



WMGLD
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Peter D. Dion, General Manager

Thomas Boettcher, Chair
Elton Prifti, Secretary
Philip Courcy
Jennifer Kallay
John J. Warchol

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

June 2, 2021

MINUTES

IN ATTENDANCE:

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

Peter Dion, General Manager, WMGLD

Mark Cousins, Financial Manager
Dave Polson, Engineering and Operations Manager
Sylvia Vaccaro, Office Manager

Julie Smith- Galvin, Town Liaison

PLACE: ZOOM MEETING

CALL TO ORDER:

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

Chair Remarks:

Commr. Boettcher mentioned that the Biden Administration had approved the 800 MW Vineyard Wind Project and stated that it will be interesting to see what this will mean for

WMGLD. He also extended kudos to the WMGLD team for its quick response time and restoration of services during this weekend's outages. He informed the Board that both he and Pete provided Town Council with an update on the EV charging pilot program and that it was well received.

Commissioner Remarks:

Commr. Courcy noted that he and Pete attended the MEAM conference in Plymouth, MA. He said that Representative Tom Golden from Lowell, who was the former Chair of the Telecommunications and Energy Committee was the guest speaker. He has filed bills on clean energy, modern electric grids, offshore wind, and has shepherded the Climate Bill. Commr. Courcy said that Representative Golden commented that the Municipal Light Plants are doing a great job in their efforts in wind, solar, electric vehicles, and conservation and wished he lived in a Municipal area. Representative Golden stated that he has concerns as to how quickly renewables will be able to come online. Commenting on offshore wind not being the end all and noting that the design of transmission and distribution for offshore wind has not even begun.

Commr. Kallay reported that the Stretch Code was passed at Town Meeting on May 8, 2021 as part of the Town's efforts to become a Green Community. She is working with WMGLD's IT Manager, Jeff Morris entering data into MEI and in the coming month they will be uploading more months of data. She noted that there will be 2 tracks running in parallel. The first will be to analyze the data to present the Town's energy use baseline and the second track will be the energy reduction plan & what our strategies will be to meet these targets and approaches used. She stated that the goal is to apply to the Green Communities program in October. The last administrative piece will be to pass a Fuel Efficient Vehicle policy which should happen in the next month or two at Town Council. She noted that she is happy to share the presentation on municipal energy use data with the Board.

Town Council Liaison Comments:

Julie Smith-Galvin thanked both Pete and Commr. Boettcher for their EV presentation to Town Council. She noted that Town Council will be discussing the Fuel Efficient Vehicle policy in the next two meetings. She mentioned that Town Council passed a clause allowing any Board in Wakefield to hold remote meetings. There are certain guidelines in place such as the majority must be in person, as well as the Chair. presiding over the meeting. This clause was passed in case the emergency measures put in place by the Governor is not extended. Commr. Boettcher inquired if this would pertain to the public. Julie stated it would probably apply to the public and presenters. Commr. Warchol inquired if she would remain as the WMGLD liaison. She noted that new liaisons will be appointed at Town Council's next meeting on June 14, 2021.

Secretary's Report

Approval of minutes from the May 5, 2021 meeting was before the Board for approval. Comms. Boettcher, Kallay, Warchol, and Prifti provided edits to incorporate into the minutes.

A motion was made by Commr. Courcy to accept the May 5, 2021, minutes as amended and seconded by Commr. Warchol.

Roll Call Vote: Commr. Courcy Aye
 Commr. Kallay Aye
 Commr. Prifti Aye
 Commr. Warchol Aye
 Commr. Boettcher Aye
 The motion was approved unanimously 5-0.

Old Business:

Project Updates

EV

Pete stated that one thing that is impacting the proliferation of electric vehicles is the shortage of electric vehicles. He noted that Sylvia is having difficulties lining up dealerships to bring electric vehicles to Farmer's Markets because of this shortage. He also mentioned that WMGLD is having issues replacing our own leased electric car.

System Maintenance

Pete noted that Anton's Cleaners 4kv mat transformer configuration was replaced with a padmount transformer this week. He commended the electric crew for the great job. He explained that Paul and Dave are working with customers to replace the last two 4kv mat transformers.

He mentioned that the upgrade work on the feeder to Circuit 4 to downtown is completed. Crews are now working on old overhead wire on West Water. He explained that there have been two recent issues in that area, so this work has been accelerated. Hopefully, in the next month that section of West Water will be upgraded. Commr. Warchol inquired as to how many more outages would be needed to complete the upgrade. Pete said one more schedule outage would be needed to convert over to the new system.

Pete said that the office has been reopened for over a month. All staff is back in the office, and we are following the same COVID protocols and guidelines as the Town. Any of our crews that need to enter homes are required to wear masks.

