

PULSE ON THE POWER MARKET // NUCLEAR

Asset Management Life Extensions



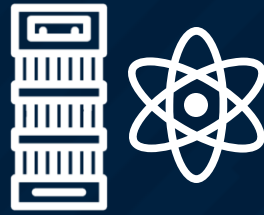
Gabe Chavez

Nuclear Project Manager



2025 GENERATION SYMPOSIUM

My Background



**NUCLEAR
FUELS**



OPERATIONS



**OUTAGE
SUPPORT**



**SPENT FUEL
PROJECTS**



MAINTENANCE



ENGINEERING

Domestic Fleet, Strategic Initiatives



The Existing Fleet is Being Extended

An additional 16 SLR applications* will be submitted by 2030.

POWER & OPERATIONS

NRC approves subsequent license renewal for Oconee

Wed, Apr 2, 2025, 7:03AM | Nuclear News



Duke Energy's Oconee nuclear power plant. (Photo: Duke Energy)

POWER & OPERATIONS

NRC approves V.C. Summer's second license renewal

Wed, Jul 2, 2025, 3:00PM | Nuclear News



Unit 1 of the V.C. Summer nuclear power plant. (Photo: DJ Slaw)



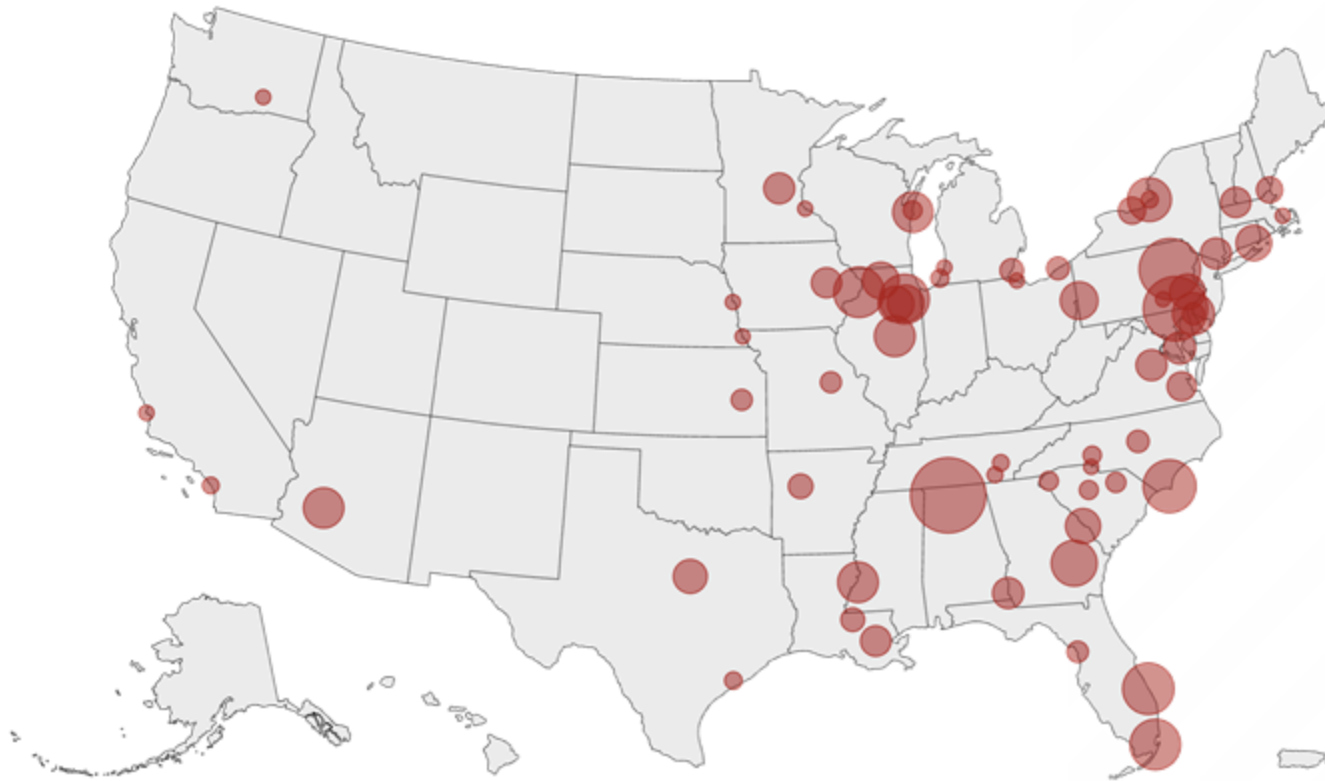
*Source: NRC

Existing Fleet is Planning Power Upgrades

Power upgrades for nuclear power plants in the United States

Circle size represents the size of the uprating in MWe. Upratings are summed for all units at a single plant, even when they occur in multiple years.

