

# Industry Update on Digital Twin

Ben Holtzman

March 1st, 2022



# Potential Digital Twin Applications

**It has the potential to transform the Nuclear Industry**



Predictive and Condition Based Maintenance



Automated Operator Rounds



Work Task Sequencing & Optimization



Physics-Based Models for Troubleshooting and Training



3D Models and AI for COM Reviews, Commissioning, and Construction QA



3D Mapping and AR Visualization of Radiation Levels

p49

Slide courtesy of OPG

# Digital Twin and the Nuclear Industry

- The business case for nuclear innovation
  - Large vs small scale implementation
- Digital Twin is a natural expansion from current usage of AI and ML
  - NEI letter on role of AI tools in nuclear power plants (ML21145A369)
- Collaboration can ensure standardization in approach providing consistency in application and reducing regulatory burden



Questions?