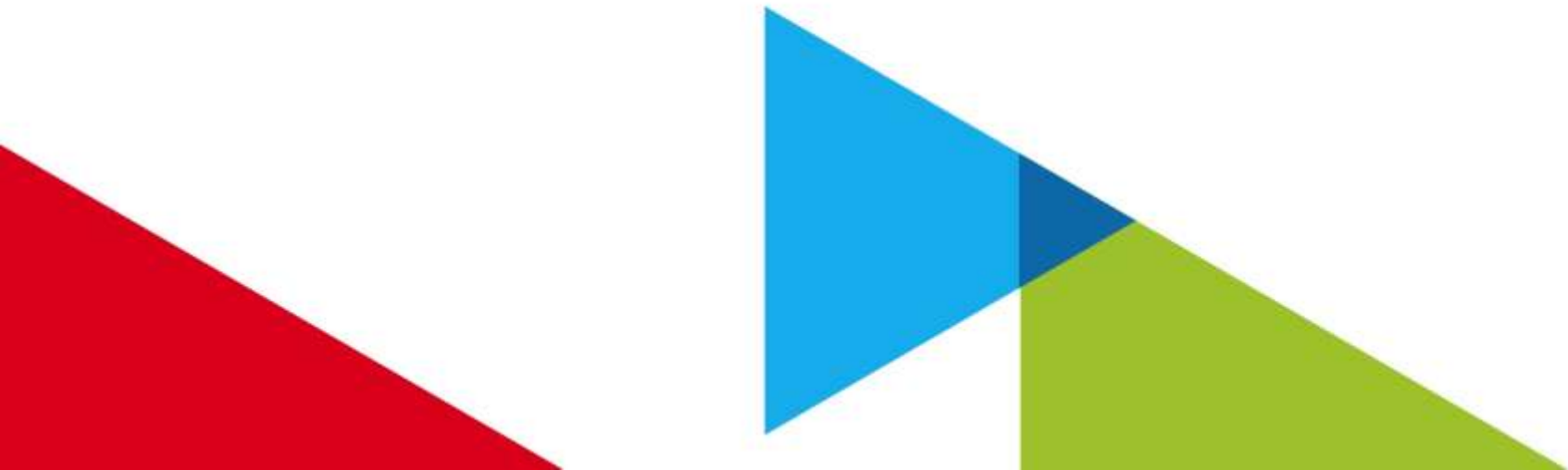


# Welcome to the Joseph M. Farley Nuclear Plant



# Safety First

Every job, every day, the right way.



Southern Nuclear

# Plant Farley Fast Facts



- Unit 1 licensed until 2037
- Unit 2 licensed until 2041
- Approximately 850 employees
- The plant's taxes account for approximately 20 percent of Houston County's tax revenue (~ \$10 million annually)



