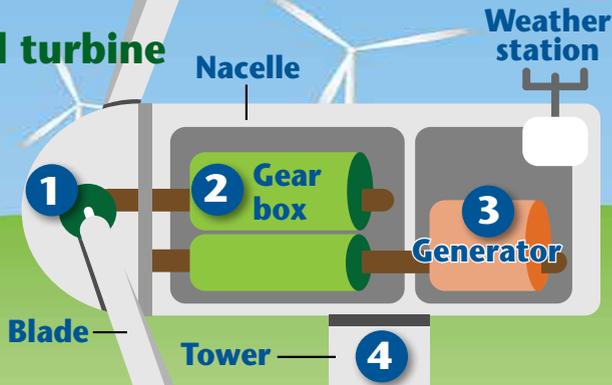


EVERY WAY THE WIND BLOWS

OPPD is continuing to reach its renewables goals by adding more wind energy. But how does electricity from a giant fan get to your home?

Inside a wind turbine



Generating wind energy

- 1 A computer turns the **nacelle** and the **rotor** (three blades and a hub) to face into the wind. The blades rotate when wind moves over them, which turns the rotor and a low-speed shaft.
- 2 The **gear box** connects the low-speed shaft to the high-speed shaft to increase the rotational speed.
- 3 The **generator** uses this faster motion to turn magnets surrounded by copper wire loops. This creates electromagnetic induction, which generates electricity.
- 4 The electricity travels down the inside of the **tower** through cables to a transformer at the base of the tower.
- 5 From the transformer, electricity flows underground to an on-site **substation**.
- 6 Overhead power lines take the electricity to an off-site substation and into high-voltage transmission lines.
- 7 The electricity goes from the high-voltage transmission lines into lower-voltage **distribution lines**.
- 8 The distribution lines bring the electricity to customers' **homes and businesses**.

OCTOBER BOARD MEETINGS

Committee: Tuesday, October 9, 8:30 a.m., Energy Plaza, 444 S. 16th St., Omaha. **Regular board meeting:** Thursday, October 11, 4 p.m., same location. Hearing-impaired may call 402-636-3208, 72 hours prior to request an interpreter. Meetings are livestreamed online at oppd.com.

Outlets

OUR MISSION

Provide affordable, reliable and environmentally sensitive energy services to our customers.



Shovels turn to start Sholes wind facility



In July, the first shovels of dirt were turned to begin construction of the newest wind energy facility to serve OPPD customers.

OPPD leaders and their project partner, NextEra Energy Resources, gathered in rural northeast Nebraska to mark the beginning of the Sholes Wind Energy Center.

When operational in 2019, Sholes will provide 160 megawatts of electricity for OPPD customers. The utility has a 20-year contract with NextEra to purchase 100 percent of the facility's generation.

When Sholes comes online, approximately 40 percent of OPPD's annual retail load will be from renewable resources, with a total renewables portfolio of more than 971 megawatts.

For more information, visit OPPDTheWire.com.



Help us celebrate Energy Efficiency Day on Oct. 5

For energy-saving tips, follow us on Facebook at [OmahaPublicPowerDistrict](https://www.facebook.com/OmahaPublicPowerDistrict) and Twitter at [@oppdcares](https://twitter.com/oppdcares).

Why switch to paperless billing?

It's simple and easy. It's convenient and a more efficient way to view your bill. Beyond that, it's free.

These are among the reasons OPPD is hoping more customers will take advantage of paperless billing.

OPPD continues its effort to convince more customers to switch from conventional paper statements to paperless statements online.

Reducing paper bills is environmentally friendly and helps keep costs low for customers.

OPPD has 365,000 customers, more than 320,000 of them residential customers, the target group.

Research has shown that people like paperless billing for several reasons.

- It is available 24/7.
- It is instantaneous. Customers receive

notification early and don't have to wait days for a bill to come in the mail.

- It reduces clutter.
- It fits into the lives of customers who prefer to conduct their personal business online.

Signing up for paperless billing is easy.

Simply go to the MyAccount link on oppd.com, enter your log-in information and make the necessary changes.



OPPD keeps a watchful eye out for zebra mussels



On a routine basis, OPPD personnel proactively inspect and clean infrastructure on the utility's power plants along the Missouri River to ensure that reliable generation of electricity is not hindered by zebra mussels.

Many years ago, OPPD implemented monitoring programs developed by its environmental professionals.

Because the mussels can attach

to solid surfaces, they can colonize in power plant water-intake structures, restricting water flow that could lead to the failure of vital plant systems.

OPPD also works closely with the Nebraska Invasive Species Council. Established by the legislature, the council coordinates management and research efforts statewide to help prevent, detect and manage invasive species.

ABOUT ZEBRA MUSSELS

What are they?

Small, freshwater mollusks that reproduce quickly. A single female can give birth to a million offspring in one year.

Where are they found?

Though not native to the U.S., zebra mussels are now established in all the Great Lakes and large navigable rivers in the eastern United States and many smaller lakes of the Great Lakes region.

How are they spread?

By the transportation of boats, since the mollusks attach to boat hulls and floating objects.

Have they been found here?

This summer, zebra mussels were found in Cunningham Lake in northwest Omaha. In 2011, Lake Zorinsky was drained to rid it of zebra mussels, as was Offutt Air Force Base Lake a few years prior.

As a boat owner, what can I do?

You are encouraged to inspect your watercraft and thoroughly wipe down and dry the outside upon exiting the water. The Nebraska Invasive Species Council website has preventive tips and practical guidelines on this topic at neinvasives.com.

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