

SUMMARY OF MEETING
TOUR OF AMEREN MISSOURI
CALLAWAY ENERGY CENTER
JULY 17, 2013

On Wednesday, July 17, 2013 the following tours were held at the Callaway Energy Center.

Those participating from Ameren Missouri included:
Senior Vice President and Chief Nuclear Officer Adam Heflin
Vice President Nuclear Operations Fadi Diya
Legislative Representative Rick Eastman
Strategic Communications Advisor Anne Roselius
State Regulatory Liaison Gaye Suggett

Commissioner Bill Kenney participated in the tour from 11:30 a.m. to 2:00 p.m.

The following individuals from the Missouri Public Service Commission participated in the tour from 1:00 p.m. to 3:30 p.m.

Goldie Tompkins
Ethan Todd
Joyce LaFontain
Brad Fortson
Dan Jordan
Kim Burton
Ron Pridgin
Jason Huffman
Angelina Whitfield
Henry Warren
Kory Boustead
Joel McNutt
Annette Slack
Cheryl Wright

Gaye Suggett welcomed everyone to the Callaway Energy Center. Adam Heflin, Rick Eastman and Fadi Diya gave a presentation of the Callaway Energy Center and a safety briefing prior to participating in the tour. The presentation is attached.

An Overview of Ameren Missouri's Callaway Energy Center and Nuclear Power

2013

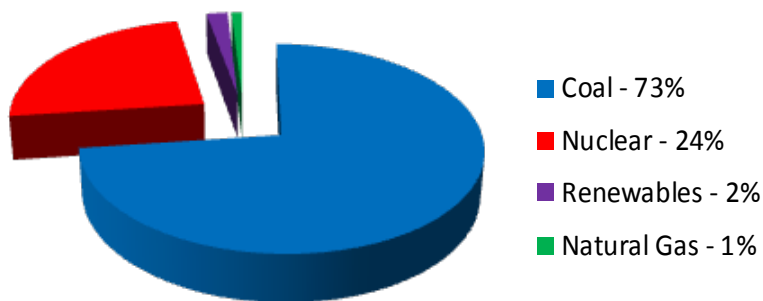


AMEREN MISSOURI

Ameren Missouri (orange)

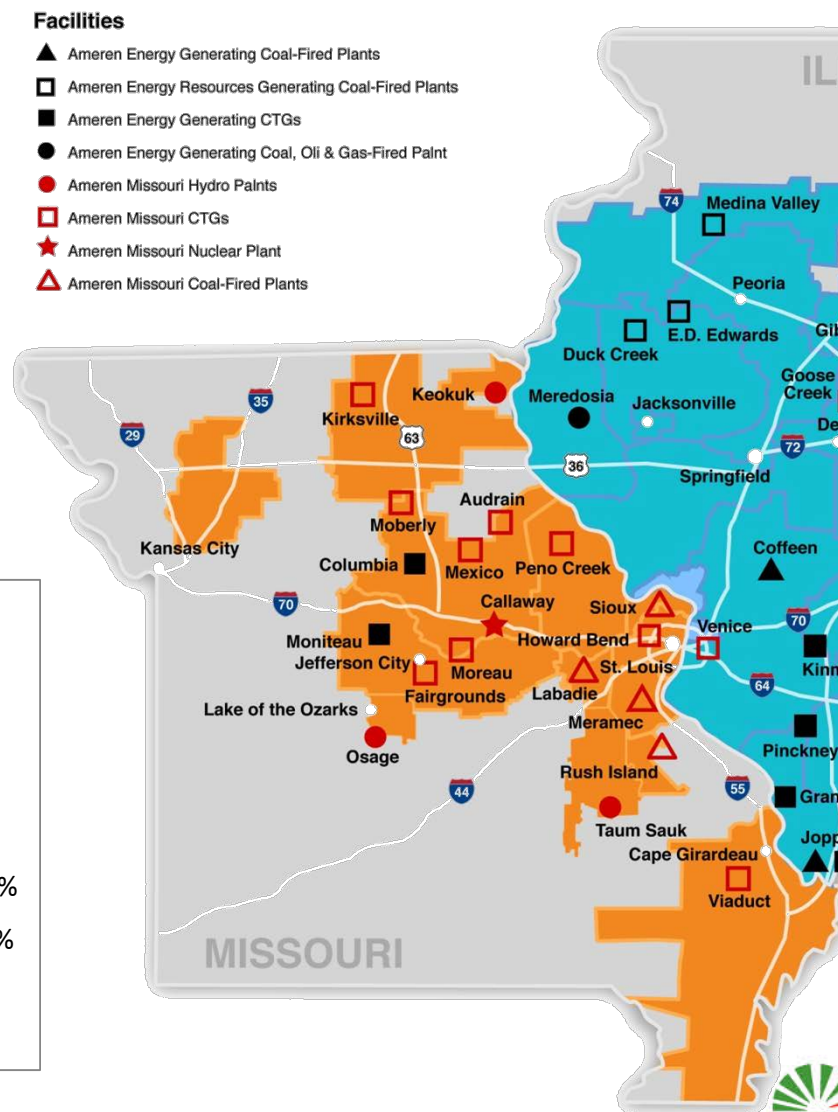
- 1.2 million Electric customers
- 126,000 Natural Gas customers
- 500 communities served
- 24,000 square mile territory
- 4,000 Employees