# Welcome to Farley Nuclear Plant

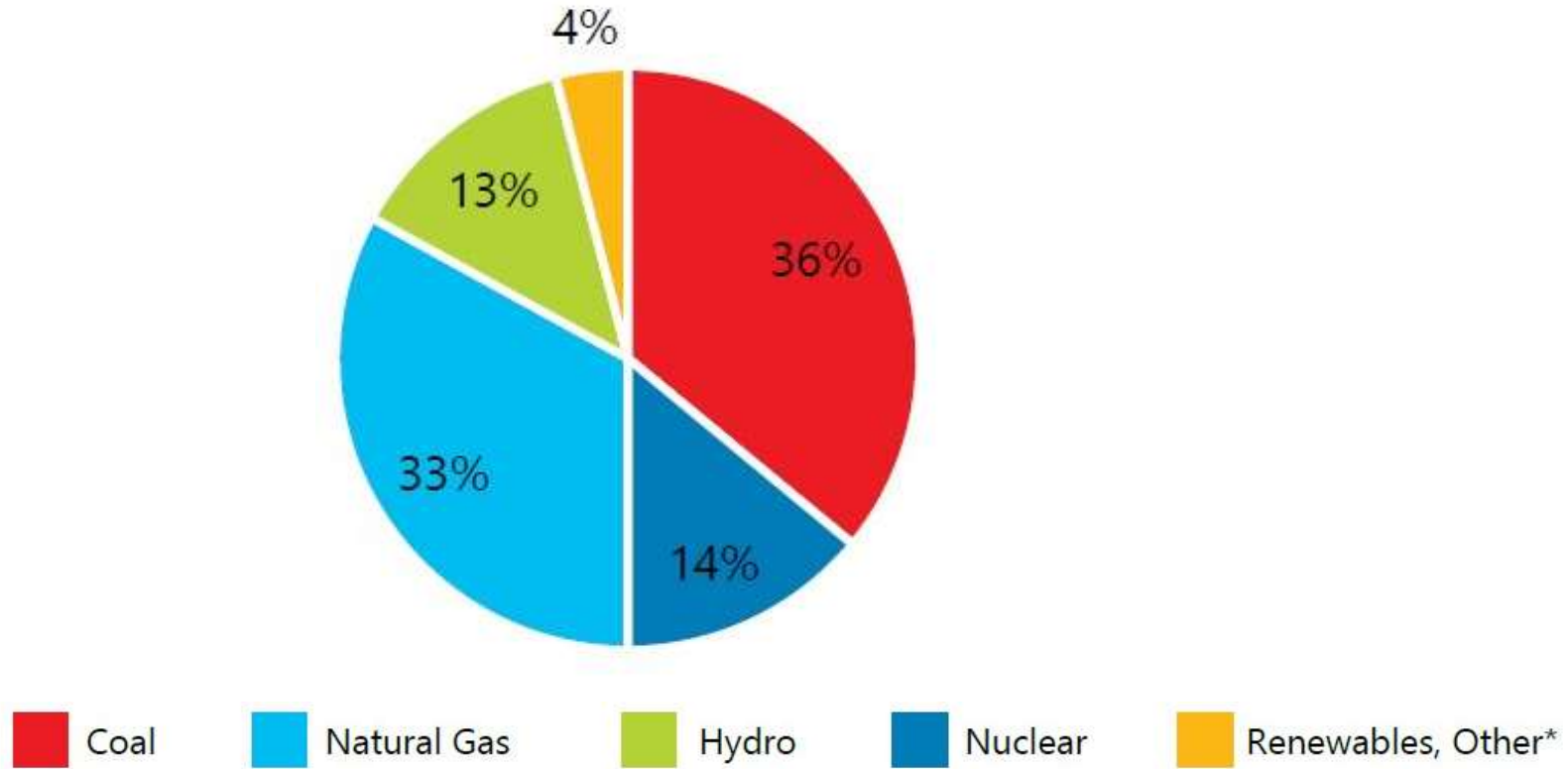


# Vogtle Units 3 &4





# Alabama Power's Capacity Mix - 2020



*\*Alabama Power generally retains the right to sell renewable energy or associated RECs to third parties for the benefit of customers.*



