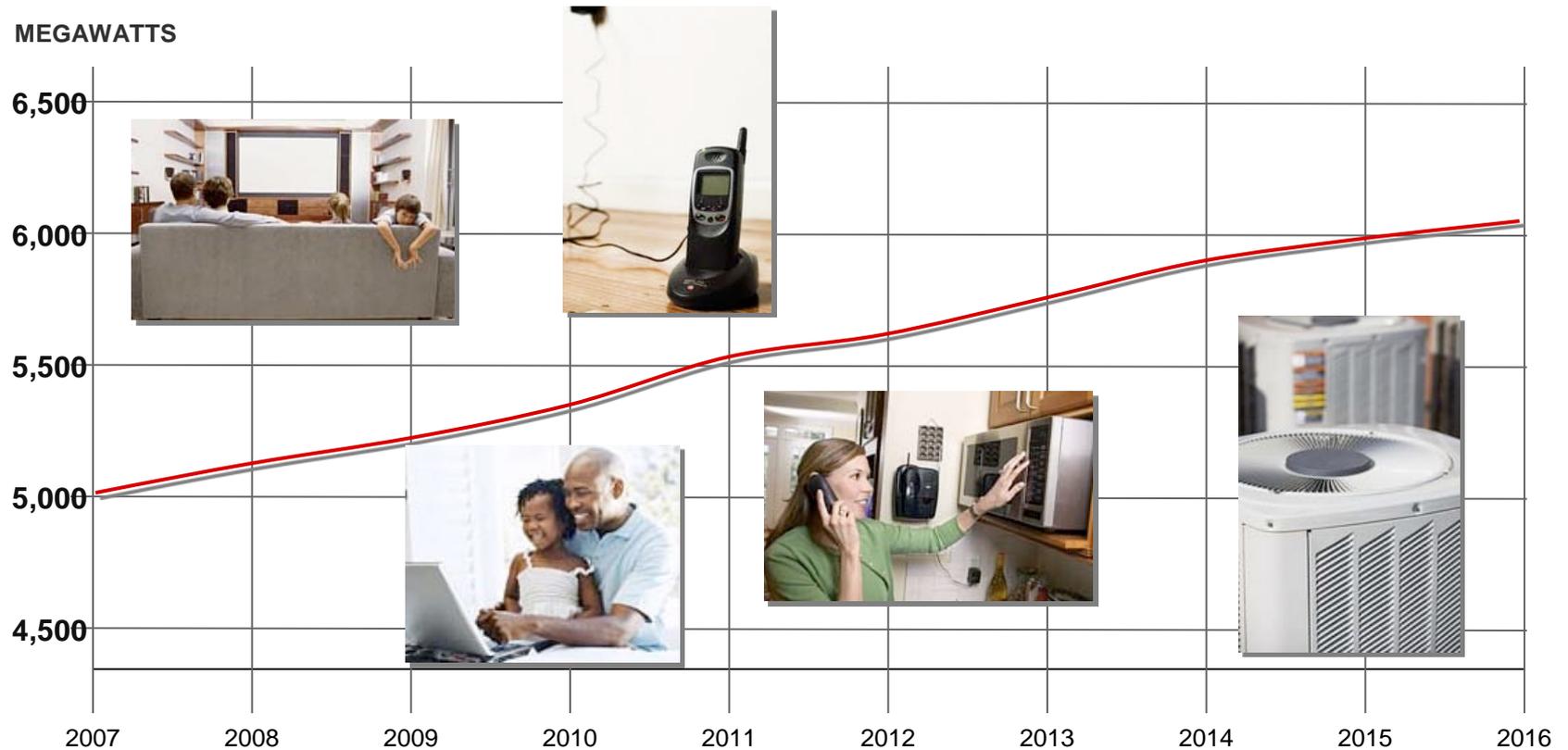


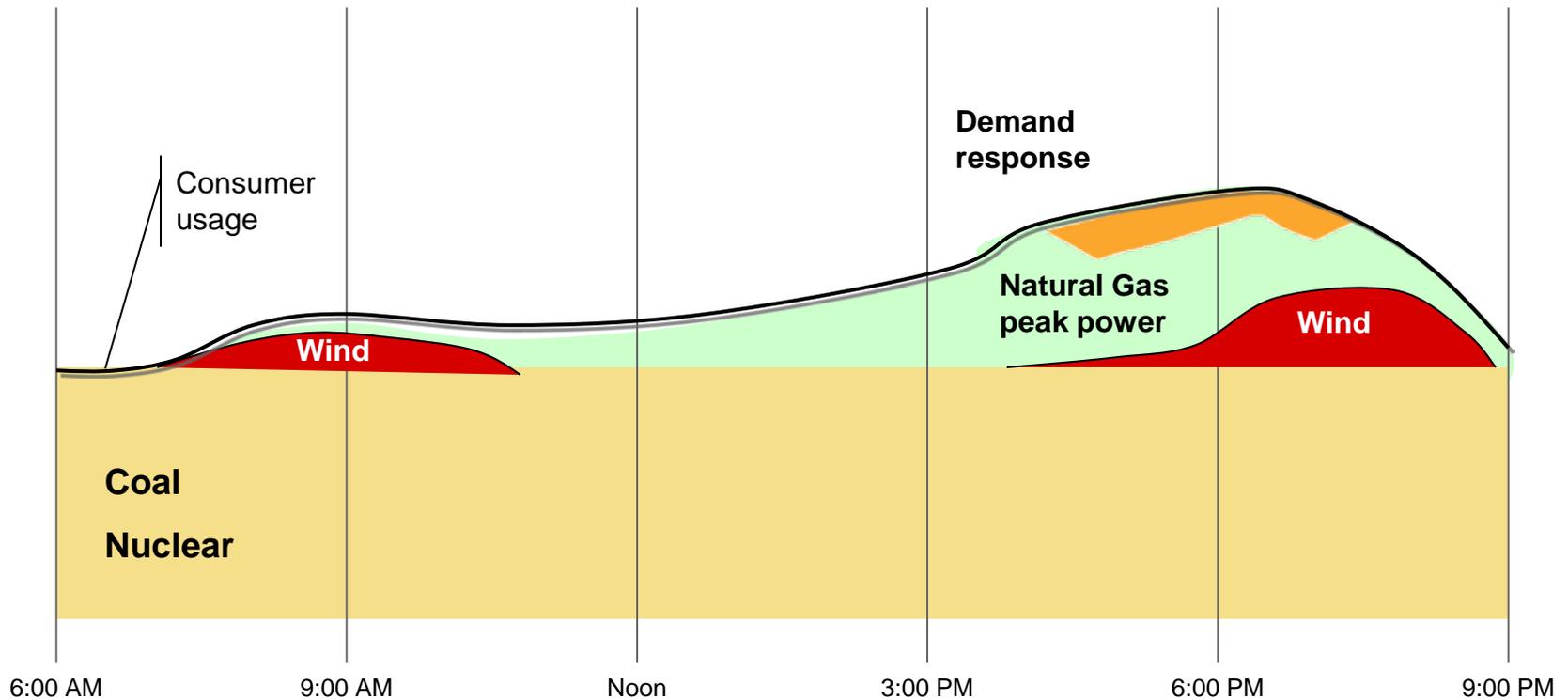
Reducing Peak Demand with Energy Efficiency

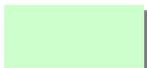
Paula M. Carvell
Kansas Energy Conference
10-13-10

GROWING DEMAND FOR ELECTRICITY



Understanding the Future of Power: Balancing Supply and Demand



-  Coal/nuclear -- low cost, steady, predictable
-  Wind -- variable, unpredictable
-  Natural Gas-fired peak power -- higher cost, very flexible

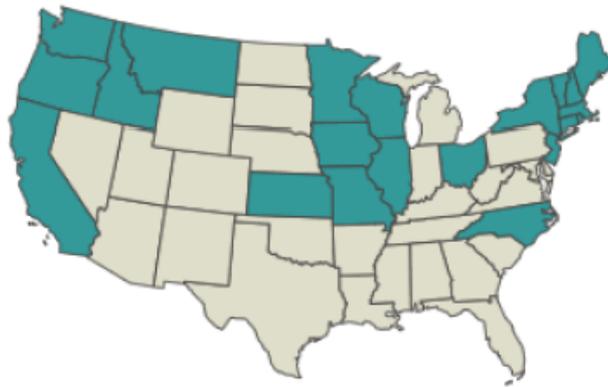
Introducing...



What is BOC?

