Reduce your municipality's risk from cyber attacks

By Brett Benson,
IT Manager, LNM

In June, the media reported that a Florida city council agreed to pay $600,000 in ransom to computer hackers who took over the city’s computer system and encrypted their records. The hackers apparently gained access to its computer system when an employee clicked on a link in a phishing email that allowed malware to be installed on the employee’s computer. It is scary to think that “one click” could take down your entire municipality’s computer system!

Without question, this incident underscores the need for local governments to examine what security is in place to help prevent the risk of a serious data breach and to recognize that systems will face new and ever-changing threats.

1. Data Backup
   a. One of the most important components of cyber security is to backup your data and ensure the backups work. Periodically restore your backups as a test to ensure they are working. One of your backup sets needs to be offline, not on the local network, off site or on a cloud backup service. Ransomeware attacks can encrypt your backup data if it is on the same network that has been hacked. Storage media and hard drives will ultimately fail, so it’s important to spread the risk by using different devices or storage media to place your backups on.

2. Awareness Training
   a. Implement a regular employee cyber security training program on email phishing scams and general computer security. Employees are the first line of defense for a cyber attack, so it is important they can identify what’s real email versus what’s fake email from a sender. Keep employees engaged. An email awareness slogan may be “Stop, Think, Act” for employees. Stop – when presented with a possible suspicious email or link. Think – analyze the content of the email, hover over the link to see where it is pointing, and determine who the real sender is. Act – if the email fails the “smell test,” delete or report it. If still in doubt, call the sender and confirm the email was sent from someone you trust.

3. Network Security Monitoring
   a. Hardware appliances or software applications provide network security monitoring by checking network traffic across the network to spot anomalies. This is an “intrusion detection systems” that create alerts and sends them to the IT staff. “Intrusion prevention systems” prevent potentially malicious network traffic from traveling inside or outside of your network. The “intrusion prevention systems” are complex, so it typically requires the role of a network security employee or a managed security service provider.

4. Filtering
   a. One of the most well-known security filters is anti-virus software, which is a necessity on servers and workstations. Anti-spyware software, which includes anti-malware

Continued on page 2
Reduce your municipality's risk from cyber attacks

Continued from page 1

Software, is recommended to be running alongside the anti-virus software. Email filtering, web filtering and Domain Name Server (DNS) filtering also are a necessity. Emails should be scanned and stripped of known malicious attachments before they get to a user’s electronic mailbox. DNS filtering denies access to known malicious IP addresses if an employee happens to click on a bad link contained in an email.

5. Application Whitelisting (AWL)
   a. This type of software is complex and labor-intensive for IT staff to implement and maintain, but it does allow for security control over workstations and what is allowed to be installed. If the application isn’t on the “whitelist” of applications, it can’t be installed on the computer.

6. Implement Multi-Factor Authentication (MFA)
   a. Strong passwords alone are not enough as a secured method to lock down an account. Hackers have been successful with phishing emails to trick people into giving up their username and password through online login page that mimics a legitimate website. The hacker will log into this person’s online email account and send similar phishing emails to the hacked accounts contacts. Using compromised account information, hackers may gain access to a municipality's network. By using MFA, it requires two pieces of information to gain access to a system. One is the person’s password and the other a random code that is generated and sent via text to the person’s mobile device. The code also is entered by the user to gain access to the system.

7. Remote Access
   a. Block all remote access through Remote Desktop Protocol (RDP) off the open internet. Implement a secure remote access method such as Virtual Private Network (VPN). VPN access authenticates the username and password and MFA, just like the user does when working at the office.

8. Security Patches
   Continued on page 3
Reduce your municipality's risk from cyber attacks

Continued from page 2

a. Implement a consistent patching schedule across all network devices. Installing hardware and software patches is one of the most important keys to reducing a system breach. Vendors that produce the products you use are continually fixing bugs and know exploits that hackers or malware use to evade your security defenses. Installing updates and patches is recommended to be done on a weekly basis.

9. Disable Macros
a. It is recommended to disable all macros from running in Microsoft Office products because of security issues. Hackers can use macros to deliver malicious code in Word or Excel documents that can trigger a security breach. If you receive a Microsoft Office attachment from outside your organization from a non-trusted sender that prompts you to “enable macros,” it is recommended that you do not enable macros.

10. Disaster Recovery Plan
a. Have a response plan in place in the event of a cyber attack that exposes your data and sensitive information.
b. Action: Disconnect the compromised computer(s) from the network by unplugging the Ethernet cable or turning off the wireless connection.
c. Action: Assess the scope of the attack and isolate all affected network device systems.
d. Action: Call your security operation center service vendor or antivirus software vendor to report a data breach.
e. Action: Assess any potential impact and disruption to utilities and emergency services.
f. Action: Initiate manual operation of equipment if control systems have been compromised.
g. Action: Call your insurance company to initiate a cybersecurity claim and implement any instructions on their response.
h. Action: Distribute any advisories or alerts to customers as needed, including customers whose records may have been compromised.
i. Action: Implement steps to eradicate the security breach and implement recovery procedures.