# The Power of the Pellet



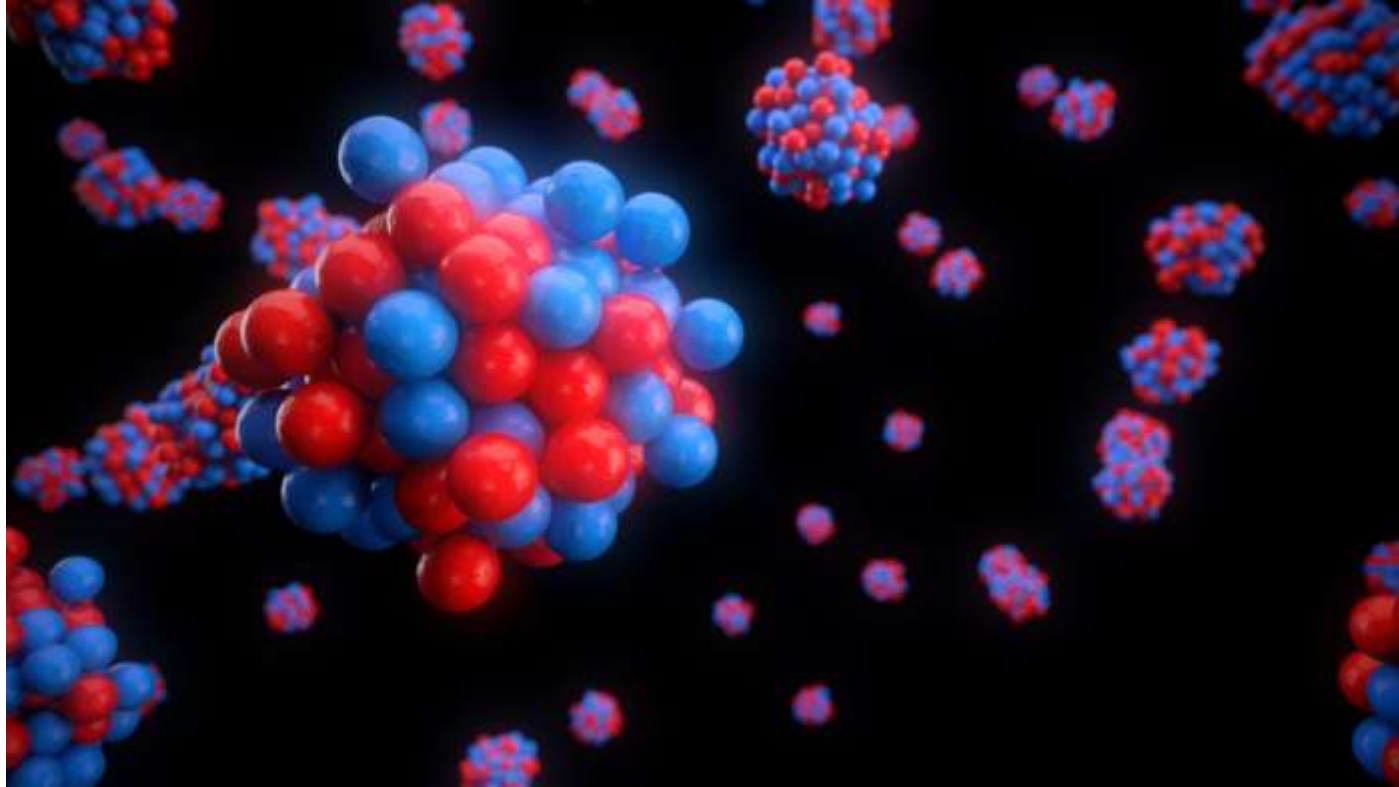
One uranium fuel pellet has  
as much energy as

