

**State of the Industry Remarks**  
**As Prepared for Delivery by Maria Korsnick**  
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Good morning, everyone.

We're all adjusting to the new reality of doing business during this pandemic -- and the nuclear industry is no exception. And at the same time, we're deep in a national conversation about racial injustice, what kind of society we want to live in, and the kind of future we want to create.

Amid that crucial work, which for all of us is both professional and personal, I want to sincerely thank you for taking the time to join me today.

I've always been passionate about the potential of nuclear power. I've seen it from every angle: from the control room of a plant ... from the inside of innovative companies who make better technology year by year ... from the heart of the communities that nuclear strengthens through its energy and its jobs ... and in my conversations with so many of you about the exciting future within our grasp.

So, yes, I've always been passionate. But as I speak to you today, I've never been more confident in the future of nuclear energy.

My optimism is rooted in a powerful idea -- one that we can never afford to forget as we go about our work of operating reactors, modernizing our fleet, or racing toward the next breakthrough.

The idea is this: Nuclear power isn't *only* about generating electricity. It's a key that will unlock solutions to some of the most consequential challenges we face today.

When it comes to technology, we've often seen how the right decisions at the right times can improve our lives in ways that we didn't know were possible.

In the 1850s, an inventor patented a revolutionary way to mass-produce steel. He did it to build stronger artillery, but his innovation catalyzed the entire steel industry – and it's what made modern cities possible.

In the 1940s, inventors at Bell Labs came up with a tiny semiconductor device called a transistor. They did it to improve radios, and transistors revolutionized the way we communicate. There is a straight line from that invention to the device you're looking at right now.

And around the same time, in Charlottesville, Virginia, a physicist named Jesse Beams developed a centrifuge capable of separating the isotope Uranium-235.

That breakthrough helped pave the way for our industry. Today, more than 440 commercial reactors generate electricity in more than 30 countries around the globe.

It's an exciting moment when technologies reach tipping points – times when our decisions have the potential to reshape not just industries, but our entire world.

And as we enter this new decade, I believe that nuclear energy has reached that kind of historic tipping point.

That is why I am so optimistic today. That is why I am so confident about tomorrow.

With the right decisions, we can meet the world's growing demand for energy. We can harness the power of technological breakthroughs to raise living standards around the world. We can supercharge innovation at home and advance U.S. leadership abroad.

Most importantly, we can play a pivotal role in addressing one of the greatest threats of our time: the worsening climate crisis.

Projections show that we need to dramatically reduce carbon emissions by 2050 to avoid the worst effects, such as a rise in global sea levels that could displace more than 150 million people.

Simply using less energy isn't a solution. We need to reduce emissions *while* simultaneously meeting growing demand. As people in other nations aspire to a standard of living like ours, they need access to energy.

By 2050, the U.S. Energy Information Administration predicts that worldwide demand for electricity will rise by nearly 50 percent. Over the same time period, the Intergovernmental Panel on Climate Change has said that carbon dioxide emissions from electricity must fall to nearly zero. And that we must find ways to decarbonize non-electric uses of energy.

For years, many of us have recognized nuclear's indispensable role in solving this equation.

For a long time, we saw the climate crisis and asked, "How?" As in, how do we stop it? How, at the very least, do we slow it?

That question has been answered. The world's most reliable and scalable carbon-free energy source – nuclear power – *has* to be part of the solution.

We're proving that nuclear can be effective *and* cost-efficient. We're on the cusp of building new designs that will bring reliable electricity to even more people.

The question today is no longer "How do we slow the problem?" but "How fast can we build a solution?"

The investments we make, the technologies we deploy, and the policies we enact over the next few years will determine how well nuclear energy can meet this moment.

Those are the decisions I want to talk about today.

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The first step is to preserve what we have already built.

In 2019, the U.S. fleet generated over 809 billion kilowatt-hours of electricity – that’s the highest ever. And we did it while *lowering* costs. In fact, generating costs last year were the lowest since 2002 -- averaging \$30.41 per megawatt-hour.

