



# DELIVERING SUPERIOR SHAREHOLDER VALUE

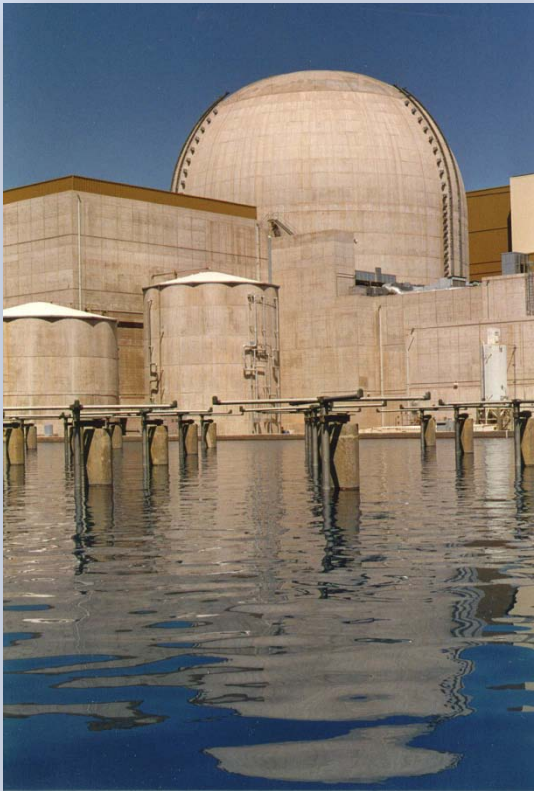
## PALO VERDE OVERVIEW

Randy Edington



PINNACLE WEST  
CAPITAL CORPORATION

# PALO VERDE OVERVIEW AGENDA



- **Business plan/objectives**
- **Performance trends**
- **Major capital improvements**
- **Fukushima follow-up**
- **Operating license extensions**





# PALO VERDE MISSION

We SAFELY and efficiently generate electricity for the long term.



PINNACLE WEST  
CAPITAL CORPORATION





# PALO VERDE MISSION

We SAFELY and efficiently generate electricity for the long term.





