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Contact: [Office of Public Affairs](#), 301-415-8200

U.S. Nuclear Regulatory Commission 34th Annual Regulatory Information Conference Commissioner David A. Wright (As Prepared)

Good morning! And welcome to the NRC's 2022 Regulatory Information Conference – the RIC!

My name is David Wright and I've had the honor of serving as an NRC commissioner since May 24th of 2018, which was also my late father's birthday.

This is my third RIC as a commissioner. As I stand here today, I never imagined that my first RIC would be my only in person RIC so far. But I think it's safe to say that none of us imagined many of the things that we've had to deal with over the past several years with COVID and how it is impacted our personal and professional lives.

I wish we were meeting down the street at the Marriott, because I miss seeing everyone in person but, at the same time, I'm grateful that we are able to gather in this way, share information, and include a broader audience given the capabilities of technology, in particular increasing participation in general and especially with our counterparts from around the world.

Before I begin my formal remarks, I would like to congratulate my colleagues on their plenary remarks and publicly acknowledge how much I appreciate their friendship, their work ethic, and their collegiality. My appreciation and thanks extend to their staffs, as well.

To the Chairman, thank you for your leadership during a challenging time, both due to the impacts of COVID and because of the evolving nature of the nuclear industry.

The NRC is tackling the regulation of new and emerging reactor and medical technologies, the extension of licenses for the current fleet, and the planned and unplanned decommissioning of facilities, as well as a myriad of other issues, including cyber and physical security. It's a busy time, and an important time in our agency's history.

I'd also like to extend my thanks to the RIC organizers. For those of you who have never attended a RIC conference, I hope you find the panels informative and helpful. The NRC staff works very hard to organize and put on this conference, which features panel break-out sessions, along with a handful of plenary sessions like this one and many general sessions.

And finally, I want to take a moment to say how proud I am to be a part of the NRC team...and to say ‘thank you’ to my team, Team Wright. Thank each of you for the ways you support me and each other as we do the important work of this agency.

My family in South Carolina is a big part of my team, too, and I especially want to say ‘thank you’ to them because they totally support me being here at the NRC. I have said this before, while I serve, my family is serving, too, and I appreciate their sacrifices in support of my being here.

As was the case last year, this past year has given me reason to reflect on many things, to remember my past, where I came from, and where I am today.

As I reflected, I kept coming back to how goals, goal planning, and executing plans to achieve my goals have played a huge role in my life. So, my remarks today will focus on that. I will share a few examples of personal goals that have shaped my life and my approach as a Commissioner. And I’ll discuss the NRC’s goal of transforming as an agency and my perspectives on how the agency can best achieve that goal.

With both professional and personal goals, you always have to factor in change and the unknown. Certainly, if the last two years has taught us anything, it is that change is inevitable, and we must adapt.

Take this RIC for example. As you know, the NRC’s goal was to have this year’s RIC in person. Omicron changed that. But I have found and will discuss with you this morning some of the ways that changes and challenges in meeting goals can ultimately give greater purpose and help achieve a greater goal in the end.

I actually have a wooden block sign in my NRC office that says “A Goal Without A Plan Is Just A Wish.”

It’s one of many motivational wooden block signs I have in my Rockville office and in my home in South Carolina but of all of the signs I have, this one speaks to an everyday truth in my life.

Having goals is important, but having a plan to achieve that goal is critical to success.

Last year, my personal goal was to find laughter despite the change and chaos that COVID-19 brought.

It was actually the subject of my RIC plenary remarks, the power of laughter and the importance of taking the time to take care of yourself.

I encouraged you to get outside and experience what is happening in nature around you. I asked you to take the time to smile and say “hello” to people you meet each day, because that recognition may be the best thing that happens to that person all day and you can see their smile in their eyes – even with a mask on.

I urged you to step away from the computer and phone and return to and experience again the things that make you smile, make you laugh, and make you happy.

That's because laughter and taking time for yourself improve you in many ways, from your health to your relationships to your work product. And I truly believe that this personal goal has huge impacts on one's success at work; in focusing on tasks, interacting with colleagues, and being productive and successful.

My goal from last year has not changed. I attribute my goal to find laughter to my Dad who, among other abilities, was a stand-up comic, and let me tell you – there was very little he wouldn't do for a laugh – bringing laughter to his audience, his family, his friends – was his mission. When I was very young, he had a safari-themed television show that ran for nearly a decade, and he would bring all kinds of animals on the show. He would get bit, and kicked, even strangled by a python, all for a laugh.

