



An Obituary for Reactive Maintenance

With the advent of technological advances and the movement to proactive maintenance, the official death knoll has been served on reactive maintenance and crisis management.

Although reactive maintenance has served the organization for the last several decades, it has left behind virtually no written documentation of any of the past work. Interestingly, it has also been discovered that quite often several hundred thousand dollars worth of spare parts inventory is stashed away in cubby holes.

With the introduction of new predictive maintenance technology, we will no doubt miss the old style of dedication to crisis maintenance. This will all fade away as work will now be conducted in a controlled planned environment with correct schedule and skill allocations and emergency maintenance requirements reduced to a minimum.

There is a realization that industry is leaning towards a new paradigm shift: We can no longer treat electrical distribution systems as everlasting, never-changing components of a facility and only fixing them when they break in some sort of crisis management scenario. Instead, we must consider the electrical infrastructure a dynamic system that requires regular attention and a formal preventive maintenance program. It must be constantly maintained and re-evaluated for proper loading, short-circuit sizing and equipment performance.

There is also a growing realization in industrial circles that companies will need to invest significant revenue in electrical safety during the next few years. Many plant managers are discovering that the electrical infrastructure, power generating equipment and work procedures have not been thoroughly evaluated for electrical safety since the doors were opened. Over time, electrical infrastructure has changed, facilities have expanded, load requirements have increased and equipment may have degraded with age or lack of maintenance. Electrical systems that were appropriate for the loads and incoming power when they were installed may now expose employees to life-threatening hazards.

A major force behind the culture shift is government mandates. Regulations and industry standards are forcing maintenance managers to be proactive about electrical hazards. Failure to compliance can result in severe fines, in addition to costly downtime and loss of production from accidents. The wise course is to address safety issues before there is an incident.

Progressive managers are already preventing future problems by adopting the necessary standards and guidelines in their internal processes. They are instituting equipment preventive maintenance programs, circuit-breaker maintenance programs and electrical safety programs that describe detailed electrical requirements.

The coming paradigm shift in electrical safety parallels the proactive shift to preventive maintenance. If a motor fails, the manager needs to know the root cause to prevent future failures and remove the cost. The same is true for electrical hazards: By understanding and proactively maintaining the electrical infrastructure, electrical system failures will be minimized and ultimately downtime and operational, medical and liability costs will be reduced.

From motors that power the plant's inner workings to the underlying interconnected electrical infrastructure, maintenance and repairs must be proactive if they are to ensure electrical quality and reliability. Even on a tight budget, this goal is achievable.

Pressure caused by aging equipment and increasing downtime, is not going away. We cannot work harder - We need to work smarter. Work issues are not to be seen as problems, they must be seen as opportunities. The engineer of tomorrow must be innovative, visionary and a leader of excellence.

The engineer of tomorrow needs to be the head of innovation and not the tail and needs to take a proactive lead in moving his plant towards the ultimate goal of achieving World Class Maintenance.

It is impossible to embrace this new vision without having the right technology in place.

“Asset Performance Maintenance is the biggest money-saver because it allows for standardization of Asset Registers, linked with up to date safety requirements, industry based schedules and provides a system of accurate recording and measurements. When interlinked with an interactive drill down exception report based Management Information System, the engineer has now the power of progress in his hands.

This type of technology does not need to break the bank and is available today for as little as a small monthly budgeted cost.

This article was submitted by Barry Wood from Mainguard Technologies who are an industrial solutions driven company specializing in the field of Asset Performance Management Systems.

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