

CASE STUDY

Golden Valley Electric Association (GVEA)

Fairbanks, Alaska, USA



THE BACKGROUND

Golden Valley Electric Association (GVEA) is a utility based in the interior of Alaska, dedicated to exploring renewable energy opportunities, including wind energy assessments. Previously for remote applications, they used custom, non-portable solar power systems that required on-site assembly, many revisions and human resources to install.

THE CHALLENGE

When tasked with powering ZX wind LiDAR for a remote wind energy assessment, GVEA faced unique challenges due to its location and extreme weather conditions. Traditional off-grid power solutions such as solar and diesel generators had proven inefficient and significant maintenance, leading GVEA to seek a more robust, portable, and purpose-built solution. The primary challenge was finding a reliable, cost-effective, autonomous power system to operate the wind LiDAR that could run for months at a time without any down time. The power supply needed to perform in remote, hard to reach locations under harsh environmental conditions, including significant snowfall and extreme cold – Temperatures hit as low as -40°F.

CUSTOMER TESTIMONIAL

"We are delighted to have experienced no downtime whatsoever since the LiDAR and power trailer were installed. Alaska presents unique weather challenges, and it's great to have technology that operates autonomously in such conditions. At GVEA we are excited to harness more renewable resources to provide sustainable power to our customers"

THE SOLUTION

After evaluating multiple vendor proposals, GVEA selected MOBISMART's [HYBRID Solar + Fuel Clean Power Trailer for ZX 300 Wind LiDAR](#) for its well-documented, purpose-built solution designed to plug-n-play wind LiDAR operation 24/7.

The MOBISUN trailer met GVEA's requirements, providing an efficient, cost-effective solution with zero downtime. Its well thought out design simplicity reduced the uncertainties of deployment and operation.

THE OUTCOME

The MOBISUN HYBRID Solar + Fuel Cell Power Trailer has proven to be a valuable solution for GVEA's remote power needs. The trailer's comprehensive design for wind LiDAR operations and ease of deployment have significantly improved the efficiency and reliability of GVEA's wind energy assessment campaign.

While there were challenges with remote communications due to poor cellular signal in the area, MOBISMART's proactive support and commitment to providing solutions, GVEA was able to access remote monitoring to determine fuel levels, battery voltages and even see the environmental conditions with the onboard IP camera. This combined with the trailer's overall performance proved MOBISMART as a dependable partner and choice for GVEA's remote energy needs. For GVEA, the MOBISUN trailer represents a critical step forward in advancing renewable energy assessments in Alaska's harsh and remote environments.