

# The IUE<sup>®</sup> System— A Comprehensive Suite of Energy Management Tools

## Enhance your energy management with IUE<sup>®</sup>

Achieving system interoperability has been a long and tiresome battle for facilities owners and managers. Fortunately, industry standards such as BACnet<sup>®</sup>, LonWorks<sup>®</sup> and XML have recently ended a major part of this problem, however true enterprise-wide energy management requires more than open standards to be successful—particularly with so many legacy systems still in operation.

Today, energy-minded organizations are looking for the best ways to leverage the various open protocols through the use of standards-based software tools and systems.

WebGen Systems delivers this leverage through a suite of software modules called IUE (Intelligent Use of Energy). Designed for both facilities management and building operations, these modules comprise a set of precise forecasting tools for measuring and optimizing energy consumption through the use of real-time data. As a leading Enterprise Energy Management System, IUE provides all the data collection and visualization in a comprehensive interface that is intuitively designed for every level of usability.

## The IUE Suite<sup>™</sup>

Designed with a holistic approach to energy management, the IUE System places all matters linked with energy consumption under a single umbrella while each of the six IUE modules is dedicated to addressing a particular set of energy-related concerns. This maximizes efficiency across the organization; facilities managers are provided the best means to streamline BMS-related tasks while accounting personnel use the same system and data for financial reporting, billing, and auditing. The six modules are *IUE Trend<sup>™</sup>*, *IUE Finance<sup>™</sup>*, *IUE Agent<sup>™</sup>*, *IUE Demand Response<sup>™</sup>*, *IUE D-Gen<sup>™</sup>*, and *IUE Critical Response<sup>™</sup>*. Combined in a single easy-to-use software suite, they deliver the most effective means to ensure tenant comfort with minimum energy usage.

## IUE Trend<sup>™</sup>

Enterprise-wide energy management begins with connectivity and data flow. *IUE Trend* provides this basis through a single gateway to your building management system (BMS) and/or meter. This non-intrusive and secure connection allows *IUE Trend* to be easily integrated for transport of any system protocol because the data is ultimately transferred as standard packets of BACnet<sup>®</sup> or XML. Though it is the most basic part of the IUE System, this underlying tool delivers many functional advantages such as monitoring, trending, alarming, graphing, and analysis.

## IUE Finance<sup>™</sup>

Adding the *IUE Finance* module instantly turns energy data into financial data. Unlike the sort achieved through conventional data “batching”, this tool delivers the most accurate information possible because data arrives in real-time from any combination of buildings and meters. Moreover, the module combines these parameters with other real-time data such as current weather forecasts and up-to-the-minute price feeds. This allows managers a greater degree of flexibility and control in auditing utility bills; verifying performance contracts; tracking performance contractors against a baseline; comparing energy costs across buildings on a normalized monthly basis; and gauging energy spent against a budget, among others.

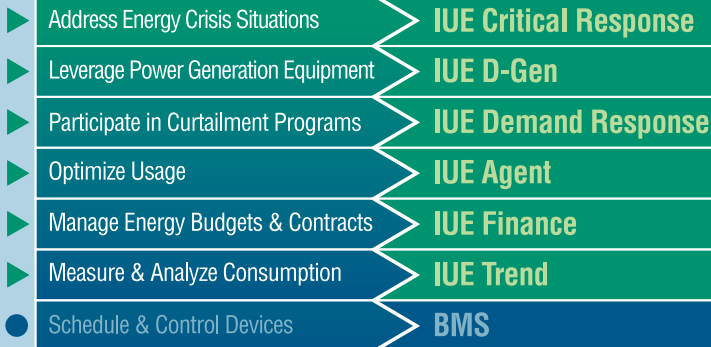
## Benefits

- Achieve energy savings of 12% or more annually
- Measure and optimize energy consumption in real-time
- Apply industry-standard energy management strategies to any installed BMS
- Leverage data from precise forecasting tools
- Maximize Peak Load Avoidance
- Ensure Permanent Load Reduction
- Realize payback in as little as 12 to 18 months
- Provide facilities managers a means to streamline BMS-related tasks
- Compare dissimilar BMS and meter data across building portfolios or campuses
- Validate utility bills
- Normalize bills to calendar months and compare across buildings
- Reduce overtime and travel costs with remote-access diagnostics and controls
- Perform measurement and validation audits on any energy efficiency project
- Fulfill emergency demand response curtailment requests
- Monitor all your energy programs under one umbrella

