

Isaiah 40:31 - Those who hope in the Lord will renew their strength. They will soar on wings like eagles; they will run and not grow weary, they will walk and not be faint.

Native American, Woman-Owned, SDB, 8(a)



**Focused on the Success of our
Customers, Employees and Community.**

**Aetos Systems, Inc.
1525 Perimeter Pkwy, Ste 115
Huntsville, AL 35806
Phone: 256-527-7821**



Corporate Summary

- Established in 2007
- Certified Native American, Woman-Owned, 8(a), SDB
- Corporate Office in Huntsville, Alabama
- Corporate Size:
 - 25 Employees
 - 2012 Revenue - \$9.8 Million
- Core Services:
 - Building Automation/Utility Control systems
 - IT & Engineering Services
 - Education,
 - Logistics/Acquisition Support
 - Professional and Program Management Support

**2009 WBCNA Small
Business Startup of the Year**



**2011 - NASA Marshall Space Flight
Center – Small Business Prime
Contractor of the Year**



Aetos

Customer/Contract Summary

- NASA – Marshall Space Flight Center – Center Operations Building Automation (COBA)
- AMCOM JTC/SIL - Redstone Arsenal
- SAIC, NASA Integrated Communications Services (NICS)
- University of Alabama Huntsville – Alabama Math & Science Technology Initiative (AMSTI)
- Booz Allen, Program and Integration Support (PAIS V) – Army Chemical Materials Agency





MSFC Building Automation Success

- **Aetos manages MSFC's enterprise-level Building Automation System**
 - Extends to over 120 buildings
 - 25,000 equipment I/O points
 - Over 75,000 total data points for trending
 - Interfaced to a variety of manufactures at the building level (BACnet, modbus, N2)
 - Single-vendor solution at the enterprise level
 - Provides unified user interface for all personnel



MSFC Building Automation Success

- **Operations Support**
 - Control room staffed 24 x 7
 - Handle work control functions during non-core hours
 - Serve as communication liaison for facilities during critical or emergency conditions
 - Approximately 2000 “alarm events” per day (2 / minute)
 - Most are normal and managed by Aetos personnel
 - Approx. 200 per day require field action by maintenance personnel
 - Approx. 10 per day require emergency response



MSFC Building Automation Success

- **Engineering Support**
 - Provide NASA expertise in control system design and sequences of operation
 - Research new technologies
 - Update specifications and design standards
 - Report utilities consumption & trend data
 - Meter Data Management
 - In-house software design capability

“So. *What can you do with the data?*”