5 10



**~2GWe of new
generation by 2032*
without building
new plants.**

*SOURCE: NRC



SOURCE: U.S. Nuclear Regulatory Commission, Approved Applications for Power Upgrades
Boston University Institute for Global Sustainability | visualizingenergy.org | CC BY 4.0



Finite Resources, Big Problems

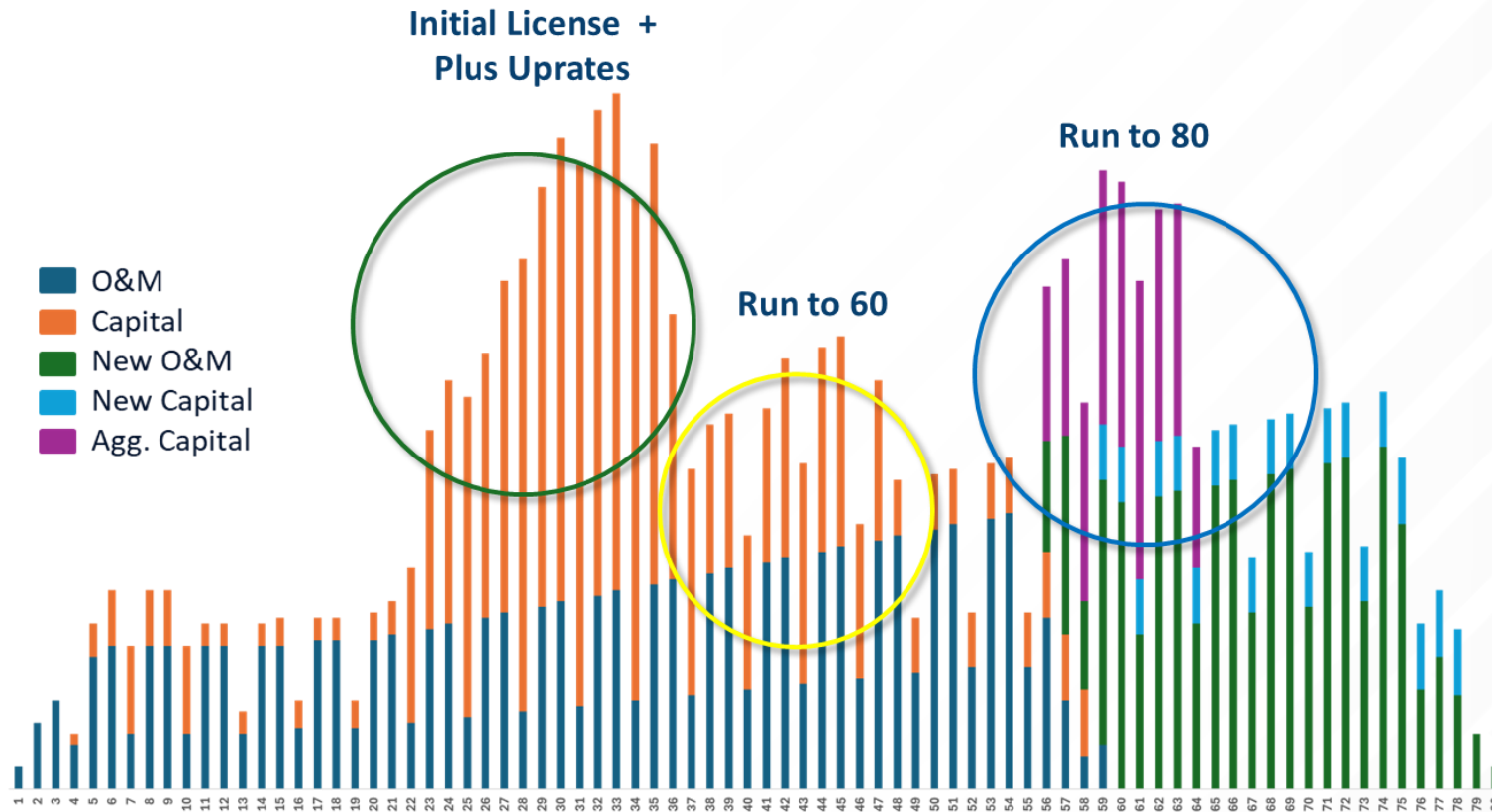
Net Capacity Factor of Nuclear Fleet Owners*

