# Nuclear Energy – Plant Vogtle

Clean, Safe, Reliable and Affordable Electrical Energy ... and Carbon Free!

John Williams
Vice President
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Southern Nuclear Company

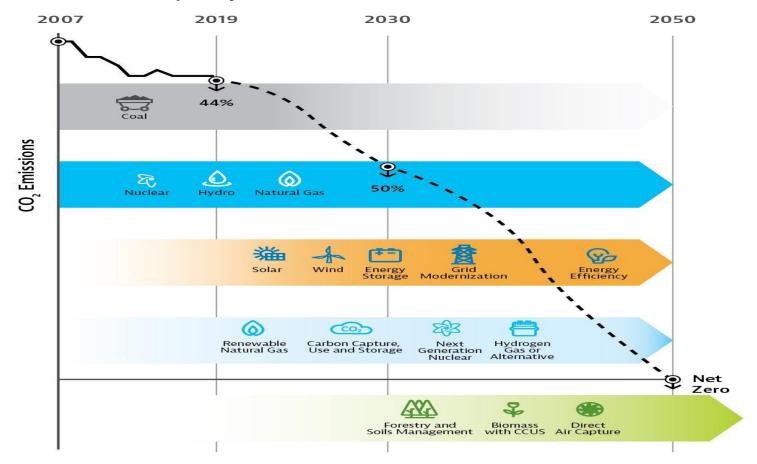
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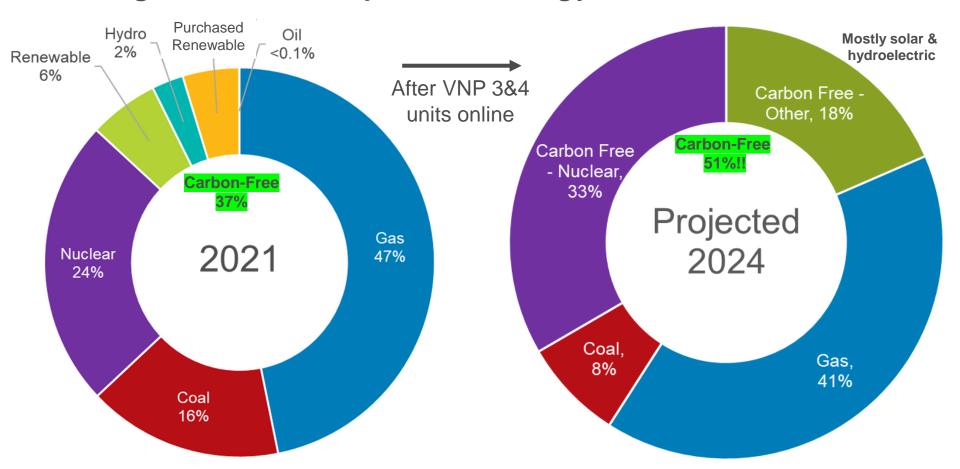




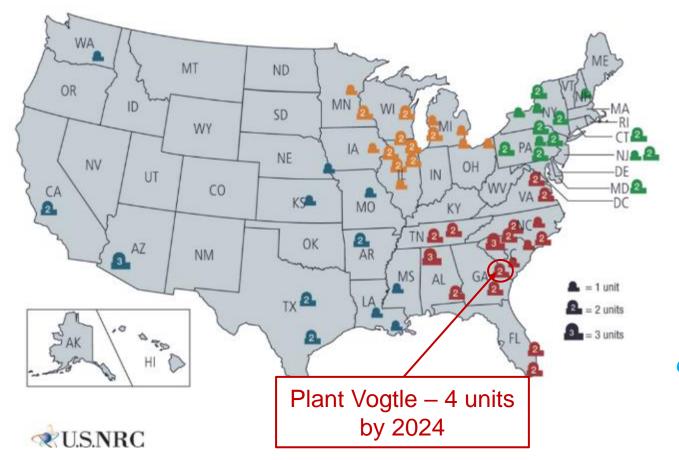
### Southern Company – A Path to Net Zero Carbon Emissions



