Sustainability Initiatives
2023

Lincoln Electric System

The following is a summary of the various sustainability initiatives either introduced or continued by LES in 2023.

Continued sponsorship of the Low-Carbon Resources Initiative

LES continued its role as an anchor sponsor, and participant in, the Low-Carbon Resources Initiative (LCRI), a six-year joint effort by the Electric Power Research Institute (EPRI) and the Gas Technology Institute (GTI) to accelerate the development and demonstration of low- and zero-carbon energy technologies. LES contributed approximately $170,000 to the ongoing effort in 2023.

Continued Energy Storage Request for Proposals (RFP)

LES executed a 10-year power purchase agreement for a new 3 MW/12 MWh battery storage project. The zinc-based battery technology used for the project is in its infancy but can support durations of up to 12 hours. The project is to be located within the LES Community Microgrid, helping to ensure resiliency and continuity of service in the downtown Lincoln area in the event of widespread outages.

Continued retail rate restructuring

LES continued with Phase II of its revenue-neutral restructuring of residential rates, moving fixed costs associated with the transmission system into fixed charges. Phase I, which did the same thing for the distribution system, was completed in 2019. Properly aligning fixed and variable charges improves the financial stability of LES, better preparing it for future generation-related expenditures.

Gatehouse Rows Efficiency upgrades

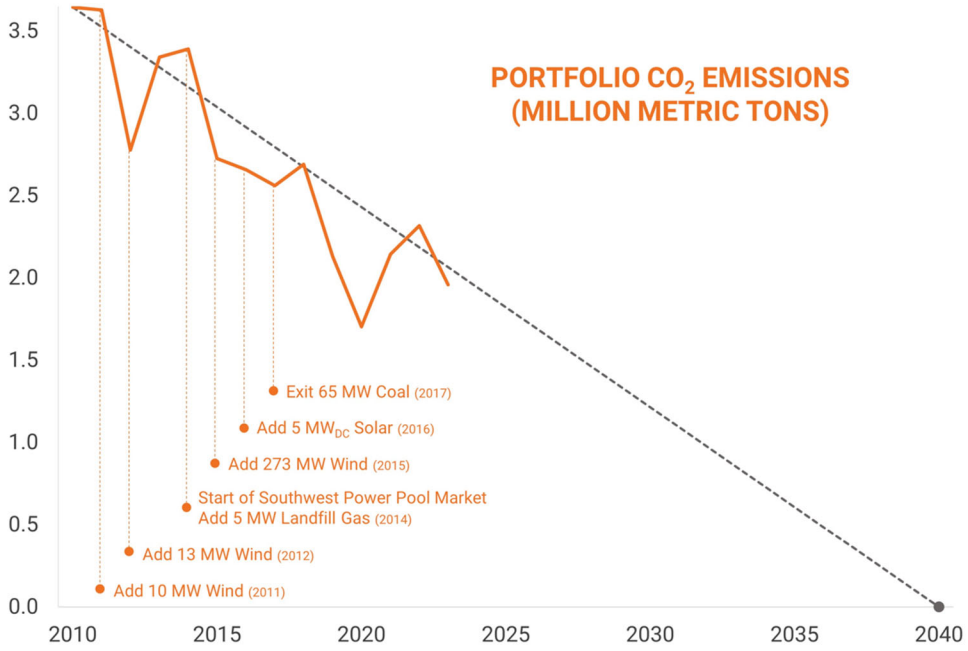
Building upon its agreement with Hoppe Development to install smart electric water heaters throughout their new 98-unit Gatehouse Rows affordable housing complex near Wyuka Cemetery, LES contracted for related communications hardware and software to support a water heater demand response pilot. The two-year pilot project is expected to launch in 2024.

Electric vehicles

The portion of LES' passenger vehicle fleet served by hybrid, plug-in hybrid or all electric vehicles reached 80%. LES also took delivery of new all-electric Ford F-150 Lightning and Rivian R1T pickups, with orders for an all-electric Silverado EV pickup and a Ford E-Transit Cargo van still pending. Outside of the direct environmental benefits, vehicles like these are poised to further change the load LES serves, so it's useful to gather firsthand experience with them.