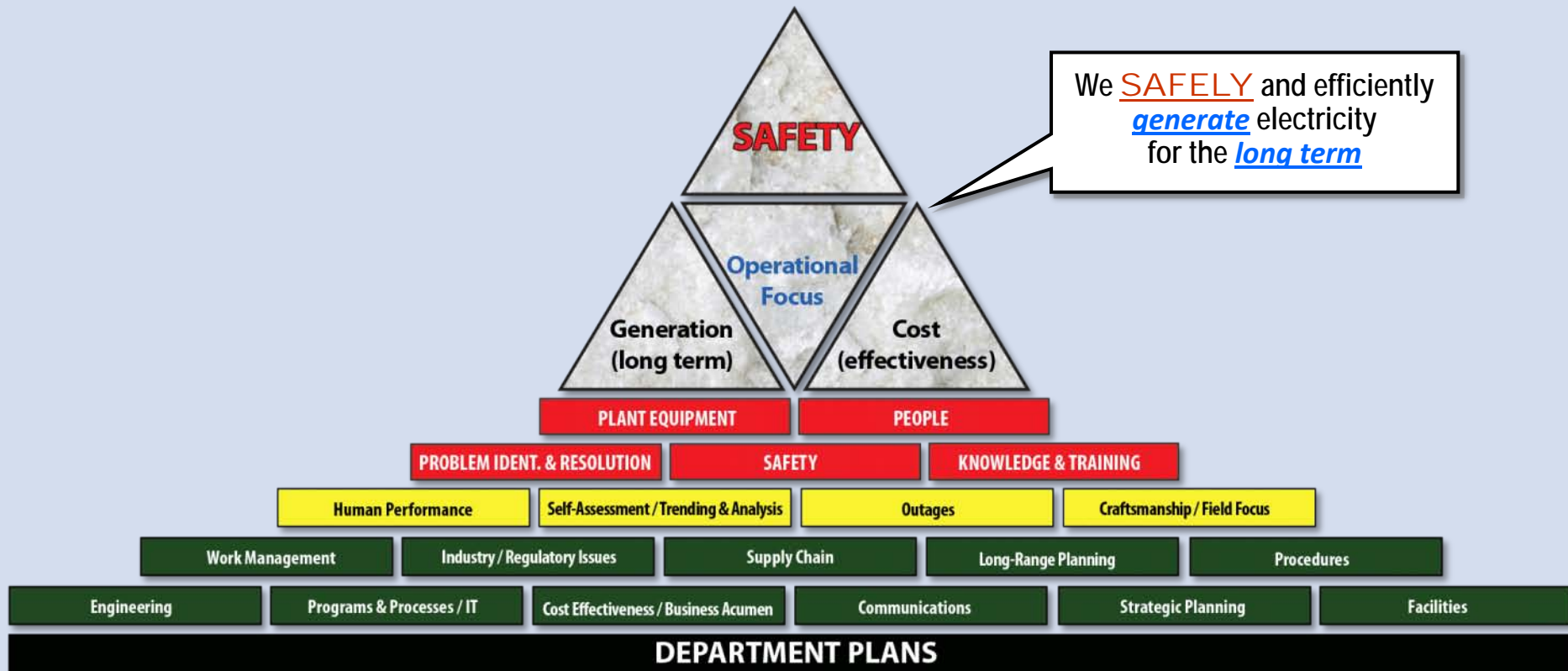
# PALO VERDE MISSION

We SAFELY and efficiently generate electricity for the long term.



# PALO VERDE BUSINESS PLAN

Our business plan guides all of our operations and initiatives.