### Georgia Power Projected Energy Mix – 2024



### U.S. Operating Commercial Nuclear Power Plants



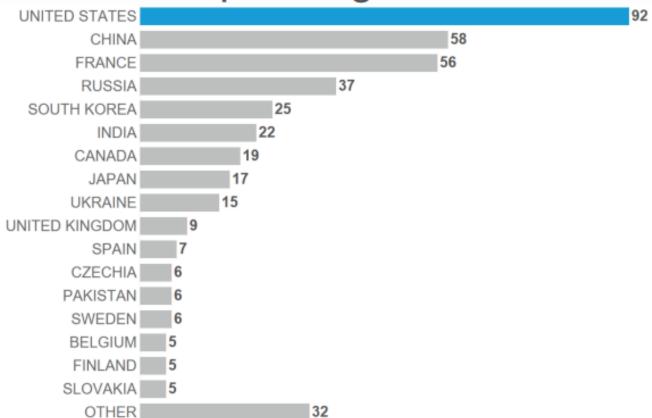
92 operating U.S. nuclear energy units

Also appx 100 U.S. Navy reactors, nuclear research/test reactors, and radioisotope processing facilities!

U.S. nuclear power plants reduce carbon emissions by the equivalent of taking 100 million U.S. passenger vehicles off the road!

## 422 reactors operating worldwide

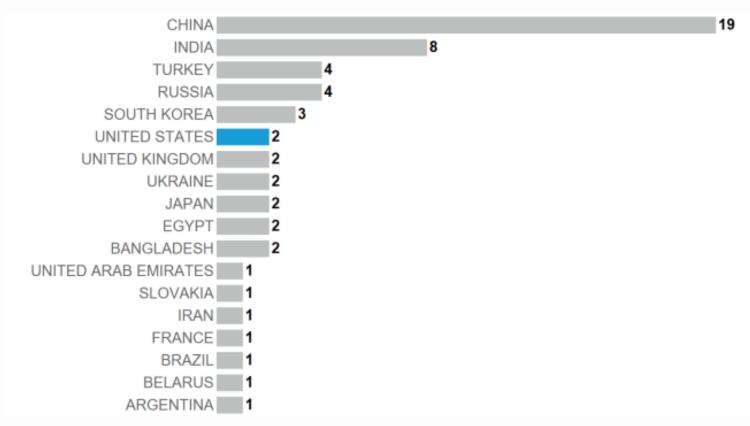




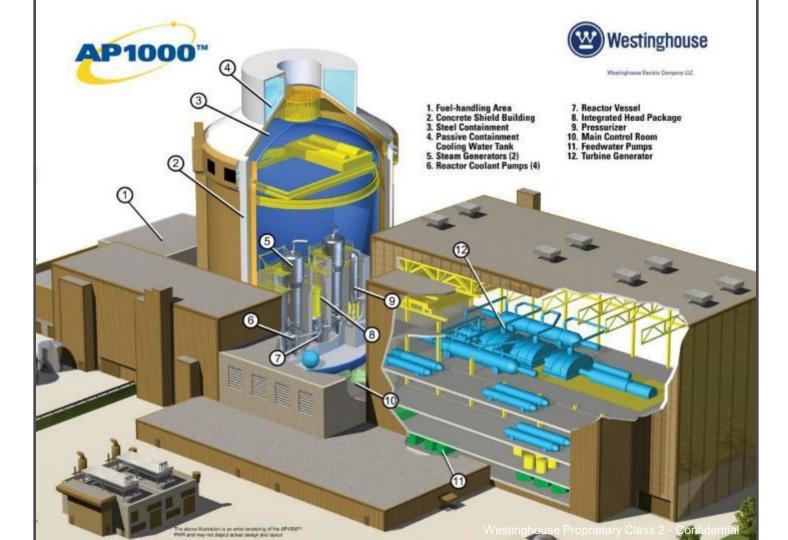
Source: International Atomic Energy Agency Updated: March 2023

