

# Managing Energy In Tribal Casinos

Western Area Power Administration

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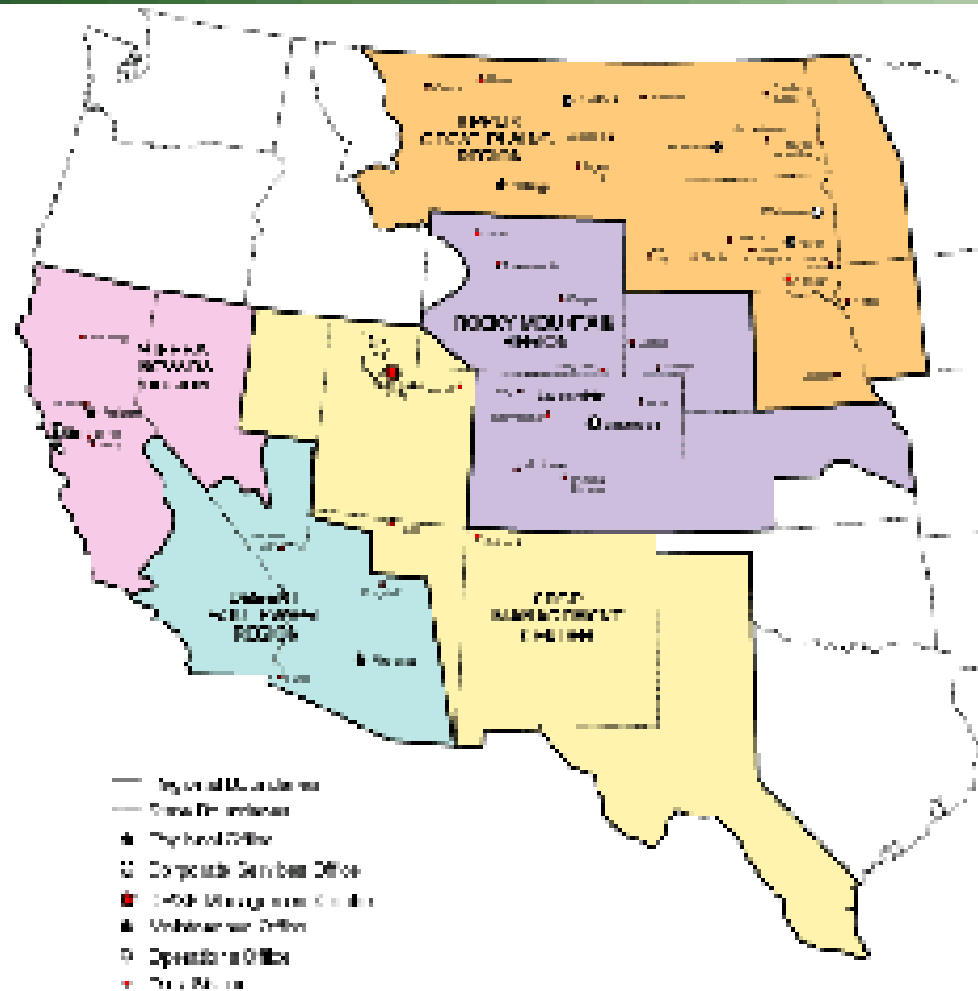
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# *Western Area Power Administration*

Serving the West with  
Federal Hydropower



# Western today



# *Who buys our energy?*

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- Municipal utilities
- Rural electric cooperatives
- Irrigation districts
- Indian tribes
- Federal and state agencies

# *Industry restructuring*

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- Open access
- Choice of providers
- Choice of power resources
- Competition
- Deregulation

# *Our role in providing energy*

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- Marketing renewable hydropower
- Transmitting it to customers
- Controlling parts of the energy grid
- Providing open access to transmission
- Tying the western and eastern grids together
- Preparing for the 21st century

# Sac & Fox Casino Study



# Casino Energy Use

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# What is Energy Management?



# Develop a Plan

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1. Build support for the plan at all levels within your organization

# 10 Elements of a Successful Energy Management Plan

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## 1. Secure Top Management Commitment



## 2. Appoint an Energy Coordinator

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- The coordinator's job is to guide energy management efforts
  - Energy management is his/her primary duty
  - Should have an energy background
  - Smaller facilities could use maintenance staff
  - Must have adequate knowledge, training, and commitment to the goals of the energy management program



# 3. Involve O&M Staff in Planning and Execution

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- The effectiveness of an Energy Management Program is proportional to the effort and time spent on it.
  - Regularly “Brainstorm” from all levels in your organization
  - Even non-technical people will have good ideas that save energy



# 4. Conduct Energy Audits

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- Initial Audit shows where and how energy is being used or wasted
- Prepare an inventory of energy-using equipment showing basic energy use data
- Energy Audit Workbook available on-line at [www.energy.wsu.edu/ftp-ep/pubs/rem/energyaudit/audit2.pdf](http://www.energy.wsu.edu/ftp-ep/pubs/rem/energyaudit/audit2.pdf).

# 5. Organize Energy Data

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- Use to convince management of the value of energy management
  - High energy costs may not be perceived as a concern until compared with other costs
  - This allows energy management opportunities to compete for resources
  - Top level managers must understand the scope of the problem.

# 6. Analyze Audit Results

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- Start with the big picture
  - Calculate your Energy Use Index - EUI (BTU per square foot per year)
  - Compare your facility's EUI with that of other facilities

# 7. Set Goals

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- Set goals for specific reductions in energy use or cost.
- Goals are absolutely necessary – they tell us where we are going
- Without goals there is no way to measure our progress
- Top management should be involved in every step of the goal-setting process

# 8. Develop an Organization-Wide Energy Management Plan

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- The Energy Management Plan Includes...
  - Policies
  - Goals
  - Assignments
  - Training needs
  - Cost Estimates
  - Implementation Schedules
  - Reports
  - Potential and realized benefits

# 9. Implement Engineering Changes

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- Start by picking the low-hanging fruit or low-cost no-cost measures
  - Doing this before contracting with an ESCO, will get you immediate savings and make the ESCO work a little harder for their savings.

# 10. Monitor and Evaluate Results

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- Find out how you are doing!
  - Compare with pre-project levels
  - Calculating savings is tricky
- Western has links to software packages to help track your energy use
  - [www.energyexperts.org/energy\\_solutions/res\\_details.cfm?resourceID=2658&category=software%20tools&subcategory=energy%20accounting&sector=all](http://www.energyexperts.org/energy_solutions/res_details.cfm?resourceID=2658&category=software%20tools&subcategory=energy%20accounting&sector=all)

# Now It's Your Turn!

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- You have the opportunity to be both a bottom-line hero and an environmental hero
  - Every bit of energy we save today is energy that does not need to be produced or extracted, and is energy we can save for future generations!
  - Somehow Tribal leadership in this area seems appropriate



Thank You