

# Harris Nuclear Plant

**NRC Annual  
Assessment  
Meeting  
May 20, 2008**



# 2007 Safety Performance

- Industrial Safety
  - Progress Energy = 0 injuries
  - Contractor = 0 injuries
- Collective Radiation Exposure
  - 11<sup>th</sup> out of 69 PWR units

**“Top Quartile Safety Performance”**

# 2007 Operational Excellence

- 20 year anniversary
- Capability
  - Ranked 5<sup>th</sup> out of 55 units with a refueling outage
  - 2% better than any other refueling outage year for Harris
- Consistent Top Quartile production cost performance

# Harris Lake and water usage

- Safe operation during exceptional drought
  - Lake maintained above minimum level
  - No extraordinary measures taken
- Cooling tower efficiency
- Service water pump operation
- Capable of safe and reliable operation with lower lake level

# Continuous Investment in Safety

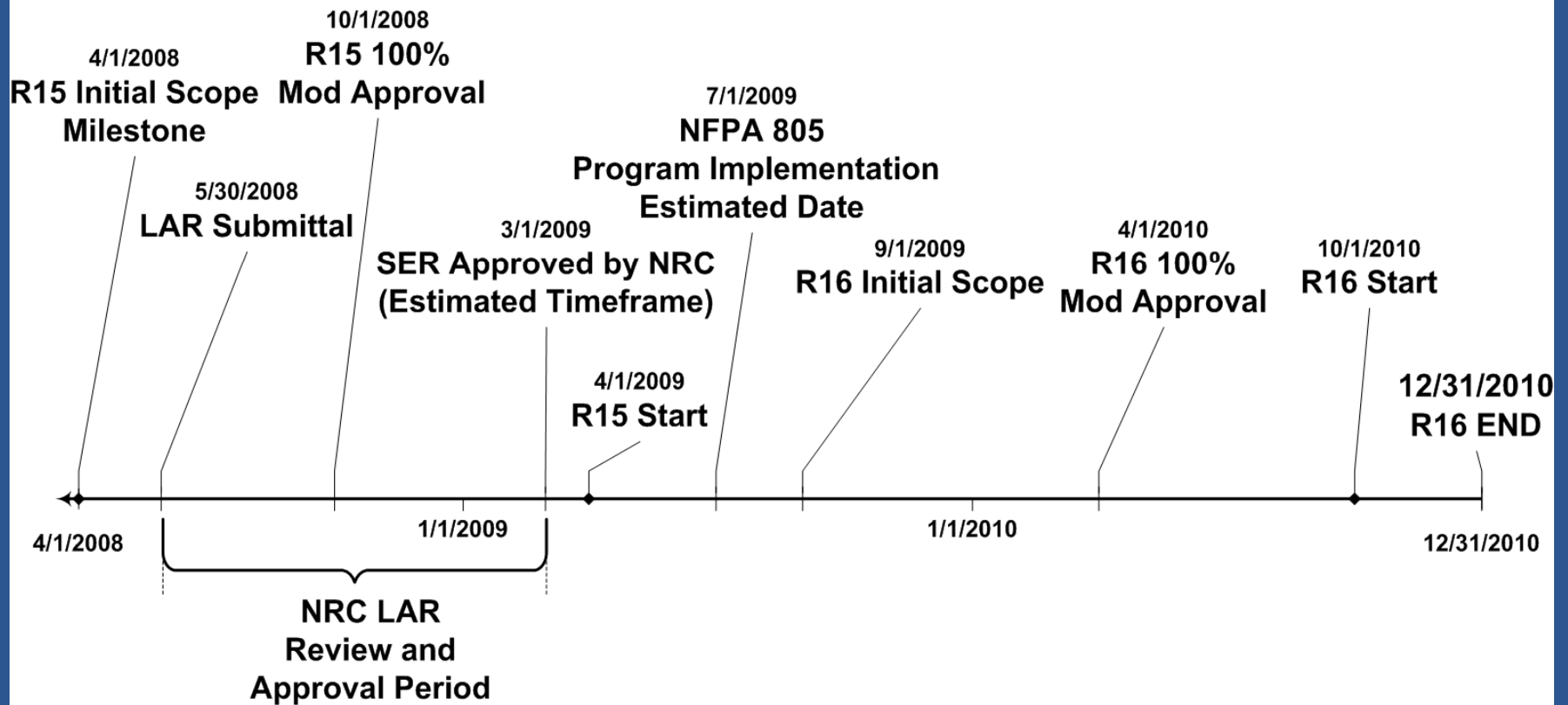
- Plant safety equipment
  - Containment sump
  - Pressurizer weld overlay
- New emergency siren system
- Fire protection