- Nationally recognized training program
 - Building operators
 - Facility engineers
 - Maintenance staff
 - Anyone interested in improving the efficiency and comfort level of their buildings

2009 BOC States



BOC training held in locations around the country
Go to www.theBOC.info



- Available to commercial and industrial customers via joint licensing agreement
 - Westar Energy
 - Kansas City Power & Light
 - Midwest Energy
 - Empire District Electric
- Future
 - In collaboration with the State Energy Office, BOC will soon be available Kansas electric cooperatives and municipal utilities

- Technical classroom training
- Exams
- Projects applied in student's facility
- Additional
 - Project liaison
 - Site tours
 - Lunch and learn presentations
 - Business case development component
 - Networking events (sometimes with CEUs)

- **Level I**
 - Building Systems Overview
 - Energy Conservation Techniques
 - HVAC Systems and Controls (2 days)
 - Efficient Lighting Fundamentals
 - O&M Practices for Sustainable Buildings
 - Indoor Air Quality
 - Facility Electrical Systems
- **Level II**
 - Focus is on troubleshooting and advanced diagnostics

Customer Benefits

- High quality, low-cost training
 - Westar will reimburse 50% of the \$1,150 tuition for certified participants
- Facilities
 - Occupancy comfort
 - Efficiencies lead to reduced energy costs
- Employees
 - Improved and diversified job skills
 - Networking provides additional learning opportunities
 - Employee confidence
 - Worker retention and succession planning

- **Coincidental peak load reduction**
 - Help delay building additional peaking power plants
- **Offer energy efficiency programs for all customer classes**
- **Partner with customers**
- **Environmental stewardship**
- **Partner with other utilities**

Implementation

- 2009
 - Two Level I course series began in November
 - 44 out of 45 achieved certification
- 2010
 - Four Level I course series
 - Wichita
 - Lawrence
 - Salina
 - Pittsburg
- 2011
 - Two Level I and two level II

2009 Participants

- **City/County/Government**

- Harvey County
- Leavenworth County
- Saline County
- Sedgwick County
- City of Andover
- City of De Soto
- City of Lawrence
- City of Newton
- City of Rose Hill
- GSA Kansas Field Office
- KS Dept of Administration

- **Other**

- Capitol Federal Savings
- Cargill Meat Solutions
- Koch Supply Co.
- Lawrence Memorial Hospital
- Protection One

- **Education**

- Cowley County Community College
- Kansas Wesleyan University
- USD 305 Salina
- USD 343 Perry-Lecompton
- USD 490 El Dorado

- **Manufacturing**

- Bombardier/Learjet
- Case New Holland
- Hallmark Cards
- Hills Pet Nutrition
- Johnson Controls/BNSF
- Landoll Corporation
- Manko Window Systems
- Monarch Cement
- Pitt Plastics
- PTMW
- Russell Stover Candies
- SPIRIT Aerosystems

Wichita Graduates



Topeka Graduates



What are graduates saying about BOC?

- Gaining a comprehensive, strategic perspective
- Increased knowledge and confidence on the job
- Access to tools that allow them to be more responsive and proactive at work
- Saving time, money and energy

WATTSaver



Westar Energy.
EfficiencyWorks
WattSaver

- 13,000 WattSaver thermostats installed
- FREE programmable thermostat
- FREE installation
- Residential & business
- Secure online access
- Energy savings
- Peak shaving



THERMOSTAT-SCHEDULE

Consumer Energy Services - Windows Internet Explorer provided by Westar Energy 09_08a

https://www.wattsaverprogram.com/spring/stars/consumer/thermostat/schedule/view?thermostatIds=%5B93%5D&scheduleId=8802

File Edit View Favorites Tools Help

Consumer Energy Services

Thermostat - Schedule
600425831

Account #Demo2
Karen Smith
777 W Central
Wichita, KS 67203
(316) 261-6570

Logout

Account
General

Thermostat
600425831

Programs
Cycling History
Opt Out

Questions
Contact Us
FAQ

Administration
Change Login

Same schedule all days of week
 Weekday, Saturday and Sunday schedules

Weekday Saturday Sunday

Hints and details Temporary adjustments

Midnight Noon Midnight

Wake (W)	Leave (L)	Return (R)	Sleep (S)
Start At: 05:40 AM	Start At: 08:00 AM	Start At: 06:00 PM	Start At: 10:00 PM
Cooling Temp: 75 °F	Cooling Temp: 85 °F	Cooling Temp: 78 °F	Cooling Temp: 82 °F
Heating Temp: 65 °F	Heating Temp: 62 °F	Heating Temp: 70 °F	Heating Temp: 62 °F

Mode: °C | °F

Thermostat Schedule Name: Saturday

Save and Send Schedule Save Schedule Recommended Settings

Done

Karen M Smith - Inbox - I... Microsoft PowerPoint - [...]

Consumer Energy Ser...

98% Internet 100%

7:36 PM

Contact Information

www.westarenergy.com

or call us at
1-888-WORKS-50

Paula Carvell
785-575-1975

paula.carvell@WestarEnergy.com

Thank you

Questions?