MSFC Building Automation Success

- **Central Chiller Facility**

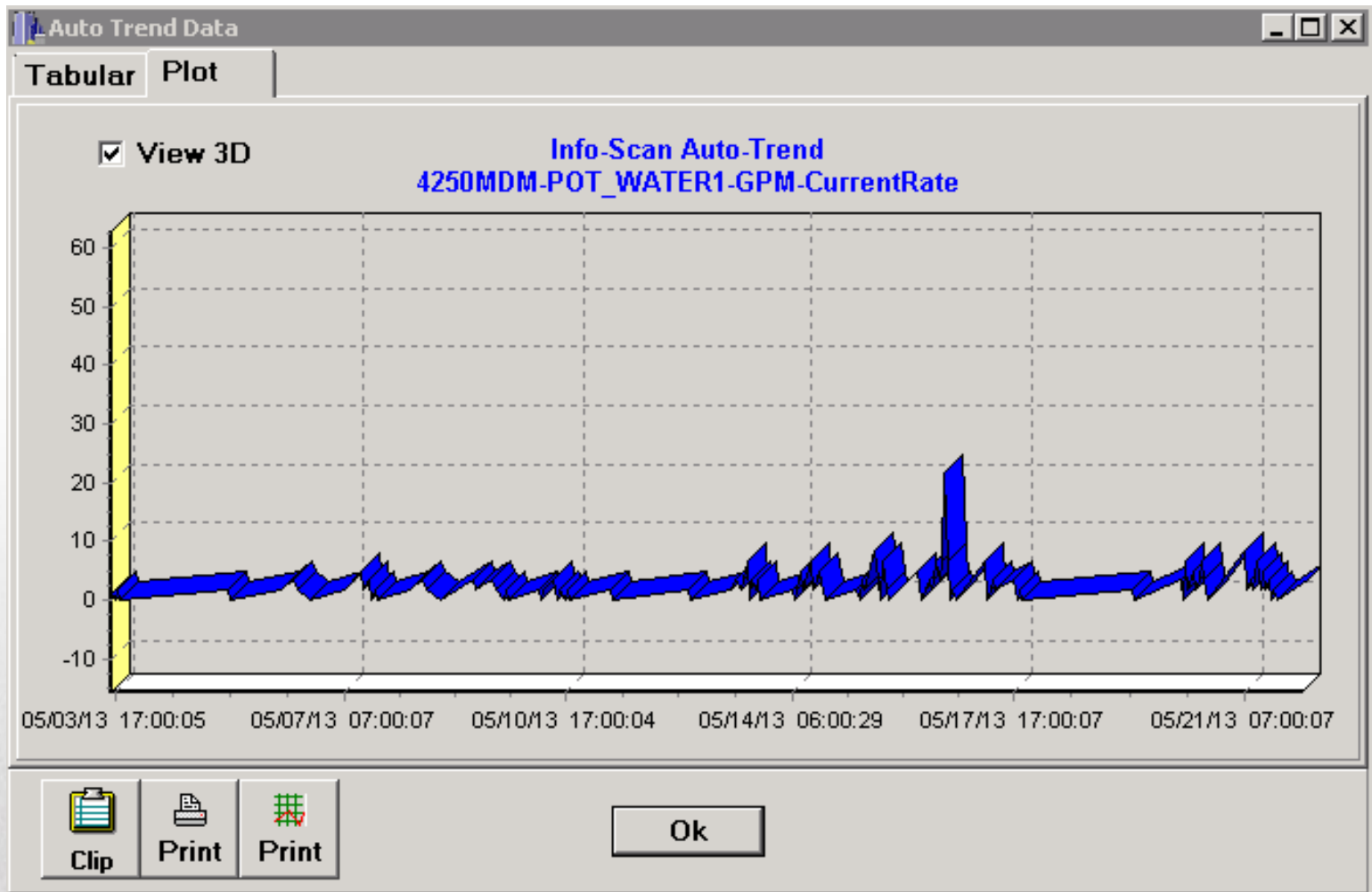
- 11,000 tons, online ~ 2000

- Water-side heat exchanger and thermal energy storage added in 2010
 - Energy program provided SEA consultant to evaluate performance with Aetos (Oct '12 to present)
 - Hourly data, >200 points, analyzed bi-weekly
 - Over 40 specific improvements/changes
 - Demand management key to cost savings
 - Peak savings \$30K/month, \$120K/summer season