- 1 ton of coal
- 17,000 cubic feet of  
natural gas
- 149 gallons of oil





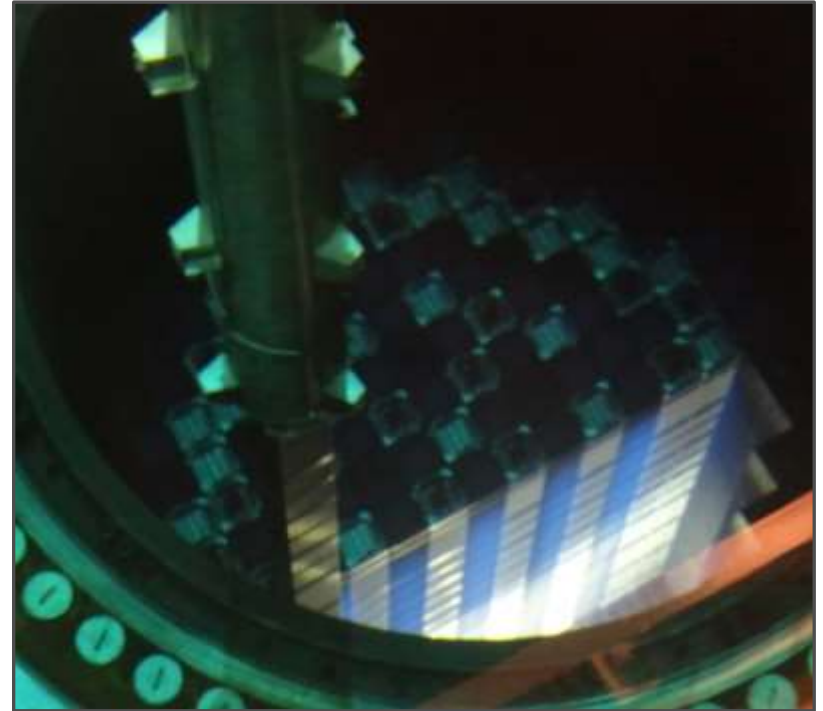
# The Power of the Pellet



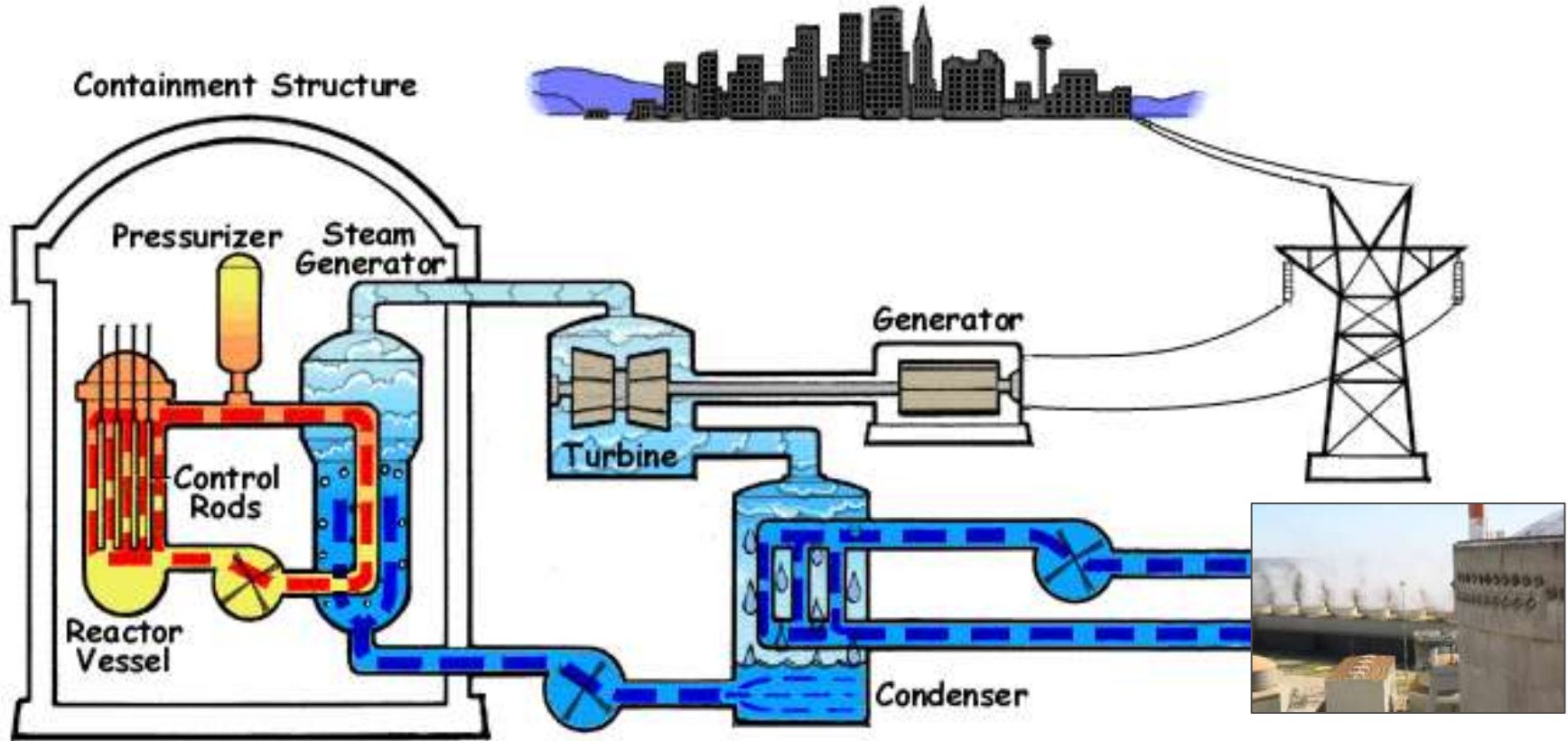
