

Energy EMC, Inc.

Smart Systems . . . Smart Future!

Intelligent Solutions For Building Controls



**Green Jobs Open House
Alameda County Joint Apprenticeship Training Center
Friday, May 29, 2009**

New IBEW Contractor Perspective

A little history first:

- 29 years in the Controls/System Integrator Market deploying solutions
- C-10 electrical Contractor since 1993
- Intermediate Size Company, “we are a hybrid”
- Work with the existing building market to upgrade to **Smart Buildings**
- Projects demand dynamic knowledgeable field staffing
- Field personnel need to understand PCs, networks, controls, electrical to heating and cooling mechanical systems
- There is (was?) no formal well rounded educational program to be a “Controls/System Integrator”

Why did Energy ETC join the IBEW?

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California Long Term Energy Efficiency Strategic Plan:

Commercial buildings will be put on a path to zero net energy by 2030 for all new and a substantial proportion of existing buildings.

Three Interrelated Strategies will be employed to achieve this:

1. *Codes and Standards: Adopt aggressive and progressive minimum energy codes and standards for buildings and plug loads, effective code compliance and enforcement, and parallel, tiered voluntary energy efficiency standards.*
2. *Access to Information: Align commercial building benchmarking, advanced metering infrastructure, energy and carbon labeling, and operations and maintenance practices to increase energy efficiency.*
3. *Financing: Target financing and incentives to support meeting commercial sector goals.*

Achieving Maximum Energy Savings in California for 2009 and Beyond

Obama Announces Over \$467 Million in Recovery Act Funding for Geothermal and Solar Energy Projects

US Department of Energy

Smart Grid to Grow 21 Percent a Year to \$17 Billion by 2014

The New York Times

Green Energy Projects Promise to Create Three Times as Many Jobs as Fossil Fuel Investments

FlexYourPower.org

Obama Administration Boosts Stimulus For Smart Grid Programs to \$200 Million From \$20 Million

The Wall Street Journal

Cisco: “Smart grid will be 1,000 times size of the Web”

Silicon Valley / San Jose Business Journal

World Business Council for Sustainable Development

Four year study released in Geneva, April 2009

New modeling by the WBCSD shows how energy use in buildings can be cut by 60 percent by 2050 – essential to meeting global climate change targets – but this will require immediate action to transform the building sector.

One of the key barriers to success from this report is:

“Shortages of skilled workers could limit the capacity to carry out wide-scale retrofitting, especially integrating the different aspects of energy-efficient renovation.”

NJATC Green Jobs Curriculum for the Electrical Industry

- Safe Practices
- Building Automation
- Programmable Logic Controllers
- Photovoltaics
- Wind Turbines
- Fuel Cells
- Lighting Controls
- Energy Efficiency
- Demand Limiting

So.....

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Together, We Are The Solution

