

Achieving New Levels of Efficiency with Monitoring-Based Commissioning (MBCx)

Reduce energy costs and improve operations

As a facilities manager, you know that most buildings - even the newest ones - don't always operate at maximum efficiency. You face many challenges—multiple facilities of various vintages, disparate energy management systems that refuse to integrate, a chronic shortage of trained resources, and a team that is constantly derailed fighting fires rather than proactively managing energy spend.

BETTER ENERGY MANAGEMENT

To help you meet these challenges, EnerNOC brings you Monitoring-Based Commissioning (MBCx), our ground-breaking energy management solution. With MBCx, you can gain visibility into your real time energy data and develop a prioritized list of no-cost and low-cost energy savings opportunities.

MBCx combines advanced metering technology with sophisticated analysis software to provide actionable insights. It seamlessly integrates data from disparate energy management systems and provides a clear window into your overall energy use. Our advanced filtering technology

processes all of your energy-related data to identify potential opportunities for efficiency. Our experienced energy analysts then review this data to provide a set of clear and actionable recommendations that can help you reduce energy consumption, prioritize maintenance issues, and enhance occupant comfort.

We help you focus your essential resources on implementing the recommendations that provide the greatest value. And we help you unlock the full energy efficiency potential of your facilities.

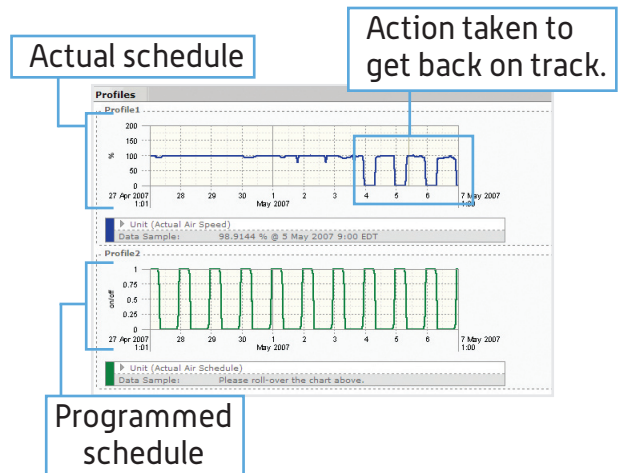
“With EnerNOC’s service, we see anomalies, differentials, energy consumption curves and other information that lets us identify buildings and areas that aren’t working efficiently – so we can reduce our energy use even more.”

— Luigi Marcone, Western Connecticut State University

DEVELOPING YOUR ENERGY MANAGEMENT ROADMAP

Monitoring-Based Commissioning can help you develop a prioritized energy management roadmap. With the power of real time data from MBCx, our team of energy analysts will deliver the following services:

- Baseline**
 Establish occupancy and weather dependent baseline energy models on a per-building basis, providing the basis for solid ROI analysis for a broad spectrum of efficiency activities.
- Identify**
 Combing through thousands of five-minute time stamp data, our software helps energy analysts identify a list of no cost and low-cost energy savings opportunities.
- Size**
 Each savings opportunity is quantified and analyzed for potential impact and return on investment.
- Prioritize & Reduce**
 Maximize the value of your resources and efforts by using an economically prioritized list of activities in a way that fits your operations and maintenance schedules.
- Record, Monitor and Verify**
 Record your energy efficiency efforts and monitor the savings on a near real time basis.



MAXIMIZE EFFICIENCY WITH A LONG TERM SOLUTION

Monitoring-Based Commissioning helps you to continually address inefficient facilities, an over-burdened staff, and the nagging frustration that your buildings are drifting out of calibration. And unlike other programs that are one-time, MBCx will keep on giving your team the data and analysis they need. As building systems change, user requirements shift, or energy economics fluctuate, you can be confident that EnerNOC is keeping your facilities efficient and green—now and far into the future.

TAKE THE NEXT STEP TOWARD GREATER EFFICIENCY

Find out more about how Monitoring-Based Commissioning can bring new efficiency to your energy management efforts. Call (617) 532-2102 or email info@enernoc.com.

