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NDEE faces COVID-19 challenges, finds opportunity

The novel coronavirus has changed many aspects of day-to-day life, and the Nebraska Department of Environment and Energy has met these challenges to ensure operations continue for our customers.

In mid-March, NDEE began transitioning to a work-from-home setting. At that time, information and news surrounding COVID-19 were updating rapidly, and our team responded just as quickly. Thanks to their hard work, NDEE staff were all working from home by early April.

Working from home and facing a pandemic has created challenges, but the NDEE team has also found opportunity. In addition to expanding our ability to work remotely, we also have found new ways to utilize technology and better serve Nebraskans.

For example, NDEE has adapted so it no longer needs original signatures for Dollar and Energy Saving Loan (DESL) applications. Instead, applicants can submit documents electronically as PDFs. Not only has this saved paper, it has also saved time and improved the DESL process.

NDEE has also recognized Nebraskans face hardships of their own because of COVID-19. As such, NDEE, along with local lending institutions, has offered deferred payments for the DESL program. See more information on the deferments here.

The state as a whole has also responded to pandemic. Gov. Pete Ricketts declared a state of emergency on March 13, and NDEE team members began working at the State Emergency Operations Center, which operated virtually. Our Energy and Assistance staff monitored energy issues surrounding COVID-19, and how those changes could affect vulnerable Nebraskans. Staff also coordinated with the Nebraska Power Association and the National Association of State Energy Officials to share information on the ever-changing situation. Communications and partnerships like this help ensure everyone has the most accurate and up-to-date information to inform decision making.

Aside from energy-specific programs, NDEE also:

- Offered online onsite wastewater testing,
- Provided guidance on pool openings,
- Allowed producers to temporarily have more livestock than permitted,
- Allowed an exception for dairy producers to dispose of excess milk that could not be shipped,
- Provided guidance on animal carcass disposal in the event a mass mortality event.

For more information on NDEE's pandemic response, visit our COVID-19 webpage.

Adding up work from home savings

NDEE team members have been working from home since mid-March. Here is a rough estimate of the energy and cost savings after 10 weeks of not commuting.

This scenario assumes that a person has a five mile trip to work (10 miles round-trip), and drives a car that gets 20 miles per gallon. At roughly $2/gallon, working from home saves this person $1/day. For a 10 week time period, a person could save $50.

While that may not seem like a huge savings, it can add up. Estimating NDEE has 220 team members that commute by car, the individual savings of $50 for 10 weeks increases to$11,000 in savings across the agency.

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Rebates available for diesel school bus replacements

Applications due Aug. 7, 2020

The Nebraska Department of Environment and Energy's Nebraska Diesel Emission Mitigation Program has announced the opening of the 2020 School Bus Rebate Program, which will use funds from Nebraska's portion of Volkswagen State Trust to provide rebates to replace diesel school buses. Schools across the state are being notified that applications are now being accepted and must be received by Aug. 7, 2020, to be considered for selection. NDEE anticipates awarding up to 44 school bus rebates during this third year of the program.

Public school districts and private schools in Nebraska are eligible for this funding. Rebates will be available to replace diesel buses (with engine model year 2009 or older) with new or late-model used buses fueled by diesel, propane or compressed natural gas (CNG) or all-electric buses. The new bus must replace a bus that is currently operational and in use. The replaced bus and engine must be disabled (scrapped) to ensure that the project reduces diesel emissions. Each applicant may submit one application for one bus replacement rebate. Previous recipients of a Nebraska or EPA Clean Diesel School Bus Rebate (2013 or later) are eligible to apply, but preference will be given to schools that are not previous rebate recipients.

NDEE anticipates providing public school districts with funding covering 50% of the base cost of a replacement diesel bus (up to a maximum rebate of $42,000), 60% of the base cost of a new propane or CNG bus that meets stricter emissions standards (up to a maximum rebate of $57,000), or 40% of the cost of an all-electric bus (up to a maximum rebate of $80,000). Private schools will be eligible for a maximum reimbursement of 25% of the base cost of a new diesel, propane or CNG bus as prescribed in the State Trust agreement.

If the number of applications exceeds the number of available awards, rebate recipients will be selected by lottery. Applicants that are not previous rebate recipients will have two entries in the lottery, while previous recipients will have one entry. Rebate selectees may not purchase the new bus until they have signed a project agreement with NDEE.

Photo by Austin Pacheco on Unsplash

NDEE is accepting applications for rebates that help schools replace old diesel school buses.