# Fire Protection Accomplishments

- Harris is a pilot plant for new regulations
- Developed industry first Fire Probabilistic Risk Analysis
- Strengthened fire prevention and response strategies
- Operator responses eliminated
  - Not required to place plant in a safe condition
  - Included as enhancement to Nuclear Safety

# Fire Program Transition Schedule

## NFPA 805 Transition Timeline



# Harris Plant Self-Evaluation

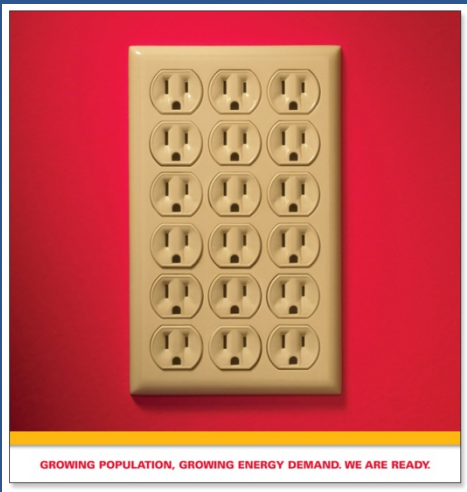
- Program components:
  - Self-assessment
  - Corrective action
  - Operating experience
  - Benchmarking
- Integrated via Corrective Action Program
- Foundation for continuous improvement
- Led by line organizations





# The New Energy Reality: More energy to power our lives

50% increase in home size



**1975**

Average size of home in 1975 -  
1,645 square feet

**2005**

Average size of home in 2005 -  
2,434 square feet

# The New Energy Reality: More customers to serve



**2007**  
1.4 million customers

**2026**  
1.9 million customers

**LOOKING  
AT POWER  
IN A  
NEW LIGHT.**

**A BALANCED SOLUTION  
FOR THE FUTURE.**

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**ENERGY EFFICIENCY**

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**ALTERNATIVE ENERGY**

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**STATE-OF-THE-ART PLANTS**

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# Changing How We Use Energy: Energy efficiency