Decarbonization goal

LES continued to track the state's most aggressive electric utility decarbonization goal to date, achieving net-zero CO_2 emissions from its generation portfolio by 2040. LES has experienced a 46% reduction in total CO_2 emissions from 2010-2023.



Continued participation in the South of Downtown Rental Rehabilitation Pilot Program (ReRAP)

Open to rental property owners in a city-designated area of town, LES is collaborating with the City of Lincoln and program administrator NeighborWorks Lincoln to provide funding for structural and energy efficiency upgrades for qualifying applicants.

Geothermal HVAC upgrade of LES Service Center

Following the completion of a successful feasibility study, LES launched a geothermal heating and cooling retrofit of its existing LES Walter A. Canney Service Center (SVC) located at 27th & Fairfield.

Continued expansion of LES Peak Rewards

LES continued to provide incentives and marketing to increase participation in its smart thermostat demand response program, LES Peak Rewards. By allowing LES to make brief, limited thermostat adjustments over the summer months, customers in this program helped to reduce LES' peak demand by 3.9 MW in 2023.

Continued administration of the Solar Trade Ally Network (STAN)

To educate and inform customers about solar, LES continued to administer the Solar Trade Ally Network (STAN). These trade allies undergo training about LES' rates and incentives and pledge to fully disclose accurate information to potential buyers so they can make an informed decision about investing in solar. LES continues to provide incentives, including upfront capacity payments, for certain customer-owned solar projects purchased through a STAN-participating installer.

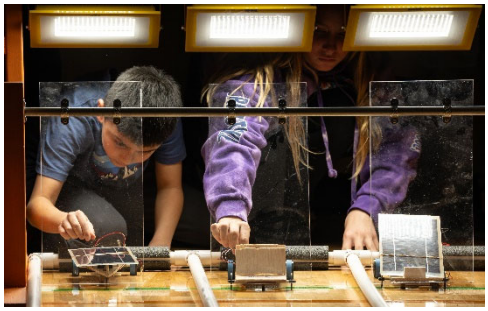
Continued support of the LES Sustainable Energy Program (SEP)

LES contributed another $2.2M to its SEP, incentivizing customers to pursue enhanced energy-efficient building practices and equipment. The 2023 installations equated to an estimated peak demand reduction of 6.0 MW, reducing LES' future need for generation resources. They also represented an estimated annual energy savings of 7.9 GWh.

Continued support of customer-owned solar projects

LES incentives, including new upfront capacity payments of approximately $225,000, supported 35 new customer-owned solar installations totaling over 500 kW_{AC}.

LPS Solar Car Challenge



In the second year of the Solar Car Challenge partnership between LES and Lincoln Public Schools (LPS), 150 students at Lux Middle School held their first solar car/EV race. This STEM program challenges sixth-grade students to design and build a solar-powered or EV car and promotes careers in energy.

Continued participation in the Climate-Smart Collaborative

LES, along with the University of Nebraska Lincoln, Lincoln Public Schools, Lancaster County and the City of Lincoln, continued participation in their Climate-Smart Collaborative.

Investigation of offering demand response aggregation services to customers

In conjunction with the DEC, LES began preparations for a project to investigate the feasibility of offering demand response aggregation services to its customers. The project, which would allow for the curtailment of auxiliary heating equipment at the LOC, will comply with Federal regulatory requirements and wholesale market protocols.

Energy Summit

LES held its annual meeting with business and community leaders. The keynote speaker was Scott Corwin, President and CEO of the American Public Power Association. He provided a broad overview of the emerging challenges and opportunities taking place in the electricity industry.

Continued LOC-TBGS pollinator projects

LES continued its support of pollinator-friendly habitat, such as areas at the LOC, TBGS and 8th & N substation, including public outreach and education efforts. In 2023, LES began preparations to expand the LOC habitat by an additional 3.5 acres. This project is expected to be completed in 2024.