Don't worry, though, I won't go that far, and I assure you there will be no live animals here today.

Another goal that I attribute to my Dad led me to public service and ultimately here to the NRC. You see, the television station where Dad filmed his safari show was about two blocks from the South Carolina State House. He took me to be on his show when I was an 8-year-old third grader studying South Carolina history in school. On the way home, Dad slowed down to show me the State House. It was an impressive structure, and I remember asking him how people got to go to "work" there? After he explained elections to me, I told him I wanted to serve there one day. That day, a goal of public service was set in my mind. And what my dad said next really resonated with me.

He smiled, nodded, and told me, "Anything is possible for you, son, if you want it bad enough."

And I wanted it bad enough. And through planning and executing, I achieved that goal at 30 years of age.

Achieving that goal brought other opportunities into my path, up to and including my current position as an NRC Commissioner.

I am truly honored and blessed to be in this role and I can assure you that I would not have imagined I could ever be hired to work HERE, much less lead this great agency! What an honor.

At the NRC, our main goal is set for us. It is meeting our vital safety mission – "reasonable assurance of adequate protection."

But there are different ways of planning and executing that goal. And there have been many changes and hardships, especially in the last several years. Through all of the change and hardship, though, I am encouraged by what I have seen accomplished at the NRC. Together, through unity of purpose and resolve, the NRC staff has shown that we can still achieve our mission—and we have achieved some really good things along the way.

And I'd like to acknowledge the efforts of all of our stakeholders, particularly licensees.

Their dedication to keeping nuclear facilities running safely, in compliance with our regulations, was no small task, particularly during COVID. Our counterparts around the world also provide incredible help and insights and work closely with us, sharing challenges, successes, and lessons learned on licensing and regulating.

Although reasonable assurance of adequate protection is our main goal, the NRC has other goals, as well.

One of the top goals of the NRC for the past several years has been transformation. I'll be the first to admit I was initially hesitant about this effort...primarily because I wasn't sure what the goal of transformation was. Was there a unity of purpose at the agency for what success meant or looked like? What was the plan for executing this goal?

As you may have heard me say before, I have always seen transformation as not a huge change in what or how the NRC is doing things. Instead, I see it as a recalibration in our regulatory approach – an acceptance that the way we have always done something might not be the best or only approach. It's about being ready for what is before us and what we can expect in the future – and ultimately for the NRC not to be a barrier to innovation.

As with any goal, I wanted to understand the staff's plan and how they were executing that plan. And I've been impressed with much of what I've seen.

The staff has been focused on four areas: 1) recruiting, developing, and retaining a strong workforce; 2) moving towards making more decisions in a risk-informed manner; 3) establishing a culture that embraces innovation; and 4) adopting new and existing information technology resources.

I'll touch on each of these four areas, with a focus on the last three.

We have had to embrace innovation and adopt new and existing technological resources in adapting to the changing world and regulatory environment in recent years. And there are two areas that I think are real success stories when it comes to innovation and the use of technology at the NRC.

The first is the agency's response to COVID. Similar to what happened for all of you and your organizations, in the March 2020 timeframe, things changed almost overnight for the NRC with the issuance of stay-at-home orders and a move to almost complete telework. For the NRC, as a safety regulator that is responsible for licensing and inspecting the civilian nuclear fleet, this raised a number of unprecedented and difficult challenges and decisions. It created emergent licensing needs, forced us to prioritize inspections to ensure the health and safety of our inspectors and plant personnel, put us in a virtual environment with each other, our stakeholders, and the public, and required us to consider our statutory and regulatory requirements to ensure we were meeting them despite the changed circumstances.

To say decisions needed to be made quickly is an understatement. Resident inspectors' presence at the plants, requests from licensees for exemptions and amendments, and how to handle the need for secure communications and in-person interactions were just a few of the challenges.

We had to transform on the spot – all of our processes and procedures were in question. And we did it – in every area, we recalibrated how we did things, using technology in new ways to address something I doubt anyone could have expected – and we never lost focus of our mission.

I cannot overstate how proud I am of the way the NRC planned for and executed the goal of dealing with COVID impacts.