MSFC Building Automation Success

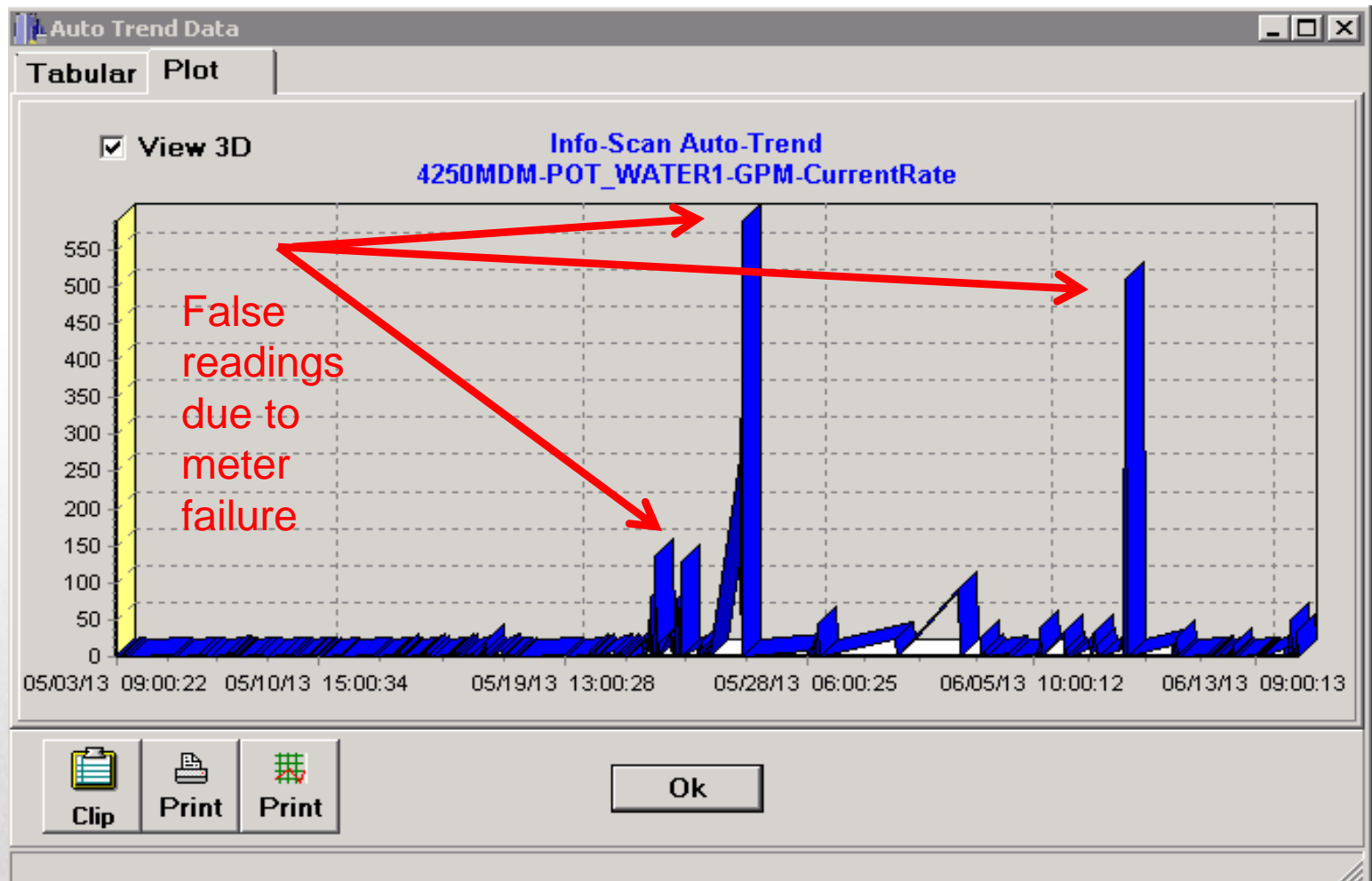
- Building 4250 water usage





MSFC Building Automation Success

- Building 4250 water usage





MSFC Building Automation Success

- **Vampire Power**

- Phantom power
- Standby power
- Electricity leaking