11. Important cybersecurity contact information:
- Department of Justice (FBI) 100 Centennial Mall North, Suite 363, Lincoln NE 68508, https://www.fbi.gov/investigate/cyber (402) 476-6393
- Department of Homeland Security Critical Infrastructure Cyber Community Volunteer Program: https://www.us-cert.gov/ccubedvp (888) 282-0870

Nebraska Breaktime Trivia
“Just For Fun”

Q-1. What city in Nebraska won the county seat over Red Willow in 1873, but lost it in 1896 to McCook?
Q-2. What city in Nebraska is located between the communities of Max and Parks?
Q-3. What incorporated Nebraska village in Nemaha County is located between Talmage and Table Rock?
Q-4. What village in Nebraska was once known as Belle Creek?

Answers on page 10.

Mark Your Calendars!

Jan. 15-17, 2020
Utilities/Public Works Section Annual Conference Embassy Suites, Lincoln

Jan. 22-23, 2020
Snowball Conference Holiday Inn, Kearney
Crow Line: A line of positive communication that all can share

North Platte, Best Tasting Water in Nebraska! The 11th Annual Water Taste Contest was held Nov. 6, 2019, at the Annual Nebraska Section-American Water Works Association (NS-AWWA) Conference at the Kearney Younes Convention Center. Eleven systems submitted water for the taste testing event which included: Aurora, Auburn, Beatrice, Blair, Fairbury, Fremont, Lincoln, Metropolitan Utilities District (MUD), Norfolk, North Platte, and Plymouth.

A panel of six judges rated the samples on a 1-10 scale for appearance, odor-scent, flavor-taste, and aftertaste. Judges included Taylor Benzol – DHHS Drinking Water Program, Jessica Johnson – DHHS Drinking Water Program; Jon Paul – City of Central City; Milo Rust (Nebraska AWWA Chair) – City of Chadron Public Works Director; Mary Gugliuzza (AWWA Public Affairs Council Chair) – Media Relations & Communications Coordinator; Ft. Worth Water Dept.; and Jason Ripa – City of Wilber, Water/Wastewater Operator. Again, this year the event declared a winner in two categories, treated and untreated water systems. The City of North Platte was declared the untreated water winner and Auburn the treated water winner. North Platte then went on to win the overall crown of “Best Tasting Water in Nebraska.” This is the third consecutive year in a row North Platte has won the event.

The Nebraska section winner (North Platte) qualifies to participate in the AWWA national conference water taste contest to be held March 14-16, 2020 in San Diego, California.

Past winners:
2009 – Lincoln (Lincoln tied for 3rd place nationally)
2013 – Fremont (treated) overall winner; Aurora (untreated)
2014 – Lincoln (treated) overall winner; Aurora (untreated)
2015 – Cortland (untreated) overall winner; Lincoln (treated)
2016 – Cortland (untreated); Metropolitan Utilities District (MUD)(treated)
2017 – North Platte (untreated) overall winner; Auburn (treated)
2018 – North Platte (untreated) overall winner; Auburn (treated)
2019 – North Platte (untreated) overall winner; Auburn (treated)

135 Year Incorporation Anniversary. On Nov. 25, 1884, Ogallala became an incorporated village, later a city of the second class and by 1980, a city of the first class). Congratulations to those Nebraska municipalities celebrating village incorporation anniversaries in 2019.

Solar Energy National Recognition. Congratulations to the City of Lincoln as they were awarded a gold distinction by the SolSmart program. SolSmart is led by the Solar Foundation and the International City/County Management Association (ICMA) and funded by the U.S. Department of Energy Solar Energy Technologies Office. More information on SolSmart can be found at the website www.solsmart.org.

Rural Communities of the Year. Aurora, Osceola and Stuart were selected as the 2019 Midwest Messenger Rural Communities of the Year. These communities were highlighted in articles of the Nov. 22, 2019 Midwest Messenger Vol. 50 No. 56 with articles on pages 16, 18 and 20. These communities were recognized for not losing their vision, their “can do” attitude along with community efforts that went above and beyond basic needs. Congratulations on your recognition as outstanding communities! Source – Midwest Messenger

Nebraska Section American Water Works Association (NS-AWWA) Awards Banquet. AWWA Membership Service Award: The City of Red Cloud was recognized with the 50-year Service to the Water Industry plaque. The following individuals received the Silver Drop Awards: Jim McGowen, Schuyler Department of Utilities; Steve Kelley, Beatrice Public Works; Rodney L. Oberle, SID 34 Sarpy County; and Paul Markowski, City of Ord Light & Water. The Silver Drop Award recognizes 25 cumulative years of membership. WISA Award: Shane Gruber, Gothenburg. Fuller Award: Mary Poe, DHHS; and Outstanding Supervisor Award: Steve Kelley, Beatrice.

