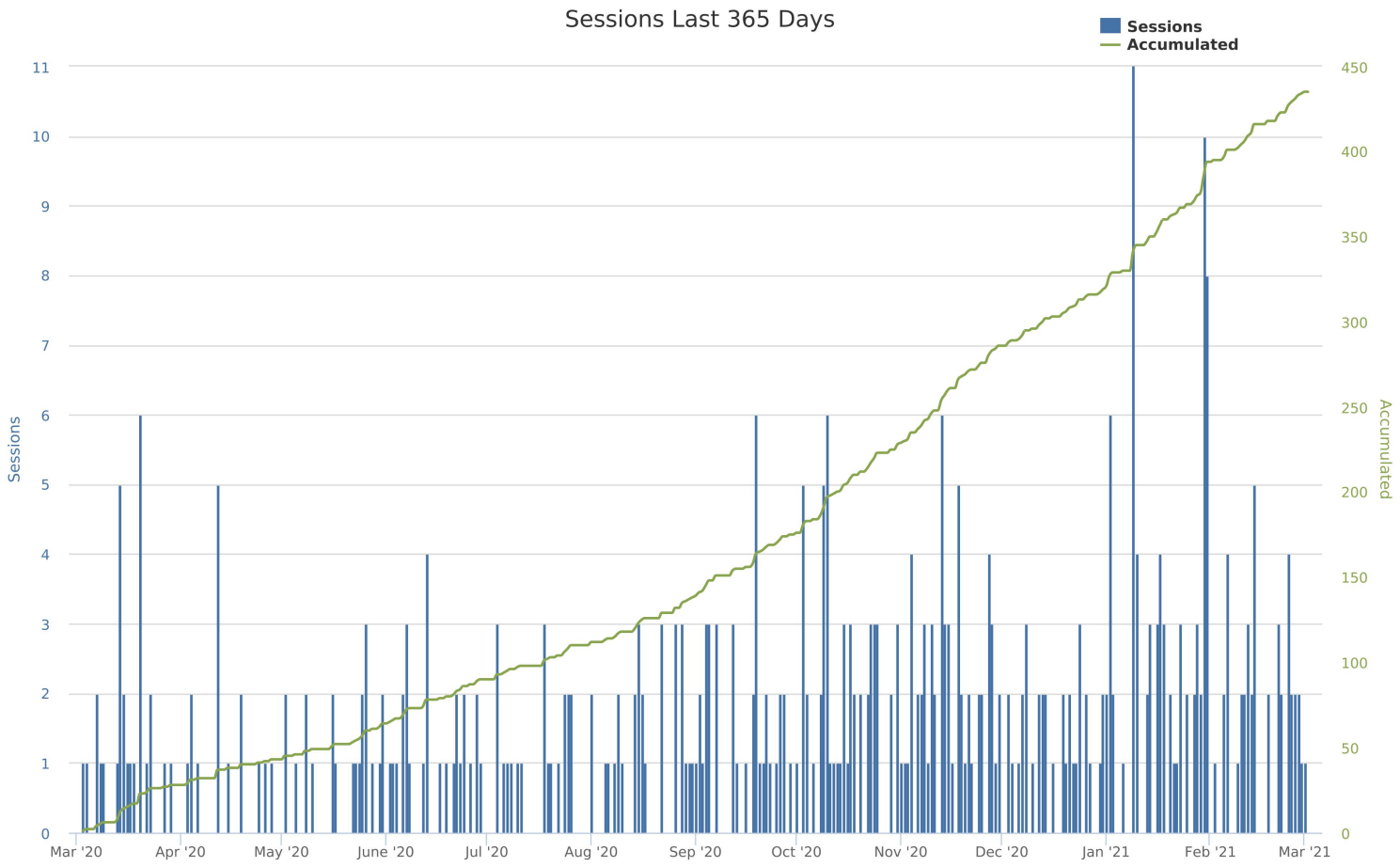

GHG Savings Last 365 Days
GHG Savings (kg)
Accumulated (kg)
100 kg
90 kg
80 kg
70 kg
60 kg
50 kg
40 kg
30 kg
20 kg
10 kg
0 kg
2,250 kg
2,000 kg
1,750 kg
1,500 kg
1,250 kg
1,000 kg
750 kg
500 kg
250 kg
0 kg
Mar '20
Apr '20
May '20
June '20
Jul '20
Aug '20
Sep '20
Oct '20
Nov '20
Dec '20
Jan '21
Feb '21
Mar '21