As some of you may remember, NEI’s strategic plan included the goal of reducing industry-wide generating costs by 30 percent from their 2012 peak. We call this initiative “Delivering the Nuclear Promise.” Today, we should take pride in having exceeded that ambitious mark with record efficiency.

In all, nuclear reactors account for a fifth of all electricity in the United States, and more than *half* of total carbon-free production. That’s more than wind, solar, hydropower, geothermal, and other carbon-free sources combined.

When it comes to wind and solar, I want to be absolutely clear: We need to develop every source of carbon-free energy that we can. The world is

counting on carbon-free sources to complement one another -- not just compete.

Our choice isn't between nuclear power *or* wind and solar. It's between a status quo with rising emissions from fossil fuels or a low-carbon future with *all* available sources – including nuclear.

But nuclear has to be the backbone of our future electricity supply. There's a simple reason: No other emissions-free source of energy comes close to matching nuclear's around-the-clock reliability. In 2019, the U.S. fleet operated at a capacity factor of 93.4 percent to provide that reliability -- our highest ever.

The past few months have shown that not even a global pandemic can stop nuclear. While the nation stayed home, keeping our reactors running was the very definition of “essential” work, lighting our homes and powering our hospitals.

Our members also refueled reactors as scheduled throughout the spring -- and we have protocols in place to ensure a safe fall refueling season, even with a potential resurgence of COVID-19.

We couldn't do any of this without the dedicated men and women on the ground, at plants around the country. They are absolutely essential, in a pandemic and in any other time.

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NEI has been hard at work too, making sure that stakeholders from consumers to Congress understand that to meet our 2050 goals, we *need* nuclear – both the current fleet and new, rapidly developing technologies.

States are recognizing this tipping point -- and most are making the right calls to keep reactors online. While Unit 2 of the Indian Point plant was shuttered prematurely in April, four other reactors in New York have been kept on-line thanks to the state's leadership. Connecticut, Illinois, New Jersey, and Ohio have also acted to keep their existing reactors running.

Just as critically, states are recognizing that no single technology has a monopoly on carbon-free energy. To reach a carbon-free future, they'll need every source available.

In 2019, Washington state Governor Jay Inslee signed the Clean Energy Transformation Act, which sets his state on a path to 100-percent clean electricity by 2045. The law's language intentionally makes room for nuclear alongside sources like wind and solar.

Since then, expert analysis has validated the legislature's choice. One utility, Energy Northwest, recently commissioned an independent study examining different routes the state could take to a carbon-free future. The study found that Washington *needs* nuclear to maintain a consistent supply of power – and that any solution without nuclear would be much more expensive.

The state of Washington's approach should serve as a model for states across the country. It's a technology-neutral plan that leaves every carbon-free source on the table when deciding what's best for the environment and for ratepayers.

When our industry is accepted as part of the solution, nuclear can thrive.

But to do that, we can't be complacent. Already, some of the solutions that states have developed to include nuclear in a clean future are running into challenges. In the wake of a Federal Energy Regulatory Commission order that undermined these policies, we need legislation that gives states more flexibility to shape their energy portfolios.

This is playing out right now in Illinois. The state legislature is currently considering the Clean Energy Jobs Act, which could either ensure that nuclear has a role in the state's future – or entirely surrender thousands of megawatts of carbon-free nuclear power.

To secure a carbon-free future in Illinois and elsewhere requires a variety of voices to echo one message: that the challenge of creating a carbon-free electricity system is so great, and the need to do get there is so important, that we need all of our carbon-free technologies working together. This means nuclear and wind and solar, together. Now is the time to send that message to Illinois and all policy leaders.

That means we must continue to educate and engage with policy makers, but also collaborate with other clean energy leaders. You'll hear that on our next panel, which includes Miranda Ballentine of the Renewable Energy Buyers Alliance and Ken Kimmel from the Union of Concerned Scientists. They will discuss how organizations with different priorities can come together to advocate for a common vision for carbon-free electricity.

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We know there is still much work to be done and we must engage all stakeholders, and that especially includes regulators.

Our industry's regulator, the Nuclear Regulatory Commission, faces a tipping point of its own. We believe progress is being made, but the commission must continue its transformation to become a truly risk-informed regulator in order for nuclear to play its part in a carbon-free future.