Water Safety Awards: Certificate of Achievement, Class III – Grand Island Water Department; Class III – City of Norfolk Water Division; Class III – City of Aurora Public Works Div.

Continued on page 5
SAFETY/HEALTH CORNER

Lifting procedures and assessment tips

By Rob Pierce, LNM Field Rep./Training Coordinator

As safety committees are performing a worksite analysis involving lifting, has there been confusion on how to assess lifting? Before employees begin to lift, they may want to determine the safe weight limit for the task. Every situation, employee and task may be different, but a quick assessment may be the difference in an accident or injury. Often back injuries occur and lasting conditions can result from improper lifting and inadequate analysis of the lifting situation. The Oregon OSHA in December 2012 released a lift calculator app that can factor in reaching, twisting, number of lifts and the duration of lifting to calculate the maximum weight for an object. As the late Al Ehlers, a former instructor for the League, often stated, “it may not be exact but it gets you in the ball park and in most cases that is good enough.” The app is free online.

Continued from page 4

Milestone celebration recognition

Is your municipality or utility celebrating a historic milestone? We are encouraging members to provide any information on milestones being celebrated such as 75 years of operating the electric system.

About 1942, private electric systems were phased out in Nebraska and several municipalities took over the systems in the 1940s.

When was your water, wastewater, electric, power generation system established? When were facilities built, improvements made, etc. If your utility is celebrating a 25, 50, 75, 100-year milestone, let the Utilities Section help you celebrate by recognizing it in the newsletter.

Remember to recognize your employees’ anniversary milestones. The League provides certificates for 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60 and 65. You can request them by contacting the League office by email brendah@lonm.org or fax 402-476-7052.

Would your utility like to host a 2020 workshop?

If you and your utility are interested in hosting a workshop or safety meeting, contact Rob at robp@lonm.org or 402-476-2829.
Nebraska utilities history – Falls City

The Utilities Section Newsletter will continue to feature histories of both utilities and associate members. Any historical data and/or photos of your utilities, a specific facility, or articles already written are welcome, along with permission to print. If you have questions, contact Rob at 402-476-2829 or robp@lonm.org.

By Rob Pierce, LNM Field Rep./Training Coordinator

Falls City is in Richardson County. About 1852, a rig to saw lumber and grind corn was built along with a flour mill called the Falls Exchange Mill in 1853. The mill was located on the Nemaha River about two miles southwest and settlers were arriving by 1854. A natural four-foot sandstone rock ledge called “Falls of Nemaha” was in the area with a rocky bed where the river could be crossed. James Lane’s industrial expectations for “a city by the falls” inspired the forming of the Falls City Town Association in 1856. Members included John A. Burbank, Judge Hunt, Jim Lane, and Ike Hamby. W.T. Stout sold the land, which was surveyed and platted for a town site. In the summer of 1857, a settlement was located on the north side of the Big Nemaha River in the southeast corner of the state on the “Lane Trail.” A proposal was made to name the new town site “Lanesville,” but Falls City was chosen. On Feb. 24, 1857, a post office was established, a hotel was built, a school was started and a newspaper was soon published called the Broad Axe.

Richardson County’s first seat, Archer, was found to be within the “Half-Breed Lands,” so a new election was required. In April 1857, a vote favored the town of Salem over Falls City, but the county offices were not moved. Another election was held to decide on “a permanent site,” which resulted in a tie-vote, so the matter was still undecided. On either May 17, 1858 or 1859, Falls City was incorporated as a village. By 1858, a dam was built on Muddy Creek about two-and-a-half miles to the northeast for a sawmill. On Jan. 13, 1860, a third county seat election was held with Falls City declared the winner. The issue caused hard feelings that during the voting, a “personal discussion” ended in a gun battle, killing two men, Dr. Davis and Thomas Meek.

The population was 473 by 1860 and on Jan. 13, Falls City was incorporated as a city by the Legislature of the Nebraska Territory. The Union Hotel was built, a stage station was established, and 20 homes were built. By 1863, the first courthouse, a frame building was built ($3,000) in the center of the public square in Block #59. One of the first ordinances passed required sidewalks to be built (brick, flagstone or plank) on designated streets and were not to exceed five feet wide. It was said that the Dorrington family, which Continued on page 7
possibly built the first home in the area, had John Brown when he passed through the settlement with some slaves on their journey to the North. On Feb. 12, 1867, Falls City was incorporated as a city of the second class and divided into two wards at the March 7, 1871 meeting. In 1869-70, a church, a school, a newspaper and two saloons were operating.

