



Duke Energy Nuclear Programs Update for the South Carolina Governor's Nuclear Advisory Council

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For Information Purposes Only



Agenda

- Nuclear Fleet Overview
 - Operating
 - New
- 2014 Performance
 - Duke Energy
 - Worldwide
- 2015 Initiatives

Current Nuclear Fleet



- Duke Energy Carolinas Service Area
- Duke Energy Progress Service Area
- Overlapping Areas

Station	Capacity (MW)	Units	Commercial Operation	License Renewal
Oconee	2554	3 PWR	1973	2033, 2034
Catawba	2290	2 PWR	1985	2043
McGuire	2296	2 PWR	1981	2041, 2043
Brunswick	1870	2 BWR	1975	2034, 2036
Harris	928	1 PWR	1987	2046
Robinson	741	1 PWR	1971	2030
Crystal River	Retirement announced 2013			
Total	10,679	11		

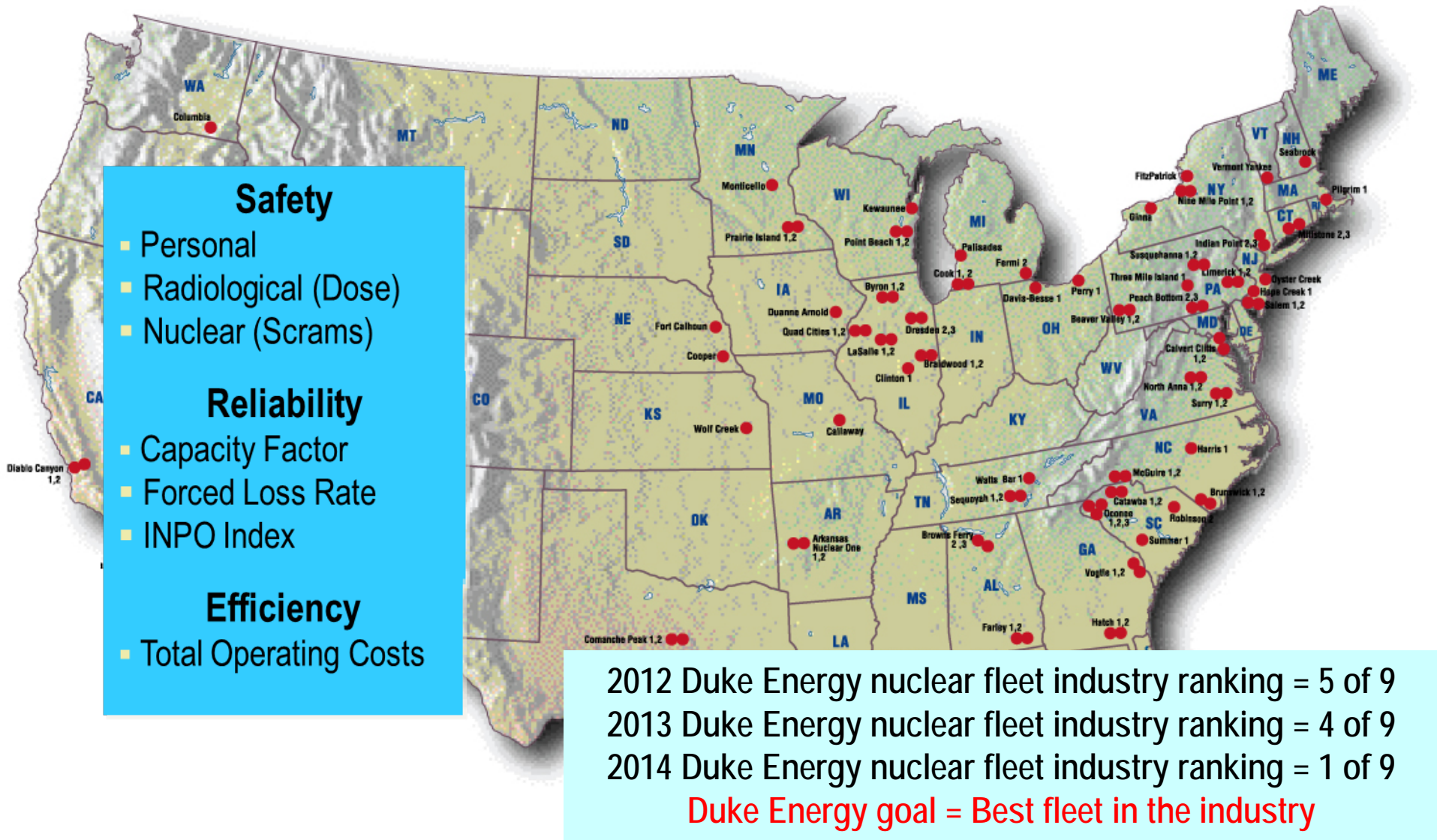
Duke Energy Nuclear Unit Ownership

- Current
 - Robinson; Oconee 1, 2 and 3; McGuire 1 & 2: 100 percent
 - Brunswick 1 & 2: 81.67 percent
 - Harris: 83.83 percent
 - Catawba 1: 38.492 percent
 - Duke Energy operates Unit 2, but has no direct ownership share
- Potential sale of North Carolina Eastern Municipal Power Administration share of Brunswick 1 & 2 and Harris to Duke Energy
 - Awaiting approvals
 - Following sale, Duke Energy would own 100 percent of Brunswick 1 & 2 and Harris