In 2019, the NRC issued the first-ever second license renewal to expand the operating life of existing reactors from 60 to 80 years. This is a significant milestone for our industry, and in the coming year we expect even more license applications and approvals. In March, Exelon received a second license renewal to operate its Peach Bottom plant in Pennsylvania until mid-2050s.

The NRC continues to prepare for the licensing of advanced reactors. In fact, it recently accepted Oklo's submission for the first license application for an advanced reactor.

Last December, the Tennessee Valley Authority received an early site permit for a small modular reactor at the Clinch River site -- the first such approval in the United States.

And in September of this year, the NRC is expected to complete its first-ever technical review of an advanced reactor design, NuScale Power's Small Modular Reactor.

The Commission also approved a proposed rule that would allow advanced reactors to establish emergency planning zones that are more appropriate for these designs.

The next generation of technology is rapidly maturing, and the commission's decision is one of many promising steps toward establishing an appropriate regulatory framework.

Now that Commissioner Wright has been reconfirmed to the NRC and Commissioner Hanson has been confirmed for his first term, the panel once again has a full slate of experienced leaders, which means the NRC can operate as effectively as our country needs it to.

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While a forward-thinking regulator is crucial, decisions in Congress and the administration should also match the magnitude of the moment. Legislators of both parties – including Senator Manchin, who is joining us today – have

been indispensable in elevating the importance of nuclear on Capitol Hill and in the national conversation.

Last December, lawmakers approved appropriations for fiscal year 2020 that include \$1.5 billion for nuclear energy programs – a twelve and a half percent increase from the previous year. That’s the most funding for nuclear in decades.

Nearly a billion dollars are going toward critical research and projects that will be up and running before this new decade is out.

In March, for example, the Department of Defense announced a demonstration project for a mobile nuclear reactor that could be used to power remote military bases. And the Department of Energy is on the cusp of announcing two new advanced reactor demonstrations.

Building technologies like this – which until recently existed only as designs – is a major tipping point for the next generation of nuclear.

In April, the Nuclear Fuel Working Group released a set of recommendations to advance both U.S. national security interests and the U.S. nuclear energy industry. We stand ready to help the administration enact many of its recommendations.

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Thanks to this type of decisive action, our industry is well-positioned for growth in the coming decade.

In fact, companies are already pushing ahead.

In Waynesboro, Georgia, for example, Southern Company is getting closer to completing its newest nuclear unit.

With more than 7,000 workers on site, and more than 800 permanent jobs available once the units begin operating, Vogtle 3 & 4 is currently the largest jobs-producing construction project in the state of Georgia. From electricians to crane operators, labor has been the beating heart of this effort.

When the two new Vogtle reactors come online, the four total units will produce enough electricity to power a million homes and businesses.

In response to customer demands, our member utilities have made aggressive commitments to reduce their carbon emissions by mid-century. Preserving their existing reactors is just a starting point for these companies – and they're looking to the next generation of nuclear to help meet their commitments.

So many companies are seeing customer interest in the next generation of nuclear and are making significant progress in moving from design to licensing to build. NEI's membership includes more than 20 developers working on advanced nuclear designs. NuScale and Oklo have applications

under review with NRC and we expect that NuScale will receive its design certification from NRC by the end of the year. In addition, GE Hitachi, General Atomics, Holtec International, Kairos, TerraPower, Terrestrial Energy USA, Westinghouse, and X-energy, are at different stages of engagement with NRC.

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My optimism is rooted in more than any one specific project. It is also fueled by the influx of bright young professionals joining our industry.

They include Kristie Soliman, a nuclear fuels engineer at Duke Energy. In light of HBO's Chernobyl miniseries, Kristie organized a panel of nuclear engineers at a local brewery to answer questions from the public. Her standing-room only event was watched live by over 1,000 people.

These young professionals also include a woman named Jesabel Rivera, and her husband, Eddie Guerra, with the Nuclear Alternative Project. They're working to bring carbon-free, cost-effective nuclear reactors to Puerto Rico – an island in desperate need of reliable electricity.