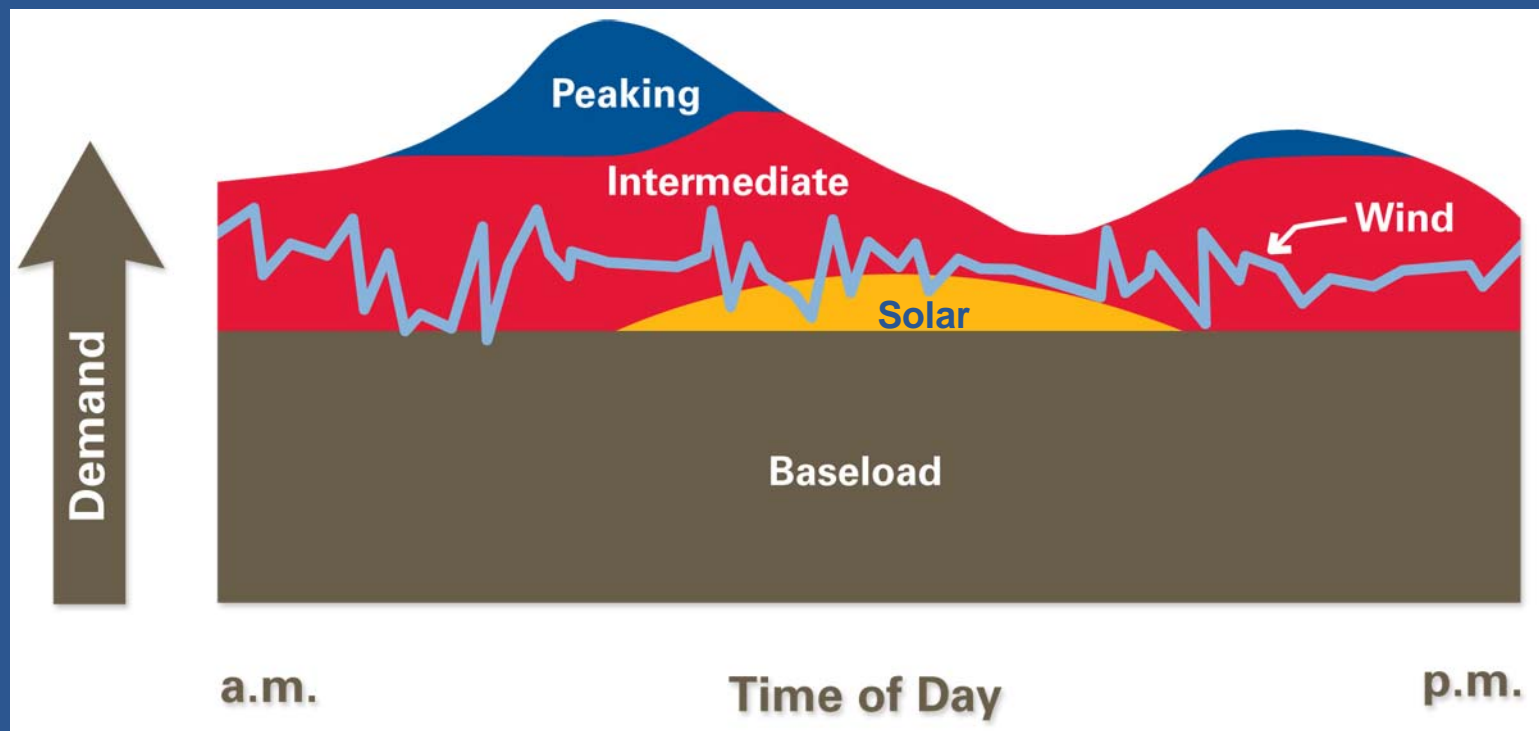
**Want to  
save energy  
and money?**

**I can help.**

Progress Energy  
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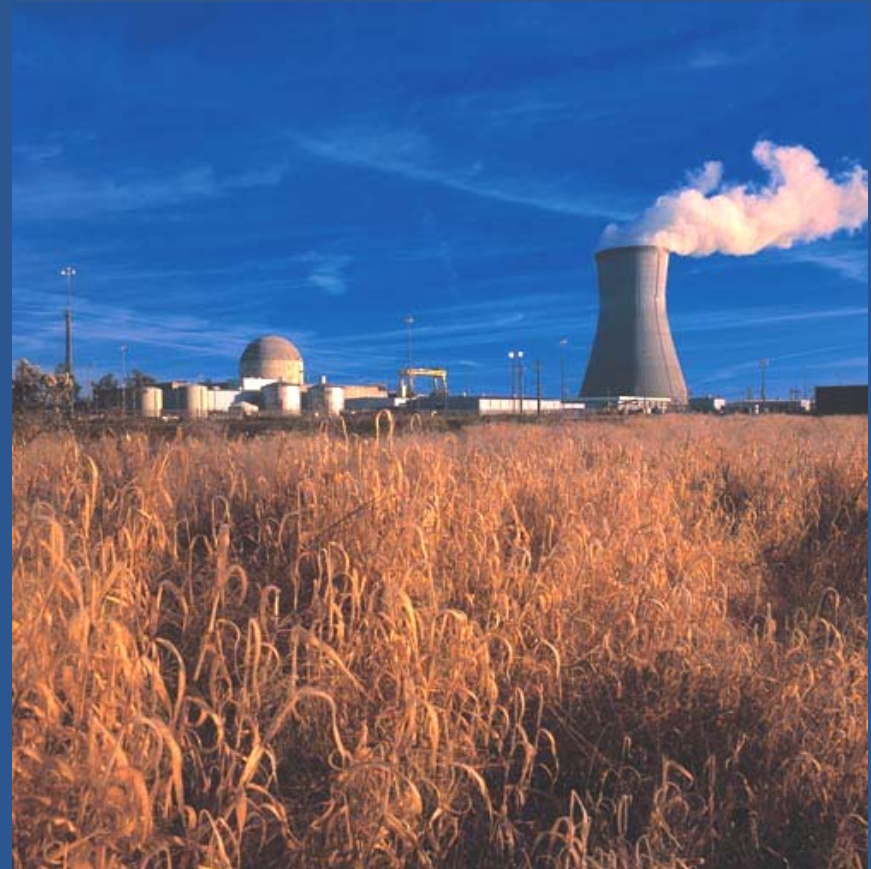
[www.savethewatts.com](http://www.savethewatts.com)

# Meeting The Challenge: Availability of renewable energy



# State-of-the-art Nuclear Plants

- Nuclear power
  - Emits zero greenhouse gas emissions
  - Promotes energy independence through less reliance on foreign energy sources
  - Stable prices over time





## Harris Nuclear Plant

**Celebrating 20 years  
of safe, reliable operation.**

