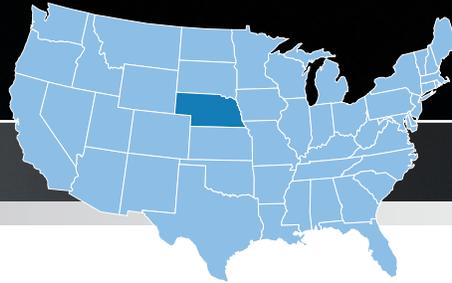


# Nebraska Overview

## Economic Development

Economic News from  
Nebraska Public Power District

Winter 2015–2016



## Research to Improve the Energy Outlook for Nebraska and Beyond

By Alan Dostal, Nebraska Public Power District's Director of Research

Nebraska Public Power District (NPPD) has been influenced by many strong and visionary leaders over the years. While being part of a very conservative industry, NPPD has progressively been willing and able to bring many exciting technologies into practice. Although not likely the first exciting new technology, Consumers Public Power District's (NPPD's predecessor) entry into the nuclear age with the Hallam Nuclear Reactor, certainly was a bold step for Nebraska. Not so many years later, NPPD took another bold step with the construction and operation of Cooper Nuclear Station. In short chronological order, NPPD greatly enhanced its transmission system and then added even more generation at Gerald Gentleman Station. Today, NPPD is collaborating with Monolith Materials to reinvent Sheldon Station Unit 2 as a hydrogen fueled power plant.

NPPD continues to look at research and development as a tool to improve the quality of life and economic opportunity for Nebraskans. In October 2005, Director Darrell Nelson and then Board Chairman Wayne Boyd discussed the potential for an energy focused research center in Nebraska. With the support of NPPD management and the Board, the Nebraska Center for Energy Sciences Research was co-founded with the University of Nebraska-Lincoln (UNL) in 2006.

Since that time, the Energy Center, as it has become known, has funded significant research in the areas of energy and agriculture. Each year, NPPD and its customers have invested \$1.0 million annually in seed grant funding for research at the University. These seed grants have enabled UNL researchers to grow their research portfolios and garner additional funding from various federal, state, and private sources. Currently for every dollar invested by the Energy Center in research, an additional \$5.00 has been added from these other funding sources which validate the investment in high quality research being conducted at the University.

Founded on the belief that energy related research would pay economic benefits to Nebraskans, the Energy Center has focused on a significant number of agriculture economy related projects. An example is expanding the value for the use of the co-products of ethanol production. Industry leading research at the University provided valuable information on the benefits of feeding wet distillers grains to cattle including first year heifers. By avoiding the cost of drying distiller's grains, the energy efficiency of the

byproduct utilization is significantly enhanced. Additional research is being conducted to find additional ways to integrate cattle and biofuel production. Examples include utilizing manure from cattle fed distillers grains to make methane for use as an energy fuel and ultimately to feed biofuel producing algae. This pioneering concept is being known as a SUPER Loop biorefinery.

Examples of other projects include conducting the best peer reviewed science on the environmental benefits of ethanol manufactured in modern biorefineries in Nebraska. UNL researchers concluded that corn based ethanol has 40 percent

fewer carbon emissions than petroleum based transportation fuel. This landmark research continues to influence the actions of the Environmental Protection Agency today and will become even more important in the carbon constrained world of the future.

UNL researchers have also focused on water and energy use in Nebraska through the Water, Energy, and Agriculture initiative that was co-funded by the Corn Board, the Soybean Board, and the Agricultural Research Division of UNL. Projects include the development of a Web-based irrigation scheduling tool now known as CornSoyWater. The tool aids farmers in their decisions regarding the efficient application of water for corn



Investments by NPPD have allowed  
UNL to expand research in energy.

Continued on next page

and soybean production. Another effort to improve water use efficiency was through the study of more accurately applying water using center pivot technology based on geospatial and temporal field conditions. Water and energy use will remain an important research area as both of these commodities become increasingly more valuable.

From practical applications like computer based corn and soybean irrigation scheduling tool, UNL researchers have also worked to develop game changing technologies with solar panels. While the cost of solar panels have dropped dramatically in recent years, the cost of the panels still inhibits the wide spread deployment of this technology. Researchers at UNL are developing alternative solar cells using organic materials. While these materials are currently less efficient at converting sunlight into electricity, the cost of these new materials are dramatically lower than current silicon-based technologies. Good progress

is being made to simultaneously improve the efficiency and durability of these new materials. This Nebraska-based research has caught the attention (and supplemental funding) of the Electric Power Research Institute, an international organization that supports research in all things important to the electric utility industry.