2013 Fuel Mix



Facilities

- ▲ Ameren Energy Generating Coal-Fired Plants
- Ameren Energy Resources Generating Coal-Fired Plants
- Ameren Energy Generating CTGs
- Ameren Energy Generating Coal, Oil & Gas-Fired Plant
- Ameren Missouri Hydro Plants
- Ameren Missouri CTGs
- ★ Ameren Missouri Nuclear Plant
- △ Ameren Missouri Coal-Fired Plants



AMEREN MISSOURI GENERATION...over 10,000 MW

Meramec
STL Co.
839 MW
1953



Sioux
St. Charles Co.
986 MW
1967



Labadie
Franklin Co.
2,407 MW
1970



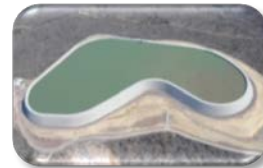
Rush Island
Jefferson Co.
1,204 MW
1976



Keokuk
Iowa
137 MW
1913



CTGs
MO & IL
2,966 MW



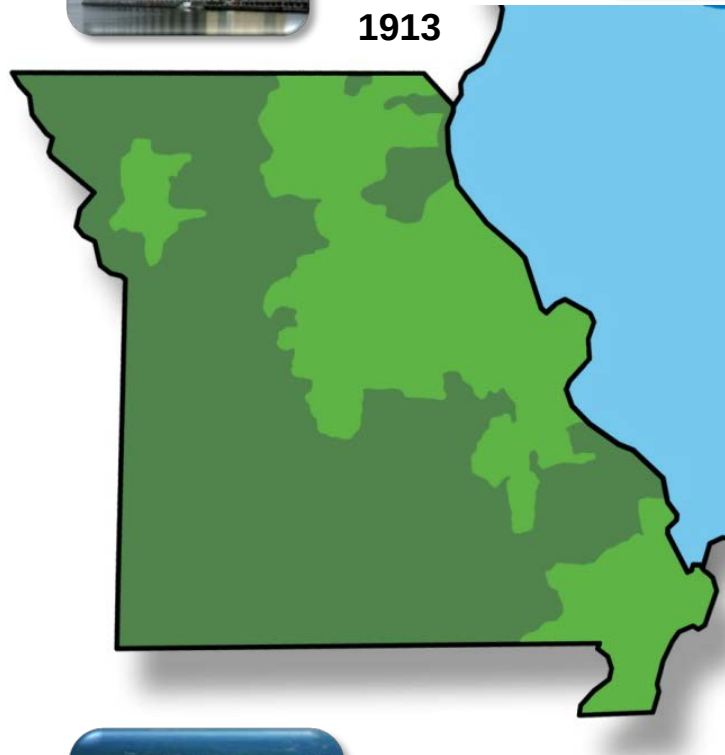
Taum Sauk
Reynolds Co.
440 MW
1963 & 2010



