



Nuclear & Small Modular Reactor Talking Points:

Nuclear energy in general

From a system perspective the lowest cost decarbonized system is one that includes clean, reliable power (like nuclear energy) in addition to renewables and energy storage.

Nuclear is the largest source of clean power in the United States and a strong commercial nuclear energy industry is essential to U.S. national security.

As a nation we have been operating commercial nuclear power plants since the 1960s and have had as many as 104 units operating at the peak of the industry. Today there are 94 reactors across the U.S. in 28 states.

Trying to provide sufficient clean energy resources using renewables and energy storage alone would have devastating impacts to the environment due to land and habitat use.

Safety

Conversely, nuclear power is energy dense, producing significantly more energy per unit of land area.

Nuclear has a proven track record of safety and maintains the highest standards for operations, security, cybersecurity and emergency preparedness.

Nuclear energy facilities are among the safest industrial facilities in the world.

Our comprehensive safety procedures and stringent federal regulations keep nuclear power plants and their surrounding communities safe. Equipped with redundant safety systems, the plants are designed to always ensure public and worker safety.

According to the Occupational Safety and Health Administration (OSHA), it is safer to work in a nuclear energy plant than working in the average U.S. office. In addition.

Small Modular Reactors

Small modular reactor (SMR) designs bring new levels of enhanced safety that do not rely on electrical power systems to maintain. There is even a design that has fuel that cannot melt.

In addition, advanced reactors have an even smaller footprint for their modular design concept allowing them to quickly ramp up and down, making them the ideal complement to intermittent renewable resources like wind and solar.

SMRs will protect the climate, boost the economy with quality jobs and ensure global leadership and national security.

Used Fuel

While the US still does not have a national repository for used nuclear fuel, we know how to store this fuel safely and have proven this. In fact today, commercial used nuclear fuel is safely stored aboveground in concrete and steel dry casks.

If all the used fuel was removed from every reactor ever operated in the US since the 1960s, it would fit on one football field no higher than the goal post .

In addition, while the US needs a permanent repository for used fuel, the better approach to this used fuel is to recycle it. There is significant value remaining in the fuel (more than 95%) and we can redeem that value and reduce the volume of remaining waste and lifetime of radioactivity that requires storage.

Final Thoughts

Recent surveys have found that more than 77% of Americans support the use of nuclear energy. Even environmental advocates support nuclear energy.

It is important to remember that every resource option has its front-end environmental impact, operating environmental impacts, and waste streams. Unlike other technologies, nuclear is required to fund for and account for all its waste through its entire lifetime.

Nuclear energy is a crucial source of reliable and clean energy for the Pacific Northwest and it has unwavering support of the public power community.

Additionally, nuclear energy plays a vital role in sustaining not just hundreds, but thousands of jobs; and ensures a consistent supply of clean energy at a time when every kilowatt counts in our state and region.