

# Proactive Work Management Process Leads to Functional and Financial Benefits

**Company:** Constellation Energy | **Sector:** Power Generation |

**Location:** Maryland, USA |

**Services Provided:** Work Management & Asset Healthcare |



## SITE:

Three large fossil fuel power generation plants, plus a number of combustion turbine generation units consisting of over 3,700 MW of generation capacity.

## CHALLENGE:

In response to deregulation cost drivers, the organization underwent significant reductions in force without corresponding revisions or upgrades in their operating and maintenance systems. In addition, the plants began experiencing reduced reliability, along with increases in the amount of high priority (schedule breaker) work and overtime. After reductions in manpower, senior management realized that they could not just reduce labor, without making substantial changes in how they operated and maintained their generation facilities.

## HOW WE HELPED:

The client needed experienced help and SAMI was selected because of our cross industry best practices and methods. We began with site wide assessments of their existing maintenance practices. Reactive maintenance was found to be the norm at all three major facilities, with little planning and / or scheduling performed, backlog management was poor, equipment history records were incomplete, and large portions of the preventive maintenance program had been turned off to compensate for the manpower reductions.

As an outcome of the assessments we:

- Defined Strategic Initiatives for maintenance and reliability
- Developed a compelling business case for investing in maintenance and reliability
- Aligned executive and operations and maintenance leadership on the path forward
- Obtained stakeholder ownership of the implementation plan
- Created a governance structure to steer the implementation

Working together with senior management and a cross functional team, we redesigned and overhauled their basic work management process with special emphasis on setting accurate priorities, and improved planning and scheduling.

- “Universal Asset Healthcare Best Practices” were designed into the revamped Stage 1 Work Management System.

- The new work management system pushed the planning horizon out to six weeks to insure that when the job is scheduled all the parts, tools, and people necessary to complete the job are available.
- Key Performance Indicators (KPI's) were developed, agreed to, and implemented across the organization to track backlog, schedule compliance (routine and PM work), % emergent work, and overtime. This would also enable the organization to perform corrective action on a timely basis.
- PM's were reviewed for accuracy / completeness, frequency, and their benefit.
- A Stage 2 Asset Healthcare pilot was performed to prepare the organization for future planned higher order reliability activities (e.g. condition monitoring, PdM, etc.)
- A combined operations and maintenance team identified critical interfaces, roles & responsibilities, and addressed operating consistency across all facilities

## RESULTS:

Our work resulted in more work being planned and executed as scheduled, as well as more labor hours being applied to scheduled work.

- Emergent work decreased by over 20% as compared to the prior 3 year average
- The number of hours spent on actual wrench time increased
- A reduction in the average cost of all work orders was achieved (a 42% cost reduction for emergent work orders)
- Benefits captured exceeded three times the business case projections primarily through a reduction in cost per work order, and over time. On the whole, this client has a proactive system in place to manage maintenance performance and costs.