# PALO VERDE GOALS BY 2013/2014

We target top-quartile cost per megawatt-hour by 2014.

## Safety

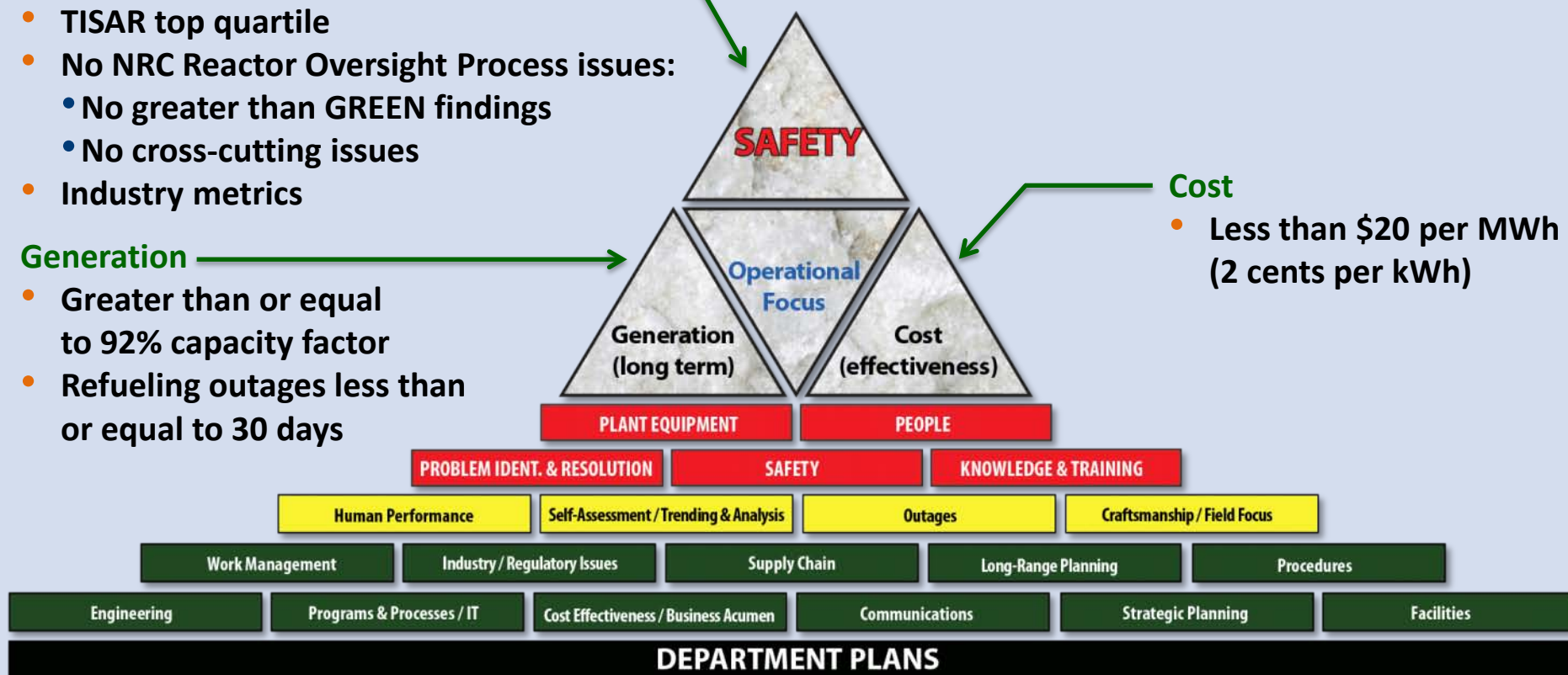
- TISAR top quartile
- No NRC Reactor Oversight Process issues:
  - No greater than GREEN findings
  - No cross-cutting issues
- Industry metrics