Osage
Lakeside, MO
234 MW
1931

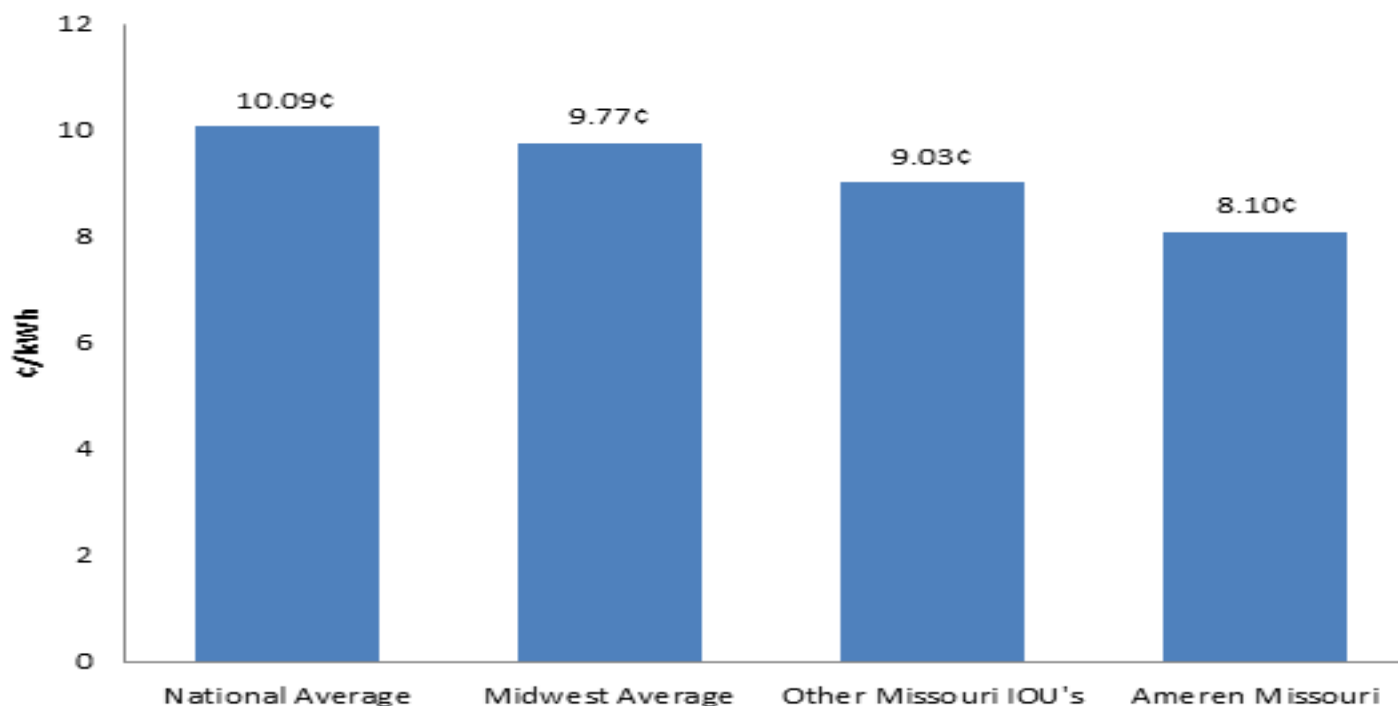


Callaway
Callaway Co.
1,200 MW
1984



AMEREN MISSOURI RESIDENTIAL RATES

COMPARISON OF AMEREN MISSOURI TOTAL RETAIL RATES



Sources and Notes: EEI Winter Typical Bill and Average Rates Report, Midwest States based on US Census definitions. Averages are for 12 months ending December 2012 with Ameren Missouri rates projected forward to include results of Rate Case ER-2012-0166 effective January 2, 2013.



NUCLEAR ENERGY 101

and AMEREN MISSOURI'S CALLAWAY ENERGY CENTER



QUESTION:

How many nuclear plants are operating in the United States?

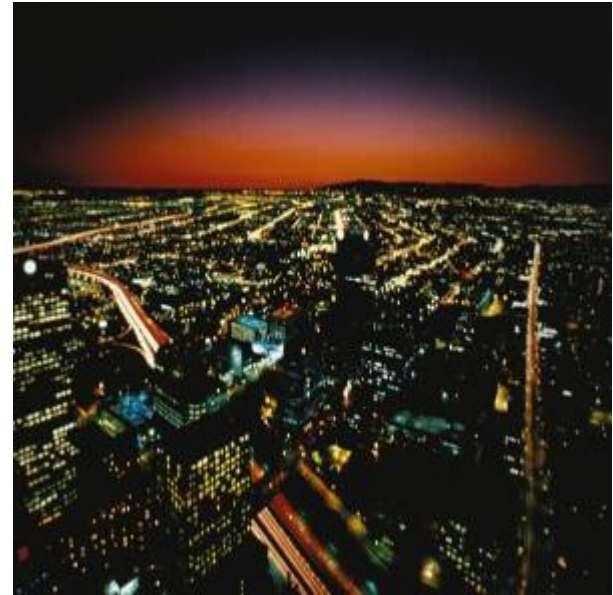
- A) 17
- B) 39
- C) 100
- D) 565



QUESTION:

Nuclear power provides what percentage of electricity in the United States?

