



U.S. DEPARTMENT OF  
**ENERGY**

**Nuclear Energy**

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## **Clean Power Plan**

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**Office of Nuclear Energy**

**Nuclear Energy Tribal Working Group Meeting**  
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# Nuclear Energy – Sustainably Clean Power

*“To meet our emissions reduction targets and avoid the worst effects of climate change, we need to dramatically reduce power sector emissions. Switching from coal to natural gas is already reducing the U.S. carbon footprint, but it’s not enough to get the deep CO<sub>2</sub> cuts envisioned in the President’s Climate Action Plan. Reducing emissions by 80% will likely require the complete decarbonization of the power sector.*”



Secretary Moniz  
COP21, Paris 2015

*Wind and solar are growing rapidly, but we have not yet solved the challenge of grid-scale storage that will provide power when intermittent sources cannot. We know **nuclear can provide 24-hour baseload power**, because it already does. Worldwide, nuclear power produces more energy than hydro, solar, wind, and geothermal power combined.*

*The bottom line is that to achieve the pace and scale of worldwide carbon reductions needed to avoid climate change, **nuclear must play a role.**”*



# Clean Power Plan

- On August 3<sup>rd</sup>, President Obama announced a **Clean Power Plan** to reduce carbon emissions in the United States.
- The plan sets flexible and achievable standards to reduce power sector carbon dioxide emissions by **32 percent below 2005 levels by 2030**.
- **Nuclear energy** can be incorporated into state plans
  - New nuclear power (including under construction) and nuclear uprates count towards compliance
  - States can design their own policies to comply with their goals, and may choose to incent existing nuclear plants to continue to operate

*“DOE stands ready to assist states with technical expertise to meet these pollution-cutting targets while maintaining an effective, affordable, and reliable electric system.”*

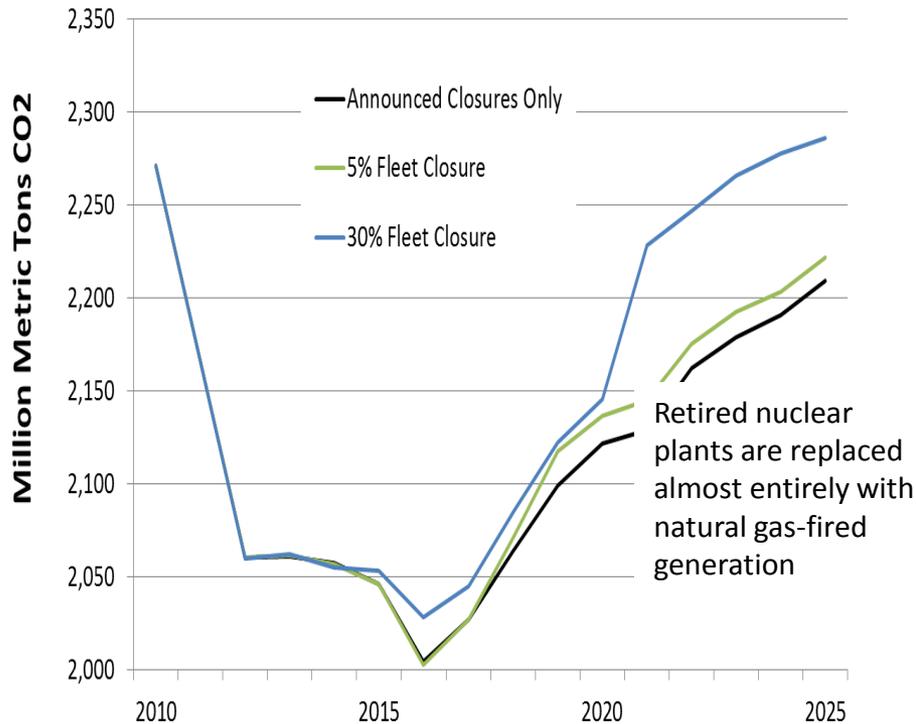
*- Secretary Moniz*



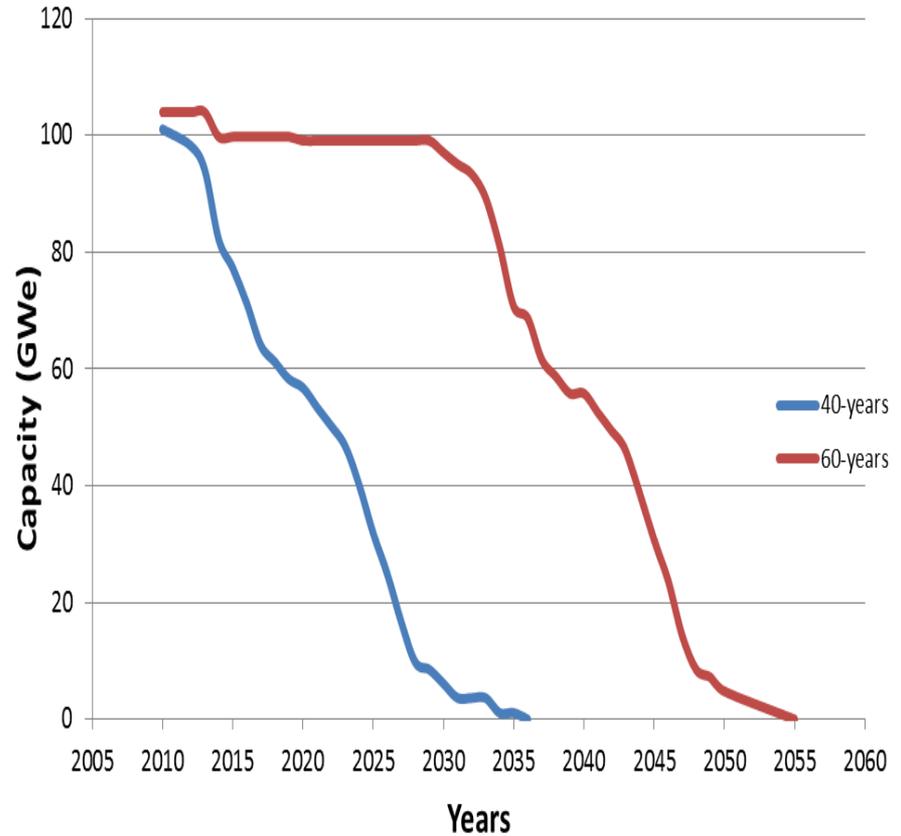


# Nuclear Retirements

### Estimated Annual CO<sub>2</sub> Emissions from Power Sector



### Anticipated retirements based on current license extensions to 60 years show a significant drop off of nuclear generation after 2030



# Obama Administration Announcement on Clean Energy Strategy

## ■ Climate Action Plan to combat climate change

- Development of new and advanced nuclear technologies
  - Investment in safe and secure nuclear power
  - Advance policy objectives to maintain economic competitiveness
  - Enhance nonproliferation, nuclear safety and security

## ■ FY 2016 Budget

- \$900 million to support civilian nuclear energy sector
- \$12.5 billion in loan guarantee for advanced nuclear projects
- Investment secure 3 objectives: energy security, economic competitiveness, and environmental responsibility