Source of this funding

A series of court settlements in 2016-2017 regarding emissions test violations required Volkswagen to establish a $2.925 billion Environmental Mitigation Trust Fund to assist states and tribes to offset the excess nitrogen oxide (NOx) pollution emitted by the offending diesel vehicles. Nebraska was allocated approximately $12.25 million in the Trust.

For more information about Nebraska's involvement in the VW State Trust, go to NDEE's Nebraska Diesel Emission Mitigation Program web page. Schools seeking more information about eligibility and application requirements can find more information on NDEE's application information page.

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Pulling together while working apart

Communities, utilities respond amidst pandemic

Reprinted with permission from Nebraska Municipal Power Pool

Member utilities of the Nebraska Municipal Power Pool (NMPP) are used to responding to emergencies due to physical outages from storms and other occurrences. A global pandemic, however, is a different kind of emergency.

Utilities and municipalities across the nation are responding to the crisis on multiple fronts, keeping municipal employees and utility workers as safe as possible while ensuring a reliable electric system to keep the lights on and homes and businesses heated.

Many utilities voluntarily implemented policies to temporarily eliminate utility disconnections during the pandemic as well as close offices and encourage online or drop box bill payment to adhere to social distancing guidelines.

Colorado and Iowa issued mandated utility disconnection orders as most utilities were already voluntarily suspending disconnection policies. Nebraska and Wyoming have not issued mandatory suspension of disconnections, but most utilities in those states are doing so voluntarily.

A survey was developed and distributed among Municipal Energy Agency of Nebraska (MEAN) participants regarding utility responses to the pandemic, including activity related to disconnection policies, and keeping personnel safe.

Photo by Julian Wan on Unsplash

Nebraska Municipal Power Pool and its member utilities have adapted to the COVID-19 pandemic.

NMPP Energy response

The NMPP Energy building remains closed, staying open only for a few employees. After in-house training, most staff headed home to serve members from makeshift home offices with the goal of providing the same level of services to member communities as if the office was fully open. As of May, travel and in-person meetings remain suspended to further protect employees and member communities.

The tough decision to cancel the 2020 NMPP Energy Annual Conference was made a week before the conference in March. The NMPP Board of Directors held its Annual Meeting via a seamless teleconference call in March, which allowed for the appointment of vacant Board positions and the scheduling of future Annual Conferences. All NMPP Energy board and committee meetings scheduled for May, which included the Municipal Energy Agency of Nebraska (MEAN), the Public Alliance for Community Energy (ACE), NMPP and the Joint Operating Committee meeting, were held by teleconference.

Communication was sent to NMPP Energy constituents to provide updates on staff's remote working situation and company activities. NMPP Energy's website includes an evolving list of useful federal, state, electric and natural gas sector and economic development resources for municipalities and communities regarding the pandemic.

Regional wholesale power markets

The regional wholesale power markets where MEAN operates took steps to ensure continuous operation of the bulk electric grid, main-

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taining sufficient capacity to serve electric load. With more people transitioning to working at home, the Southwest Power Pool (SPP) reported a shift in load patterns to a later morning peak and has experienced approximately a 4-6% reduction in load across its system during the first couple weeks of April. SPP also reported seeing an uptick in the cancellation of planned generation and transmission outages. It continues to work closely with its members and market participants to adjust to real-time conditions to facilitate reliability over the long term.

The MidContinent Independent System Operator (MISO) reported experiencing a reduction of approximately 6% of total energy consumed across its footprint and a change in its load shape with longer morning and evening peaks and occurring at different times. These changes are attributed to the reduction in industrial and manufacturing demand and communities on stay-at-home status.

Mutual aid assistance stands ready

NMPP's Mutual Aid Program stands ready to help member utilities that need assistance. The program can coordinate utility assistance in response to storm recovery, workforce disruptions due to COVID-19, equipment needs or other emergencies that may arise.

To request assistance through the program, contact Rich Eymann, NMPP Electrical Distribution O&M Specialist, at (402) 473-8207 or reymann@nmppenergy.org.

ACE adapts to participate in Choice Gas Selection Period

Staff working on ACE's Choice Gas Selection Period adapted to the pandemic by transitioning to a remote work environment. Training was held remotely for staff and the two-week selection period was held as originally scheduled April 10-23.

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Pandemic sets stage for rising scam calls

Reprinted with permission from
Omaha Public Power District

Omaha Public Power District is, once again, seeing an uptick in reports of scammers trying to take advantage of its customers.