- A) 5 percent
- B) 20 percent
- C) 46 percent
- D) 63 percent



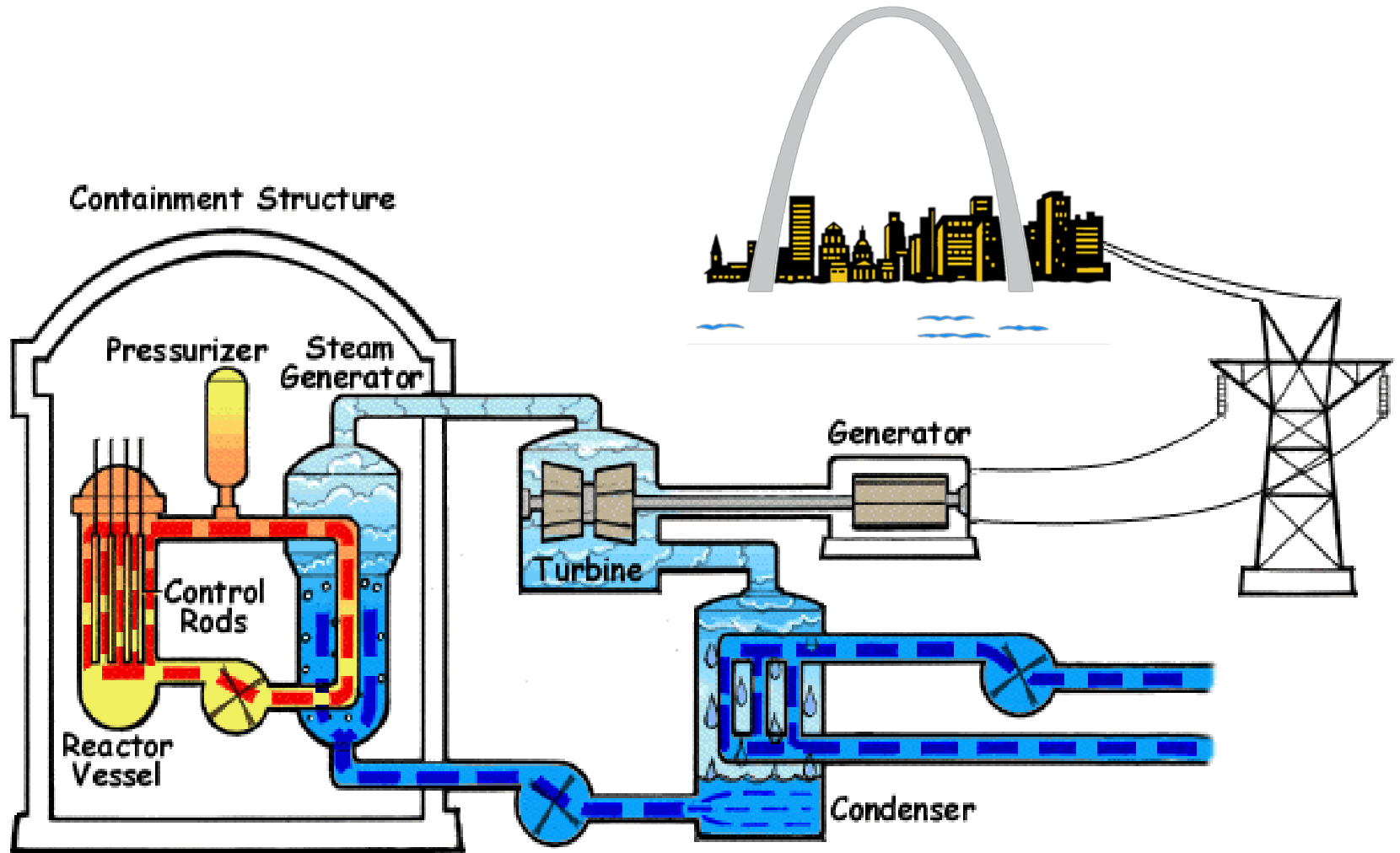
UNITED STATES

- Largest producer of nuclear energy in the world
- Nuclear energy provides 20% of U.S. electricity
- A 1,200 megawatt reactor like Callaway powers 700,000 average households each year
- Oldest operating plant is located in Oyster Creek, N.J. (1969)

