

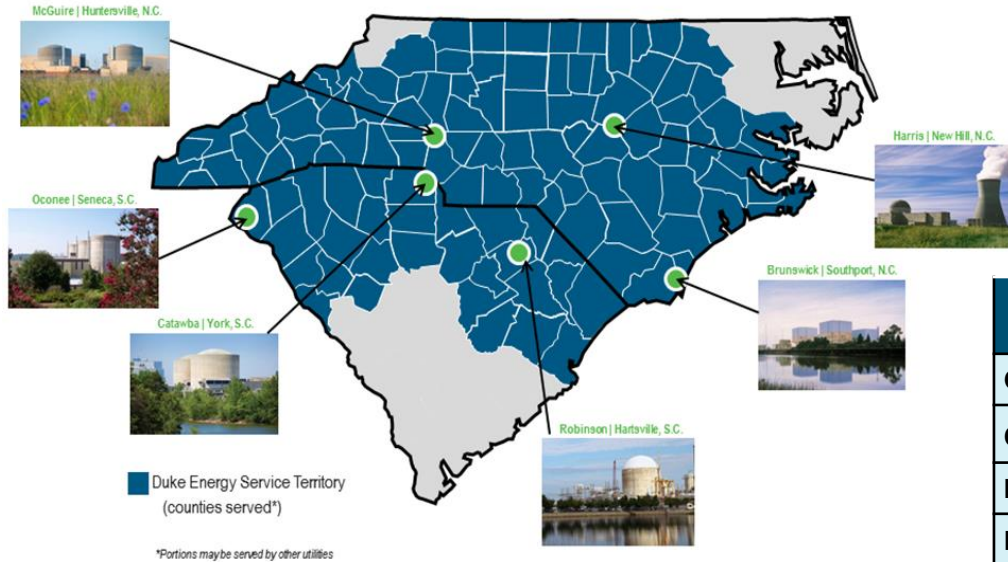


## Duke Energy Nuclear Generation

Preston Gillespie, Senior Vice President and Chief Nuclear Officer  
Joint Legislative Commission on Energy Policy Briefing – April 3, 2018



# Duke Energy Nuclear Fleet



Station	Capacity (MW)	Units	Commercial Operation	License Extension
Oconee	2,554	3 PWRs	1973	2033, 2034
Catawba*	2,310	2 PWRs	1985	2043
McGuire	2,316	2 PWRs	1981	2041, 2043
Brunswick	1,870	2 BWRs	1975	2034, 2036
Harris	928	1 PWR	1987	2046
Robinson	741	1 PWR	1971	2030
<b>Total</b>	<b>10,719</b>	<b>11</b>		

Catawba is jointly owned by North Carolina Municipal Power Agency Number One, North Carolina Electric Membership Corporation, Piedmont Municipal Power Agency and Duke Energy



# Partners with Local Communities








  
 REACHED OUT TO MORE THAN  
**92,096**  
 COMMUNITY MEMBERS IN  
 THE CAROLINAS.


  
 LAUNCHED  
 A NUCLEAR  
 TWITTER  
 HANDLE.










  
 DONATED **10,000**  
 BOTTLES OF WATER  
 TO AID IN HURRICANE  
 MATTHEW RELIEF EFFORTS.

DONATED MORE THAN  
**2,400**

  
 FOOD ITEMS TO HELP  
 BUST CHILDHOOD  
 HUNGER.





DONATED APPROXIMATELY  
**950** BACKPACKS/SCHOOL  
 SUPPLIES.















GAVE MORE THAN  
**351**

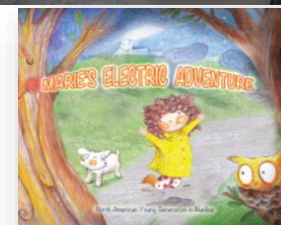
  
 UNITS OF BLOOD.

DONATED   
**875 PRESENTS,**  
 FOUR LARGE BINS OF TOYS,  
**\$5,000 DOLLARS AND 583**  
 BIKES DURING THE HOLIDAYS.