## Generation

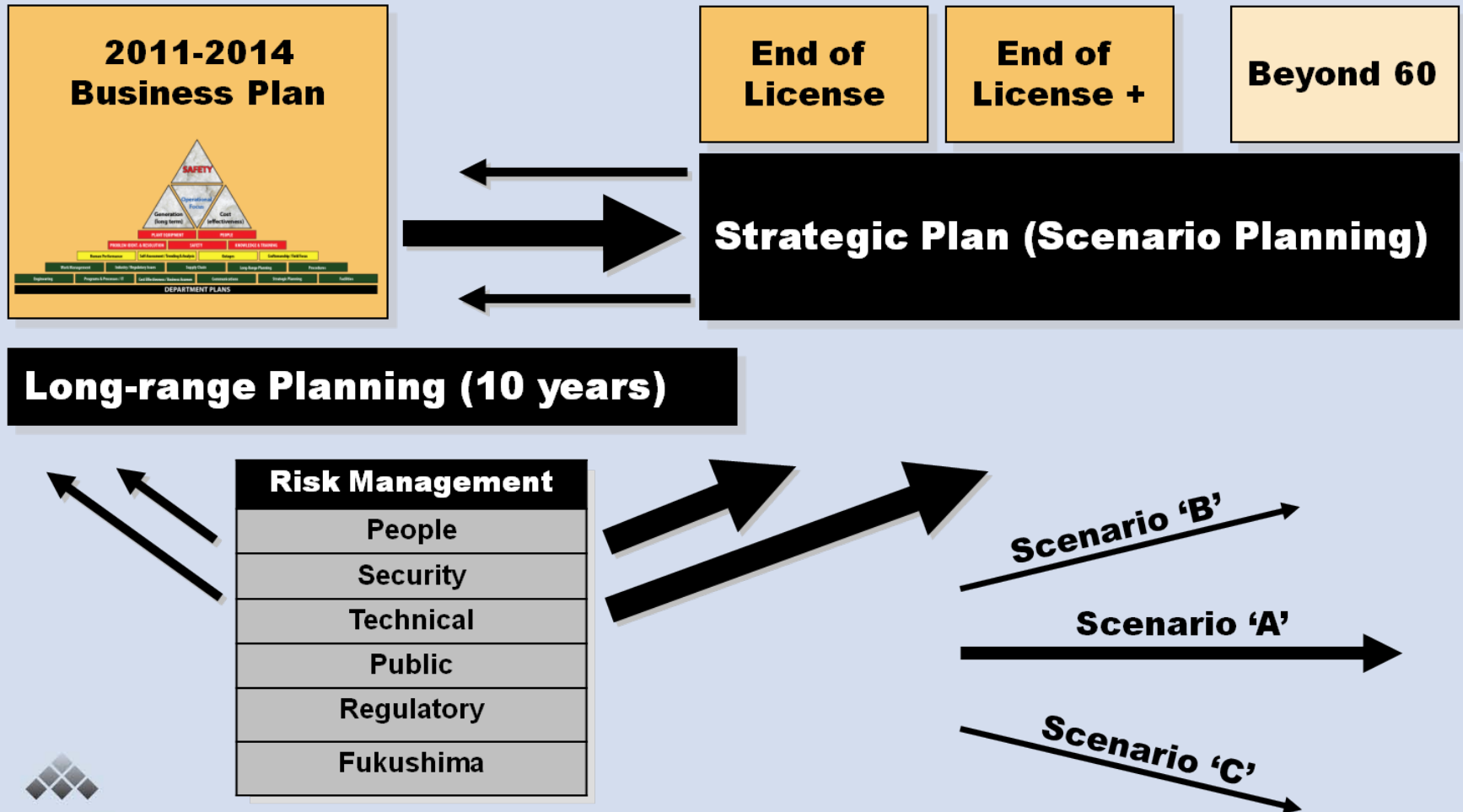
- Greater than or equal to 92% capacity factor
- Refueling outages less than or equal to 30 days