# The Power of the Pellet



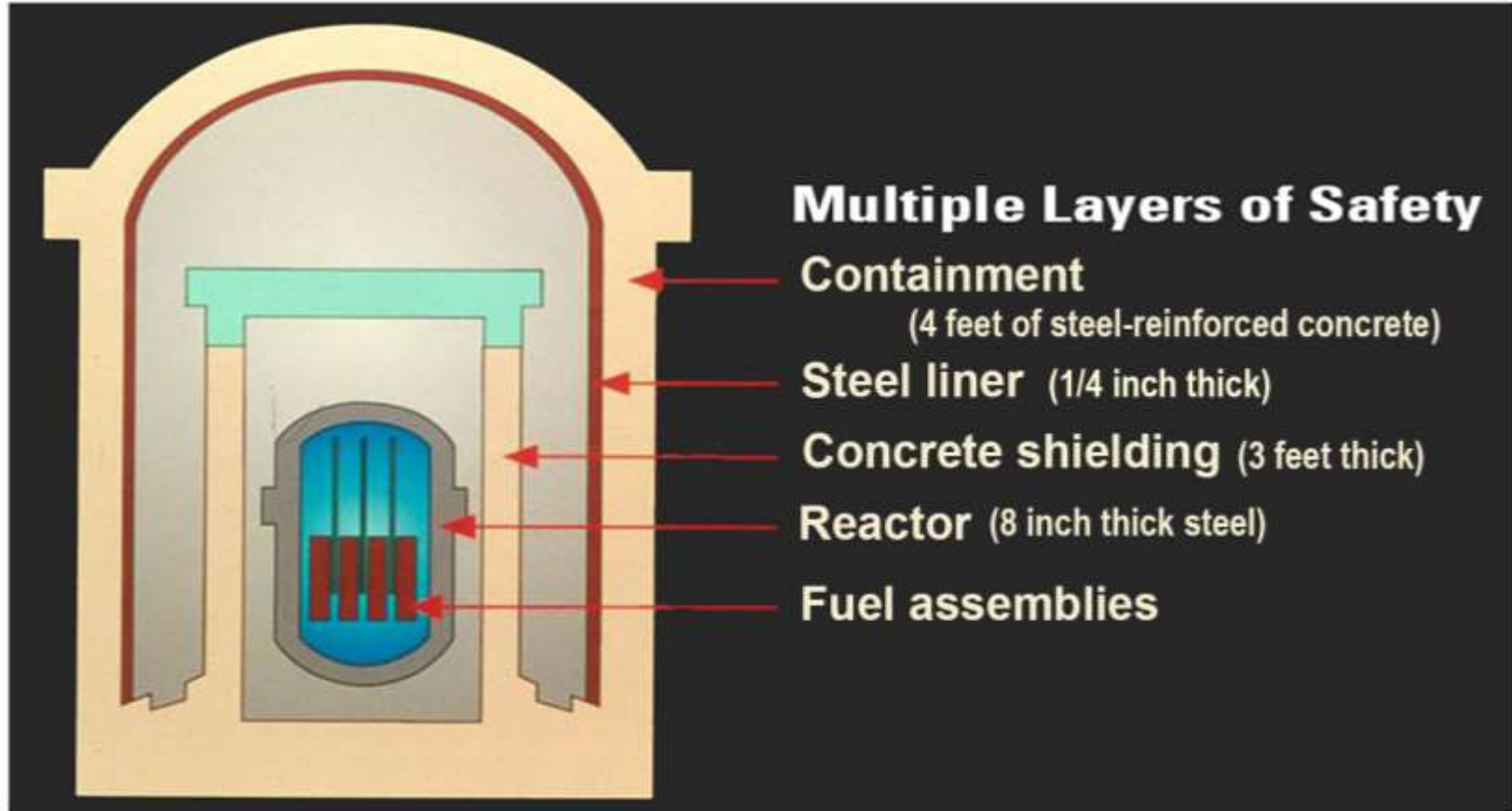
- Pellets stacked in fuel rods
- 264 rods make-up each fuel assembly
- 157 fuel assemblies in each Farley reactor