MMWC Project 2015 A

Pete mentioned that this item was added to agenda because Commr. Kallay requested a follow up discussion. He stated that the MMWEC Board, in a special session, took a vote to temporarily pause this project to evaluate the project further. This hold is for a minimum for 30 days. He revealed that he is working with city of Peabody to identify a location large enough to hold a public forum and will hopefully have a date in the next few weeks. He cited that one concern about this project is that not enough people were engaged in it.

In addition, he said that they are looking at adding hydrogen as an additional fuel. Noting that the Pratt engine can run partially (up to 25 percent) on green hydrogen, which would reduce its carbon output below the original forecast of 7000 tons of CO2 annually. The issue is the availability of green hydrogen. Most generating companies are faced with the lack of green hydrogen. We are looking at the availability of State and Federal grant money to possibly update the unit. Pete also noted that we received a request to analyze battery technology. He commented that it is a great supplement but not a replacement for this type of unit. Batteries would not work here because there is not enough land at this site. Additional off-site locations would add tremendous cost to infrastructure and only provide 2-4 hours which is only a piece of the run time. Pete noted that 65 percent of the time the Peabody peaker would run 2-4 hours, but he asked what will you do for the other 35 percent of time when the peaks last more than 2 hours. He said that he met with two battery manufacturers so far and neither one is ready to do any projects in the North East Massachusetts (NEMA) transmissino zone because there is not enough land for these type projects.

Commr. Kallay asked Pete if there is a drop-dead date for decision making that the Board needs to know about. Pete said that one time frame would be September 1st, in that Fall window due to forward capacity commitments, permits and contracts with manufacturers.

Commr. Kallay inquired as to what happens with the original DPU hearing if we make changes, would the hearing be repeated. Pete said we asked the DPU to hold off on a decision until we get back to them. Pete stated it would be repeated if anything changed that would trigger a new hearing. For example, if adding hydrogen adds significant cost, does it change the bonding request or could it be offset by State or Federal grant money. Commr. Kallay also inquired about what information would be presented at the public forum. Pete indicated that he would present all the information that we know at that time. He does not believe that we will have cost information at that time. Commr. Boettcher inquired if hydrogen is added, do we know what the environmental offset would be as the plant is designed now. Pete said that potentially up to 25 percent of the fuel can be supplemented with hydrogen which reduces the output of the unit without major changes to the existing technology. Hydrogen would have to be injected and mixed with the natural gas. Commr. Boettcher inquired as to what the reduction in greenhouse emissions output would be if the unit as designed today was injected with 25 percent hydrogen. Pete said he asked the question and has not received a clear answer if it is a one-to-one ratio or not.

Commr. Courcy expressed his concern of not only the cost of cancelling this project, but the cost of losing local control. He noted that Breathe Clean North Shore, which is primarily MCAN who is speaking for them, do not represent the ratepayers of Peabody, Salem, and Wakefield. Pete noted that he shared earlier that day the cost of cancelling this project on Wakefield as well as the other communities. Commr. Kallay asked what the total cost would be for the people of Wakefield. Pete stated that we are 8.75 percent owners of the project, and that our share of the committed cost right now is \$2.7 million. Pete stated that the

total project commitment to date is over \$30 million of the \$85 million we are seeking bonding for. If the project is cancelled, that money would be lost

Green Options

The Board reviewed the draft of the Green Options flyer. Commr. Boettcher commented that this is a good start. Pete said that we are looking at how to market non-carbon emitting and making your entire electric supply renewable. He said that they came up with the name Customer Choice and some copy for a marketing campaign. Commr. Warchol said that he saw numerous areas where we could change the grammar, usage, and the accuracy of the description of the program. He thought there would be two options. One being non-carbon and the other being totally renewable eliminating the nuclear. He said that this draft only describes one option. Pete stated that we were just trying to keep it simple.

Commr. Boettcher said that depending on how the Board votes he thought that per Pete and Mark's guidance to keep it to one option would keep the billing simple. He stated however, that he was struggling with the name of Customer Choice for the program. He did like the phrase Go Green with Power Choice. He thought the flyer information was very concise.

Pete said that this is only a first draft, and we will continue to refine the marketing program and flyer.

Commr. Boettcher stated that the Board needs to discuss if this is something that they want to offer our customers and if so, do you want to offer one or both options. If we choose only one option, which option do you want to offer. Commrs. Courcy, Kallay, and Prifti agreed to keep it simple and offer one option. Commr. Warchol noted that we need to be careful that we are clear as to the cost implications. We need to be honest as to what people will be volunteering to paying extra for each month. That this will be so WMGLD can purchase RECS for environmental reasons. He noted we should see which option will provide the most bang for our buck.