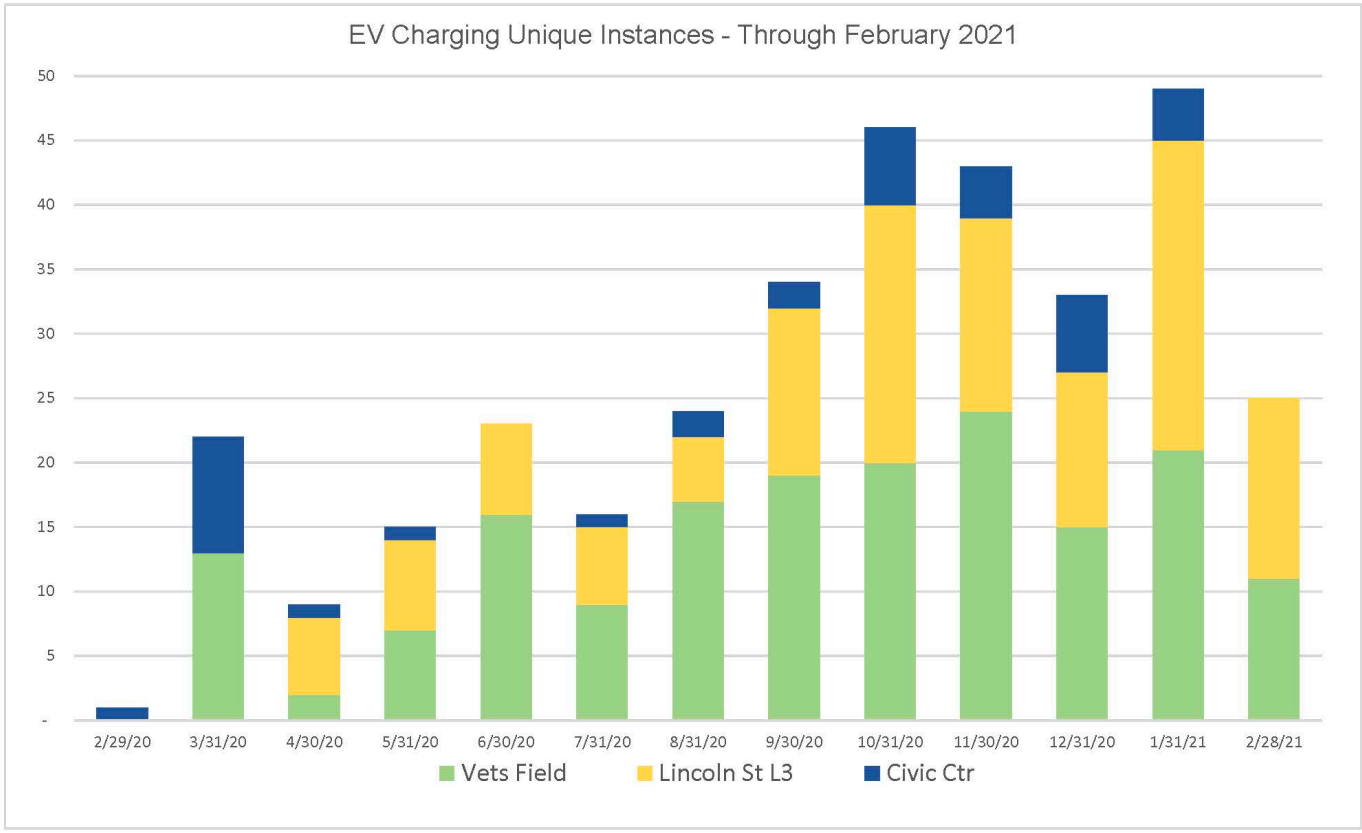
Chargepoint Revenue:

Town's Net Revenue	$0.14	$49.83	$41.05	$47.68	$25.58	$25.25	$50.49	$61.39	$117.13	$109.65	$148.91	$163.74	$84.83	**$925.67**
Charge Point Fees Collected	$0.02	$5.54	$4.57	$5.28	$2.85	$2.80	$5.60	$6.80	$12.98	$12.15	$16.52	$18.15	$9.39	**$102.65**
Customer Payment	$0.16	$55.37	$45.62	$52.96	$28.43	$28.05	$56.09	$68.19	$130.11	$121.80	$165.43	$181.89	$94.22	**$1,028.32**
EV Customer kWh Usage	1	277	189	222	125	121	263	298	582	551	763	814	400	**4,605**
Month	**20-Feb**	**20-Mar**	**20-Apr**	**20-May**	**20-Jun**	**20-Jul**	**20-Aug**	**20-Sep**	**20-Oct**	**20-Nov**	**20-Dec**	**21-Jan**	**21-Feb**	



Chargepoint Sessions:




