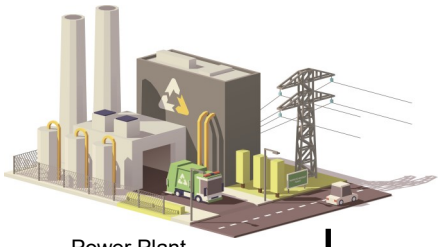
Feeder Optimization Solution

Client Remote

Secure Socket Layer (SSL) protects data exchanged between clients and servers. Supports industry-standard Cyber Security.

Field Laptops

Operator Mobile Devices



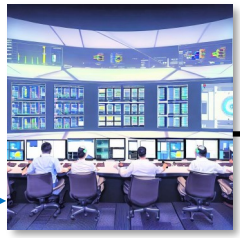
Power Plant

HONI

IESO

Telemetry, Dispatch, PF/VAR Control.

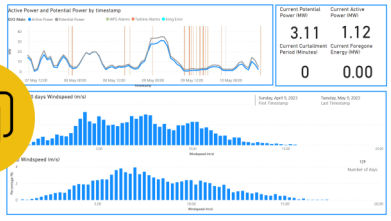
System visualizations, secure operations and alarm notifications.



Control Room

ESAC CloudSCADA

Site Data



Business analytics service Providing interactive visualizations, reports and business intelligence capabilities.

Automated Daily and Monthly Reports

PowerBI Service

Weather Data

Additional Data

Revenue

Transformer Station

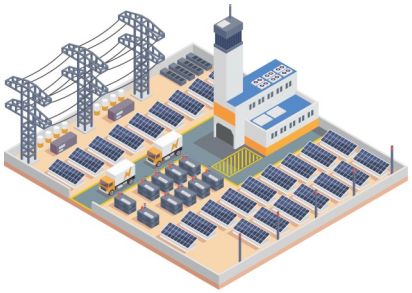
Communications and Control

Power Distribution

BESS

EV Charging

Solar, Wind & Hydro



Distribution Station

I. Feeder Evaluation and Optimization

- Conduct a detailed evaluation of the existing feeder to identify areas that need optimization.
- Identify the current power generation capacity and the expected future load demand for municipalities, facilities like hospitals and schools.
- Determine the capacity and suitability of the existing infrastructure for accommodating new renewable energy sources for these facilities.
- Identify bottlenecks and areas of inefficiency in the existing feeder infrastructure for these facilities.

II. Renewable Energy System Optimization

- Develop a comprehensive plan to optimize the integration of BESS, EV charging, solar, wind & hydro, distribution station, transformer station, power plant and ESAC control room for municipalities, facilities like hospitals and schools.
- Evaluate the existing renewable energy infrastructure to identify areas for improvement and expansion to cater to the needs of these facilities.
- Optimize the BESS system by adding new battery banks and ensuring efficient charging and discharging cycles.
- Optimize the EV charging system by installing new charging stations and implementing a dynamic charging algorithm.
- Optimize the solar, wind & hydro power generation system by installing new panels and turbines and upgrading the existing equipment.

III. Distribution and Transmission Optimization

- Optimize the distribution station and transformer station to ensure efficient power distribution and transmission for these facilities.
- Upgrade the existing transformers and other equipment to accommodate the increased load demand for these facilities.
- Install new stations where required to improve the efficiency of power transmission.

IV. ESAC Control Room Integration

- Develop a comprehensive plan to integrate the power plant with ESAC CloudSCADA and reporting system for these facilities.
- Install sensors and other monitoring equipment to enable real-time monitoring of the power system.
- Implement integrated systems to enable remote monitoring and control of the entire facilities electrical power.
- Ensure alarms and notifications are set up to provide early warning of any issues or potential facility or distribution feeder problems.

V. Regular Evaluation and Reporting

- Regularly evaluate the system to identify areas for improvement and optimization of system's performance for facilities.
- Conduct periodic audits of the entire system to identify any bottlenecks and inefficiencies.
- Generate detailed reports on system performance to enable efficient operations and management of the entire feeder system for these facilities.
- Continuously monitor and evaluate the system to identify potential opportunities for expansion and optimization.