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Enabling versatile nuclear deployments of the eVinci microreactor

Westinghouse is developing the eVinci microreactor, a 5MWe, 15MWth microreactor with the intention of having the most versatile and flexible microreactor on the market. The reactor will to be factory built and deployed fully fueled to the site, transported by rail, road or barge. Westinghouse is also investigating deployment through a TNPP together with their partnership with Prodigy Energy.
The discussion will present various aspects of the design which enable a transportable size and weight including utilization of TRISO fuel, heat pipes and open air Brayton power conversion system. In addition, it contains various passive safety features which facilitate deployment and operation in remote locations which requiring minimal personnel for monitoring, maintenance or operations. These design features are also coupled with a simplified site layout requiring limited construction, above ground installation and return back to greenfield.
The discussion will also discuss the challenges from a social and regulatory pathway which will need to be overcome to allow for a novel way of deployment for microreactors, in order to enable a green-energy transition for remote and hard to reach locations.

Country OR International Organization

USA, Canada

Email address

agata.leszkiewicz@westinghouse.com

Confirm that the work is original and has not been published anywhere else

Yes

Author: LESZKIEWICZ, Agata (Westinghouse Electric)

Presenter: LESZKIEWICZ, Agata (Westinghouse Electric)

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