BOOST SAVINGS AND VALUE VIA EFFICIENT ENERGY MANAGEMENT

Monitoring-Based Commissioning creates tangible value and offers a quick, measurable return. For example, during the implementation of MBCx at a flagship customer location, EnerNOC analysts initially identified more than 46 distinct, data-driven, proactive measures with total avoided costs of more than \$380,000, many of which the customer has begun to implement. And the savings continue to add up. As seasons, schedules, and occupational patterns change, EnerNOC and MBCx keep uncovering additional value and providing new recommendations.

FREQUENTLY ASKED QUESTIONS:

METERING

Q: I'm not an energy expert—how can I interpret all the information MBCx offers?

A: As a standard offering, EnerNOC delivers a monthly ScoreCard that clearly details site energy use. Using charts and graphs, it shows baselines and benchmarks, comparisons to previous years, percent of usage for different metering locations, and other key metrics—all easily reviewed and interpreted by a facility manager. EnerNOC will only make recommendations -- how you choose to implement the savings is up to you.

Q: How can we take advantage of additional metering?

A: In addition to the main electric metering connected under EnerNOC demand response (DR) programs, MBCx customers typically have sub-metering installed. You can get a near real time look at your comprehensive energy use, whether we are metering individual buildings in a campus setting, benchmarking different departments, or monitoring equipment.

CONNECTIVITY

Q: How do you connect to my Building Management System (BMS)?

A: We install a gateway device that enables MBCx to collect data from most BMS systems via BACnet open protocol (developed by ASHRAE).

Q: What if my BMS is not at a level that supports BACnet?

A: Most BMSs today can be upgraded to support BACnet at either the field panel level or the operator workstation. In certain cases we can connect directly to legacy BMS systems.

Q: How do you connect to our intranet?

A: EnerNOC will set up a secure VPN connection into your intranet, taking advantage of all firewall and security access technologies. You simply provide static IP addresses at the locations of the gateway devices to enable MBCx to collect your energy information.

REPORTING AND DELIVERABLES

Q: What do I get for the monthly fee?

A: Each month, we deliver a ScoreCard presenting a detailed analysis of your entire portfolio of electrical data. Included

in the ScoreCard is a section that outlines the savings of measures MBCx has identified to date. Also included in the ScoreCard is a section listing all the opportunities that have been identified using the combination of automatic filtering of the data and EnerNOC's expert analysis. EnerNOC also stores all of your data and gives you complete access (via the Internet) to all your data via PowerTrak, the application that hosts MBCx.

Q: Are other reports available?

A: MBCx offers a selection of predefined reports ranging from billing reports, cost/usage reports, load factor, and load duration curve.

Q: We need our data presented in a certain way and custom reports. Is that possible?

A: We aim to cover most reporting structures with our standard reports. However, custom reports are available for a fee. Any charges for creating custom reports will depend on the nature of the report.

TERMS

Q: How much does MBCx cost? What is the pricing model?

A: The cost depends largely on your facility's BMS, equipment type, point counts, metering requirements, and other specifics of your site. After a site survey and connectivity discussion, we can create a proposal that details costs and payback. The technology costs for the solution are high and difficult to justify unless you spend \$1 million or more a year on energy. Our contract model uses a shared savings approach, where we guarantee a level of identified savings, and charge you a monthly fee based on half the savings. If we don't demonstrate the savings for you, you can exit the contract after 12 months.

Q: How does EnerNOC make money?

A: EnerNOC will require a three year contract to make money. EnerNOC bears the bulk of the technology costs upfront, and then hopes to earn that money back as the contract continues.

Q: Are there no out-of-pocket ways to get this service?

A: The ideal contract structure is to use a portion of your EnerNOC demand response (DR) revenue to pay for the ongoing monthly service fee. This payment can be structured so EnerNOC simply keeps a greater portion of the revenue stream, ultimately making your DR revenue go even further.

ABOUT ENERNOC

EnerNOC, Inc. is a leading developer and provider of clean and intelligent energy solutions for commercial, institutional, and industrial customers, as well as electric power grid operators and utilities. EnerNOC's technology-enabled demand response and energy management solutions help optimize the balance of electric supply and demand. The Company uses its Network Operations Center, or NOC, to remotely manage and reduce electricity consumption across a network of commercial, institutional, and industrial customer sites and make demand response capacity and energy available to grid operators and utilities on demand. EnerNOC's energy efficiency offering also allows commercial customers to permanently reduce their energy usage and cut costs. For more information visit www.enernoc.com.