The population in 1870 was 607 and a new school was built for $2,500. The Atchison & Nebraska Railroad came to the area in 1871 and the Hinton Mill was built. In 1871, D. Sorenson was appointed the first city marshal and in November, the first bank was started. On April 20, 1872, there was a proposition for a $25,000 bond to build a new courthouse. By May, the vote failed, but on Feb. 14, 1873, a bond issue vote was passed and a two-story brick/stone courthouse building was built. On June 30, 1873, the Pioneer Hook & Ladder Company No. 1 was organized. By 1877, the central school was built and in April, seven buildings were destroyed by fire.

The Missouri Pacific Railroad arrived in 1881-82 and from 1980-1982, the population increased from 1,583 to more than 2,000. On July 4, 1883, a 30-acre park with a walnut grove and swimming lake was opened at the mill.

The population was about 3,000 in 1885 and a library was organized. By 1885, several businesses were operating including the Chicago Lumber Company, a Union Hotel, the Nemaha Brew-
Nebraska utilities history – Falls City

Continued from page 7

ery, the Gehling Brewery, and the F. W. Ingram Windmill Factory.

In 1887, Ordinance #100 was passed to build a wastewater system using a $24,000 bond. On May 7, 1887, a meeting was held to establish a waterworks system and on April 9, 1888, $10,000 in bonds were voted on to establish a waterworks system. An ordinance was passed on May 12 and a standpipe and pump station were in Legion Park with the first water commissioner, W.W. Musselman. About 17,217 feet of water mains were laid for $8,000. Four new wells in old First Ward Station produced 200,000 gallons per day (gpd) with a large reservoir. The water works was located at McLane & 1st Street and consisted of a covered well, 26-foot deep, (180,000 gallons). A brick building housed a boiler and had a 40-foot chimney with a coal shed. The water storage standpipe was 100 feet by 12 feet diameter on a 22-foot base with a capacity of 85,000 gallons. A Knowles duplex pump had a capacity of one million gallons in a 24-hour period. Domestic water pressure was 40 pounds and direct to the mains was 130 psi. The system consisted of two-and-one-quarter miles of water distribution pipes and 28 double fire hydrants. The water storage tank had a capacity of 85,000 gallons with the top 80 feet above the highest point of town. On July 30, 1888, a council meeting was held with an interest to establish an electric lighting system. A committee of three were to confer with a representative from the W.C. White Electric Company on the proposed plans for a city Electric Light System.

On March 23, 1890, a $6,000 bond issue was voted on to build a system to include a building. The first electric light plant was built in what is now Legion Park, thus establishing an electric system. The final contract was awarded to the Brush Electric Company in the amount of $6,977.

In November 1891, the city lights were first turned on as the plant ran from evening to midnight and then shut down. Rate schedules were: commercial – 16 candle commercial lamp every night until midnight except Sunday per month $1-$1.80 and a candle commercial bulb as above per month $1.50; residential – 16 candle commercial lamps as above per month; each additional candle light $0.50. On May 1, 1893, a franchise was granted to the Southeast Nebraska Telephone Company to install poles and wire. In 1895, the city was divided into three wards, north of 18th became the First Ward, from 18th to 12th Streets became the Second Ward and all south of 12th Street was the Third Ward. Also, in 1895 the Sacred Heart Academy Catholic School opened.

By 1900, the population was 3,022 and the Brackhahn Bros. Nemaha Brewery, located two-and-a-half miles southeast of the post office, and the Gehling Falls City Brewery, located at the intersection of 10th & South Stone Streets, were operating. In September 1900, an ordinance was passed to accept $10,000 from the Lydia Braun Estate for a library. The library was to be called the Lydia Braun Memorial Library. A permit to build was issued in 1901 and the library opened in 1902. A roller mill was built in 1904 and the Peerless Stock Powder Company was established. In 1906, the Leo Cider & Vinegar Factory

Continued on page 9
was started and by 1909, the city became a division point on the Missouri Pacific Railroad (now Union Pacific). The city purchased 23 acres for a public park ($12,622.87) in 1907-08 from the Falls City Improvement Company. In 1908, test wells were drilled to find more water supply for the growing town.

