Panel Discussion: Stop Small (Multiple) Modular Reactors

The future of the nuclear power industry is in question due to the sluggish and misfiring nuclear renaissance and increasing competition from renewables. Their hopes for kickstarting new reactor development are now shifting to “small modular reactors,” – small light-water reactors grouped together in a single plant footprint. The original power reactors were small, but the industry soon went to giant reactors, due to “economies of scale” to improve the financial equation. New large-scale reactors have been expensive (Westinghouse’s AP1000 and Areva’s EPR) and have experienced numerous technical problems and construction delays, so the new theory is that economies of scale will be experienced in reactor production factories for large numbers of these smaller reactors, bringing costs down, rather than with larger reactors producing more power to recover their construction costs.

In the one proposed design, created by Fluor Corporation’s NuScale division, being pursued in the United States, twelve 50 MW reactors would be operated in a single facility with a combined output of 600 MW – a little more than half the size of typical reactors built since the 1970s and 80s. Even unabashed supporters acknowledge the need for substantial and ongoing federal subsidies to build and operate the first of these. This session will give an update on the NuScale reactor design, the Tennessee Valley Authority (TVA) Early Site Permit application, the Utah Associated Municipal Power Systems (UAMPS) project, DOE subsidies, and NRC licensing.

We will discuss the economic and technical difficulties facing this new nuclear industry strategy and strategize on building our network opposing the ill-conceived idea. Financial fallacies, safety compromises, continued production of highly radioactive waste, and more will be covered. The nuclear industry and the US government are actively promoting and moving forward with this latest nuclear gambit. Strategies for effective opposition including interventions will be discussed.