EV Charging Unique Instances - Through February 2021
50
45
40
35
30
25
20
15
10
5
-
2/29/20
3/31/20
4/30/20
5/31/20
6/30/20
7/31/20
8/31/20
9/30/20
10/31/20
11/30/20
12/31/20
1/31/21
2/28/21
Vets Field
Lincoln St L3
Civic Ctr

Electric Vehicle Scheduled Charging Program 2020 Report

Prepared for Wakefield Municipal Gas & Electric Department by Massachusetts Municipal Wholesale Electric Company

Jason Viadero

February 18,

2021

Program Summary

2020 was a tumultuous year for the WMGLD EV program as it was for the entire world upended by the ongoing COVID-19 Pandemic. Traditional customer driving and charging habits came to a grinding halt in March as the Commonwealth shifted to a work from home economy with minimal opportunities for social gatherings and activities outside the home. While we have seen some aspects of the economy recover and reopen, driving habits have still not rebounded fully and December 2020 charging levels are just 70% of pre lockdown levels. Had these events not occurred, WMGLD projected 2020 EV charging would have been expected to exceed 50,000KWH. Table 1, below, indicates total monthly charging by WMGLD customers for 2020:

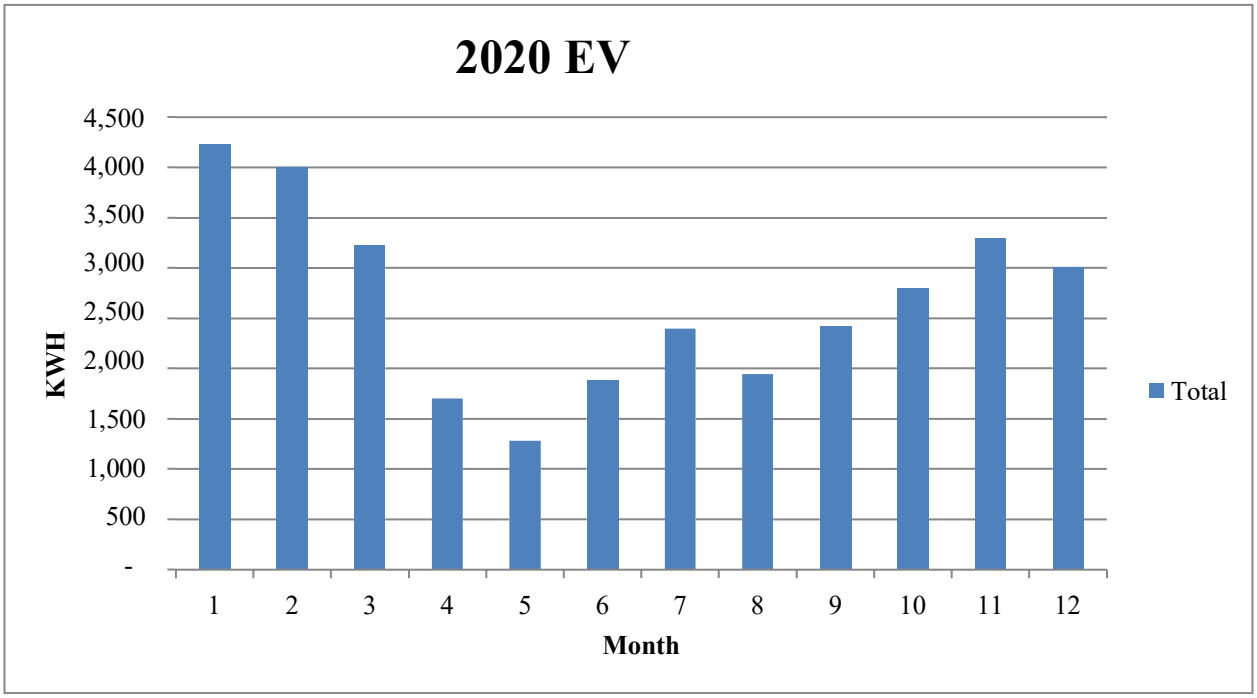


Table 1

While declines in vehicle driving and charging have led to declines in program economics which will be discussed later, the WMGLD EV program continues to remain an important offering to encourage off peak EV charging amongst customers, as well as incentivize customers to move forward with vehicle electrifications. With the ambitious goals set under the 2030 Clean Energy and Climate Plan, decarbonization of the transportation sector will be key in keeping Massachusetts on a path to Net Zero. The WMGLD EV program is one tool to help enable that expansions and allow the Commonwealth to meet those goals.

Program Economics

The economics of the WMGLD EV program have been measured by fixed costs (for the purchase of EV chargers) as well as variable costs for regular load shedding and administration. The financial benefits of the program include energy sales and demand reduction on both monthly and yearly peaks. Below is a high level summation of the program's yearly economics.