### 57 reactors under construction worldwide





Source: International Atomic Energy Agency Updated: March 2023



## Plant Vogtle Unit 3

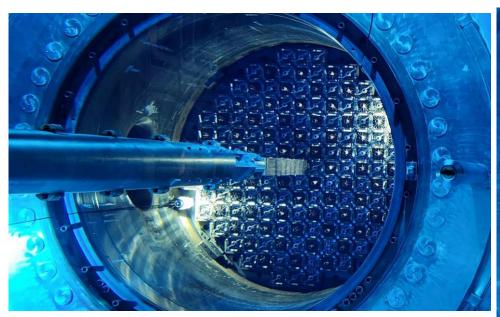


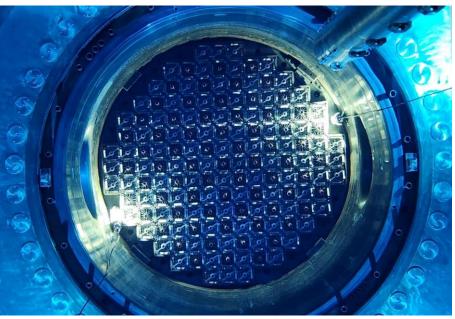


#### **Unit 3 Start-up Milestones:**

- ✓ Initial Criticality (March 6<sup>th</sup>)
- ✓ Sync to the Grid (April 1<sup>st</sup>)
- ✓ Achieved 75% Power (May 1<sup>st</sup>)
- Achieve 100% Power
- Commercial Operations

### Vogtle Unit 3 fully fueled for first time! – Oct. 17, 2022



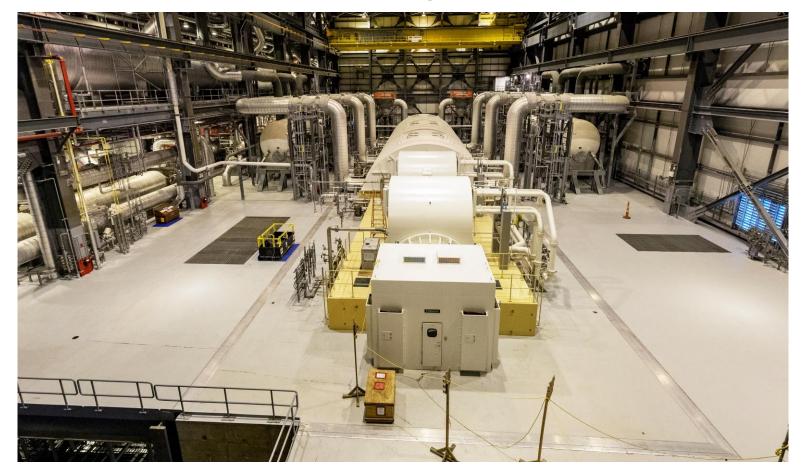


Vogtle Unit 3 initial criticality achieved March 6, 2023!

## Inside Unit 3 containment (Jan. 2023)



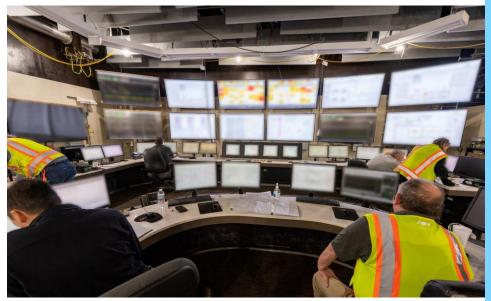
## Inside Unit 3 Turbine Building (Feb. 2023)



### Plant Vogtle Unit 4

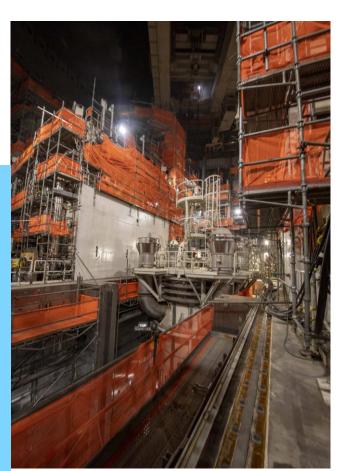
#### **Unit 4 Focus Areas:**

- ✓ Hot Functional Testing
- ✓ Fuel Receipt Started
- 132 ITAACs To Go
- Fuel Load



Left:
Operating
the Plant
from the
Main Control
Room

Right: Inside Containment Vessel Preparing for Hot Functional Testing



## Vogtle 3&4 timelapse video – 2009 through 2022