Another aspect of the work of the Energy Center is the development of an energy sciences minor at UNL. Students are given an opportunity to learn about the many aspects of energy and how it impacts their lives in a myriad of ways. As NPPD's Director of Research, I have participated as a guest lecturer for select energy related classes at the University. In working with these students, I see first-hand their keen interest in the topic of energy and I believe the future is bright for our industry. More can be learned about the Energy Center at <http://ncesr.unl.edu>.

## Texas-based Company to Build \$125M Manufacturing Facility in Norfolk, NE

Work began back in November on a \$125-million pipe mill manufacturing facility in northeast Norfolk that will bring 180 new jobs in the area.

OCT Pipe LLC CEO and Director Charley Havens announced this past fall that the company would build a one-million-square-foot manufacturing facility to make seamless steel pipe in Norfolk. It is estimated the plant will use 350,000 tons of steel per year, once fully operational.

OCT Pipe will produce and sell drilling and production pipe to the major oil and gas production companies throughout the United States. The company will take steel from Nucor's Norfolk plant and turn it into threaded oil field pipe, as well as "green pipe" commonly known as "Plain End" to customers that have special needs in finishing the pipe to different specifications.

Norfolk Mayor Sue Fuchtman said, **"These are exactly the kind of good-paying jobs this area has been working to attract. We have the schools, work ethic, and business climate that are favorable to their company and to their employees. They'll be a great addition to our manufacturing community."**

OCT Pipe's plan to create at least 50 jobs with average salaries upwards of \$70,000, and plans for capital investment in their facility and equipment of upwards of \$111,000, qualifies them for Tier 6 of Nebraska Advantage incentives. The company is also applying for Tax Increment Financing to make the project financially feasible by offsetting some necessary infrastructure costs.

**"The city of Norfolk is delighted to welcome OCT Pipe to the community. Nebraska is a great state in which to do business.**



Pictured above: Courtney Dentlinger, Economic Development Director, City of Norfolk and Charley Havens, CEO and Director, OCT Pipe LLC

**Just as important as our business-friendly climate are the economic development programs which help communities attract capital investment and quality jobs. We're thankful for the foresight of our state and local leaders in creating and funding these necessary programs,"** said Economic Development Director Courtney Dentlinger.

**"Nebraska Public Power District assembled a diverse, District-wide project team (Project Thor) to work alongside the city of Norfolk and OCT Pipe LLC and to explain why the state – and in particular, Norfolk – is the ideal place for them to build their business,"** said General Manager of Retail Tim Arlt. **"The team interacted with the city and OCT Pipe LLC on numerous occasions to make presentations, answer questions, deliver details, and tour site locations."** OCT Pipe will be served electrically by Nebraska Public Power District. The company plans to be operational in July 2017.

# Iron Horse Business & Industry Park Ready for Tenants

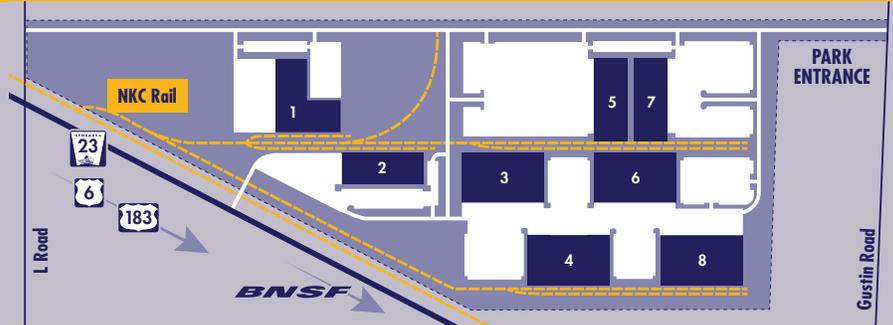
Phelps County's 134-Acre Iron Horse Business & Industry Park is located west of Holdrege, Nebraska. The name resonates with the area's strengths and work ethic.

The 134 acres are designed to be subdivided for eight tenants, each with a facility of 100,000–150,000 square feet and ample space for parking and outdoor storage.

The site has been engineered for a rail spur off the Nebraska, Kansas & Colorado Railway (NKCR) which runs along the south side of the land. With a BNSF Railway Company interchange less than a mile from the site, companies are able to ship goods nearly anywhere in the world.