- Fixed costs (EV chargers purchased): **$1,893.00**
- MMWEC Admin Costs: **$5,573.18**
- Energy Sales ($.1798/KWH): **$5,787.97**
- Transmission & Capacity Reduction: **$2,428.93**

- Yearly Program Costs: **$750.72**

While the program has netted a savings to the WMGLD this year, overall savings has been significantly weighed down by decreased charging associated with the ongoing pandemic. Had EV driving continued at pre pandemic levels, added energy sales alone would have covered all operating costs for the program. Additionally added demand reduction due to off peak charging prevented would have left the program firmly in the black.

Emissions Reductions

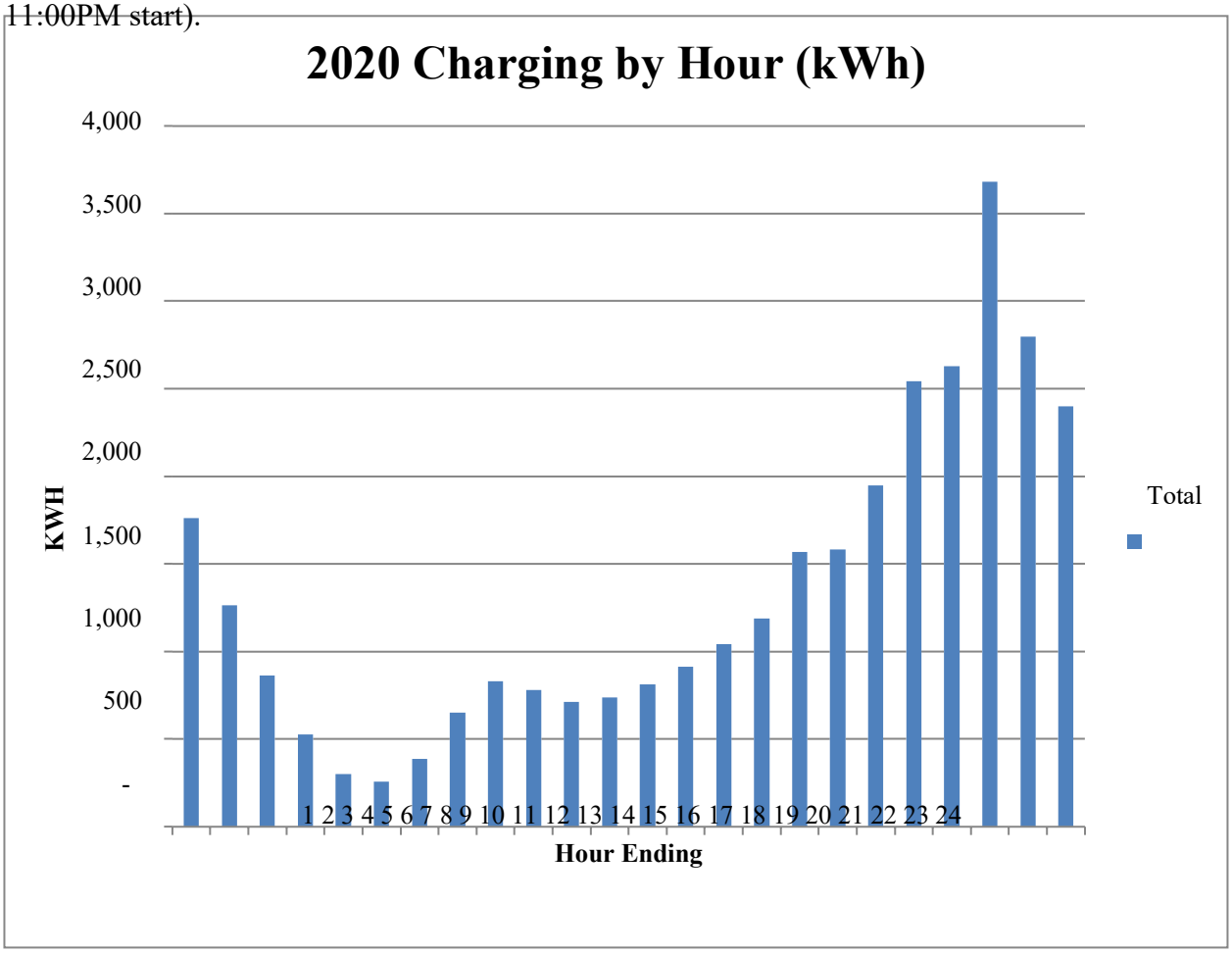
In evaluating emissions reductions for the program, MMWEC looked at available data from ISO-NE regarding on peak and off peak average emissions for the region. ISO-NE considers on-peak the hours from 8:00AM-10:00PM and off peak 10:00PM-8:00AM. In 2020, 35% of EV charging was done by WMGLD customers during off peak hours where emissions from CO2 producing generators tend to be 8- 10% lower than on peak hours. For every MWH shifted from on peak to off peak, average emissions of CO2 decline by 46lbs.

