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Dear UAMPS Members:

I was very honored to participate in the UAMPS Town Hall Meeting on July 21. I hope I conveyed just how important nuclear energy is in achieving an affordable, reliable, low-carbon electricity system. I appreciate the pioneering spirit and true leadership that UAMPS and its members are demonstrating not only to the country but to the world.

Like you, I have been reviewing the questions raised about the UAMPS Carbon-Free Power Project at the recent Utah Taxpayers Association news conference. Given that there was so much misinformation and misinterpretations of the facts presented at the news conference, I wanted to share responses to the key issues. As you heard from me at the town hall, I've spent my career in nuclear energy because I believe in this technology so I am always disheartened when I see the facts misrepresented. Below, I've commented on the key issues raised in order to help you set the record straight about nuclear energy's ability to be the cornerstone of a cost-effective power system and contribute to a healthy environment and economy.

Nuclear Energy Balances Electricity Systems and is Cost-Effective

As they make very clear in their statements, the Utah Taxpayers Association (UTA) and Peter Bradford (who served on the NRC from 1978-1982) envision a future where wind, solar and batteries generate all of our electricity. While it is clear these technologies have an essential role to play, an affordable and reliable low-carbon electric system requires a significant share of dispatchable low-carbon generation to balance the system year-round. Nuclear power is the only energy source that delivers both carbon-free and reliable electricity – 24 hours a day, seven days a week, 365 days a year – regardless of the weather. As former NRC Commissioner Pete Lyons (2005-2009) said in his opinion piece published in the Idaho Falls Post Register, SMRs “complement intermittent sources of electricity like wind and solar, because when the sun doesn't shine and the wind doesn't blow, SMRs can provide reliable baseload clean power.”

In fact, an electricity system dependent only on renewables could be very costly. Bill Magwood, a former NRC Commissioner (2010-2014) and now director general of the Organization of Economic Cooperation and Development's Nuclear Energy Agency, [referenced his agency's report on this threat](#), saying “the total price of electricity will double if the share of renewable power production in the total

electricity mix approaches 75%.” While wind and solar have an important role to play, returns diminish as more and more are added to the system. Nuclear energy complements renewables by supplying predictable carbon-free electricity whenever it is needed. Researchers at the [Massachusetts Institute of Technology](#) and [Energy + Environmental Economics \(E3\)](#) agree, finding that adding advanced nuclear to the mix is the most cost effective way to achieve carbon emissions reductions.

Nuclear Companies Are Planning Now for Efficient Construction

UTA and Mr. Bradford also highlighted the risk of a first-of-a-kind nuclear project, but ignored the benefits. Small modular reactors are just that – modular units that are primarily fabricated in a factory before moving to a site for final installation. Their smaller size and uniformity reduce construction risks because much more of the work is done at a factory where production and quality are better controlled. In addition, advanced nuclear companies are sharing knowledge and building on decades of nuclear experience to make construction efficient and cost-effective. Although the U.S. has seen its share of nuclear projects come in over-schedule and over-budget, there is also a lot of experience with building nuclear plants on-time and on-budget. NEI launched an effort last year to learn from this experience, good and bad, and assembled a report on the Construction Best Practices that lead to construction success. We continue to work with our members to develop these best practices into concrete practices that the next nuclear projects can implement to dramatically reduce construction risk.

Nuclear Energy Provides Value for the Money

The Utah Taxpayers Association also fails to recognize that nuclear reactors provide a wide variety of benefits to the communities and regions that host them – a valuable investment. Former NRC Commissioner William Ostendorff (2010-2016) highlighted that “economically, the nuclear industry provides well-paying jobs supporting local communities across the country,” and noted that military veterans often work at reactors. Nuclear plants can also provide jobs in communities that have transitioned away from coal plants and other fossil fuels. While nuclear power plants provide numerous jobs, [they do it on a little bit of land](#) – nuclear reactors take up 1,000 times less land than solar farms and 10,000 times less land than wind farms would need to produce the same amount of energy.

The benefits to a community go beyond jobs and tax dollars. Small modular reactors (SMRs) provide clean energy. They can also turn saltwater into drinkable freshwater. One 12-unit SMR plant can produce enough water for a city of 4 million.

The Federal Government Supports Innovations Like Nuclear Energy

The Utah Taxpayers Association questions the role that the federal government can play to support new reactor technologies. The fact is, however, that the federal government has had a [long history of incubating new energy technologies](#) including wind and solar. With respect to nuclear energy,

government investment has provided support in order to de-risk development and operations. Former NRC Chairman (2006-2009) and Commissioner (2009-2010) Dale Klein referenced this support in testimony to the House Science Committee, noting that the Human Genome Project and other major scientific achievements have all been enabled by Congress' ongoing support stemming from the Atomic Energy Act of 1954, saying "while the government advanced the science, it was the innovators and public-private partnerships that advanced technology and medicine. This has proven to be a successful model for the U.S. system." The government's planned investment in the Carbon Free Power Project will continue the story of investment in American-made innovation.

Nuclear Energy Keeps Our Air Clean

Finally, the Utah Taxpayers Association seems to undervalue the primary benefit of nuclear energy. Nuclear energy is a vital piece of the puzzle as we move toward a clean energy future. Nuclear energy currently produces over half of the carbon-free electricity in the U.S, with reactors at 56 sites throughout the country. This is a contribution that's been going on for decades – a [report from the International Energy Agency](#) estimates the world's nuclear plants have prevented more than 60 gigatons of emissions, equivalent to erasing two years of the world's energy-related emissions. And unlike other power plants, nuclear reactors do not emit nitrogen oxides and sulphur dioxide, which can cause respiratory health problems, smog and acid rain. As former NRC Commissioner Jeff Merrifield, who served from 1998 – 2007, said, "it has become increasingly apparent that we must seek a wide range of technological innovations to reverse the global production of greenhouse gasses or risk further environmental impacts associated with the release of carbon into our atmosphere." Adding new reactors, like the ones planned as part of the Carbon Free Power Project, will extend these benefits and keep the air clean for future generations.

I hope my comments will help further the positive consideration of nuclear energy among your members and its constituencies. I applaud your pursuit of the Carbon Free Power Project, and I believe the inclusion of nuclear energy will have enduring benefits for you, your families and your communities.

Yours very sincerely,

A handwritten signature in black ink that reads "Maria Korsnick". The signature is written in a cursive, flowing style.

Maria Korsnick