

Quality LED Neighborhood Lighting Improvements Offer Reduced Maintenance and Efficiency Incentives for Co-op.

The need for an economical, low-maintenance, dark-sky friendly neighborhood lighting solution was apparent to Jim Anderson, Tanner Electric Cooperative's Manager of Operations and Engineering. When Jim joined the team at Tanner in 2013, "We were probably rolling a truck at least once a week to go out and change out a photocell or investigate why a light wasn't working. Maintenance was an issue."

Complicating serviceability was the wide variety of lights on the system at the time. "We had a mixture of different wattages, different bulbs, different ballasts, and different lenses, three or four different manufactures as well."

While researching solutions, Jim talked with another Washington utility, Okanagan County Electric Co-op, "They told us they had done a case study for their Board of Directors. The payback was enough that they could support installing new streetlights throughout their system." David Gottula, Okanagan's General Manager, had told them about the LED AreaMax manufactured by Evluma, a local company based in the Seattle area. Working locally was important to Jim and LED would offer efficiency gains and reduced maintenance. Plus the AreaMax

offered Photocontrol Failsafe TM putting an end to time-consuming and costly photocell change outs, a big concern for Jim and his crews.

After seeing the AreaMax at a tradeshow, Jim took advantage of a promotional offer to buy 8 AreaMax for the price of 4, the Evluma 4x4. Ordering a mix of 40W and 70W units Tanner Electric was able to perform a small study on their own. "I was very strategic in where I placed these units," said Jim. One member wanted to light up an intersection close to his home, so Jim's team opted to place a 70W at that location- "a rural country road - and the feedback from him? He just couldn't believe how bright and white it was. The Dark Sky initiative is very important to [Tanner] because of where we are located. A light that put out the amount of light that the AreaMax put out brightened up the intersection and made all the residents feel safer, even those that didn't support the light originally." When a board member reported favorably to the Board of Directors on the quality of the light from the AreaMax Jim had placed at his house, Tanner knew they had a good project.

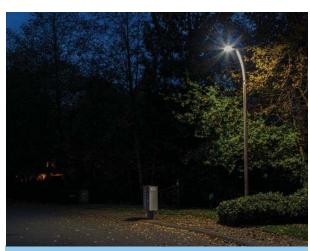
An incentive from BPA (Bonneville Power Authority) was available to Tanner Electric. "The dollar amount

Tanner Electric Co-op Case Study

that we had for conservation was large. Not huge — it wouldn't pay for the project, but it was enough for us to approach our board and General Manager for the approval to proceed." In 2015, Tanner Electric replaced over 400 fixtures varying from 100-400W with 40W AreaMax in residential areas and used 70W at intersections, "anywhere where there was a large volume of traffic." BPA rebated \$30,000.00 to Tanner Electric once the project was complete.

North Bend is an upper bedroom community of Seattle, WA. As Tanner Electric rolled out the conversion, residents left for work in the dark, with the old HPS lights on. Later that day, commuters coming home in the dark immediately noticed the new AreaMax lights. Members promptly commented on the evenness of the light and that they could see the entire sidewalk. "They could see into the dark spots that they were missing before. This area has a lot of kids. So safety is important. The quality of the lighting changed the appearance of the neighborhood, made it friendlier, safer. It is what members expressed they had wanted in the first place," said Jim.

"We rolled this project out 100%. We dedicated 2 crews for the majority of the summer. They were out there about 1 month changing out every light they could find. At the end of the project our final number was closer to 480." Once the system has paid for itself Tanner is hoping to re-evaluate their rates and pass savings back to the members.



The AreaMax's wide light pattern and soft diffused light make it a pleasing solutions for neighborhood lighting.



Evluma AreaMax luminaires save rural co-ops maintenance with a 24+ year LED life and by eliminating the need to replace photocontrols.

FOR MORE INFORMATION, CONTACT:



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