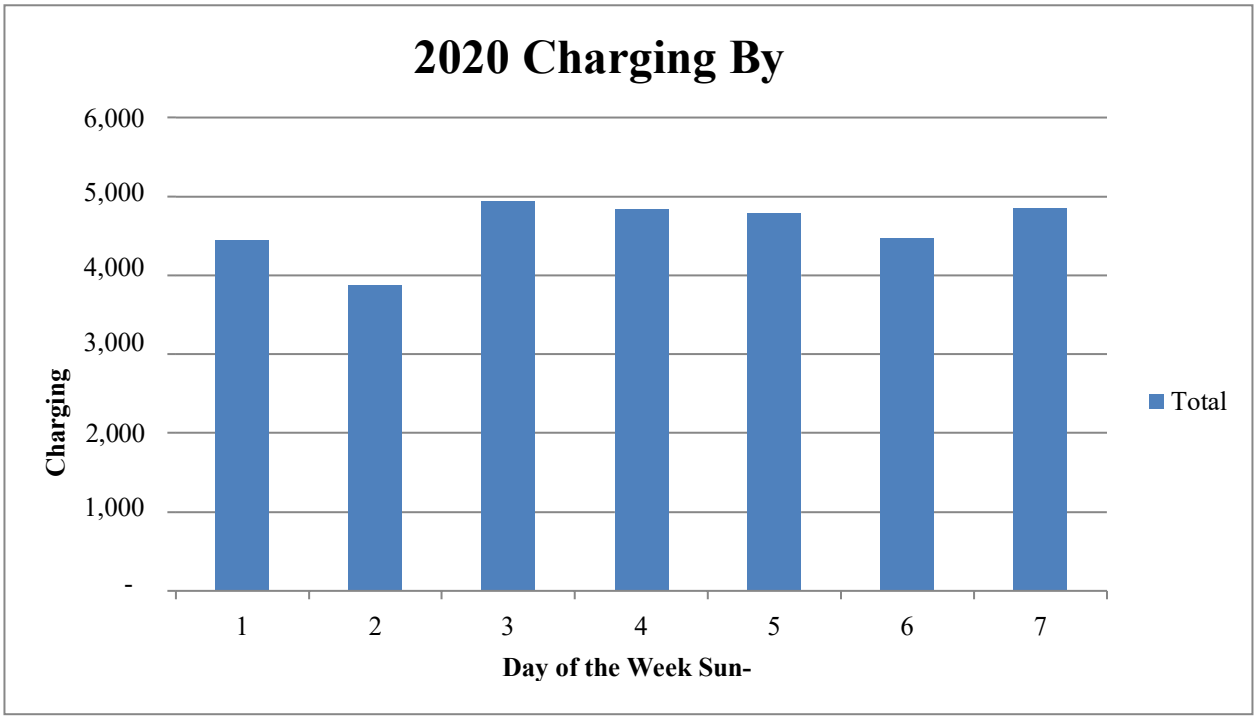
Annual Emissions (SO_2 and CO_2)					
Air Emission		Annual			Annual Average (All Hours)
		On-Peak	Off-Peak		
SO_2		0.12	0.05		0.08
CO_2		681	635		654

After evaluating the effects of both targeted load shedding by MMWEC as well as customers electively using the Chargepoint App to schedule their charging off peak (defaulting to an 11:00PM start), MMWEC determined that charging done between 10:00PM and 2:00AM, left unmanaged would have occurred between the hours of 6:00PM and 10:00PM. And as such we have assumed this charging to be effectively shifted due to the WMGLD EV program. This resulting shift in energy in 2020 was approximately 8,224KWH, resulting an avoided emissions of 378lbs of CO2