Scammers may be trying to take advantage of the increased number of people who are working from home or who have students taking classes online, due to COVID-19.

The scam pre-dates COVID-19, though. It's been happening all across the country for years, now. Aggressive callers pose as utility workers, trying to convince customers they owe money either for a bill or equipment, such as a meter. Often they use "spoofing" technology to make their phone numbers appear legitimate on caller identification. The scammers typically instruct customers to use a pre-paid debit, gift, or Green Dot card to settle up. They threaten to disconnect service if customers do not pay.

OPPD does NOT charge for meters and would NEVER cold-call customers demanding payment. Also, keep in mind, OPPD has suspended disconnections for non-payment until 30 days after the expiration of the last directed health measures of any of the 13 counties within OPPD's service territory. So, any threat to shut off power right now should immediately tip customers off that the caller is trying to scam them.

If you receive such a call, hang up. The disconnection moratorium is part of a series of Customer First Solutions to help customers facing challenges related to COVID-19. OPPD is also waiving late bill payment charges for customers until 30 days after the expiration of the last directed health measures of any of the 13 counties within OPPD's service territory.

OPPD cautions customers, NEVER give personal or financial information to a stranger during an unsolicited phone call. If such a person should appear at their door unannounced, claiming to work for the utility, ask for identification or verification. OPPD employees always carry identification. Failure to produce identification is a tip-off to the customer that something is wrong.

Customers with questions about making a payment, or about their account in general, should always call OPPD directly. Within Omaha, the number is 402-536-4131. Outside of Omaha, customers should call 1-877-536-4131.

Photo by NordWood Themes on Unsplash

OPPD has seen an increase in scam calls as callers take advantage of the COVID-19 pandemic.

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Did you know...?

Statistics on NDEE's energy programs

The Nebraska Department of Environment and Energy's Energy and Assistance Division provides several services to residents across the state, including the Weatherization Program and Dollar and Energy Saving Loans (DESL). Below are some quick facts about these programs from the 2019 Annual State Energy Report.

Weatherization Program

428 Homes weatherized in 2019

Common improvements include adding insulation, replacing and repairing furnaces, reducing air leakage, installing high efficiency lighting, insulating water heater tanks and pipes and repairing cracked windows.

$213 million Spent since 1977 to make energy efficiency improvements in homes

From 1977-2019, 69,619 homes have received weatherization funds. Funding for this program comes from the federal Low-Income Home Energy Assistance Program and the U.S. Department of Energy.

6 million pounds Reduced in carbon dioxide emissions between July 2018 and June 2019

Efficient homes reduce air pollutants. In addition to carbon dioxide, weatherized homes also reduce the amount of sulfur dioxide, nitrogen oxide, particulate matter, and volatile organic compounds released into the air. Learn more about the weatherization program **online.**

Dollar and Energy Saving Loans

390 DESL projects financed in 2019

These projects totaled $11 million in financing. Funds for the DESL initially came from Oil Overcharge Funds and later augmented with American Recovery and Reinvestment Act Funds. Now the program is continually recharged with loan repayments from borrowers.

$359.9 million Invested in 29,688 projects since 1990

Dollar and Energy Saving Loans are available for energy efficiency, renewable energy and waste minimization projects in all sectors. Read more and learn about project eligibility on the **DESL webpage.**

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Conservation practices that save: nutrient management

Information from the USDA Natural Resource Conservation Service

Appropriate substitution of manure for commercial fertilizer can reduce crop production costs by as much as $85 per acre for a 1,000-acre farm. Nationwide, doubling the application of manure-based nitrogen through a nutrient management plan could save agriculture about $1.2 billion worth of natural gas each year and save society up to 100 billion cubic feet of natural gas.

Photo by Jake Gard on Unsplash

In addition to saving money, nutrient management practices also can save energy costs and provide environmental benefits.

It takes some 40,000 cubic feet of natural gas to produce a ton of commercial nitrogen fertilizer. Producers who use nitrogen-fixing legumes as cover crops or in crop rotations also can reduce their need for commercial fertilizer.

Nutrient management is a conservation practice that involves proper timing and placement of the right amounts of nutrients and soil amendments for adequate soil fertility and to minimize potential environmental degradation, particularly of water quality.

The Natural Resources Conservation Service (NRCS) works with owners and operators of animal feeding operations to develop nutrient management plans that are unique to each operation and achieve production and natural resource protection goals. A comprehensive nutrient management plan begins with soil testing. The plan incorporates conservation practices to use animal manure and organic by-products as a beneficial resource in amounts needed by growing crops.

