

City of Grand Island, Nebraska Reduces Overhead Costs Using Digital, Subscription-Based OMS Application



Case Study

Single Reporting of **Outage Information**

Easily Integrated with Other GIUD Applications and Systems

CHALLENGE

Grand Island Utility District (GIUD) looked to replace its homegrown outage management solution (OMS) and expand operational capabilities.

GIUD also wanted to avoid costly infrastructure and hardware maintenance expenditures, as well as the ongoing costs of hardware that needed to be replaced every five years.

Lastly, GIUD needed to ensure that the new OMS could be easily integrated with existing systems.

SOLUTION

GIUD deployed OSI's **Electra OMS™** in the cloud—a convenient, subscription-based, full-featured application.

VALUE CREATED

- Subscription system delivers advanced software application, providing affordable, reliable power to 27K customers.
- Saves significant time and costs by not having to manage and maintain on-premise solution.
- Increases overall efficiency, enabling GIUD to focus on serving its customers.



Introduction

Located in south-central Nebraska, GIUD has provided electrical and water services to the city of Grand Island for nearly 150 years. GIUD is owned and controlled by its citizens, and is committed to providing affordable and reliable electrical service to 27,000 customers, and water distribution service to 17,000 customers. Production includes the use of coal, gas, and renewable energies, including solar, wind, and hydro, with a summer peak demand exceeding 170 megawatts. GIUD serves its load with a combination of local generation and power purchase agreements from outside generators via distribution substations on a 115-kV transmission loop.

Sample Cloud Architecture

Key features:

- High-availability redundant pair OSI application VMs in primary cloud data center location
- Local redundancy in primary and backup control centers



Low cost

OSI Outage Management System

Electra OMS is a next-generation, state-of-the-art outage management solution that empowers utilities to better manage all areas of their outage response times. It keeps customers, management, and regulators well informed about the scope, status, and forecast of restoration efforts while improving overall system reliability. **Electra OMS** equips utilities with a solution that enables them to efficiently and effectively assign work to field technicians and improve field technician utilization and productivity. At GIUD, the core OMS application is hosted as a service: managed and maintained by OSI in the cloud while GIUD retains administrative oversight of the application and access for their operators. Operator workstations are housed at GIUD, providing dedicated, high-performance, full client access to the OMS application for their operators.

The hosted OMS application integrates with other GIUD applications and systems, including an outage data warehouse at GIUD, to provide all outage information for reporting purposes as well as the SCADA and AMI systems.

The valuable functions of **Electra OMS** include:

- Advanced situational awareness and display capabilities
- Customer outage portal and communication
- Advanced AMI features
- Mobile field crew app
- Hazard management
- Advanced ETR calculation
- Storm/operations events
- Damage assessment
- Planned outage management
- Integration with switch order management
- Quality assurance process



Conclusion

By setting up its OMS system in the cloud and adopting the subscription model, GIUD is benefiting in terms of cost, reduced administrative burden, performance, reliability, availability and security. The full-featured OSI **Electra OMS** provides the flexibility, scalability, and ease of operation to exceed GIUD's needs. With the ability to add and interface additional application modules through **Electra OMS**, GIUD's new system opens numerous future possibilities. This hosted OMS will reduce total cost of ownership, increase availability, and offer continued reliability for the city of Grand Island.

As a core company principle, OSI is committed to innovation, providing customers with the best product features and technology. OSI is continuously working with customers like GIUD to design cloud systems that meet utility needs—whether that is a fully hosted system or hybrid (partial onsite and partial hosted). OSI is also expanding cloud support to all product areas, including its advanced distribution management system (ADMS) suite, distributed energy resource management system (DERMS), and advanced analytics using artificial intelligence, among others.





About Open Systems International

Open Systems International (OSI)—headquartered in Minneapolis, Minnesota provides open, state-of-the-art and high-performance automation solutions to utilities worldwide. OSI's solutions empower its users to meet their operational challenges, day in and day out, with unsurpassed reliability and a minimal cost of technology ownership and maintenance.

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