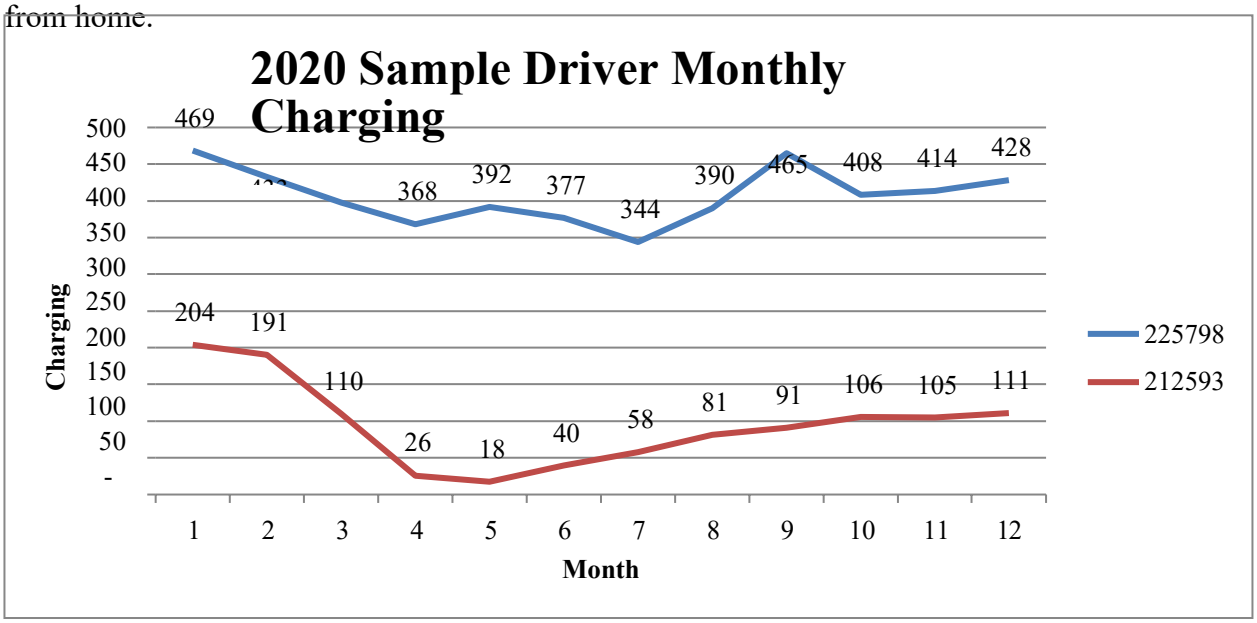
Key Metrics

Additionally, as a means of better understanding EV charging the following graphs have been compiled in aggregate or as a demonstration of a single anonymized EV customer. As a reminder MMWEC regularly sheds EV charging from 5:00-9:00 on non-holiday weekdays to help reduce on peak EV utilization. However some WMGLD customers have elected to utilize the ChargePoint App and start their charging later in the day (the ChargePoint default is 11:00PM start).



