Worthington Energy Innovations

Monitoring and Verification-Sustaining your ECM

WORTHINGTON DESIGNS IT

WORTHINGTON BUILDS IT

WORTHINGTON SUSTAINS IT

Worthington Energy Innovations is committed to the sustainability of your new Energy Conservation Measure ("ECM") project and through Monitoring and Verification ("M&V") is 100% accountable for the savings we guarantee. Worthington has developed its comprehensive M&V program to ensure that ECM energy goals are met. This program allows Worthington to stay actively involved with the continued success of an energy project. Worthington's M&V program is a collaborative effort that involves Worthington's engineering team, tech services team and concept design team as well as its clients' management team, operators and maintenance personnel. Worthington has established the M&V scope of work to provide the tools necessary to guarantee the profitability of your ECM project now and in the future. As evidence of M&V's value, the following lists outline Worthington's deliverables:

Daily On-Line System Operation Analysis

- Verify that the system is operating according to the concept design through a network login
- · Identify problems through alarm and warnings logs and notify client by e-mail or phone
- · Identify opportunities to improve the system based on performance observations
- Verify that all meters are operational and that metered data is valid
- Verify that the energy data Worthington downloads is complete and accurate
- Identify any equipment communication loss and take timely corrective measures
- Verify mode scheduling based on plant production schedules
- Adjust system parameters based on current weather conditions and seasonal changes

Energy Reporting

- Worthington can create customized energy reports for any metered equipment on the Worthington system
- · Issue graph and other energy reports weekly, monthly and annually in order to track system performance
- Energy reports can include actual metered energy use compared with the projected ECM energy use in any format
- · Historical data reports also aid in troubleshooting equipment failure

Equipment Warranty

- All Worthington supplied equipment will be repaired or replaced free of charge (excluding labor for parts removal and replacement) while under contract with Worthington's M&V program
- · Includes equipment lifecycle analysis and part failure documentation

Preventive Maintenance

- · Worthington prepares and provides detailed PM work orders on all new equipment supplied to the client
- · Periodic verification of proper maintenance scheduling and task completion
- · Worthington provides equipment cut sheets and other documentation

On-Site Visits

- Allows Worthington and its clients to engage in dialog on ECM performance and identify potential improvements
- Assistance with troubleshooting and operation of new equipment
- Worthington prepares site visit reports to document activities for future reference

24/7 Technical Service Hotline

 Worthington has Tech Service representatives available to help with operation and troubleshoot problems with remote access

Worthington Energy Innovations' experience has shown that a properly executed M&V program is an essential part of every Energy Conservation Measure. M&V ensures the continued success of an ECM project and validates guaranteed savings. While the fundamental deliverables outlined above are standard, they can be customized to fit your unique requirements. The ultimate value of M&V is that it allows Worthington to stay involved with the energy systems it designs and be 100% accountable for the savings we guarantee.

