

Kenton deKirby, The Breakthrough Institute

Title: Advanced Nuclear Technology and the American Public

Abstract: Rapid deep decarbonization of the energy system in response to the threat of climate change will require scaling up nuclear power, absent miraculous breakthroughs in technologies for the storage and transmission of energy from intermittent renewables. However, controversy has engulfed nuclear energy since its inception and public opposition has hindered the expansion of nuclear capacity in the US and abroad. The purpose of this panel is to assess the potential of advanced nuclear technologies such as SMRs for increasing public support of nuclear energy, along with the communication strategies, institutional arrangements, and modes of public engagement that would help realize this potential. There has been considerable research on nuclear energy and public opinion, which has addressed a bevy of research questions. Overwhelmingly, this research paints a picture of lukewarm public support, widespread concern, and entrenched negative associations. Through this lens, the prospects for growing public support for nuclear appear grim. But with the commercialization of advanced nuclear reactor technology on the horizon, there may be an opportunity to reengage the American public about nuclear energy in a way that overcomes stuck debates and ossified attitudes. From a communications standpoint, however, this engagement must be robust to what is known about how the public—considered as a whole and a collection as a collection of different ideological groups—thinks about energy issues in general and nuclear energy in particular. And it must be robust to politics. As many have argued, stakeholders should endeavor to identify communities interested in hosting new plants and building support at a grassroots level. Otherwise, there is a grave risk that whatever potential advanced nuclear technologies hold for growing public support will be squandered.