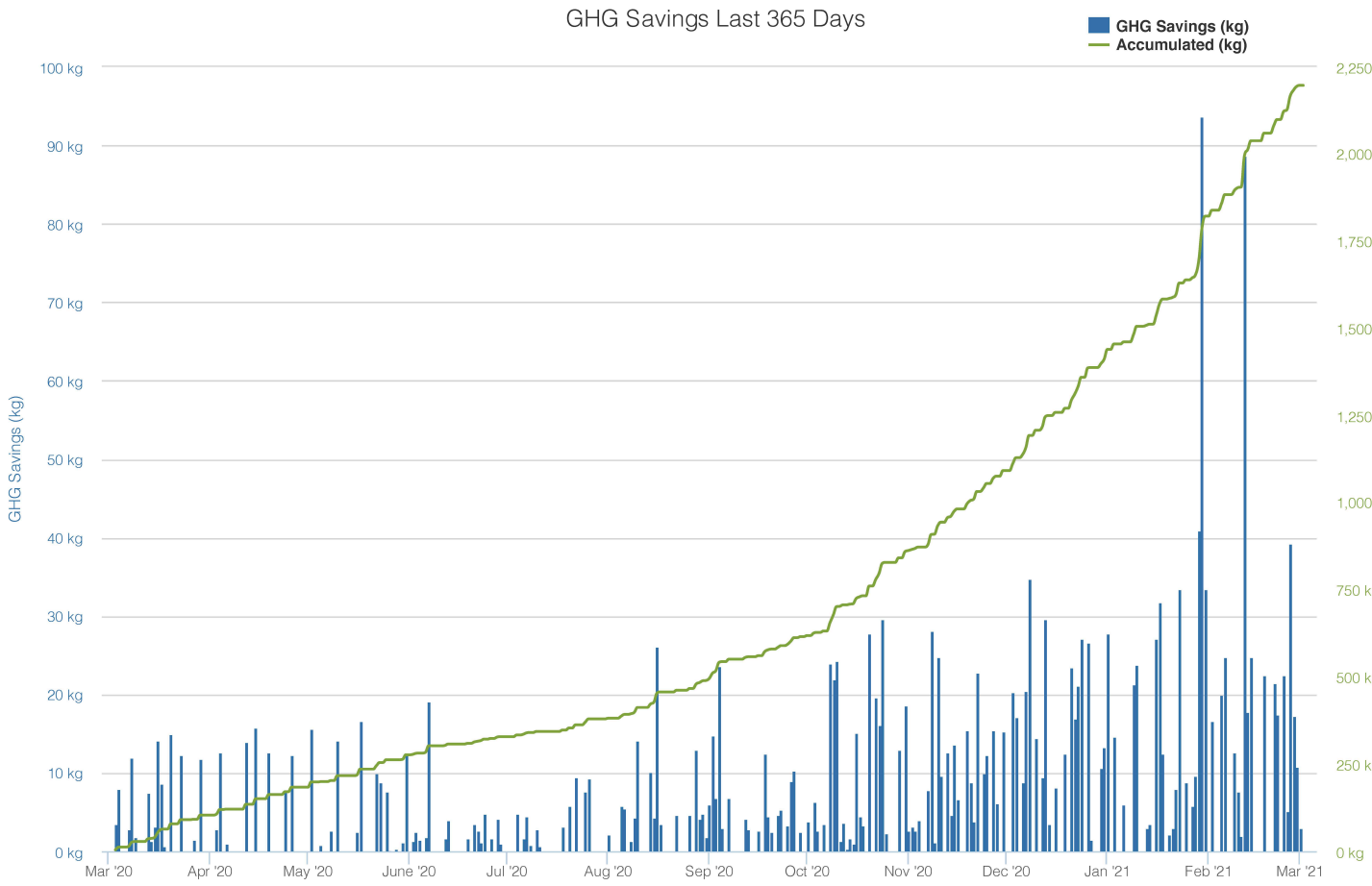


Below is a graph of the charging habits of 2 individual WMGLD drivers illustrating the effects of the ongoing pandemic and work from home economy. On average, an EV driver traveling 13,000 miles per year would expect to charge between 300-350KWH per month. While both drivers regularly exhibited conventional driving habits in January and February. Driver 225798 continued driving as normal (with lower charging in the summer months due to less cold weather demands on battery life). Driver 212593 however sharply curtailed their driving and even in December is only at 50% of their pre pandemic charging levels, likely due to working from home.



Conclusion:

Despite challenges faced in 2020, the program continued to serve WMGLD and most importantly put controllable EV chargers out into the field for your customers. September 2020 saw some of the highest EV sales in the Commonwealth in the past 2 years, and as the economy rebounds in 2020, we expect that existing driver utilization as well as new driver adoption of EV's will increase as will interest in the program. The Commonwealth has stated that over 750,000 vehicles on Massachusetts roads by the 2030's will need to be EV in order to meet ongoing benchmarks towards net zero 2050. By continuing to provide free EV chargers as well as managing the customer charging, WMGLD is doing their part to decarbonize the transportation sector, while ensuring the EV charging does not lead to higher on peak utilization harming the broader customer base.


GHG Savings Last 365 Days
GHG Savings (kg)
Accumulated (kg)
GHG Savings (kg)
100 kg
90 kg
80 kg
70 kg
60 kg
50 kg
40 kg
30 kg
20 kg
10 kg
0 kg
2,250
2,000
1,750
1,500
1,250
1,000
750 k
500 k
250 k
0 kg
Mar '20
Apr '20
May '20
June '20
Jul '20
Aug '20
Sep '20
Oct '20
Nov '20
Dec '20
Jan '21
Feb '21
Mar '21

Comments

In praise of the ever-greener WMGLD

The town's gas and light company continues to get greener as it increases use of carbon-free energy generation, and deserves praise for the move.

Last week, the WMGLD announced that it is one of six municipal utilities participating in a solar project scheduled to be built in Ludlow by the Massachusetts Municipal Wholesale Electric Company (MMWEC), the publicly owned utility's joint action agency.

The WMGLD will purchase approximately 1 megawatt from the 6.9-megawatt nameplate capacity project planned for the MMWEC property. Joining the WMGLD in the project are five other municipal utility members of MMWEC, including Boylston, Ipswich, Mansfield, Marblehead and Peabody.

The ground-mounted solar project will be built on a 30-acre section of MMWEC's 200-acre property in Ludlow, a site well suited for solar, according to MMWEC. After receiving responses to its request for proposals (RFP), MMWEC is working with EDF Renewables Distributed Solutions, Inc., as the project developer. In addition, MMWEC intends to maximize the use of local subcontractors in the project. Construction will start this summer, and the project is expected to be online by late 2021.

Using its unique statutory financing authority as a political subdivision of the Commonwealth, MMWEC plans to use a local financial institution to issue tax-exempt revenue bonds to finance the project. The project's cost is estimated at $14.5 million.