Land was purchased from William Dorrington in 1908 and bonds were voted on for a new building and power plant equipment at this location. As the new plant was built, the old plant was abandoned and salvaged. A municipal electric plant was operating, noting an increase in the use of electric appliances in the homes (1908-17) with the plant soon getting overtaxed. The powerhouse was steam driven (coal) with a 190-kilowatt (kW) generator and 762 kW motors in 1909. Many neighboring towns were selling their municipal power plants to private power interests rather than make the necessary expenditures for expansion. In 1908, the concrete sidewalks/crosswalks and dirt Main Street changed with the first paving district created in 1910 from 19th to 17th Streets on Stone Street.

Following a 1910 survey, a sewage system was contracted. In June 1912, construction began on sewer district #2 (prior to this, cesspools were used). From 1912-1917, the sewer system was built with two main line sewers (35,168 feet at a cost of $22,200). Lateral sewers for alleys of nearly every block totaled 13 miles and 1,261 feet for $45,000. In 1912, street

Continued from page 8

Continued on page 10
Nebraska utilities history – Falls City

Continued from page 9

Improvements were contracted for three blocks around the courthouse and six blocks on Stone Street (total 9 blocks). Bricked streets were laid from 11th Street to 21st Street at a cost of $1.93 per square foot. The municipal power plant in 1915 consisted of a 400 horsepower (HP) boiler, a 330 HP steam engine, a generator rating of 340 kilovolt amperes (kVA) with a lighting rate of $0.09 per kilowatt hour (kWh) and a power rate at $0.04 kWh. The municipal water works had six wells (30-inch x 40 feet deep) located one mile from the distribution system. Boilers consisted of a vertical 60 HP Eric pump driven by an electric motor (107.5 kW, 120-volt two phase 60 cycle G. E. & Allis Chalmers). Electric energy from the municipal lighting plant operated the air compressor Ingersoll-Rand, which pumped to the 100,000-gallon elevated steel water storage tank. The distribution system had 14 miles of four-and-one-half-inch cast iron pipe, 68 Rensselar fire hydrants, 58 right and left-handed threaded Fairbanks valves and 660 Neptune & Hersey meters. The average daily consumption was 6 million gallons per day (gpd) to 672 service connections. Ordinary pressure was 70-80 pounds per square inch (psi) with the fire pressure 80-90 psi. Water rates in 1915 were a flat rate of $8 per year with meters $0.45 per 1,000 gallons maximum and a minimum of $9. By 1916, there were three miles of brick street paving, a new post office building, along with the Lindell Hotel, Union Hotel, National Hotel and the Goulsby House all operating. By February 1916, the city electric plant/pump station No. 2 had a centrifugal pump, a 35 HP electric motor, one steam turbine, a 100 HP Dynamo, a 150 HP engine with a Dynamo and two boilers. In 1916, three municipal wells were found to be contaminated with surface drainage and decayed vegetation matter through testing so new wells would be needed. In 1917, the Ninard Engineering Company of Falls City awarded paving in District #15 at $2.10 per square yard. Western Cereal Company was established in 1918, the Lutheran Hospital was built. In 1918, a special election was held and bonds of $85,000 were voted on for improvements and enlargement of the power plant and pumping facilities.

A fire hose house located on W. 11th & Chase Streets on the southeast corner housed a hose cart with 500 feet of two-and-a-half-inch hose. Another hose house was located on Harlan Street. In October 1918, the Richardson County Bank burned with little water to fight the fire. On May 7, 1919, the old red brick courthouse was destroyed by fire and in October, the Leo Vinegar and Cider factory building burned to the ground. About 1919-1920, fire destroyed the JCPenney store and YMCA rooms. From 1910-1920, the population increased from 3,255 to 4,930. The Missouri Pacific Railroad Depot was built in 1920 and a Community Hospital was built in 1922. Increased power usage caused the city to build a new pumping station on the Nemaha River and the first diesel engine was installed to replace the steam-type engine. This lowered the cost of producing power, rates were lowered, consumption increased and a gradual change-over to diesel engines were affected. By August 1922, two new double cylinder pumps were installed and the water plant had a daily capacity of 800,000 gallons. Paving districts were being extended about 1924. The new Richardson County Courthouse was built for $250,000 and was dedicated in May 1924. The “Weaver Building,” now Stephensen Hotel.

“Just For Fun” Answers

A-1. Indianola (Utilities Section member since 2005).
A-4. Arlington (Early post office was named after Belle Creek, which was named for the Belle family. On Feb. 2, 1882, the name was changed to Arlington – after Arlington, Virginia, which was located along the Potomac River).

*Note: Utilities Section Members are listed in bold.

Continued on page 11
Nebraska utilities history – Falls City

Continued from page 10

(20-room) was built in 1924-25 and a new water filtration plant was constructed in 1925. By 1928, the water rates were $0.11-$0.53 per 1,000 gallons. The municipal power plant had electric rates of $0.08-$0.115 per kWh. Falls City became a member of the League of Nebraska Municipalities in 1928.