## Cost

- Less than \$20 per MWh (2 cents per kWh)



# PALO VERDE BUSINESS AND STRATEGIC PLANS





# STARS ALLIANCE

We team with other nuclear plants to create efficiencies and purchasing power.

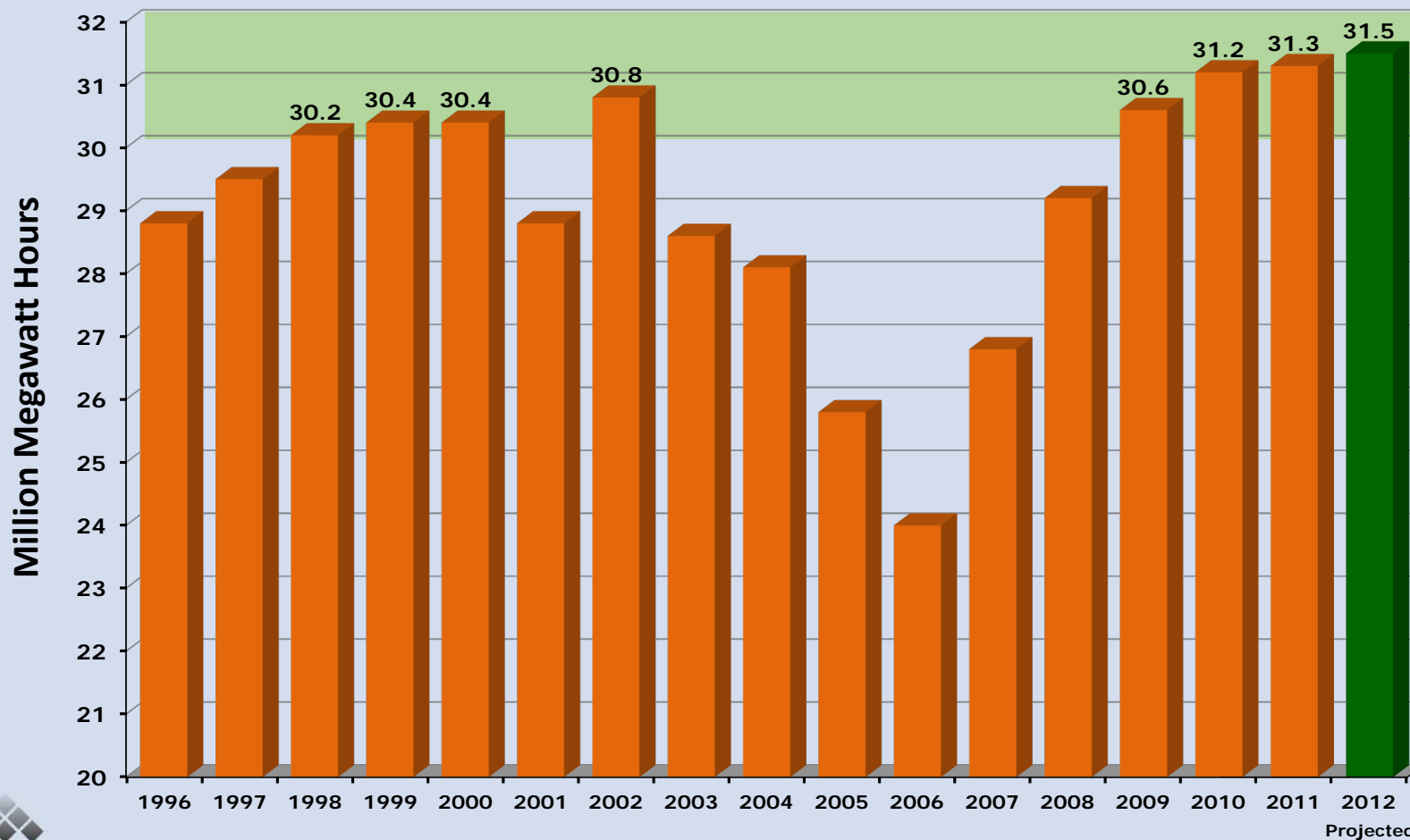
## ★ Headquarters

- Palo Verde (Arizona)
- Callaway (Missouri)