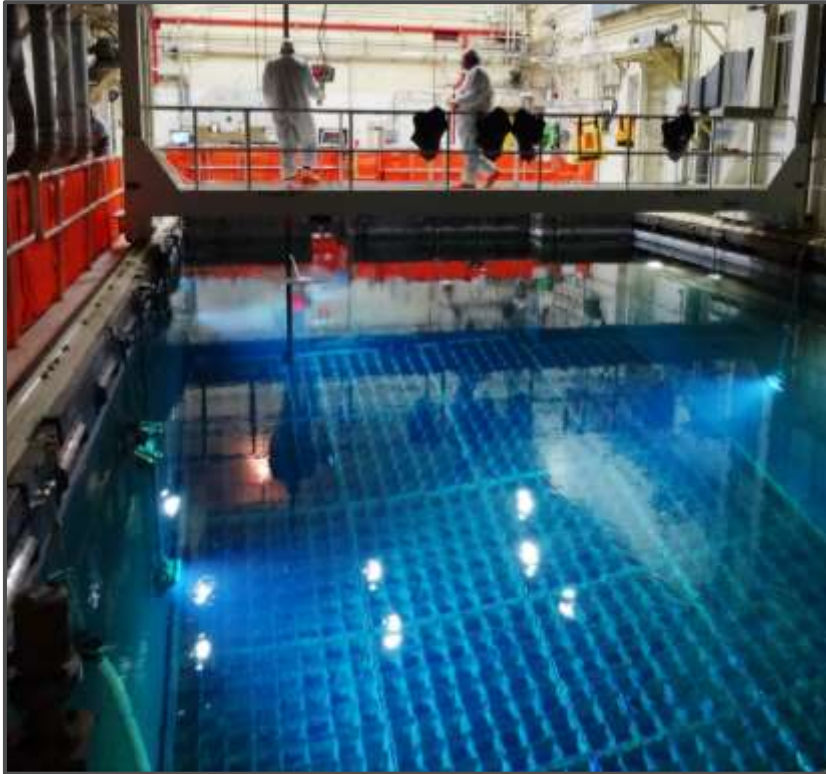
# Pressurized Water Reactor



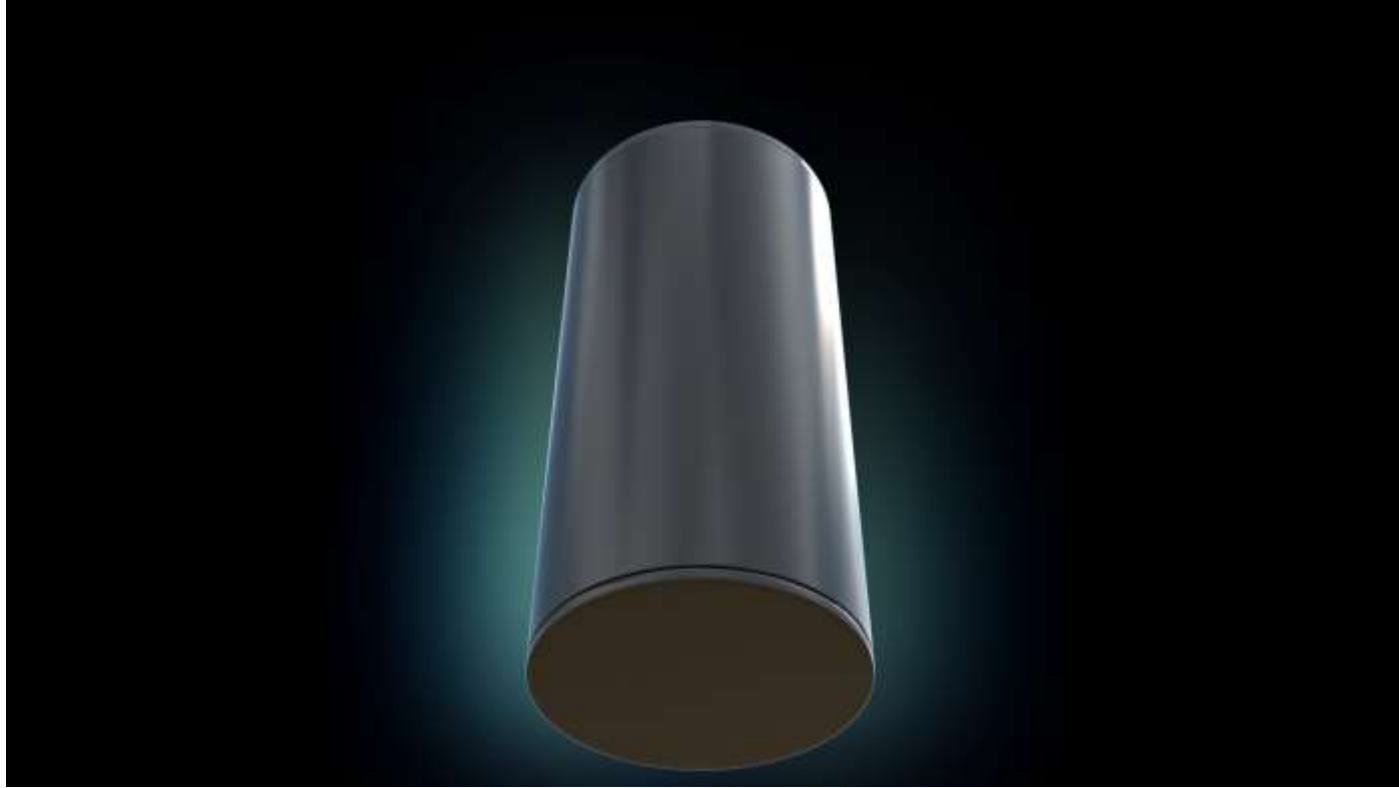
# Safety in Depth- Containment Building



# Safety in Depth- Used Fuel Storage



# Safety in Depth- Used Fuel Storage





# Safety in Depth- Plant Security



## Comprehensive security measures:

- Robust containment, spent fuel pools and spent fuel storage containers
- Redundant and diverse plant safety systems
- Trained plant staff, skilled in accident and event response
- Comprehensive emergency plans
- Rigorous security plans and security forces





# Safety in Depth- Environmental Hazards



Designed to withstand the most extreme events safely:

- Maximum credible earthquakes and floods
- Loss of off-site power
- Post-Fukushima lessons learned
- Industry preparation, training, etc. exceed NRC requirements
