

# COGENERATION MEANS LOWER ENERGY COSTS FOR MUNSON



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## **CUSTOMER**

Munson Medical Center

## **LOCATION**

Traverse City, Michigan

## **CONTRACT BUDGET**

\$413,800

## **START DATE**

September 2021

## **COMPLETION DATE**

October 2022

## **PARTNERS**

TRANE, Michigan CAT

## **SUMMARY**

- Installation of primary voltage 2.5 MW Cogeneration, paralleling switchgear, generator metering and utility metering
- Project will provide two-thirds of Munson Medical Center's power consumption

## **OVERVIEW**

The largest hospital in northern Michigan, Munson Medical Center continues to grow and improve, winning numerous national awards. Windemuller worked with TRANE and Michigan CAT on this cogeneration project to help the hospital save on energy costs.

Cogeneration helps the hospital save money by using an engine generator to produce electricity, reducing peak demand needs which reduces operating costs. Then, by using byproduct (waste) heat, it produces steam for their steam plant, further reducing costs.

## **CHALLENGE**

The biggest challenge on this technical project was locating the Consumers Energy primary and redundant underground feeds and intercepting them without disruption. Designing a way to excavate and isolate each feed in a very small footprint – without downtime – would be the key to installation.

## **SOLUTIONS**

First we located the Consumers Energy main feed, which was found to be in the same trench as the hospital's alternate circuit. We worked to separate those two circuits without interrupting service. Windemuller then switched the hospital over to its alternate feed so that we could intercept the primary feed. The main feed was then rerouted through the paralleling switchgear, where the cogeneration system could contribute to the hospital's power supply. From there, the power was ready to be sent to the hospital's medium voltage power system and distributed across their campus. Finally, after testing of the Cogen system, the hospital was restored to its new primary power source, and now benefits from the cogeneration system.



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