By 1930, the population was 5,787 and a new a 0.7-megawatt engine was put into service at the power plant. A high school stadium was built and the water source (Nemaha River) went dry or nearly dry. The city looked for a new water source. By 1934, a PWA water main and reservoir project costing $17,762 was almost completed and work began on a PWA sewer outfall replacement project for $7,792. On Feb. 26, 1935, the council approved a proposal to construct a dam to impound water in the river for use by the municipal water plant for about $4,000. The Falls City municipal power plant by 1936 had a capacity of 1,706 kilowatts (kW) of internal combustion power generation. The power plant saw the initial operation of a new 1.0-megawatt (petroleum) engine in 1937. The Laura C. and Leander Prichard Auditorium was built in 1938 on land was given by the Towle Family. The exterior consisted of some 2,000 tons of native limestone. On Nov. 1, 1939, Nebraska's first producing oil well was drilled west of town at about 1,000 feet.

In 1940, the population increased to 6,146 and the city drilled water supply wells on the Missouri River bottoms south of Rulo, Neb. The Layne-Western Company of Kansas City constructed a 14-inch cast iron water pipeline from the well field to Falls City. In 1946, the city exercised an option in the contract and purchased the system from Layne-Western for $344,000. Also that year, another engine was installed at the power plant (1.1 megawatt).

From 1945-1950s, the power rates paid 60 percent of the city's operating expenses (lowest rates in the state). A 1.1-megawatt engine, the first dual fuel engine (gas or oil) in Nebraska, was purchased and installed. A new pump house was completed as another larger engine was installed.

The population increased slightly to 6,203 by 1950 and the power plant saw the initial operation of a 2.0-megawatt engine. In the 1950s, service was closed by the Missouri Pacific Railroad and by 1956, a new school building was constructed. The fire department had 25 volunteer firefighters and a paving project was underway in 1958. A 2.5-megawatt Fairbanks-Morse engine ($416,125) was installed at the power plant in 1958. The city owned the diesel generation electric plant, which had a capacity of 5,246 kWh, along with the distribution system with 35 miles of lines and 2,849 electric meters owned by city. The cost of street lighting and the cost of water pumping was $0.015 per kWh. In May 1957, the Frontier House Manufacturing business started operation, which had 100 employees. In the 1950s, a new park and lake, formerly known as Stanton Lake, was developed as a recreation area. The city-owned water plant had 2,088 meters in service owned by the consumers with rates (1956) of first 30,000 gallons at $0.30 per 1,000 (M) gallons (gals.), next 20,000 gals. at $0.20 per M gals. with excess at $0.10 per minimum $1 per month.

By 1960, the population as 5,598 and by 1962, the natural gas was supplied by a Gas Service Company with garbage collection by a private collector. The city-owned water plant had 2,236 meters in service (consumer owned) with a meter deposit of $2. The city sewer system was maintained from a sewer charge of $0.50 in 1962 and the city power generation plant had a capacity of 7,748 kWh. A 2.8-megawatt Cooper engine was initially operated in 1965 at the power plant. A new hospital was built in the 1960s and by 1968, the city sold water to the Village of Rulo at $0.25 per 1,000 gallons. Contracts for a new treatment plant were let in 1967 with a “trickling filter” plant built in 1969.

The population by 1970 was 5,440 and in 1971, an improvement/extension of the sewer system was underway. The $2,030,000 project included the construction of a new 20-inch water line from the Falls City well field on the Missouri River bottom south of Rulo, replacing

Continued on page 12
Nebraska utilities history – Falls City

Continued from page 11

a 14-inch cast iron pipeline built in 1940. Also that year, streets and alleys received new asphalt overlay ($155,091 project by Nider-Jorgensen Construction Co. of Omaha).

The population in 1980 was 5,374 and a 6.0-megawatt Cooper Bessemer LSVB-20 engine was installed at the power plant in 1981. The sewer treatment facility was updated with a rotating biological contactor (RBC) system installed (1981-82). In 1987, the city served the Village of Preston with retail electric service.

In 1990, the city negotiated the purchase of the gas system and from 1991-1999 the population decreased from 5,374 to 4,823. In 1992, the water system was upgraded with a 20-inch pipeline installed from Rulo along with a new lime mixing tank at the plant. In 1995, the city received a grant for $25,427 for a closure assessment and the closing of the old landfill.

By 1999, the water treatment plant was upgraded ($1.829 million), including the addition of a 150,000-gallon clear well. The new addition also included an office, a lab, a restroom plus four new 20-foot deep sand filters. The old filters had a capacity of 100,000 gallons and the new clear well addition added another 150,000 gallons to the plant. Both Rulo and Rural Water District #2 pumped directly out of the clear wells for their water supply. The city was supplied by 11 wells located in the Missouri River bottoms. The 2 million gallons per day upgrade was radio controlled from the power plant, where before, the pumps were radio controlled from the Rulo plant. In 1999, the auditorium was remodeled at a cost of $1.5 million.