New Nuclear Plants

- Combined construction and operating license (COL) applications
 - Lee (two AP1000 units near Gaffney, South Carolina)
 - Levy (two AP1000 units in Levy County, Florida)
- COLs expected in 2016
- Licensing challenge: managing changes to the AP1000 standard design

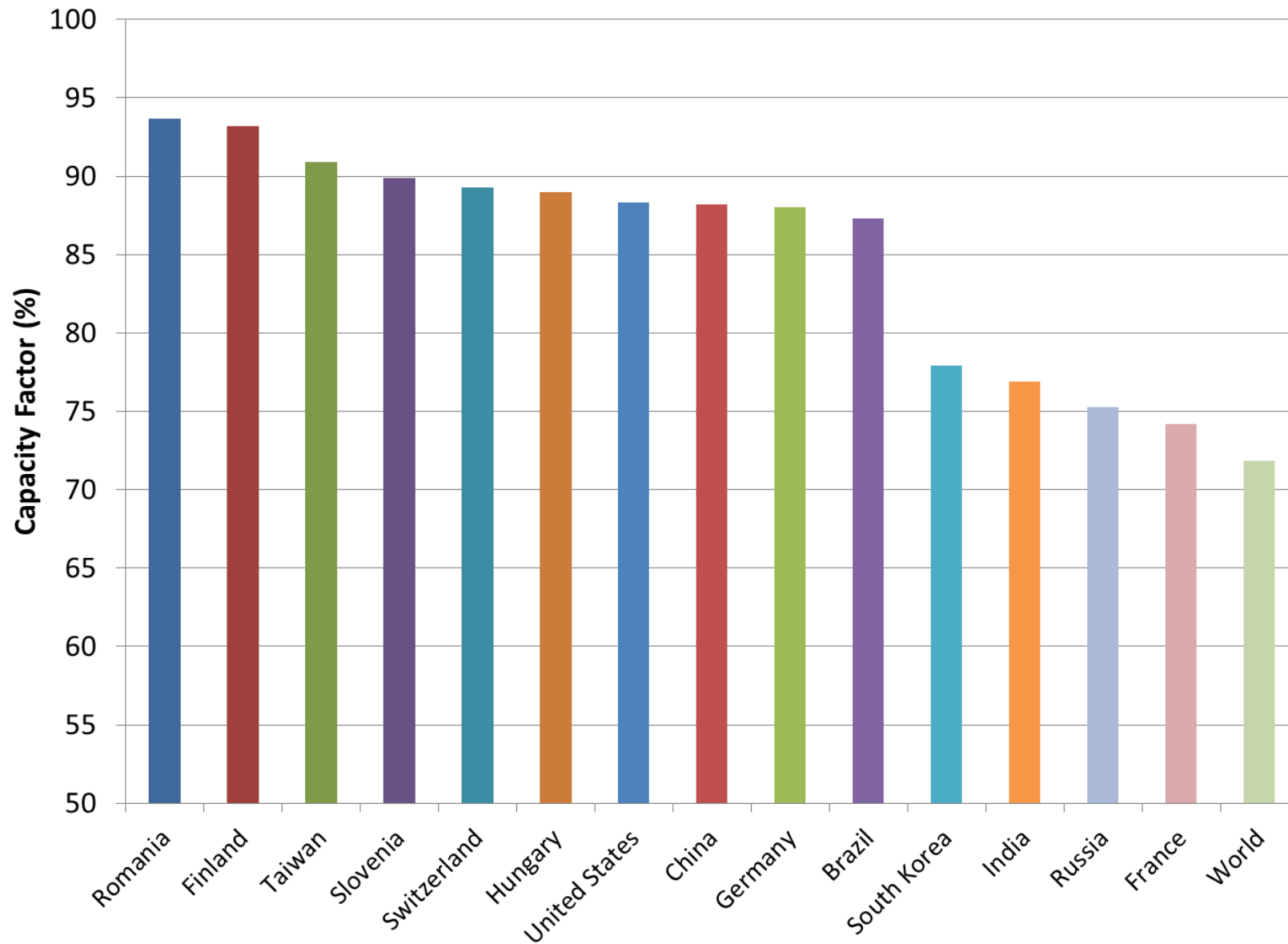
Nuclear Fleet – Key Performance Indicators



2014 Generation Highlights

- Fleet capacity factor of 93.18 percent
 - 16th year of fleet capacity factor greater than 90 percent (excluding Crystal River 3 in 2010-2012)
 - Exceeded U.S. industry average for past 22 years
- June – August fleet capacity factor 97.04 percent
- Catawba Unit 1 completed a continuous run over its entire operating cycle
- McGuire Unit 2 completed a continuous run over its entire operating cycle
- Oconee station had a capacity factor of 94.73 percent (site best)

2012-14 Average Capacity Factor



Top Industry Practice (TIP) Awards

- Annual Nuclear Energy Institute awards to utilities
 - New ideas and practices that have a profound and direct impact on the success of the nuclear energy industry
 - 14 awards given out each year
- Two Duke Energy TIP winners in 2015
 - Excellence in Cost Management – Vision, Leadership and Ingenuity Award (new category)
 - Dry Cask Storage Dose Reduction Using “Neverwet” at Robinson Nuclear Plant – Operate Plant Award

2015 Fleet Initiatives

- Equipment Reliability
- Workforce Sustainability
- Outage Execution
- Financial Stewardship (Excellence in Cost Management)
- Merger Integration

Questions ?