### Nuclear Energy in Oregon

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# OREGON DEPARTMENT OF ENERGY

Leading Oregon to a safe, equitable, clean, and sustainable energy future.



The Oregon Department of Energy helps Oregonians make informed decisions and maintain a resilient and affordable energy system. We advance solutions to shape an equitable clean energy transition, protect the environment and public health, and responsibly balance energy needs and impacts for current and future generations.

What We Do On behalf of Oregonians across the state, the Oregon Department of Energy achieves its mission by providing:

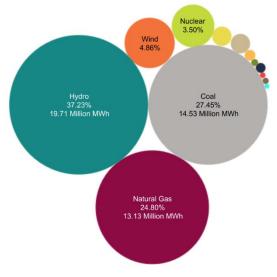
- A Central Repository of Energy Data, Information, and Analysis
- A Venue for Problem-Solving Oregon's Energy Challenges
- Energy Education and Technical Assistance
- Regulation and Oversight
- Energy Programs and Activities

#### ODOE's Nuclear-Related Roles



**Energy Facility Siting Council** 

OREGON DEPARTMENT OF ENERGY



Electricity Resource Mix (2019)



Radioactive Waste Transport



**Emergency Response Drills** 



Radioactive Waste Disposal



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#### Nuclear Power Plant Siting in Oregon

- Nuclear power plants subject to Energy Facility Siting Council jurisdiction
  - Require compliance with EFSC siting standards
  - Require compliance with citizen initiative standards
  - No distinction between traditional reactors and new advanced technology reactors
- All nuclear power plants also subject to Nuclear Regulatory Commission jurisdiction and require NRC license
- Oversight from both EFSC/ODOE and NRC



#### Ballot Measure 7 (1980)

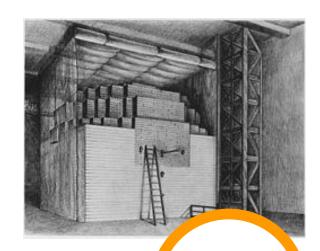
The Energy Facility Siting Council cannot issue a site certificate for a nuclear power plant unless:

 A permanent national repository exists for disposal of high-level waste (ORS 469.595); and

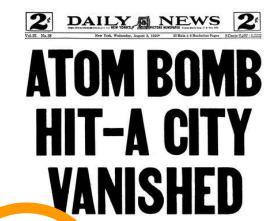
 The plant is approved by the voters at a statewide general election (ORS 469.597)



# **Nuclear History**









# **Nuclear History**

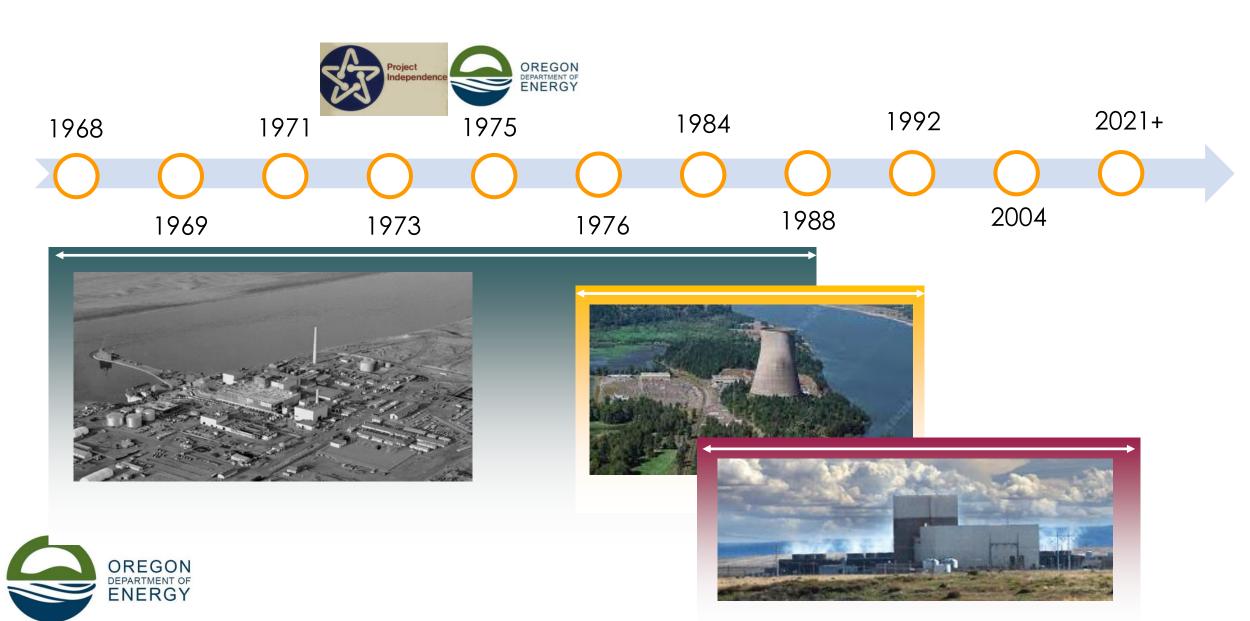








# Nuclear Power and Oregon



# Vocal Opposition



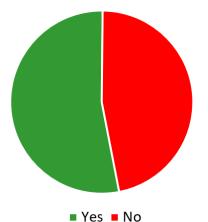
Pre-











1980 Initiative



#### Disasters, Demolition, and Decarbonization





#### National Permanent Geologic Repository

- Nuclear Waste Policy Act (1982)
   Find two repositories for nuclear waste
  - Yucca was chosen (1987), then stalled. The future of Yucca as a potential repository is highly uncertain.
- Potential interim storage facilities for Spent Fuel proposed: NM and TX
- New direction is to engage in consent-based siting, but there is much uncertainty







# Thank You! Questions / Comments?

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#### **MORE INFORMATION:**

2020 Oregon Energy Report - <u>Small Modular Reactor Technology Review</u>
2020 Oregon Energy Report - <u>Energy History Timeline</u>