In 2000, the airport received $60,000 for improvements and the city power plant had a capacity of 21,116 kilowatts (kW) with a peak demand 15,100 kW. From 2000, the population again decreased from 4,671 to 4,325 in 2011. By 2001, the city had 34 miles of natural gas mains supplied by Williams Gas, with 2,380 gas customers and five employees in the gas department. AIG Highstar Capital acquired the Southern Star Central

Continued on page 13

Falls City water rates:

- **1928** – $0.11-$0.53 per 1,000 gallons.
- **1956** – first 30,000 gallons at $0.30 per 1,000 gallons, next 20,000 gallons at $0.20 per 1,000 gallons with excess at $0.10 per minimum $1 per month, minimum $1 per month.
- **1962** – first 30,000 gallons at $0.30 per 1,000 gallons, next 20,000 gallons at $0.20 per 1,000 gallons, minimum $1 per month.
- **2011** – Monthly base fee was $6; then residential rate was $3.54 per 1,000 gallons, commercial base rate was $6 then fees were rated by meter size.
- **2017** – Monthly base fee was $7.28, then residential rate was $4.31 per 1,000 gallons, commercial base rate of $7.28 then fees are rated by meter size.
Nebraska utilities history – Falls City

Continued from page 12

Gas Pipeline System in 2002, previously owned by Williams Company. In 2003, GE Commercial Finances Energy Financial Services acquired 2 percent of the Southern Star Central Gas Pipeline System. In 2005, the natural gas pipeline (Southern Star Central Natural Gas Pipeline System) serving Falls City was sold for $362 million to the General Electric Company and Canada’s largest institutional investor.

By 2004, a new swimming pool/water park was planned and construction began on updating the wastewater facility, which included the installation of reed beds. A new $21 million hospital (68,000 sqft) project was under construction (2008-2009) and in 2011, a new library was built. By 2014, the population was 4,325 and a downtown street project was underway by 2015 with curb extensions and decorative lighting installed. A new collector well was installed in 2017 and in 2017-2018, the electric system had a capacity of 21,116 kW, a peak demand of about 15,100 kW, a new Wartsilla engine was installed with a dedication held in 2019. By 2018, the wastewater facility had a capacity of 1.4 million gallons per day with the present load at 650,000 gallons per day.

Today, Falls City is a city of the second class with a population of 4,325 and has been an incorporated village/city since 1858 or 1859 (either 160 or 161 years). Falls City has been a member of the League of Nebraska Municipalities for over 91 years and a Utilities Section Member for over 42 years (records only to 1977). The city maintains an electric distribution system and generation plant, natural gas system, water and wastewater systems, several miles of paved streets, parks and a cemetery. Falls City Sanitation provides collection services.


Solid Waste Screening Workshop scheduled

A Solid Waste Screening Workshop is scheduled for Jan. 28, 2020, in Hastings. This workshop meets the state of Nebraska requirements covering hazardous waste screening for employees of transfer stations and landfills. The workshop will also cover landfill/transfer station safety along with regulatory/industry updates. Two more workshops will be scheduled later in the year. This workshop is sponsored by the League of Nebraska Municipalities Utilities Section.
Public Works Director. The City of York is accepting applications for a Public Works Director. **Department Overview and Responsibilities:** Responsible for directing and managing the Public Works Department, including the divisions of water, wastewater, streets, landfill, airport, parks and code enforcement. This position also administers building and zoning regulations and flood plain management. Reports to the City Administrator; Experience with GIS, GPS, CAD, etc. and/or related software. Previous work in planning and zoning, flood plain management, building codes, public utility systems is desirable. Effectively represent the City in meetings with governmental agencies, community groups, various businesses, professional, and regulatory organizations, and in meetings with individuals. Be adept at combining a hands-on management style with confident professionalism and an ability to work with a variety of stakeholders. **Requirements:** Job requirements include: minimum of a Bachelor’s degree in Civil Engineering from an accredited college, and Licenses as a Professional Engineer (PE) and able to get licensed in Nebraska within one year of hire. Must be a licensed Street Superintendent in the State of Nebraska or have the ability to attain this license within 12 months. Must possess and maintain a valid driver’s license. **Essential Functions:** Assists in the development, implementation, and administration of divisional performance objectives, policies, processes, capital projects, and priorities: identifies resource needs and makes recommendations for improvement. The applicant should also have five to seven years of progressively responsible civil service experience. **Ideal Candidate:** The ideal candidate for the Public Works Director position will be an innovative and creative leader with a high level of integrity, will have a proven record of building and leading teams, and shall possess high expectations for customer service. Send cover letter, resume and completed application to: City Administrator, City of York, PO Box 276, York, NE 68467 or email to jfrei@cityofyork.net. Applications are available on the City’s website www.cityofyork.net. Position will remain open until filled. First application review will be Sept. 30, 2019.

