In 2017, one of our primary goals is to focus on the customer’s experience when working with OPU, as well as our reputation within the community. We want to be recognized as an expert within the utility industry where our customers know they can come to us with utility related questions and we will be able to answer them knowledgeably. We want to be recognized for excellence in all we do and, we want to be recognized for our involvement within the community of Owatonna.

In our continuing efforts to offer excellent customer service, one of the first items we have addressed is the design of the OPU newsletter (the Customer Update). In March 1991 the very first ever Customer Update was mailed to Owatonna Public Utilities’ customers. Several factors were considered when designing the first newsletter. The main rationales were to educate our customers on the benefits of being served by a public power utility, to provide important information regarding the utility industry and to enhance the safety of people and property within our community, whether they are a customer, a resident or are just visiting. Over the years, the quality, format and design of the newsletter have changed significantly. What has not changed is the importance of the information provided.

In 2017, the significant changes we are making include changing the design from a 4-page to an 8-page layout, mailing the newsletter separate from the bill, and mailing to a larger demographic. The design was increased to an 8-page layout to provide more information to customers on important utility related issues. We want to provide information to our customers which will allow them to make more informed decisions regarding utility related issues. For instance, this month we feature the first of a two-part article regarding electric vehicles. In future editions you can expect to learn more about Electric Vehicle charging stations, Community Solar, cyber security as it relates to OPU, smart meters, renewable energy and much more.

The benefits of mailing the newsletter separate from the bill allow us to mail the newsletter to all customers at the same time. Previously many customers did not receive their newsletter until much later in the month and sometimes the information was not timely. Now, the newsletter will be mailed out to everyone within the 55060 zip code during the first full week of the month.

As a municipal utility we are required to follow certain government regulations. One of these regulations comes from the Minnesota Office of Pipeline Safety which requires us to educate citizens on natural gas pipeline potential hazards and safety. This includes citizens who may not necessarily be an OPU customer, but who live near a natural gas pipeline or regulator station. By mailing the newsletter to everyone within the 55060 zip code we meet these requirements.

We sincerely hope you enjoy the new layout of the newsletter, appreciate getting it earlier in the month and find the information contained in it to be valuable. As always, please feel free to provide feedback.
The past year and a half the City of Owatonna has been working to update the city’s GIS (Geographic Information System) and implementing GIS into department work flows. The goal is to support staff by providing accurate information and tools needed to make informed decisions. The information and tools are accessible on many platforms through desktop software, mobile applications and web maps.

Well, what exactly is GIS? GIS is a system of data, software, and hardware used to maintain, analyze, and store spatial information, basically, maps and databases. The maps are created using layers that are representations of real world features such as streets, hydrants, or manholes. Each of these spatial layers are linked to specific attribute data related to the features. GIS enables users to visualize the information spatially and identify patterns, relationships, and trends.

City staff is utilizing GIS in various ways such as creating maps, generating mail lists, storing and accessing documents, and assisting the public. The initial focus is incorporating GIS into Public Works tasks. Projects include sewer utility mapping, street rating, sign inventory, and ADA inventory.

Sanitary utility mapping has benefited Engineering and the Wastewater Treatment crews. The crews have the ability to view sanitary system maps and collect information in the field using iPad applications. They are able to review information such as pipe size or pipe material. The crews are able to record inspection and maintenance tasks performed on the sanitary infrastructure while in the field. This application saves time by being able to view and enter information onsite rather than driving to the office. The app has also assisted in communicating and planning infrastructure repairs. Public Works and Engineering both can collect conditional ratings and maintenance priorities. Then review the information to recognize patterns or trends and better prepare for future improvements.

The street rating project is assisting Engineering with their street maintenance planning. Engineering is using GIS to assign street conditional ratings and document high priority locations. They’re also using iPads while in the field to document the street conditions. Once back in the office, they are using GIS software to spatially and statistically review the collected street ratings. This application helps to plan upcoming street maintenance but also track street maintenance progress.

The sign and ADA inventories provide essential information as the city works to maintain state and federal standards. The information assists Public Works plan and budget to maintain both signs and ADA curb ramps. The sign and ADA curb ramp projects involve data collection and maintenance task record keeping. The sign application allows staff to inventory signs that have the required retro-reflectivity. They can then track the progress as non-compliant signs are updated. The ADA application is helping staff locate the city’s curb ramps. While collecting the curb ramp locations, staff is also surveying the ramps and reviewing the ramps conditions. Both these projects are beneficial in maintaining safe assets and transitioning to the new compliant standards.