Energy costs also may be reduced through use of anaerobic digesters, such as covered lagoons and complete mix digesters, coupled with electricity generation from methane. Manure from the anaerobic digesters provides a reliable level of nitrogen fertilization and can be used to replace commercial fertilizer. When stored and handled properly, animal manure loses less nitrogen and can be applied with confidence. NRCS can provide information and considerations for designing and constructing appropriate manure handling facilities. Methane produced by the manure allows biogas generators to produce electricity and heat that producers can use onsite. Also, the potential exists to sell the excess electricity to a local electric grid. The Federal AgSTAR program estimates that 426,000 metric tons of methane may be recoverable for use in over 3,000 livestock facilities across the United States. Biogas systems are expensive initially, but have great potential for long-term cost efficiencies with large concentrations of livestock.

In addition, nutrient management provides environmental benefits, such as reducing animal manure odors and reducing surface and groundwater contamination.

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Reduce your summer electric bill

Reprinted with permission from
Nebraska Public Power District
by Cory Fuehrer, NPPD Energy Efficiency Program Manager

Some people question whether their electric meter is registering correctly. Most blame air-conditioning as the culprit. While cooling usually consumes the largest portion of home energy bills during hot months, there is another reason why you must reach deeper into your pocket to pay summer electric bills.

To support high electricity usage on very hot days, your electric utility often requires supplemental electricity from additional generating facilities. For most utilities in the U.S., these peak periods occur weekdays, between 3 and 8 p.m. Sometimes "peaker" plants, which run on natural gas and usually do not operate 97-99% of the year, can be switched on quickly to satisfy periods of peak power demand. Other times, less-efficient fuel oil and coal plants are added to the generation mix to meet increased electrical needs.

Estimates show that 10-20% of the overall annual cost of providing electricity comes from supplying electrical demand during the 100 most-expensive hours of the year. In Nebraska these "peaks" usually occur during the summer; therefore, most Nebraska utilities bill their customers using a summer rate.

Some utilities begin their summer rate period as early as May 15 and run as late as October 15. In general, summer rates are often designed 25-35% higher than winter rates to cover additional peaking power costs.

Is there anything you can do to reduce the cost of your summer electrical use? Absolutely! Consider this: the wholesale purchase price your utility must pay for the electricity you use is significantly impacted by what time of day you are using it. If you use it most during the peak period, your utility will pay more for additional energy resources needed. But if you can reduce or shift your usage to another time of day, your utility will pay less. That reduces the need for future rate increases to you.

Photo by Maxwell Ingham on Unsplash

While the cost of running an air conditioner contributes to high summer electric bills, there are other ways to save on energy and money—for example, running a fan can move air, which allows a room to feel cooler.

Here are easy ways for you to help your electric utility and reduce your "peak" energy use:

- Shift as much of your energy use as you can to before noon or after 9 p.m.
- Your microwave uses about two-thirds less energy than your stove. Better yet, grill outside.
- Most dishwashers use less water and energy than washing dishes by hand. Use the air-dry setting on your dishwasher to save even more.
- Fill your refrigerator. Filling your fridge with lots of food and beverages will keep it from warming up quickly when the door is open – causing it to run for a long time after the door is closed. Just remember to leave sufficient room around items so chilled air can properly circulate.
- Set your air conditioning thermostat to 78°F when you are home, and 85°F, or off, when you are away. Using ceiling or room fans allows you to set the thermostat higher because air movement will make the room feel cooler. When you leave the room, don't forget to

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turn the fan off.

• Do your laundry by using the cold water setting on your washer. Line-dry clothes whenever you can.

• When you need to use the clothes dryer, run full loads, use the moisture-sensing setting, and clean the lint trap after each use.

• Unplug electronic devices and chargers when they are not in use. Turn computers and printers off at the power strip.

• Unplug and recycle that spare refrigerator in the garage if you don't really need it.

• Replace dirty air conditioner filters. Plugged filters restrict airflow and can cause the system to run longer.

• Install and use window shading inside to reduce heat gain while the sun is shining.

• Install patio covers and awnings, and plant trees where appropriate to shade your home.

• Have a cooling system tune-up completed on your HVAC system to reduce energy needed for air-conditioning.

• Replace your standard electric hot water heater with a heat pump water heater that provides cooling while heating your water.

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