Solution Overview

Turn key standards-based end-to-end smart grid

Nexgrid's full suite of products include smart grid network infrastructure, software, and intelligent devices necessary for seamless electric, water and gas metering, street light management, load control, outage and restoration management, disconnects/re-connects, smart home, two-way messaging, and real-time pricing.

Communication Infrastructure

Nexgrid's ecoNet™ SL utilizes street lights to create a robust wireless mesh network based on IEEE 802.11 and 802.15.4 protocols. This broadband based infrastructure provides the platform for multiple types that utilize the same communication method. In addition to providing the broad band smart grid infrastructure, ecoNet SL's manage and monitor the street light that its attached to. The ecoNet SL monitors current and light levels of the street light providing a street light management system for the Utility. The wide array of uses and deployment for the ecoNet SL means that the network can plug-and-play with future devices on a backbone that is based on the most stable technology standards available today.

Intelligent Devices

Devices include:
- Load Control switch
- Thermostat
- Street light control module
- HAN display
- Smart home devices
- Over-the-air upgradable

- Wireless real-time communication
- Remote management and control

- Device monitoring
- Self provisioning

intelaMetering (Electric, Water, Gas)

Electric metering features include:
- Wireless real-time communication
- Net-Metering (Received/Delivered registers)
- Instantaneous outage reporting
- Tamper and disconnect alerting
- On board memory (180 days)
- Over-the-air upgradable
- Remote Disconnect/Reconnect

Water / Gas metering features include:
- Wireless communication
- Instantaneous tamper alerting
- Leak and disconnect alerting
- Over-the-air upgradable

Enterprise Management Software

ecoOne
Energy Management System

Meter Data Management
- Water, Gas and Electric Metering
- Asset mapping and monitoring
- Paginated reporting
- Live meter reads
- Customer portal management

Load Management
- Load Event scheduling and Status
- Asset Mapping
- Paginated reporting
- Remote management and control
- Historical Event Graphing

Street Light Management
- Streetlight control and scheduling
- Maintenance reporting
- Asset mapping
- Remote management and control
- Integrated public safety alerting

Outage Management
- Home, transformer, circuit, and substation outage reporting
- Asset outage mapping
- Paginated Reporting
- Alerts to email and SMS
- Historical outage data

Network Management
- Monitoring of all smart grid
- Asset mapping
- Paginated reporting
- Live status reporting
- Alerts to email and SMS

Customer Portal

intelahome™

intelaHome® is a simple to use web based portal designed for consumers to manage and monitor their home and/or office's energy and smart home products. In addition, it is a powerful energy auditing system that provides real-time information regarding electric, water, and gas usage. For the first time, customers can control costs and conserve energy through an online management tool that is as easy-to-use as online banking.

Energy Data Head-End Cluster

Nexgrid's EDS is an advanced data management system manager for smart grid solutions, enabling Utilities to retrieve accurate and historical information about the status, security, and performance of the end devices.

- Minimizes future obsolescence: compatible with industry leaders and standards groups to assure support for a wide range of future devices.
- Supports open system industry standards for integration to third party software. XML, SOAP, Web Services, MultiSpeak and CIM.
- Automatic memory management, statistics, and data recovery advisor, automatic backups, snapback capable, hot failover with automatic direction to the standby site within seconds.
- Provides continuous discovery for Level 2–Level 3, faults, device configuration and management, auditing health and performance, remote firmware upgrades, security, and device interoperability.
- Network management: Monitors network health, performance and security; performs preventative measures to the WAN and LAN.
- Multi-utility service management: Offers management applications for Smart Metering (electric, gas, water), Grid Modernization, Demand Response (ZigBee, 802.11n), as well as future smart grid applications.

nexgrid
innovative smart grid solutions