**"The park has been a long time in the making,"** said Monica Boyken, Executive Director of Phelps County Development Corporation. **"When I came to Phelps County eight years ago, I quickly learned we didn't have the type of "product" sought by businesses. It took salesmanship and patience to convince the community that we needed to make this kind of investment in our future. We evaluated the amenities of half-a-dozen areas around Holdrege and are thankful that the owner of one of the two best parcels was willing to sell."**

Doug Stevenson, Industry Recruitment Committee Chairman, added, **"All we need now is a prospect to come in and see all that we have to offer—transportation (rail and highway), infrastructure (utilities are close and ready to install), and community. The people, education system, health facility, YMCA, and highway improvements are second to none. All they have to decide is if they want to be part of our community."**



## IRON HORSE BUSINESS & INDUSTRY PARK

**"The citizens of Holdrege recently passed the LB840 Economic Development Plan by a landslide, authorizing a one-half percent local option municipal sales tax to be collected through 2032,"** said Holdrege City Administrator Bob Rager. **"The LB840 program is a municipal sales tax earmarked for community improvements and economic development efforts designed to help stimulate economic development growth. Funds from LB840 will help with water and sewer services being extended to the park at an estimated \$800,000."**

Holdrege is a Nebraska Economic Development Certified Community designating that the community is prepared for business growth and ready to meet the needs of companies seeking new business and industrial locations. For more information on the city of Holdrege, click here for the recently completed 36-page **Holdrege Community Guide**.

The city of Holdrege is a wholesale customer of Nebraska Public Power District.

## NPPD's New Wholesale Economic Development Rate

Nebraska Public Power District's (NPPD's) Board of Directors approved a new wholesale economic development rate of 2.9 cents per kilowatt hour, effective January 1, 2016.

The final rate is determined by the local retail power provider and would include additional applicable expenses needed to deliver and service the customer. Preliminary estimates indicate the range could fall in the 3.7 to 5.0 cents per kilowatt hour range.

Prospective or expanding industrial customers are eligible to receive the economic development rate for up to five years, IF they receive retail service from NPPD or one of NPPD's wholesale customers AND meet the following criteria:

- **have a projected new or additional electrical load of 1 megawatt or greater;**
- **have a minimum monthly load factor of 60 percent or greater;**
- **have entered into a written agreement with the state or any political subdivision to provide an economic development project pursuant to state or local law; and**
- **wholesale customer and end-use customer have entered into a written service agreement with NPPD.**

## C.J. Foods

**Celebrates 30 years in business**



C.J. Foods, an area pet food manufacturer with facilities in Pawnee City, Nebraska, and Bern, Kansas, is celebrating 30 years in business. When C.J. Foods started in late 1985, they operated out of one building of approximately 6,500 square feet, with one extrusion system that had the capacity to produce about 2.5 million pounds a year. They started out with one shift and only seven employees.

After an expansion in April 1996, C.J. Foods established production relationships with the likes of Hill's Pet Nutrition, Hartz, and PNP, that helped grow this business.

Today, C.J. Foods has three plants, with a total building space of roughly 315,000 square feet, four extrusion systems, and the capacity to produce about 265 million pounds a year. They currently operate 24/7, with four shifts, and employ nearly 300 employees.

The C.J. Foods facility in Pawnee City is served electrically by Nebraska Public Power District.

# Cargill Investing \$111 million on Columbus Plant

Cargill is investing \$111 million to convert its ground beef production plant at Columbus, Nebraska, to produce cooked meats and will relocate the Columbus ground beef production to Butler, Wisconsin, and Fort Worth, Texas.

The conversion began in December and cooked meat production is expected to start in mid-2016. The conversion will be to large volume cooked meat products for customers, primarily food service. The meat processed will mainly be beef but the plant will be capable of cooking meat from other species.

Cargill employs more than 4,000 people in Nebraska at 22 locations. The Columbus plant is served electrically by Cornhusker Public Power District, a wholesale customer of Nebraska Public Power District.



INTERNATIONAL PRODUCTION & PROCESSING EXPO

Nebraska Public Power District will be attending the 2016 IPPE trade

show in Atlanta, January 26–28. International Poultry Expo, International Feed Expo, and International Meat Expo integrated their trade shows in 2013, under the International Production & Processing Expo (IPPE). The tradeshow is expected to bring together more than 1,250 exhibitors and over 30,000 attendees.

In addition to Nebraska's advantageous central location for transportation services, Nebraska offers an excellent trainable workforce, a top state for business development, and a place where people thrive at work and in their communities. If you would like to visit with a Nebraska representative while attending the trade show, please contact Keith Ellis at [kdellis@nppd.com](mailto:kdellis@nppd.com) to set up an appointment.

For more information, visit: [www.ippexpo.org](http://www.ippexpo.org).



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