

2003 Energy *An Energy-Efficiency Workshop and Exposition*
Orlando, Florida

Getting Ready.....

For Technology Changes
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2003 Energy *Topics we will cover*

- Perspective on energy management
- Learning from mistakes
- Top 10 reasons new technologies fail
- Strategic Planning

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2003 Energy *Balance Management & Technology*

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2003 Energy *Prioritize Appropriately*

Move up the opportunity hierarchy

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2003 Energy *Management vs. Technology Fix*

- **Management Fix:** institution of an integrated approach that implements and preserves improvements
- **Technology Fix:** purchase of new equipment to solve energy crisis

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2003 Energy *Examples*

Technology Fix: Textile dye house installs heat pump heat recovery system with expected 35% energy cost savings. System abandoned due to lint build-up on coils.

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Examples

Technology Fix: School System uses state \$\$ to install new building automation system. After 2 years, all set points overridden and all benefits are abandoned.

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Top 10 reasons.....

Plan

1. Dazzled by technology promises / fail to plan
2. Disconnect between supply/demand
3. Failure to know organizational capabilities
4. O&M requirements ignored
5. Inadequate risk analysis

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Top 10 reasons.....

Do / Check

6. Inadequate M&V
7. Lack of training
8. No performance checks

Act

9. Lack of procedures
10. No organizational sustainability

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Technical/Management Interaction

Technical	Managerial
<ul style="list-style-type: none"> PLAN <ul style="list-style-type: none"> Baseline Track DO <ul style="list-style-type: none"> Projects Assessments Design CHECK <ul style="list-style-type: none"> M & V ACT <ul style="list-style-type: none"> Procedures Process Control 	<ul style="list-style-type: none"> PLAN <ul style="list-style-type: none"> Policy/Goals/Targets Resources DO <ul style="list-style-type: none"> Training Documentation Communication CHECK <ul style="list-style-type: none"> Internal Audits ACT <ul style="list-style-type: none"> Management Review Corrective/Preventive Action Incentives

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Energy Organization

Energy team must cross organizational boundaries

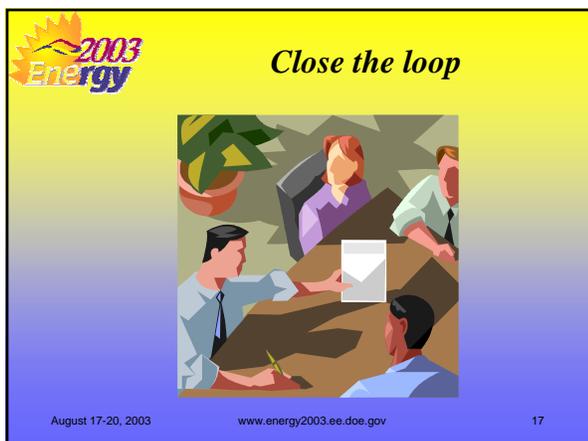
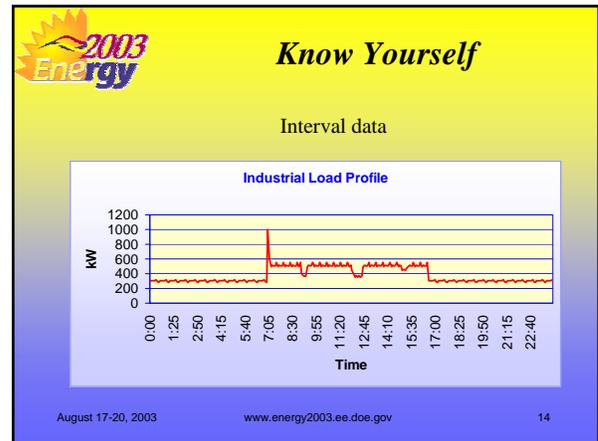
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Know your price signals

Time of Day	Electricity Cost (\$/MWh)
12:00 AM - 6:00 AM	\$0.024/kWh
6:00 AM - 6:00 PM	\$0.123/kWh
6:00 PM - 11:00 PM	\$0.055/kWh
11:00 PM - 12:00 AM	\$0.024/kWh

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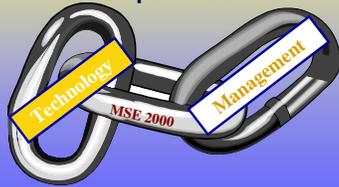


- ### 2003 Energy Get Help
- Partner with other energy organizations
- FEMP / DOE
 - Universities
 - Consultants
 - Other energy managers in organization
 - Utilities
 - ESCOs
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Management & Technology

Adoption of technology should be tied to management of the selection process.



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