NUSCALE - SMALL MODULAR REACTORS

Speaker - Kenny Anderson. Kenny is a nuclear engineer with roughly 15 years of experience in a wide variety of roles in the nuclear industry, including established vendors and operating plants. After earning a BS in Physics from the University of Washington and an MS in Nuclear Engineering from North Carolina State University, he has authored calculations in the majority of the main nuclear engineering sub-disciplines. For the past nine years at NuScale Power, he has been part of teams that have developed, justified, and implemented methodologies and software to perform analysis of the NuScale design for nuclear, thermal-hydraulic, systems (including control system feedback), and radiological considerations. In terms of research and application, Kenny is particularly interested in multi-physics modeling capabilities, uncertainty quantification, numerical optimization techniques, and the application of emergent technologies to nuclear applications.

Presentation - An overview of NuScale and other small modular reactors (SMR) and non-conventional designs were included in the presentation.

Other items discussed include:

- Can nuclear plants like NuScale be constructed in a reasonable amount of time so they can have a meaningful impact on meeting the Biden administration's decarbonizing goals?
- Can these plants be built cost effectively - i.e., competitive with wind and solar?
- How does NuScale's reactor differ from previous large-scale U-235 fueled reactors?
- What is the anticipated NRC's licensing time?
- What is the life expectancy of a NuScale plant?
- What are the expected annual operating costs?
- What are the primary advantages and disadvantages of the NuScale plant?
- What magnitude earthquake are NuScale reactors built to withstand?