GIS a powerful tool that can display spatial patterns, show trends, store inventories, document tasks, and centralize records. These resources assist staff while planning for future improvements, promotes collaboration, improves work flows, and saves time. The city’s GIS system will continue advancing to provide resources, tools, and data necessary to make informed, effective, and efficient decisions.
The information for this article is provided by Jukka Kukkonen, Founder of PlugInConnect, a Minnesota based electric vehicle market and technology consulting firm.

This is the first of a two part series. The market for electric vehicles (EVs) has been developing rapidly over the past several years. As the market matures, it has the potential to make a dramatic impact not only on the auto industry but electric utilities, consumers, and the entire electric grid. To make sense of it all, we take a look at which market forces are shifting EVs into DRIVE, which are keeping the market in NEUTRAL, and which are moving things in REVERSE. For this month we will focus on the DRIVE.

Shift into DRIVE

One of the most consistent drivers of the electric vehicle (EV) market has been its enthusiastic base of customers and supporters. A recent survey of 10,000 EV drivers found that more than 90 percent have shifted to driving electric for good. Plug-in vehicle owners are the best ambassadors for the technology, because they are talking from experience. No one can make as compelling and convincing a case for new technology as those who use it every day.

California and other Zero Emission Vehicle (ZEV) states have kept powering the transition by requiring that car manufacturers make emission free vehicles a certain percentage of their sales. Without this pressure we would have seen significantly fewer resources invested into EVs, resources that have been crucial for the advancement and innovations in technologies that are making the EVs competitive with the internal combustion engine powered vehicles. This shift is forcing manufacturers to rethink their future strategies and it likely wouldn't have happened without the pressure that ZEV mandates put on them.

No company has done more to show just how great an electric vehicle can be than Tesla. Their Model S literally broke the mold for how cars are designed and built. Model X is following the same path and together they have introduced a number of innovations that very few of us could have anticipated even 5 years ago: Touch screen controls, over the air updates, 4 wheel drive technology that is more efficient than 2WD drive and the autonomous driving features. Tesla is showing us how digital age technology will change the way we drive.

Of the traditional manufacturers, Nissan, Chevrolet, and BMW have put the most resources into EV development. Nissan and Chevrolet started the competition with Leaf and Volt in 2011 and kept tweaking these models over the years. BMW on the other hand ran two limited field trials (Mini E and BMW Active E) before launching their cutting edge i3 model in 2014. These companies are not only bringing great cars to market, they're using innovative strategies to give themselves a one up on the competition.

Meaningful support by the federal government has helped level the playing field for new technology so that the price difference between an EV and a non-EV is now less than a couple thousand dollars in most cases. Two drivers in particular have been the federal tax credit for purchasing an electric vehicles ($7,500) and tax credits for charging infrastructure (30 percent). For states that have implemented their own electric vehicle incentives and programs, EVs can actually be cheaper than a comparable gas vehicle – and that's not even taking into account the significant savings in paying for fuel and maintenance over time.

The electric drivetrain is changing things because it is 4 times more efficient than a traditional ICE drivetrain and at the same time shifts the energy use from oil to electricity. This is a very welcome development for utility companies who have seen a pretty flat line for their electricity growth thanks to energy conservation programs and increasingly efficient appliances and buildings. Utilities have started to figure out ways they can work with consumers when they shift to driving electric not just because this shift creates demand for electricity, but because of how this new demand can impact a utility's system.

The rapid improvement in battery technology is taking each new batch of EVs into a new level. For instance, a 2012 Nissan Leaf had a tested battery range of 73 miles whereas the 2016 model has a range of 107 miles. That is a 47 percent increase in range in just 4 years. Advancements in battery technology have made lithium ion batteries both cheaper and more energy dense so Nissan could fit more kilowatt hours into the same space. This vehicle also has the best heater that I have ever had in any car thanks to the new heat pump heating technology. Heat arrives now in seconds compared to minutes in internal combustion vehicles.

Next month we will focus on the Shift into NEUTRAL, Shift into REVERSE and will take a Look Forward.
ENERGY STATION

Southern Minnesota Municipal Power Agency (SMMPA), OPU’s wholesale electricity provider, continues work on the Owatonna Energy Station (OES). The energy station will have four Caterpillar 20 cylinder, spark ignited, natural gas engines providing 38 mW total output. The plant is anticipated to be in full service the fall of 2017.

Benefits of the OES include providing local reliability to Owatonna in the event of a transmission line interruption; it provides needed capacity for the SMMPA system as a whole; it hedges market energy prices; it diversifies the generation fuel mix and it utilizes existing transmission capacity.

Pictured below is the progress of the OES thus far.

NEW HOURS

In a continuing effort to improve our customer service, customer data and feedback indicated it was time to change our office hours. Effective January 1, 2017 we are open longer on Fridays and not open as long on Thursdays.