Commr. Warchol said we need to know the benefit of this program, so we state what we are selling to the customer. Commr. Boettcher said we are providing the customer an easy way to offset their carbon production from their usage of electricity. Commr. Kallay said there are numerous ways to state what participating in this program will achieve. The first being that the customer would be funding future renewables being built. Secondly, you can meet the 2050 goal to be carbon free today, and lastly you are funding your usage to be green. Commr. Warchol noted that we could state that you would be offsetting by contributing to greener generation within the New England region, however it is still incorrect to say your entire usage will be green.

Commr. Kallay suggested that we should focus our marketing material on who our target market would be for this program, such as renters, condo owners. Commr. Warchol said he is leaning towards offering the lower cost option of non-carbon emitting.

Commr. Kallay stated we do not receive any additional credit for the difference between the non-carbon emitting and renewable. Pete confirmed this and noted that we would just purchase more RECS. Commr. Kallay stressed that the important piece is buying the high-quality REC that will generate new incremental renewables.

Pete said that we are going to have about 1000 new renters over the next few years. This program may be their only option to become greener. The Board chose to move forward with this program. Pete asked the Commissioners to send him any comments about the marketing campaign. He will speak to Jeff Morris, WMGLD's It Manager, about how the billing system will be able to handle this new rate.

A motion to implement a green option rate on the non-carbon option at \$0.0222 per KWH premium was made by Commr. Warchol and seconded by Commr. Kallay.

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

The motion was approved unanimously 5-0.

New Business

Colonial Gas Cyber Attack

Commr. Boettcher said that it is important for the Board to be aware of this subject and that he asked Pete to add this subject to the agenda. He commented that these attacks have been on the uptick. Pete explained it is about making these attacks a glancing blow and minimizing their impact. Jeff Morris, IT Manager put together a slide show that provides a high-level overview of what WMGLD has in place to help mitigate these cyber-attacks. It was noted that there are virtually a million attempts to hit our servers on a daily basis. We utilize multiple layers of protection. WMGLD also has relationships with third parties, such as MMWEC, and Utility Services, to help spot potential problems. WMGLD also educates its employees about the dangers of opening bad emails or attachments thereby, inviting the hacker into our system. We utilize backups and offsite backups in case there is an attack to help minimize the impact.

Commr. Courcy inquired what would happen if the New England power lines came down would we need to consider a contingency. If we were attacked thru our substations, how would we come back. Pete stated that we have plans in place for all those areas. We do have limited capacity within our system thru the batteries and generators, certainly not enough to bring back the entire system. We have the ability to go manual if our SCADA system were attacked. Upstream there are more global ISO and National Grid plans we would be part of if ISO or National Grid were attacked.

Commr. Boettcher inquired if our system has the ability to completely isolate ourselves from the larger system if there were a need. Pete stated we are fed by four 115 lines. Two to the north that feed the Wallace station and two to the south that feed the Beebe station and they are all fed from the Montrose ring station. To physically isolate we would open all four breakers.

Commr. Courcy inquired if we would be able to restore all circuits to the Police, Fire and Town Hall. Pete explained that they all have their own generators as does WMGLD. He noted that the hierarchy would be backup for a shelter. As the plans for a new high school come along, we would build a network up there that would include solar, battery and some form of generation.

Commr. Boettcher explained that there are two ways to recover from ransomware attack. The first is to pay the ransom and the second is to recover from your backup. He commented that from his perspective Jeff has a good layering plan in place.

Commr. Kallay asked how WMGLD would address a ransomware attack. Pete said that in our case we would disconnect from SCADA and go manual for a while and on the billing and customer side, we would disengage and restore from backups, and manually enter anything we lost. Commr. Boettcher noted that federal guidance from law enforcement is not to pay ransom because it encourages that activity. He also stated that if something like that ever happened the Board would have to convene to discuss how to handle the situation.

Gas Systems of the Future

Pete noted that as part of the Climate Bill, there is a focus on the future of the natural gas business. Basically, how do we migrate a gas system to the gas system of the future. Pete mentioned that Commr. Kallay had asked to incorporate the entity heet.org in this discussion.

Heet.org started out by tracking gas systems, their inefficiencies and number of gas leaks. They expanded into designing pilot micro grids using geothermal. National Grid and Eversource are currently participating in test pilots on how to migrate their gas systems to a gas system of the future. Heet.org has been working with investor-owned utilities but are also interested in working with Municipals to gather data and potentially propose a test pilot on a street in Wakefield.