**WebGen**  
Systems<sup>®</sup>

*Moving Energy to Your Bottom Line<sup>™</sup>*

## Energy Management Goals and the IUE Suite



### IUE Agent™

The most environmentally sound energy source is conservation. This is the calling card of *IUE Agent*. Its function is to successfully and automatically apply energy management strategies to any building with or without a BMS—including those with the most “proprietary” legacy systems. In short, this tool contains the industry’s best practices, such as load rotation, supply air temperature (SAT) reset, pre-cooling, and others. And since it applies these actions based on real-time data (such as the current weather conditions), *IUE Agent* delivers the minute-by-minute monitoring and adjustments needed to maximize tenant comfort while minimizing energy consumption.

### IUE Demand Response™

Demand response programs can bring tremendous savings, but they also represent a risk to the organization. With *IUE Demand Response*, that risk approaches zero since curtailment actions no longer rely on periodic manual intervention but precise data optimized by the system. The ability to compare disparate BMS data from any meter, building portfolio, or campus along with real-time environmental and economic data (e.g., energy price feeds) gives this tool its power to deliver on these curtailment contracts. In addition to providing the facilities management team confidence to participate in these programs, *IUE Demand Response* automatically manages the demand response calls from the utility or the Independent System Operator (ISO), so each contract is fulfilled in the most accurate and time-efficient manner. At the same time, *IUE Demand Response* maintains the highest comfort across all buildings by devising the most optimal curtailment regimen based on the most current data.

### IUE D-Gen™

*IUE D-Gen* was designed for organizations that have power generation equipment integrated within their portfolio. This tool works in conjunction with *IUE Agent* to give distributed generation facilities an internal monitoring and control system that is based on real-time data rather than the traditional fixed processes. The greatest benefit delivered by *IUE D-Gen* is the ability to manage consumption to such a degree that the excess energy can be sold back to the grid. With the addition of this module, the IUE System is not only an energy-savings device but also a new source of revenue for the organization.

### IUE Critical Response™

During brownouts or blackouts, *IUE Critical Response* helps organizations manage the crisis by consolidating and monitoring vital parameters, such as fuel levels and UPS charging activities. This tool informs and empowers energy managers during times that might otherwise render the entire organization blind. Under regional or national emergencies, *IUE Critical Response* provides a status picture that allows managers to make crucial operational decisions while the information and alarms provided enable them to make decisions that optimize the use of their underprovided energy resources. As a result, all critical functions maintain priority as the various areas of the building portfolio are precisely apportioned over the duration of the emergency.

*The IUE System is a tiered approach to Enterprise Energy Management that adds energy-savings enhancements in a modular way. With IUE Trend as the foundation, and each module adding to the previous one, building owners and managers are allowed to optimize energy use to meet their specific EEM goals.*

### About WebGen Systems, Inc.

WebGen Systems provides advanced software for energy conservation and control in commercial buildings. We combine the highest level of industry expertise with a reliable suite of open-protocol software tools called IUE®, which provides real-time command of energy use to generate savings. Our system connects all aspects of building energy management to automatically measure, monitor, and control energy consumption *building by building, system by system, meter by meter, and device by device*. In this way, we offer the most effective Enterprise Energy Management solution on the market today.



*Moving Energy to Your Bottom Line™*

#### For more information contact us at:

WebGen Systems, Inc  
Attention: Sales Department  
41 Linskey Way  
Cambridge, MA 02142

Tel. 617 349 0724  
Email: [sales@webgensystems.com](mailto:sales@webgensystems.com)  
URL: [www.webgensystems.com](http://www.webgensystems.com)

**Moving Energy to Your Bottom Line™**