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## GE Energy / Bently-Nevada Validates Energy Condition Monitoring Technology

GE Energy <u>announced</u> today that, having recognized Energy Condition Monitoring technology has reached an important threshold of maturity, they are entering the market with the brand name AnomAlert® . Many of you have asked questions about what this means to the industry and Industrial EKG. The following discussion presents our interpretation of this market development.

#### What is energy condition monitoring?

The market convergence of energy metering, power quality monitoring, and machinery condition monitoring is referred to as Energy Condition Monitoring. It encompasses the general methodology of making electrical measurements (current & voltage) and deriving various indicators of electrical and mechanical health in industrial machinery and power distribution systems. Particularly for motor-driven equipment, there are distinct and significant advantages to this methodology over vibration and other condition monitoring technologies. Energy Condition Monitoring is sometimes confused with MCSA, which is a distinctly different methodology based on electrical current measurement.

#### What is AnomAlert?

AnomAlert is GE's brand name for the instrument manufactured by Artesis and resold by IEKG and other distributors around the world.

### Are GE/Bently and Industrial EKG selling the same thing?

On the hardware side, GE, Artesis and Industrial EKG all market a functionally identical instrument. The GE version of the instrument is recognizable by the AnomAlert branding and unique cosmetic appearance; Artesis and Industrial EKG continue to use the MCM brand.

The offerings diverge when it comes to server and client software, although all the offerings consist of two parts: a database server, and a data viewing and analysis tool. (The database holds historical trend data and other information that is not maintained in the instrument).

Unlike Artesis and IEKG, AnomAlert does not use or support the current MCMScada software, which is a database server and viewer combined in one package. For data viewing and analysis, GE requires System 1®, recognized in the market as the Bently-Nevada condition monitoring software. AnomAlert also requires a completely new AES

database server from Artesis. This new server provides for communication between the instrument and System 1, and replaces the database part of MCMScada. As of this writing, this new database software is in late stage beta testing, with a release of the new software expected soon.

Artesis and IEKG continue to support MCMScada. In addition, IEKG has software available for analysis, diagnostics and supervisory monitoring that extends well beyond the capabilities in the Artesis software. When the new AES software is released, a new viewer will also be released that can replace MCMScada in new installations, with a migration path available for those customers who decide to switch.

And of course, pricing policies will vary.

## Why did GE decide to partner with Artesis?

The market convergence of smart energy metering, power quality monitoring, and machinery condition monitoring is referred to as Energy Condition Monitoring, and the convergence rate is accelerating. While of course one can only speculate as to GE's unstated motives, clearly a major consideration was their conclusion that this technology is sufficiently mature to be brought into the mainstream of the machinery condition monitoring industry. There are powerful arguments for making machinery condition measurements from the electrical side as opposed to running cables and installing vibration sensors on machines. And of course the new capabilities are complimentary to GE/Bently's present offerings.

# How is AnomAlert complimentary to, or competitive with, GE Energy's many products having similar functionality?

That aspect of the strategy is not mentioned in the GE announcement, so we can only speculate. However, there is obvious overlap with other GE products, and GE will likely be asked by customers whether they are purchasing redundant functionality.

#### Where will GE focus?

GE/Bently's focus for many years, and their primary customer base, is in those industries utilizing high speed turbomachinery, such as Oil & Gas and Power Generation. We expect them to maintain that focus.

The GE announcement has a clearly expressed European emphasis, including commentary from the Turkish operation's country manager, which of course is a very small piece of GE Energy. GE Energy is a big company with many interests, thus it's not completely clear whether AnomAlert is a regional initiative, or whether GE is going "all-in" and will enthusiastically market Anomalert worldwide. Time will tell.

The full GE press release can be found here. http://www.gepower.com/about/press/en/2010_press/092910b.htm