This is still in the conceptual phase as to how to migrate to a new system. Pete stated that over next 20 years if we are successful in electrification how do you manage the gas system that is left behind for those still utilizing that system and the associated costs. From our perspective we are strongly encouraging movement to heat pumps in order to curb our peak load in the winter months. There may be money from the State to help support pilots so we will continue to examine these new concepts.

Commr. Boettcher stated that part of the discussion would be augmenting where we do not have gas infrastructure now and do not plan to in the future. He noted that perhaps these streets would be a candidate for a neighborhood wide geothermal heat pump system that the utility manages. Pete confirmed that these streets could potentially be candidates for a micro grid geothermal system. He did mention that you have to consider the geology of the area. You would need to have enough of the geothermal source without hitting bedrock. He commented that the geology on the entire street would have to be suitable for a geothermal system. Pete stated that geothermal is not a universal answer but if you can find an appropriate location it could be helpful. Pete mentioned that he believes Eversource is looking at streets that do not have gas and National Grid is looking at both streets with and without gas.

Commr. Prifti confirmed that National Grid is looking at both options. He commented that the main driver is some of the communities where there was a stop on gas expansions for commercial customers. He also said that there are other communities where there was a stop on residential expansion as well. He noted there are two schools of thoughts, one is to convert to geothermal and the other to convert to hydrogen gas. He mentioned that there are certain restrictions in areas where the system would need to be ready to accept hydrogen gas with the pipes that are in the ground. They are also looking into the impact this would have to electric system as well and if they would be able to accept those new loads.

Commr. Kallay inquired if we would be able to recoup our costs if we conducted a project on a non-gas street. She asked if it would be a feasible pilot project to network all the municipal buildings in the downtown area. Pete advised that these buildings are too spread out for a project like this. Perhaps a better option would be the three schools that are near each other. You may want to consider dedicated systems at Town Hall and the Public Safety building.

Commr. Boettcher inquired if these questions could be asked of heat.org for their expertise and guidance. Pete said that his impression of heat.org was not as a consultant, but as a group trying to bring people together to facilitate discussions and to work on different projects. He stated that heat.org does not have a good feel for the Muni world. They are looking for data from Munis to provide them with educational information about our infrastructure and gas leaks.

Commr. Courcy commented that New England is an expensive area to start an underground project because of its rocky geography which makes the costs of these projects increase exponentially for blasting and chipping away at ledge. He believes that with projects like this we will learn from other about the costs and differences.

Pete said that there is a reason why certain streets in Wakefield do not have gas. He said that it is because the developer or the utility did not put in gas because of the geography. Commr. Prifti stated that there have been incremental cost increases for material and construction for underground systems. Right now, costs are north of \$50 million a mile to install a duct bank.

Commr. Kallay found the tri school thought interesting considering the significant load of these buildings. Commr. Courcy mentioned that there is ledge in that area. Commr. Boettcher said it will be interesting to see if we can provide another option to our customers in the future. Commr. Kallay inquired how things were left with heet.org. Pete said that there is a follow-up call later this week. He will see what information they are looking for from us and report back to the Board next month with any new information.

Board Recognition Discussion

Commr. Boettcher said that he wanted to discuss how the Board could recognize former Commr. Chase for his 42 years of service. Pete said that he also wanted to mention to the Board the following four long-time WMGLD employees that have or will be retiring shortly this year: Mark Pebley, Wayne Sampson, Kathy Martino, and Bob Rainville. He stated that former Commr. Chase's length of service was remarkable and certainly worthy of a different kind of recognition.

Commr. Courcy noted that former Commr. Chase expressed that he did not want any acknowledgement. Commr. Warchol said that former Commr. Chase asked him for a copy of the minutes from this last Board meeting. Commr. Warchol said maybe we could incorporate the retirees into the Employee Appreciation Day this year. Pete said hopefully we can do an in-person Appreciation Day this Fall and include the retirees.

Commr. Boettcher said perhaps if we can have a plaque dedicated in his name somewhere. He served this community for such a long time, and I feel he should be recognized. Commr. Kallay inquired about naming the new community solar program the Ken Chase Community Solar Farm. Pete said that would be a great opportunity to dedicate it to him. Commr. Warchol said it is a good idea to dedicate something to him, and perhaps we could also have an honorary diner, present him with a plaque, and have an article in the Item.

Any other matter not reasonably anticipated by the Chair.

No comments.

A motion to adjourn was made at 8:30 pm by Commr. Courcy and seconded by Commr. Boettcher.

Roll Call Vote:

Commr. Courcy	Aye
Commr. Kallay	Aye
Commr. Prifti	Aye
Commr. Warchol	Aye
Commr. Boettcher	Aye

The motion was approved unanimously 5-0.