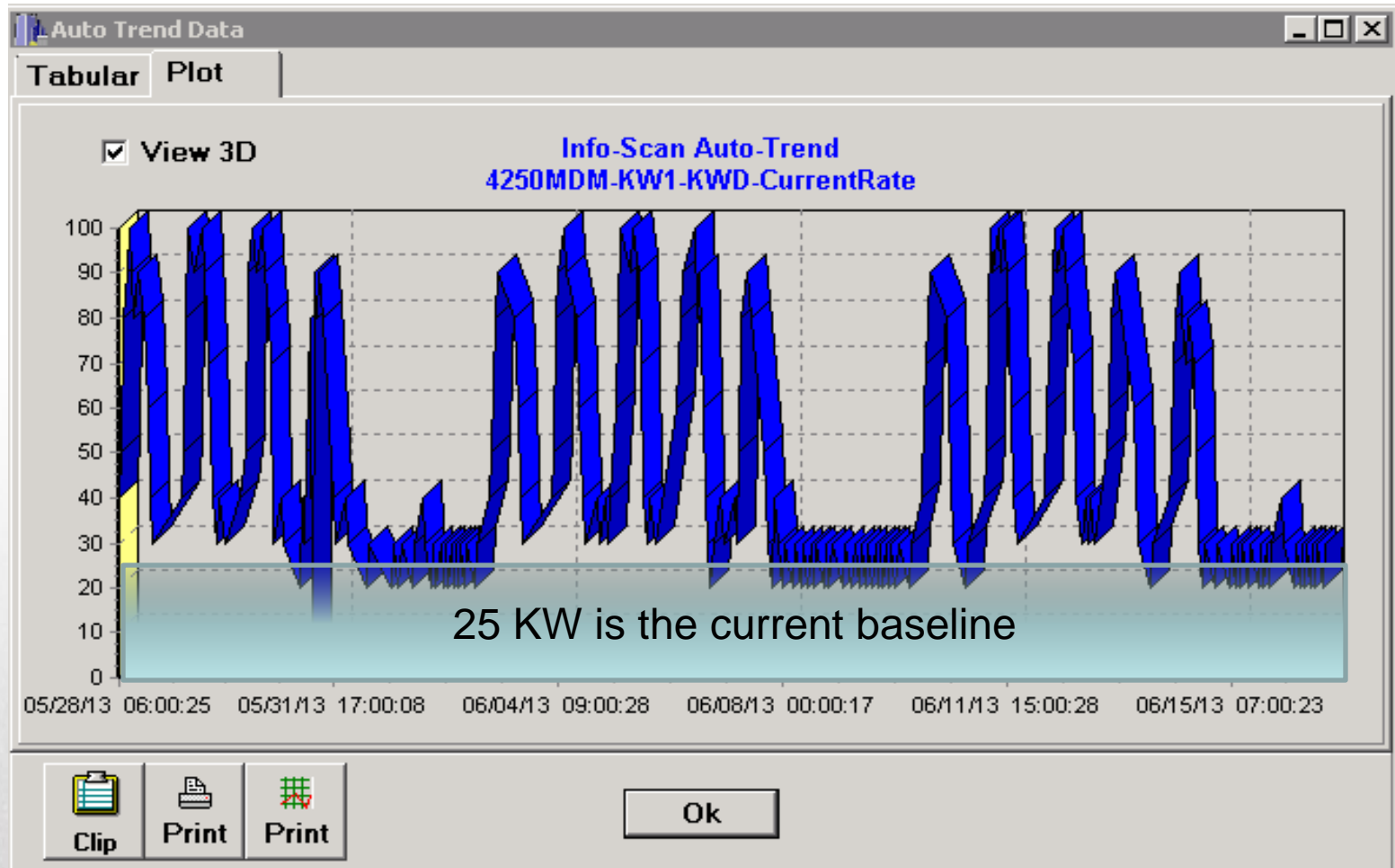


- **Anything that sucks power at a continuous rate whether you use it or not!**



MSFC Building Automation Success

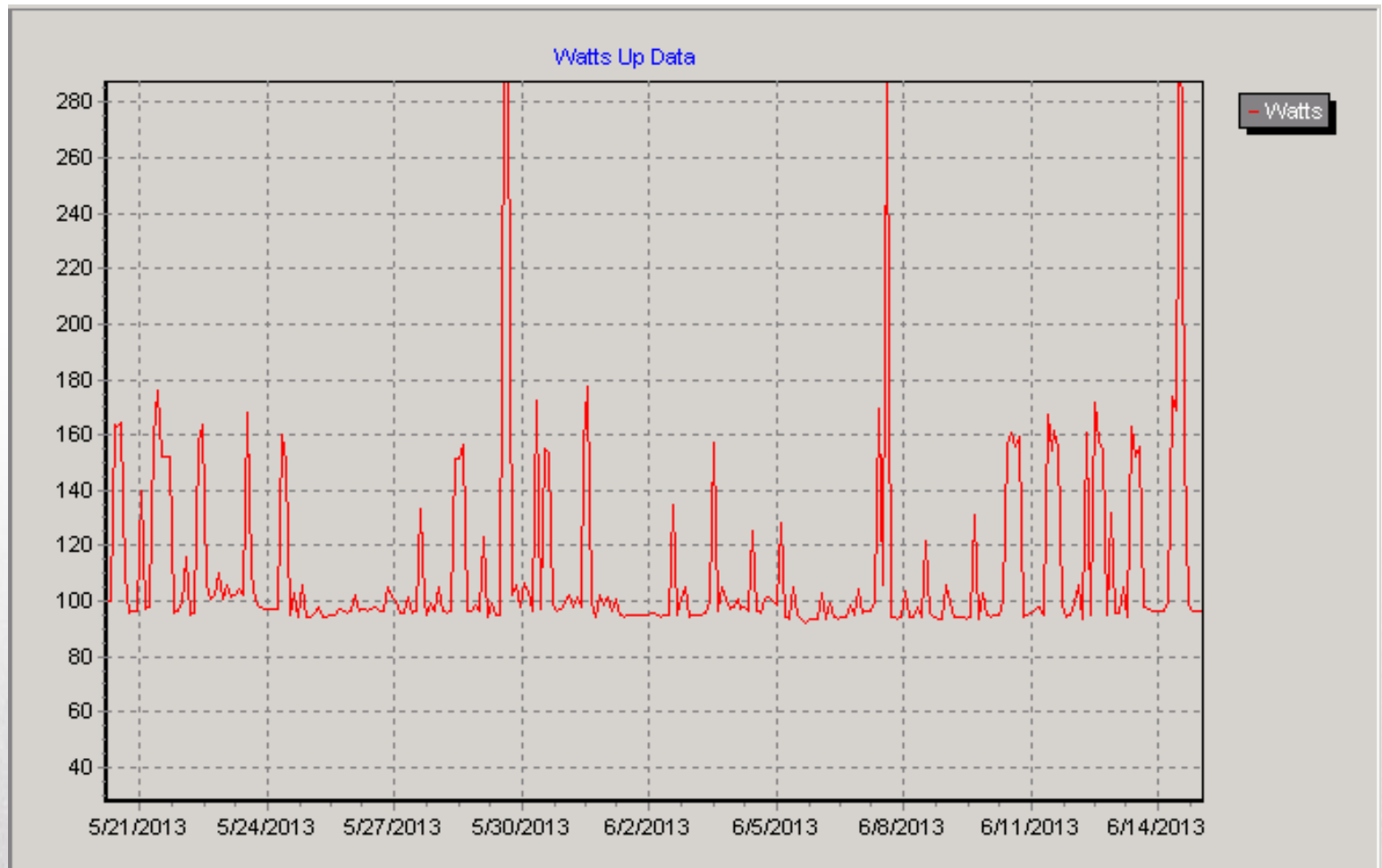
- Building 4250 electrical usage





MSFC Building Automation Success

- **Typical computer workstation (Wade's)**





Contacts

Donna Coleman, President/CEO

Email: donna.coleman@aetossystems.com

Wade Robinson, Systems Architect

Email: wade.robinson@nasa.gov

Visit us at www.aetossystems.com

Native American, Woman-Owned, SDB, 8(a)