

Federated upgrades the old warehouse, outside lighting & office to LEDs with CERT's grant & rebate

This spring Federated practiced what it preaches and saw the white light!

Federated upgraded its 1990s T8 fluorescent lights in the Jackson office to new LED lighting fixtures. This energy-efficiency measure is expected to save the cooperative about \$10,000 a year on its electric bill.

"We sorely needed to upgrade our Jackson office, inside and out, plus our old warehouse lighting," stated Jon Beckman, Federated's marketing specialist. "We removed the T8 fluorescent bulbs installed in 1995 and the entire fixture, including the yellowed 1970s plastic fixture covers. With the new LED fixtures we eliminated the ballasts and bulb-changing labor. We now have a nice, crisp, white, even lighting throughout the whole office. The oldest warehouse went from sodium vapor fixtures with an orange cast to white LEDs too. In the highway sign we changed out the 8-foot fluorescent bulbs to LED strips. The wallpacks on the outside of the building went from an orange cast to a white light with better coverage, along with LED fixtures installed on the light poles for the employee parking."

"Our lighting upgrade was something we wanted to do for a few years," Beckman added. "When we received a \$3,200 lighting grant from the Clean Energy Resource Teams, it gave us a timeline for 2018 completion. The Federated energy-efficiency lighting rebates, which we promote to our members, also helped; the rebates amounted to nearly \$5,000, reducing the upgrade costs to about \$31,000. Meanwhile, we expect to save 104,000 kilowatt-hours a year or about \$10,000 annually on the co-op's electric bill. This creates about a three-year payback window as our lights are on during business hours. To put this in perspective we like to see a four to six-year payback on lighting retrofit projects."

The 247 light fixtures, plus two occupancy sensors in the mail room and

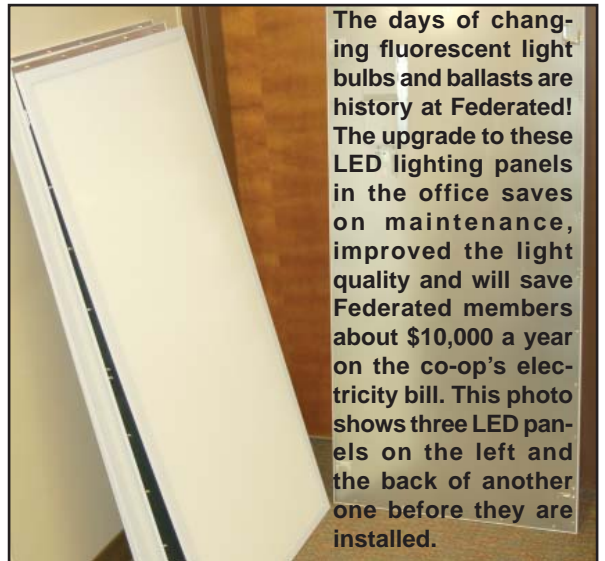


Wow! What a difference! The old lighting is on the right with an orange glow on Federated's Jackson office. The white LED lighting (on the left) provides better quality light and energy savings; check out the difference in the circles of light on the building. Federated offers LED lighting rebates to help offset the installation costs so you too can improve your lighting and decrease your electric bill.

vault, were upgraded over approximately 10 days by a local electrical contractor; this firm originally did the wiring to the building in 1970.

The office's quality of lighting improved as well. One method of measuring light is in footcandles. "The flame of one candle equals one footcandle," Beckman explained. "We had four offices that doubled their footcandles or brightness due to the LEDs. The first few days some employees thought they were too bright, but everyone adjusted and likes it now. The parking lot is also better lit at night for improved security and visibility."

Besides the energy savings for the Federated membership, Federated gained a showcase. "Now when members visit with me about LED lights, I can show them the examples



The days of changing fluorescent light bulbs and ballasts are history at Federated! The upgrade to these LED lighting panels in the office saves on maintenance, improved the light quality and will save Federated members about \$10,000 a year on the co-op's electricity bill. This photo shows three LED panels on the left and the back of another one before they are installed.

of our office, warehouse and outside lighting," Beckman said. "For members seeing is believing! I hope more members consider upgrading their business and farm lighting to LEDs and use our rebate. I'd be happy to answer any questions or mail them the rebate form, which is also found on our website www.federatedrea.coop." 