- Comanche Peak (Texas)
- Diablo Canyon (California)
- San Onofre (California)
- South Texas (Texas)
- Wolf Creek (Kansas)



# PALO VERDE NET GENERATION

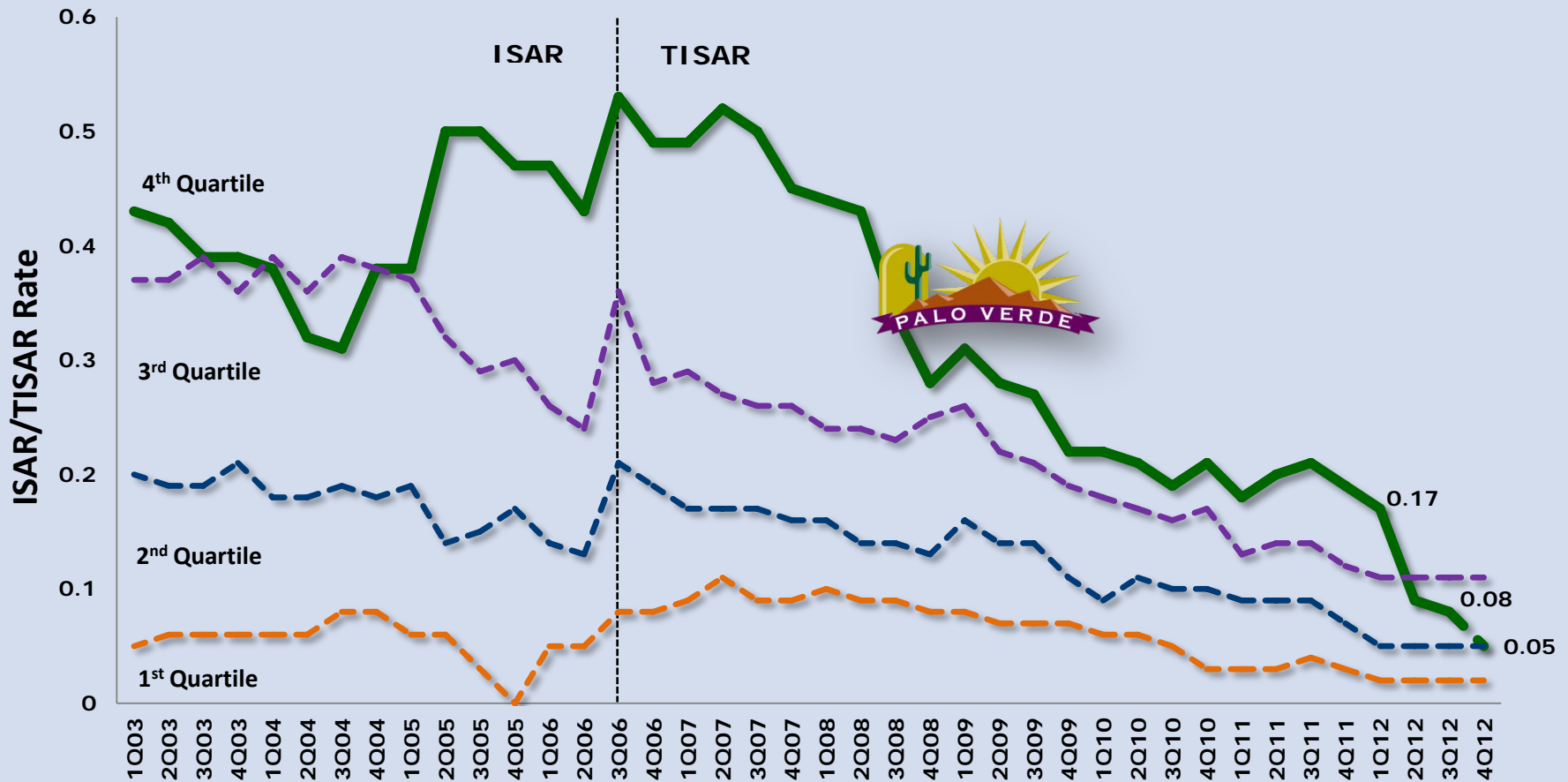
Palo Verde has exceeded 30 million megawatt-hours annual production seven times – the only U.S. plant to ever do so.