Rank	Owner/Operator	Factor	% Change
1.	Constellation	93.85	-0.47
2.	Southern	93.52	-0.45
3.	Duke	91.08	-0.71
4.	NextEra	90.37	0.77
5.	Vistra	89.66	-1.18
6.	Dominion	88.16	-2.18
7.	TVA	88.12	-3.68
8.	Xcel	82.79	-9.23
9.	Entergy	81.73	-0.97



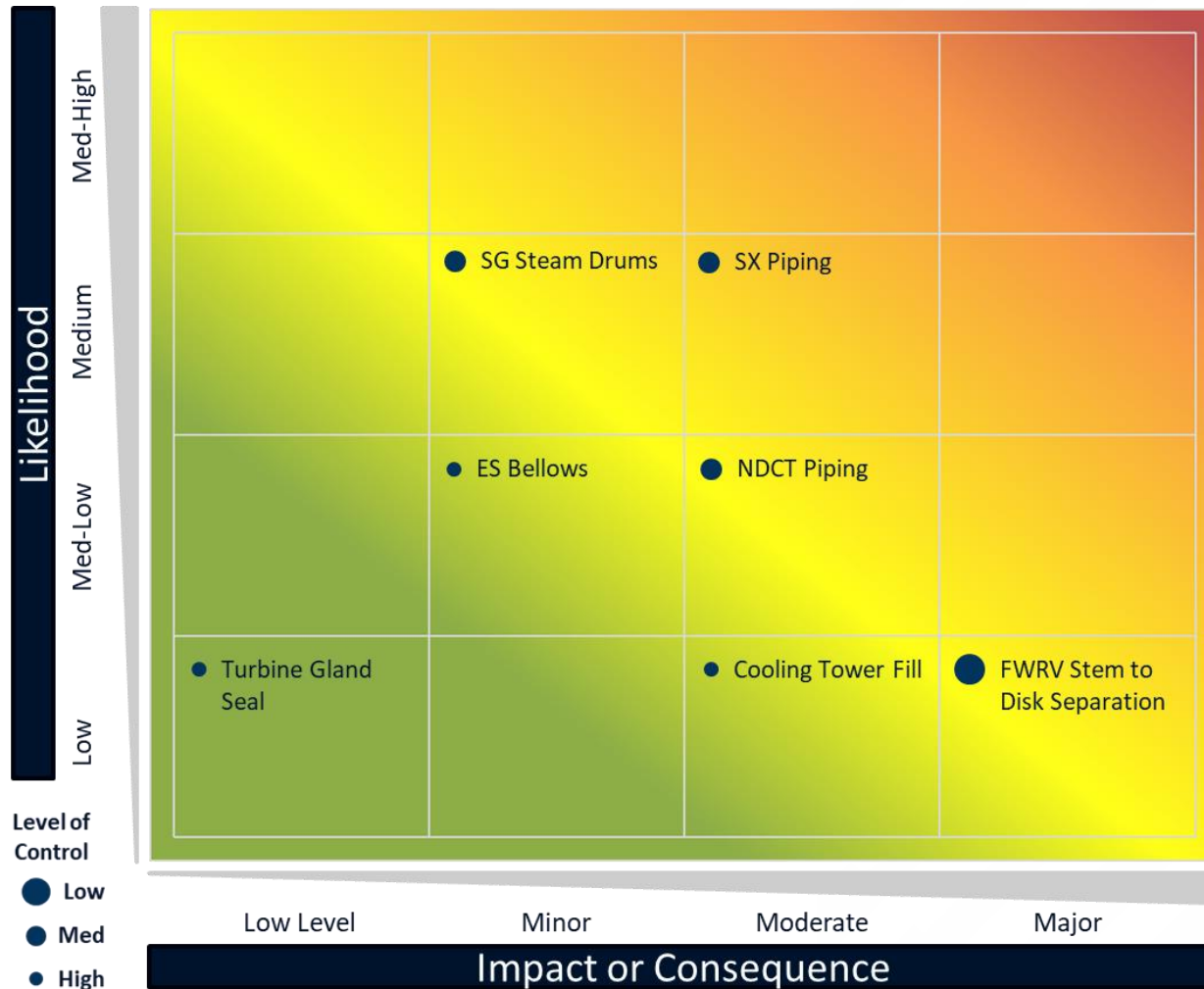
*Source: ANS

Capital Spend Plans are ramping up for 80 years!



\$22B slated* for uprates, license extensions, and reliability improvements.

Prioritization & Planning



3

REPLACE OR
UPGRADE

2

PROACTIVE
MAINTENANCE

1

CORRECTIVE
MAINTENANCE



Asset Management: Plan Early, Revisit Often



Q & A