Utilities Lineman. The City of Chappell is accepting applications for the position of an additional Utilities Lineman. This position works under the Utilities Foreman and in conjunction with current lineman. Assists in the operation and maintenance of the city owned electric distribution and water system. Applicant must be willing to obtain Grade 4 water operator license. Prefer electrical experience, but will train the right person. Wage is based on qualifications. Quality benefits package. Application can be obtained at PO Box 487, 757 2nd Street, Chappell, NE 69129 or by email to chappellcityhall@hotmail.com.

Continued on page 15
Classifieds

Continued from page 14
Website is www.chappeiine.org. Inquiries can be sent to 308-874-2401 or faxed to 308-874-2508. EOE. Position will be open until filled.

Maintenance Position. The Village of Cody is accepting applications for a full-time maintenance position to oversee the Village’s maintenance needs. Duties include oversight of water and wastewater system, streets, snow removal, equipment care, weekly trash pick-up and disposal, up-keep of village public areas (park, ball field, arena) and some seasonal requirements (Christmas decorating, 4th of July, etc.). The successful applicant must be able to obtain a grade 4 water license (we will provide training to right applicant if not licensed at hiring). A valid Nebraska driver's license is a must and a CDL will be required if hired. Wage is commensurate with experience. North central Nebraska is a great place to live for the outdoor person. We are a small town of about 150 population located in the Sandhills of Cherry County. The high school and middle school are located in Cody and the grade school is located nearby; together they form the Cody Kilgore Unified Schools. We have a grocery, restaurant, banking, post office, fuel, repair and service shops as well as other services available. We are situated about half-way in-between Valentine and Gordon on Highway 20. Applications are available by calling the clerk at 402-823-4118 or writing to Village of Cody, PO Box 118, Cody, NE 69211. Applications will be accepted until position is filled. EOE.

Wastewater Treatment Plant Supervisor. The City of Aurora is accepting applications for the position of Wastewater Treatment Plant Supervisor. The duties will include but are not limited to; performing technical and supervisory work as head operator; participating in the operation and maintenance of the sewage treatment plant; perform all sampling, laboratory testing and reporting of all necessary wastewater tests, including, daily, weekly, and monthly readings; monitor sludge utilization according to EPA regulations and work with Nebraska Department of Environmental Quality to comply with all requirements of NPDES permit. Experience preferred in the field of wastewater treatment, including laboratory analysis and education. Must have a valid Nebraska driver’s license. Salary is DOQ, with an excellent benefit package. Applications can be obtained at; Aurora City Offices, 905 13th Street, Aurora, NE, 68818; website at www.cityofaurora.org or via email at utlysupt@cityofaurora.org. Position will remain open until filled. The City of Aurora is an EOE.

Writing an article for the Utilities Section Newsletter

Are you interested in writing an article for the Utilities Section Newsletter? We are interested in articles on the past, present and future of your municipal utilities. Articles can be written on a specific department or an overview of the history of the entire utilities department. Items of interest may be information on the first well in your community, number of services, service fees, the equipment used, and also the employees that worked in the various utilities departments. Photos would enhance the articles and will be returned unless otherwise instructed.

When writing an article, just answer the simple who, what, when, where, why and how questions.
Training calendar

Visit our website at www.lonm.org for a complete list of workshops and conferences.

January
Jan. 9 ............. Workzone Workshop .......................................................... Water Treatment Facility, Blair
Jan. 15-17 ....... Utilities/Public Works Section Annual Conference ...... Embassy Suites, Lincoln
Jan. 21 .......... Water Operator Training Workshop .................................. Holiday Inn, Kearney
Jan. 22-23 ....... Snowball Conference ....................................................... Holiday Inn, Kearney
Jan. 28 .......... Solid Waste Workshop ...................................................... Hastings
Jan. 29 .......... Water Operator Training Workshop .................................. Hastings
Jan. 30 .......... Water Operator Training Workshop ................................... Gretna

February
Feb. 4 .......... Water Operator Training Workshop .................................... Beatrice
Feb. 5 .......... Water Operator Training Workshop .................................... Grand Island
Feb. 6 .......... Water Operator Training Workshop .................................... North Platte
Feb. 11-12 ..... Meter Conference ............................................................... Holiday Inn, Kearney
Feb. 24-25 ..... Midwinter Conference ......................................................... Cornhusker Marriott Hotel, Lincoln