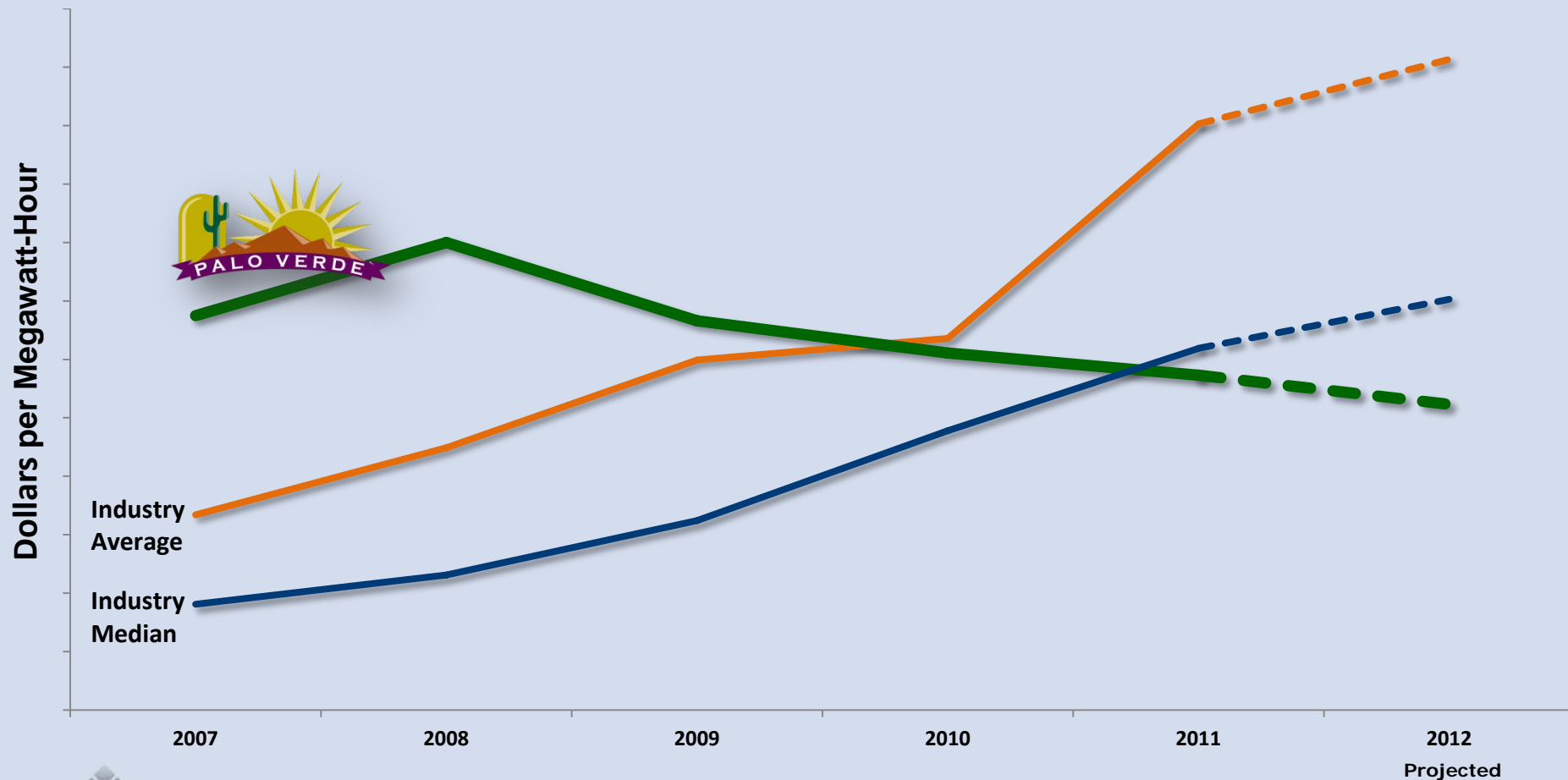
# TOTAL INDUSTRIAL ACCIDENT RATE

Palo Verde's safety metrics compare favorably with industry norms and are improving.



# U.S. NUCLEAR OPERATING COSTS

Palo Verde operating costs are below industry averages and improving.





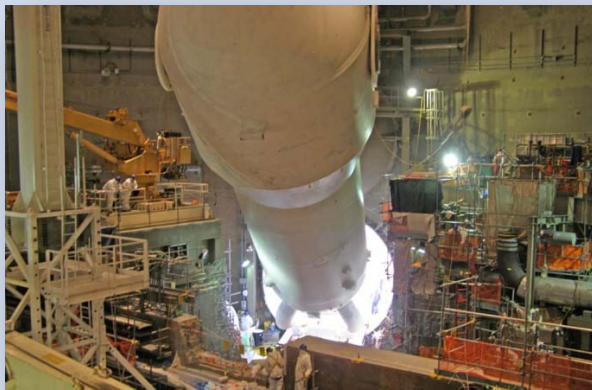
# PALO VERDE MAJOR CAPITAL PROJECTS

Completed capital projects position Palo Verde well for safe, efficient operations for the long term.

- **Major capital projects completed in past 10 years**
  - **Steam generator replacements**
  - **Reactor vessel head replacements**
  - **New rapid refueling packages**
  - **Main transformers**
  - **Main generator rotors**
  - **Circulating water system tie-in for future cooling towers**
  - **Energy Education Center**
- **Cooling tower replacement update**



# PALO VERDE MAJOR CAPITAL PROJECTS



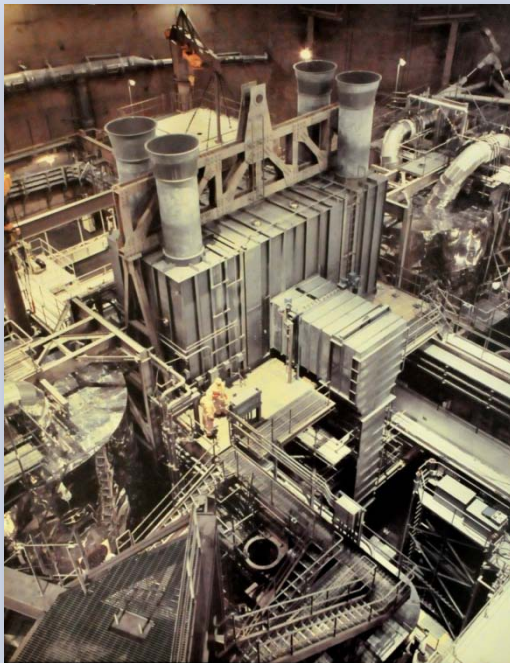
- **Steam generators**
  - Installed 2003-2007
- **Reactor vessel heads**
  - Installed 2009-2010