- Industry has a long history of continuous learning



# Safety in Depth- FLEX Strategies



- The dome houses generators, pumps and other equipment needed to maintain key safety functions after an extreme event.
- More than 17,000 square feet of storage.
- Built to withstand high winds, earthquakes and other natural disasters.

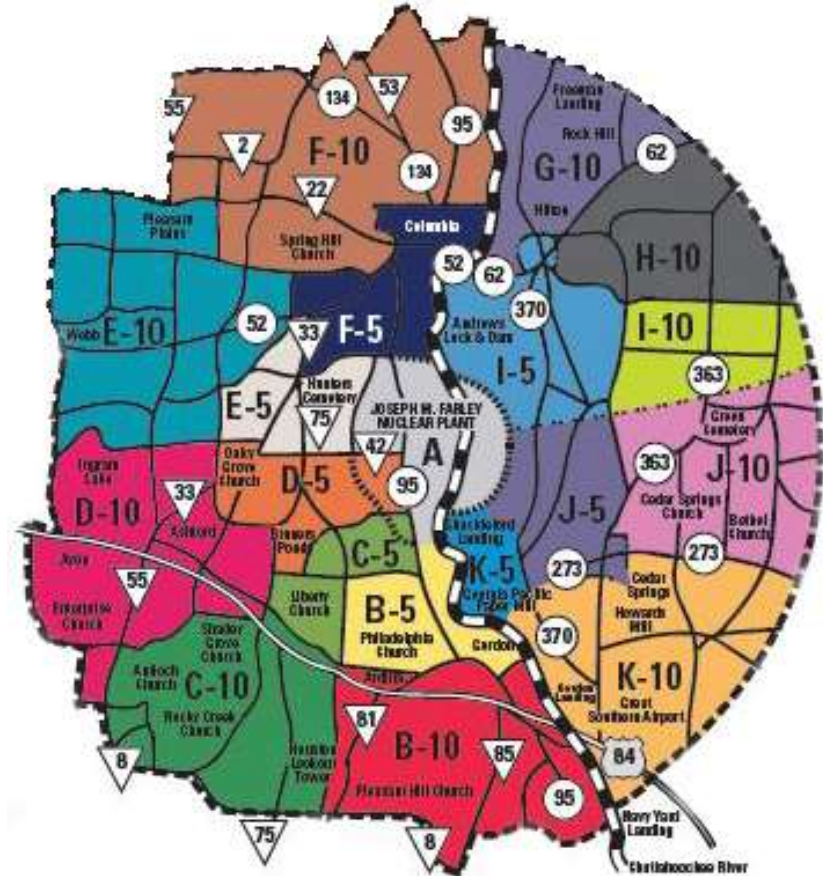


# Safety in Depth- Emergency Preparedness



## Emergency Planning

- Drills
- Monitoring
- Collaboration
- Communication



# Community Outreach



**Wiregrass United Way:** More than \$138,000 in 2023

**STEM Contributions:** \$31,500 to area schools in 2023

**Non-Profit Contributions:** \$25,000 in 2023

**Employee/Company Organizations:** Hundreds of service hours  
(mentoring, volunteering & fund raising) by employees annually





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