

Small Modular Reactors and Advanced Nuclear Technologies

Thursday 6 June 2024 16:15 (1 hour)

With Net Zero targets and climate change on the minds of policy makers, technology vendors, utility providers and the general public, challenges have never been greater in the energy sector. It is clear from the direction of travel over the last decade that nuclear will play a part in this energy mix, to what degree is largely undecided. What is apparent is the need for new solutions to ensure confidence in three markers that have historically posed challenges within the industry; price, time and delivery certainty.

In this talk I will give an overview of the SMR technologies on offer with a focus on the six designs through to the next stage of the UKs nuclear technology competition. Giving some insight into; key design choices that are made when developing a nuclear technology, how nuclear safety is managed throughout the CADMID cycle, the regulatory process and challenges faced by the regulator in this new era of nuclear technology and what the near term for nuclear deployment looks like (national grid supply, hydrogen generation, data centre supply etc.). A number of advanced nuclear technologies are in development to meet more niche demands, additionally I will discuss some of the more forward thinking and innovative ideas regarding deployment and improvements to nuclear safety.

Presenter: BEECH, Ryan (Jacobs)