The project was developed in alignment with the state's decarbonization goals. It also allows for municipal utilities that may not have ideal locations for projects within their own communities to add more solar to their power portfolios.

"We're excited to be a part of this project that will further increase the amount of carbon-free generation in the WMGLD power portfolio, which is approximately 47.2%," WMGLD General Manager Pete Dion said. "The WMGLD remains committeed to continually balance financial responsibility and environmental stewardship in our power supply decisions. This project is a key indication of that commitment."

WMGLD takes part in new solar project

LUDLOW — Continuing its initiative to provide opportunities to increase the carbon-free portion of its Members' power portfolios, the Massachusetts Municipal Wholesale Electric Company (MMWEC), the state's joint action agency for municipal utilities, has announced plans to construct a 7 megawatt (MW) nameplate capacity solar project on its Ludlow campus. Six MMWEC municipal utility Members are participating in the project.

The ground-mounted solar project will be built on a 30-acre section of MMWEC's 200 -acre property in Ludlow. The site is well suited for solar. After receiving responses to its request for proposals (RFP), MMWEC is working on a contract with EDF Renewables Distributed Solutions, Inc., as the project developer. In addition, MMWEC intends to maximize the use of local subcontractors in the project. Construction is scheduled to start this summer, and the project is expected to come online by late 2021.

Using its unique statutory financing authority as a political subdivision of the Commonwealth, MMWEC plans to use a local financial institution to issue tax-exempt revenue bonds to finance the project. The project's cost is estimated at $14.5 million.

The municipal utilities located in Boylston, Ipswich, Mansfield, Marblehead, Peabody and Wakefield are participating in the project.

The project was developed in alignment with the state's decarbonization goals. It also allows for Member municipal utilities that may not have ideal locations for projects within their own communities to add more solar to their power portfolios.

MMWEC CEO Ronald C. DeCurzio said he's excited to offer this project to MMWEC members.

"The site selected on MMWEC's campus represents an ideal location for this type of project," DeCurzio said. "We are happy to be able to provide this opportunity to our Members looking to increase their ownership of carbon-free and renewable generation. This is yet another example of the ways MMWEC and its Members use their joint action agency capabilities of vertical integration and project ownership to lead the way in incorporating new carbon-free resources, dating back to the 1980s."

MMWEC is a non-profit, public corporation and political subdivision of the Commonwealth of Massachusetts, created by an Act of the General Assembly in 1975 and authorized to issue debt to finance a wide range of energy facilities. MMWEC provides a variety of power supply, financial, risk management and other services to the state's consumer-owned municipal utilities. It has 20 municipal utility members and 28 project participants. As one of 83 public power joint action agencies in the United States, MMWEC uses the strengths of working together, greater efficiency and economies of scale to help its members provide superior service at a low cost.

WMGLD to hold meeting on energy efficiency

WAKEFIELD — The Wakefield Municipal Gas & Light Department (WMGLD) will hold an informational meeting via Zoom platform on Thursday, February 25, 2021 at 7 p.m. to introduce a new energy efficiency program for commercial and industrial customers, and HVAC and electrical contractors. The Massachusetts Municipal Wholesale Electric Company (MMWEC) Green Opportunity (GO) program is designed to help customers and contractors achieve savings through rebates and incentives, while reducing energy consumption.

The GO program offers energy audits to WMGLD commercial and industrial customers to identify areas where energy efficient improvements can be made, and to understand and choose the best measures to install. The WMGLD will also work with local electrical and HVAC contractors to identify rebates and incentives as part of the program.

The GO program will also help local businesses reduce their energy costs when they, or their contractors, participate in the program and install energy efficient materials, further promoting economic growth and reducing the impact on the environment.

The meeting will include presentations by WMGLD General Manager Pete Dion and MMWEC Energy Efficiency Program Manager Joe Coles who will explain the program and the benefits to both the customer and the WMGLD. A question and answer session will also be held to allow participants to ask questions. Other WMGLD representatives will participate in the interactive Zoom meeting and will provide information about various aspects of the program.

"This is a great opportunity for local contractors and WMGLD customers to participate in this unique program to save energy and money for both customers and contractors," WMGLD General Manager Pete Dion said. "This informational session will enable us to not only introduce this program, but provide more customers with the means to participate in energy efficiency programs through the WMGLD."

Participants are asked to register at https://zoom.us/meeting/register/tJYvfu-hrzooHNGY-myrOyS052gfNOgpzkOM.

The link will also be available on the WMGLD website, www.WMGLD.com.

For information about WMGLD energy efficiency programs, visit the WMGLD website www.wmgld.com.