 PENNED  
**53**  
 BLOG ARTICLES

ABOUT NUCLEAR ENERGY.



# Nuclear Energy Facts



## **CLEAN ENERGY**

Provide more than 60% of U.S.  
carbon-free generation



## **CONSISTENT BASELOAD GENERATION**

Nuclear units run 24/7, over 90% of time



## **LOCAL ECONOMIC CONTRIBUTOR**

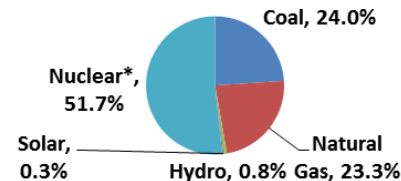
Employ thousands;  
Provide payroll & property taxes

# 2017 Duke Energy Nuclear Fleet Performance

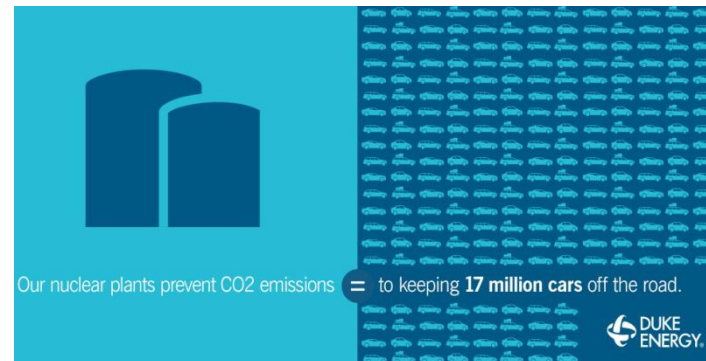
- Capacity factor = 95.6%
  - 19th consecutive year with capacity factor > 90%
- Provided 52%\* of Duke Energy's generation in the Carolinas
- Prevented carbon dioxide emissions equal to keeping 17 million cars off the road
- Employed about 6,300 at Carolinas nuclear stations
- Paid more than \$322 million in property and payroll taxes
  - N.C. nuclear payroll = \$165 million
  - N.C. nuclear property = \$20 million

\*Adjusted for Catawba ownership

## Duke Energy 2017 Generation by Fuel (N.C. and S.C.)



\*Adjusted for Catawba ownership



# 2017 North Carolina Plant Superlatives

- Brunswick Nuclear Plant

- Unit 2 achieved a 712-day record operating run



- Harris Nuclear Plant

- Generated record annual generation of 8 billion kilowatt-hours



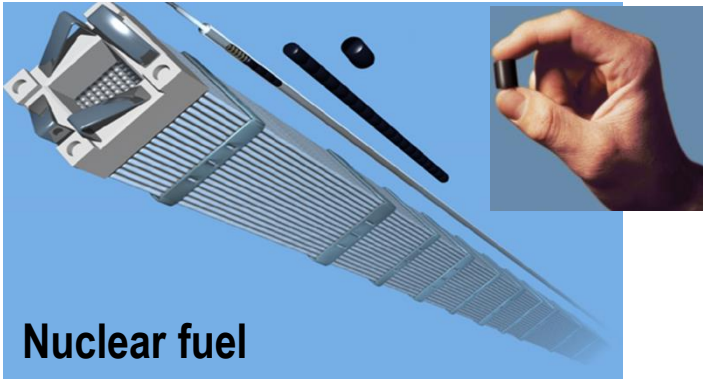
- McGuire Nuclear Station

- Unit 1 completed a 524-day record operating run
- Both units attained their shortest refueling outages units
- Continues as the longest running exemplary plant in U.S.





# Used Nuclear Fuel – Safe and Secure



**Nuclear fuel**



**Used fuel pool**



**Dry fuel storage**

# Shared Values

- Nuclear energy is a sustained success story for the Carolinas providing carbon-free, safe, reliable electricity that customers depend on every day
- We recognize it is a privilege, not a right, to operate in our local communities
- Our teams are both proud and passionate about their work
- We strive to be good corporate citizens – our employees are honored to be part of many service and volunteer efforts in their communities
- This is the common space where our obligation to serve our customers perfectly aligns with your obligation to serve the public