When it comes to workforce, we know that a more inclusive and diverse nuclear industry is a stronger nuclear industry. We can't afford to insulate ourselves from the pain of communities we serve – in particular, communities of color.

NEI is currently taking steps to build a more diverse pipeline of talent into the industry. We recognize that it will take enterprising young people, from all walks of life, to unlock nuclear energy's full potential. But the responsibility to inspire and include them lies with us.

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This is what an industry at a tipping point looks like.

If we get this right – if the nuclear industry can meet the moment in the United States – we'll have a global opportunity in front of us. As we speak, there are more than 50 new nuclear plants under construction worldwide, and at least 170 more in advanced planning stage.

Over the past year, my team and I have spoken with leaders in countries from the Czech Republic to Brazil who are entrusting their energy future to nuclear.

Poland, for example, sees nuclear energy as a way to limit both coal emissions and its reliance on Russian natural gas.

I personally had the privilege of accompanying Energy Secretary Dan Brouillette to Brazil on his first trip abroad as secretary. I want to thank both Secretary Brouillette and Dr. Rita Baranwal, the assistant secretary for nuclear energy, whose efforts to promote our industry's growth around the world have been absolutely vital.

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Even as we look abroad, we have important decisions to make right here at home.

States are committing to reducing carbon emissions. Now, we need legislatures to codify policies that take advantage of every carbon-free option available – which would allow nuclear to compete on a level playing field.

Appropriations from Congress in 2019 are a welcome step in the right direction. Now, we need increases in funding that reflect the gravity of our climate crisis – including in the next stimulus bill.

The Nuclear Powers America Act would help level the playing field with an initial 30 percent investment tax credit for capital expenditures and fuel costs. And the bipartisan Nuclear Energy Leadership Act would boost investment in research and development, fuel security, and nuclear workforce development.

Abroad, emerging markets and the maturation of next generation of reactors offer an unparalleled opportunity. We can reestablish U.S. leadership, bring power to developing nations, and reduce carbon emissions.

Now, we need to empower the U.S. industry to compete on the merits against state-owned enterprises from Russia and China. Support for exports can make an enormous difference.

Earlier this month, the U.S. International Development Finance Corporation proposed a rule lifting its legacy policy of excluding nuclear energy projects -- a welcome and overdue change. Enhanced financing from the Export-Import Bank would also be a major step forward.

Utilities are fighting to keep existing reactors online. Now, we need policies that recognize their importance and properly value the carbon-free electricity they produce.

Innovative companies are investing in small modular and microreactor designs. They'll bring electricity to hard-to-reach places – like parts of Alaska – more safely and reliably than diesel generators or coal boilers. They'll emit no pollutants, and they'll only need refueling every 10 to 15 years.

Now, we need concrete plans to build them – with government support for demonstrations and a technology-inclusive regulatory framework to bring new technologies online as soon as they are ready.

The world is making the essential decision to decarbonize -- and that makes nuclear nothing less than indispensable to our energy system. Americans need to know they can trust nuclear on our journey to a carbon-free future.

Finally, as nuclear becomes more agile and opens new markets across the globe, the U.S. industry *must* continue to lead. The world is better off when the United States sets high quality, safety and efficiency standards.

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We've always taken pride in that leadership role. The world's first commercial reactor, the Shippingport Atomic Power Station in Pennsylvania, went online in 1957. It was the start of our industry, and a major tipping point for the world.

As we enter this new decade, we are at another tipping point – the cusp of what I believe will be the most innovative decade for nuclear since we began generating power at Shippingport all those years ago.

We can decide to break down the barriers standing in the way of nuclear's potential to transform our world.

We can bring power to billions of people. We can do it safely and efficiently and with American leadership. And we can play a vital role in addressing the climate crisis – the great global threat of our time.

My hope – and my firm belief – is that when we reach 2050, nuclear power will be at the foundation of a carbon-free energy system.

All of us have the unique obligation – we have the *privilege* – of making that vision a reality.

Let's seize this opportunity for ourselves and for future generations.

Let's choose the path that we're going to be proud to have taken.

Thank you.