If we are needed after normal business hours, convenient options for making payments, moving, and rebate information are offered on-line at www.owatonnautilities.com.

OPU HIGHLIGHT

Myron Volker of OPU’s Water Production department was presented the Leonard A. Thompson Award by the Minnesota Section of the American Water Works Association (AWWA) at the December OPU Commission meeting. Pictured above are OPU Commissioners with Mr. Volker. Members of the AWWA, along with family and friends, were on hand to congratulate Myron in achieving this prestigious award.

The Award is presented annually to one member of AWWA for their distinguished service to the water supply field in commemoration of Leonard A. Thompson, past General Manager of the St. Paul Water Utility for nearly 34 years. Each year, the Thompson Award Committee of the Minnesota Section, upon reviewing the eligible candidates, determines if a Minnesota Section member typifies the standards that were characteristic of Mr. Thompson’s contributions to the Section and the water supply industry, including longevity, service to his community, and service to the water industry.

Congratulations Myron!
When your gas meter is covered with ice and snow, it can cause a potentially dangerous situation. If there is snow on your meter, brush it off. If it's covered with ice, give us a call at 451-1616 and we'll take care of it for you.

In addition, snow and ice should be cleared from exhaust and combustion air vents for gas appliances to prevent the accumulation of carbon monoxide in buildings and to prevent operational problems for the combustion equipment. Monitor the accumulation of snow or ice blocking regulator or relief valve vents which could prevent regulators and relief valves from functioning properly. Use caution in cleaning snow from around the piping on service regulator set as it is susceptible to damage that could result in failure of the equipment. Where possible, use a broom instead of a shovel to clear snow off regulators, meters, and associated piping.

As always, if you smell gas and can’t find the source immediately, go to a neighbor’s house and call OPU at 451-1616. Don’t turn electrical switches on or off or use a flashlight or telephone in the home, because a spark could ignite the gas and cause an explosion.

### 2017 Stormwater Utility Fee Changes

Beginning January 1st, 2017 you will notice a change in your Stormwater Utility Fee. As a result of the 2015 rate structure study conducted by Foth Infrastructure and Environment, LLC the stormwater utility fee is set to be gradually increase on an annual basis through 2019 in order to provide an equitable and stable funding source for all stormwater management activities.

The rate for a single family residential property is a constant monthly fee of $3.40 (starting 2017). All other properties are based on the following equation that evaluates the equivalent residential unit, acreage, and land use:

\[
FEE = \frac{Parcel\ Acreage}{0.33} \times \text{Intensity Factor} \times \text{Current ERU}
\]

If the property is multi-family, townhomes, and or mobile homes with individual meters, it will be billed at 80% of the current ERU per unit.

<table>
<thead>
<tr>
<th>Year</th>
<th>ERU</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>$2.45</td>
</tr>
<tr>
<td>2016</td>
<td>$2.92</td>
</tr>
<tr>
<td>2017</td>
<td>$3.40</td>
</tr>
<tr>
<td>2018</td>
<td>$3.87</td>
</tr>
<tr>
<td>2019</td>
<td>$4.34</td>
</tr>
</tbody>
</table>

For more information regarding the Stormwater Utility Fee please contact the Public Works Department at 507-444-4350.
New Year’s Resolution:  
CONSERVE & $AVE®  
It’s That Easy!

Visit our website at owatonnautilities.com to learn how to conserve energy and save money all year long! You’ll also find a list of available rebates for energy- and water-efficient equipment.

www.owatonnautilities.com
OFFICE HOURS:
Monday-Wednesday:
8:00 a.m. - 5:00 p.m.
Thursday:
8:00 a.m. - 6:00 p.m.
Friday:
8:00 a.m. - 4:00 p.m.
Saturday & Sunday:
Closed

Payment Options
- Online at www.owatonnautilities.com
- Automatic Withdrawal; bank account or credit card
- Drive-up drop box located in the parking lot south of building
- Drop box locations at Cash Wise Grocery Store and HyVee Food Store
- Mail
- At Owatonna Public Utilities; cash, credit card, check or money order

Moving?
Remember to contact the Customer Service Department ONE WEEK prior to moving, 451-2480.

From the Editors
We welcome your comments and suggestions for future issues. Feel free to give us a call at 451-2480
or send an email to schmoltt@owatonnautilities.com.

Gas Leak?
If you smell gas and can’t find the source immediately, go to a neighbor’s house and call OPU at 451-1616.
Don’t turn electrical switches on or off or use a flashlight or telephone in the home, because an electrical spark could ignite the gas and cause an explosion.

Happy New Year from the Owatonna Public Utilities