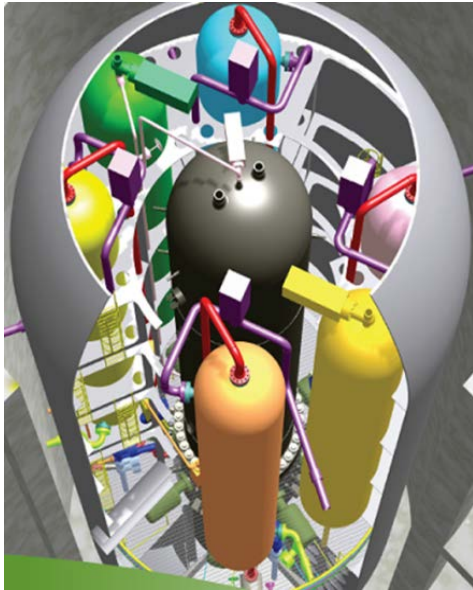
100 reactors in 31 states



HOW DOES NUCLEAR ENERGY WORK?

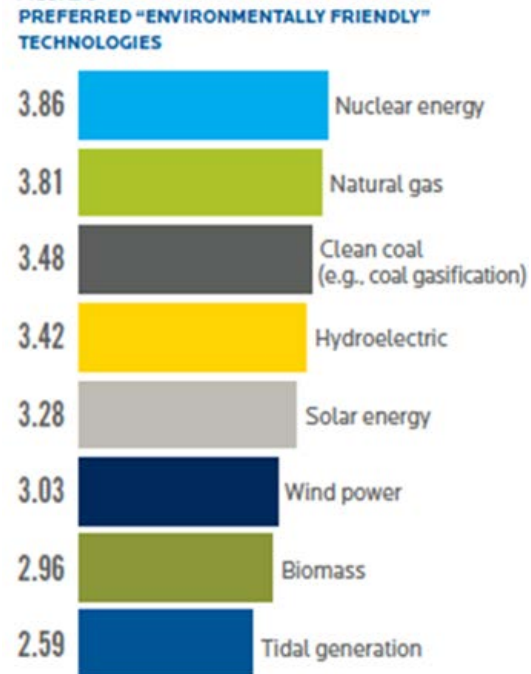


SMALL MODULAR REACTORS CAN BE IN OUR FUTURE!



- Improved reliability
- New jobs
- Cleaner generation
- Energy Efficiency
- Renewable Energy

SMRs can present game-changing opportunities for our state's electric grid and Missouri's consumers



WHAT THIS OPPORTUNITY MEANS FOR MISSOURI

More than **3x** the Opportunity

\$7.3
BILLION
PER YEAR



**TOP MISSOURI
AGRICULTURAL
BUSINESSES**

\$25
BILLION
PER YEAR



AMEREN MISSOURI'S FOCUS

- Our focus is on providing customers with safe, reliable, clean and affordable energy



CALLAWAY ENERGY CENTER – REFUEL 19

- Refueling and maintenance outage began April 8 – 50 days
- RF19 concluded a 500-day run of continuous operations (2nd longest)
- Outage Workforce
 - 815 Ameren Missouri Callaway employees
 - An additional 800 workers from 36 different contractors
 - Over half of these outage contractors are union workers from MO
- Major projects
 - Refuel the reactor (89 new fuel assemblies)
 - Main Transformer Replacement
 - Digital Feed Water Controls
 - Reactor Coolant Pump (RCP) Shutdown Seals (No Leak Seals)
 - NFPA 805 Implementation
 - Perform thousands of maintenance activities, inspections and tests to ensure maximum safety and reliability when the plant returns to service.

WHAT YOU WILL DO ON THE PLANT TOUR TODAY

- What you will do and see
 - Put on personal protective equipment (hard hat, safety glasses and hearing protection)
 - Walk into the power block of the plant

SAFETY BRIEF

- Our highest value – three types
 - **Nuclear** – our employees see to that every day – security is highly trained and well armed
 - **Radiological** – special ALARA brief
 - **Industrial** - This is **an industrial environment**
 - Hazards
 - Icy/wet surfaces
 - Trip hazards such as floor grating and concrete curbs
 - Hot pipes
 - High noise
 - Don't touch or bump any plant equipment
 - Personal Protective Equipment will be issued
 - Hard hats
 - Safety glasses
 - Earplugs

SECURITY BRIEF

- No cell phones – leave them here
- No cameras – we will take pictures for you
- Stay with your assigned escort at all times – within eye sight. If you become separated from your escort, immediately contact Security or the nearest plant employee.
- Ensure your Visitor Badge is displayed in plain view at all times.



FOCUSED ENERGY. For life.