

DOCKETED

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Reducing electricity usage for three phase air conditioning systems

I posted a comment during Webex for meeting:

My company represents a family of alternating current three phase motor controllers that reduce electricity usage for three phase air conditioning and refrigeration.

These motor controllers would reduce electricity usage and provide summer demand reduction with Demand Management and provide additional capacity for substations systems.

I would like your assistance to reach appropriate person(s) to discuss.

I

Additional submitted attachment is included below.

**Demand Management is now available And More
Financially Attractive With Demand Response
needs reduced for California Power Companies and
their customers.**



**No work is required once our Motor Controllers are
installed. Summer season HVAC usage will include
these saving benefits for Customers and Power
Companies!**

Part I - Overview

As each summer season nears, U.S. electricity providers shudder.

Huge increases for electricity occur as their customers, especially commercial and industrial, turn on their air conditioning and HVAC (Heating, Ventilation and Air Conditioning) systems.

Few U.S. electricity providers do not have significant "Demand Response" efforts on going to help ensure that their customers' electricity needs are met.

These demand response efforts have customer and power companies contract for the companies' to commit to short term lead time, 2 hour, and or longer term lead time, 10 hours or more, adjustments of their electricity usage.

Both the companies and the power companies must take agreed to actions for these reductions to be in effect.

Now, that has all changed.

What if each three phase alternating current air conditioning and or HVAC or Roof Top Unit (RTU), contributed to lower demand just by being turned on for each approaching summer season?

The technology and capability for this has been in use successfully worldwide for ten (10) years and while not known in the U.S., is available now.

With the "Intelligent Motor Controllers" represented by Owl Energy Technologies, each installed air conditioning, HVAC and or RTU system will deliver saving of 25% just by being turned on.

Now, the first incentive for companies to consider these capabilities is their reduced electricity bills.

In addition, many power companies provide rebates based upon KWh reductions for these type of motors, decreases provided by these motor controllers.

A known rebate example is \$0.16 for each KWh reduced, providing a Return on Investment (ROI) that could pay for the motor controllers in one summer season.

Demand Management is now more available and economical and Demand Response needs are Reduced

Part Two - Set Up

For each Air conditioning/HVAC and or RTU customer candidate:

Motor controllers are sized by motor label Voltage, HP, amps and KW and type of compressor: reciprocating, scroll, etc.

Prior to motor controller installation, measurements can be taken for existing motor Start-up spike and KW usage.

Motor controllers are installed between power supply and the motor. The installation is very straight forward and would be accelerated with pre-installation review and experience. With experience and pre-installation planning: 3 to 4 hours or less.

Measurements can be taken for motor Start-up spike and KW usage with the motor controller and compared to provide the expected Demand Reduction contribution.

Installations, with weather conditions considerations, can be done any time of year.

When the motor controlled air conditioning, HVAC and or RTU system are made operational for each summer season, the anticipated and measured Demand Reductions will be seen.

No other work or efforts are required by either the customer, Con Ed or the local power company.

For Con Ed or the local power company, as installations are completed, a table of old and new Demands can be created to manage Demand Reduction needs for each summer season.

Our "Intelligent Motor Controllers" provide Soft Start and Energy Optimizing and include Variable Voltage Drive (VVD) capabilities.

These motor controllers will provide 25% electricity usage reductions for three phase Refrigeration and Air Conditioning, HVAC, commercial/industrial New York State power company customers.



Size 3
Up to 400 Amps

Size 2
Up to 200 Amps

Size 1
Up to 100 Amps