

**Business Item 2016-9:**  
**Authorization to Award and Execute**  
**Contract 15P115 for Electrical**  
**Maintenance Services at Metropolitan**  
**Council Environmental Services**  
**Facilities**

Craig Edlund, Electrical Manager Maintenance

Environment Committee: January 12, 2016



# Preventive Maintenance

Preventive Maintenance (PM) of electrical systems is critical to the successful and safe operation of Metropolitan Council treatment processes.

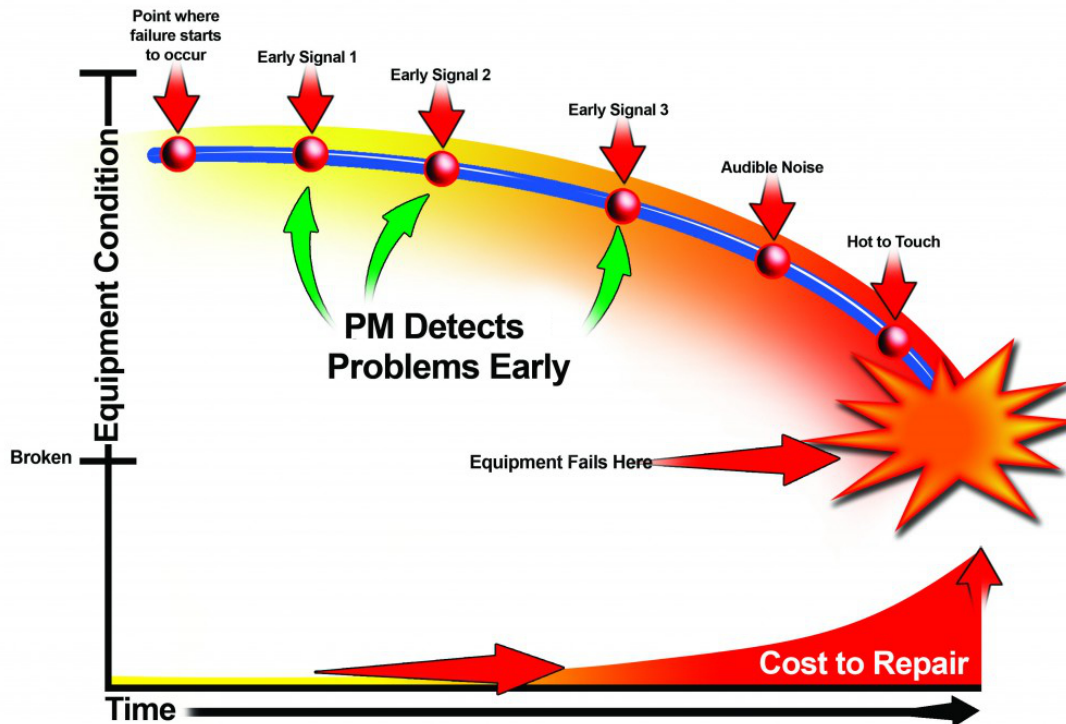
Preventive Maintenance is:

- Inspection
- Cleaning
- Testing
- Adjustment to specification
- Repair as needed

# Preventive Maintenance

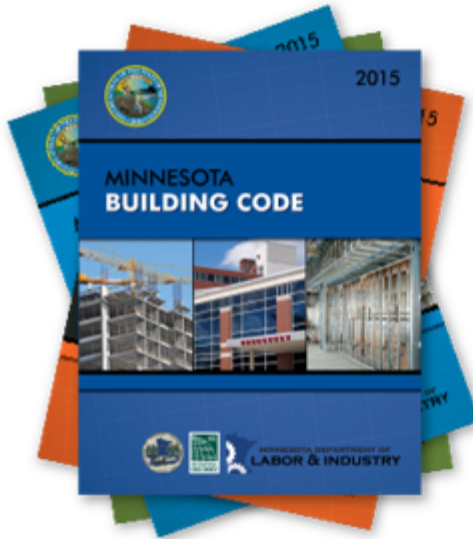
Preventive Maintenance detects potential failures before they become catastrophic and will decrease down time and cost to repair.

\$1 spent preventing failure = \$10 spent repairing after failure



# Preventive Maintenance

## Minnesota State Codes



## National Electrical Code



## International Standards



Maintenance, inspection and testing of electrical equipment is governed by multiple codes and standards

# Preventive Maintenance

Electrical Equipment covered under contract includes:

13,800V Main Switches & Substations



480V Motor Control Centers



13,800V, 4,160V and 480V Transformers



# 15P115 Electrical Maintenance Services

- If approved this will be the third Electrical Maintenance Services contract for electrical systems since 2006
- These contracts have successfully inspected, cleaned and tested 98% of the electrical systems at the treatment facilities
- They have greatly increased the reliability of the electrical systems
- Service outages due to internal electrical equipment failure have dropped to near zero at the treatment facilities
- This contract expands services to the Interceptor Services facilities (Lift stations, Metering sites, Regional Maintenance)
- Addresses newly expanded code requirements for testing and documentation

# Why contract inspection, cleaning and testing?

- Flexibility to adjust staffing levels based on:
  - The specialization, qualification and certifications required
  - Scope of work scheduled
  - Availability of equipment
- The typical electrical PM
  - Requires 8 to 12 qualified and certified personnel
  - Can take between 5 to 30 days based on the scope of the work.
- Contractors own and maintain
  - The specialized equipment for high voltage testing
  - Training, certification and qualification of technicians
  - Accreditation by NETA for electrical testing standards and protocols

NETA = International Electrical Testing Association

# Electrical Maintenance Services

Contractors were Pre-Qualified based on:

- Qualifications of the Contractor
  - Successful performance of electrical maintenance contracts in similar industrial setting
- Qualifications of the Contractor's Employees
  - High voltage experience and certification
  - Electrical Maintenance experience
- Qualifications for electrical testing
  - Current NETA accreditation of firm
  - Current NETA certification of Technicians
  - Testing experience in similar industries and equipment on similar sized contracts

NETA = International Electrical Testing Association



# Electrical Maintenance Services

The Pre-Qualified contractors then provided a bid which included:

- Cost of Services
  - Equipment servicing unit pricing
  - Cost reimbursable rates for miscellaneous work
- MCUB plan for meeting a 10% goal
- Premier Electric submitted the lowest priced bid
- MCUB plan approved by OEO

MCUB = Metropolitan Council Underutilized Businesses  
OEO = Office of Equal Opportunity

# Electrical Maintenance Services

## Proposed Action

- That the Metropolitan Council authorize the Regional Administrator to execute a contract for Electrical Maintenance Services at MCES Facilities to Premier Electric Corporation for an amount not to exceed \$12,000,000 and a term not to exceed five years.

## Background

- Premier Electric submitted the lowest responsive, responsible bid.
- The contract has a term of five years. The award will fund the contract for the term of five years.

# Questions