## **CASE STUDY:** Glencoe





## SEASONAL LOAD AND LOCAL RENEWABLE RESOURCE

"Our vegetable canning load is pretty significant, and we need that load covered during the three or four months when the canning facilities are operating," Glencoe Light and Power General Manager David Meyer said. "But when they're not running, they're not using electricity. CMPAS provides me with customized services based on our varying need."

As a project-based agency, CMPAS provides all members with planning and market monitoring and can develop projects without impacting the wholesale rate structure of non-participating utility members. In the case of Glencoe, the Agency developed and procured a fixed price, long-term contract that tracks their energy load needs according to the season of the year.

Also unique to Glencoe Light and Power's electricity portfolio, CMPAS incorporates local generation from a landfill gas plant. With a capacity factor of about 98 percent, the plant produces electricity nearly all the time and provides Glencoe Light and Power with more than 30 percent of its electricity.

"Landfill gas generation is an under-appreciated renewable resource," said David during a tour of the Spruce Ridge Methane Gas Plant operated by Waste Management, Inc. "It's more reliable than any other form of electric generation, and it's renewable."

Unlike a waste-to-energy power plant, which burns trash to generate electricity, landfill gas generators capture the methane produced by decaying trash in a landfill and use it to produce electricity. The Glencoe landfill has been accepting trash for decades from cities and counties as far as 80 miles away, and before the Spruce Ridge Gas Plant was built, landfill methane was flared at the site. Now, with four generating units of 800 kilowatts each for a total of 3.2 megawatts of electric generating capacity, the plant serves as a critical baseload resource that also is a renewable resource.

"Even if the nearby landfill closed tomorrow — which it won't — the Spruce Ridge Gas Plant would have decades of fuel going forward," David added.



"Spruce Ridge has a higher capacity factor than coal, wind, or solar," commented David. "Having a baseload resource with greater availability than a coal or gas plant, or wind or solar generation, is a huge benefit to the city and its customers."

"Being in a partial requirements agency like CMPAS is the best option for Glencoe," David continued. "It's like an all-you-can-eat buffet — no two people will have the same appetite. You can take what you need and leave what you don't. With public power utilities having very diverse needs for their power supply, the ability to choose the power contracts would best suit your utility is a great option."