# PALO VERDE MAJOR CAPITAL PROJECTS

## *Before*



- **Rapid refueling packages**
  - Installed 2009-2010
  - Increased efficiency and safety
  - Reduced future outage durations

## *After*



# PALO VERDE MAJOR CAPITAL PROJECTS

- **Main transformers**
  - 2008 to 2018
- **Main generator rotors**
  - Most recent outage
- **Circulating water system tie-in for potential future cooling towers**
  - 2009-2010





# PALO VERDE MAJOR CAPITAL PROJECTS

## *Energy Education Center*

- Public education
- Response coordination in state-of-the-art Emergency Operations Facility
- Joint Information Center





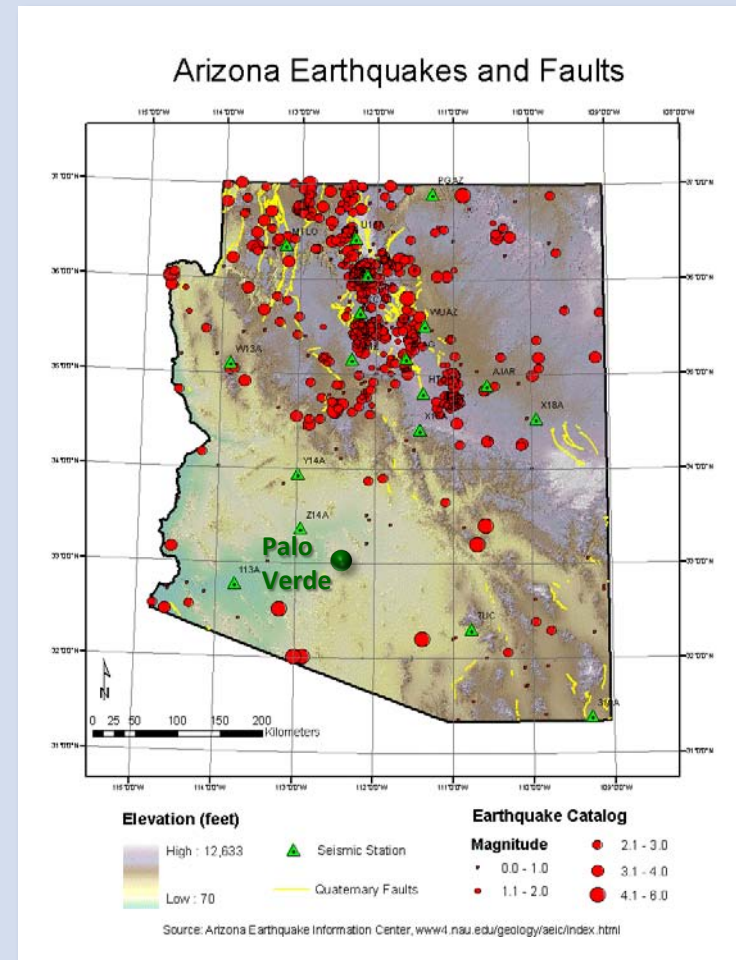
# FUKUSHIMA FOLLOW-UP

## Fukushima Event Response Team Room



# FUKUSHIMA FOLLOW-UP

- **Low risk of natural events at Palo Verde**
- **Seismic and flooding walk-downs conducted**
- **Changes in NRC regulations and industry standards**





# FUKUSHIMA FOLLOW-UP

- **FLEX / Beyond Design Bases Event Mitigation**
- **Enhanced Procedures and Emergency Plans**
- **Significant Investment in Safety**





# PALO VERDE ECONOMIC IMPACT

Palo Verde is estimated to favorably impact Arizona by \$1.8 billion each year.

- **Largest single commercial taxpayer in Arizona**
  - **Nearly \$50 million in property taxes annually**
- **Local purchases of materials and services**
- **Palo Verde employees donate approximately \$1 million annually to local charities**
- **Approximately 2,800 employees**



# PALO VERDE LICENSE RENEWAL

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