The other area where I've seen real success at the NRC in executing its transformation goal is STAFF-led efforts to innovate. A few examples that come to mind are Embark Venture Studios, the BeRisk Smart initiative, Nuclepedia, IdeaScale, and the variety of staff-level efforts to streamline our environmental review processes.

It is exciting to see staff at every level of the agency being energized and encouraged by management to think creatively about new and different ways to achieve our mission. I personally want to thank every staff member and external stakeholder watching or listening, including other federal agencies, domestic and international organizations and members of the public, that has been brave enough to put their idea out there, and I'd like to encourage each individual watching and listening today who has new and innovative ideas to keep those innovative thoughts coming – even if some question you.

I recall when the NRC's Embark Venture studios was first introduced, there were chuckles in the halls of the NRC. What a silly name! What is this?

This isn't uncommon when there is change or new ideas – there is often initial skepticism or some level of discomfort. But thankfully, the staff kept moving and kept thinking. Now Embark Venture Studios is a launching ground for innovative ideas, including initiatives that support BeRiskSmart. Embark Venture Studios is leveraging data and risk information to help inform its licensing reviews and inspections. This is exactly the type of technological innovation that ensures that we are working in a risk informed, innovative, and effective way.

The NRC's Jam in 2019 likewise was met with some resistance and questions about what it was and how useful it would be. And it ultimately led to many thoughtful conversations and ideas. I hope that the staff considers another Jam in the near term.

To me, this is success in achieving our transformation goal – but by no means does it mean that every staff level idea, or ideas from external stakeholders are accepted or tried, because they're not. The ideas have to be vetted, and each idea that goes forward must meet our mission. But I love innovative thinking and action without too many layers of management...keeping it simple and not overcomplicating the plan or its execution.

There are other areas where the staff has looked to transform that have been more challenging. One example that comes to mind is the advanced reactor area.

As most of you know, there are many state and federal legislative efforts related to supporting or expediting advanced nuclear reactors and technology. And there are many vendors and licensees developing a variety of designs and concepts. There is also considerable focus on whether and when an effective regulatory framework will be in place for these technologies.

The NRC is at the heart of making that happen, and there are many perspectives, too, both internal and from external stakeholders, on our plan and execution of meeting the goal of transforming our regulatory framework to support advanced nuclear technologies.

One of the NRC's many efforts in this area is developing a rule required by the Nuclear Energy Innovation and Modernization Act, or NEIMA. This is referred to as the Part 53 rule, and many of you listening have been actively watching or engaging with the NRC on this effort.

I appreciate all of the input and conversations on this important effort. And I am excited that the Commission has directed, and the staff is proceeding on a schedule that would have this rule ready well before the required deadline in NEIMA.

However, recently, the NRC has had growing criticism on its approach, with multiple stakeholders submitting extensive comments suggesting that there are some challenges that need to be addressed.

First, I appreciate the staff's work and the extensive outreach done. And make no mistake, there has been transformative thinking and approaches in developing Part 53 thus far, including early release of draft rule language for discussion and consideration of the Commission's Advanced Reactor Policy Statement.

I also appreciate the detailed feedback from stakeholders, in particular feedback pointing out particular technical areas where more clarity from the NRC is needed or would be helpful.

Overall, I would say the feedback we are hearing on Part 53 is that the timing of the rule isn't as important as the rule being useful and usable. Of course, that is easier said than done when you are talking about a rule that is supposed to cover a broad spectrum of technologies.

But I encourage the staff to push forward, think creatively, and recognize that not only are we not constrained by how we've done things in the past, perhaps we should approach things differently because these are, after all, different designs than our current fleet. As we all know, what made sense for a large light water reactor may not make sense for a micro reactor.

Let me make an observation: what we are being asked to do and tasked with accomplishing requires us to be transformative and innovative. We may be an independent safety regulator – and our safety mission is clear - but we must remain externally aware regarding the goals of other agencies and other branches of government. The goals of the Congress, the Department of Energy and the NRC are all connected, and our preparation to evaluate new technologies will ultimately enable the safe use of these new technologies.

And, again, although our mission is clear, the NRC should not to be a barrier in achieving this common goal. For example, our Congressional oversight committees often reach out to us to ask if we need anything to support our mission generally or any particular area, like licensing advanced reactors and technologies. We should not be afraid to provide feedback and have frank discussions. If we need more resources or are having challenges, we should say so. This does not indicate that we are failing. It indicates that we are aware of the issues and are searching a path to reach our goal. Their questions are asked so that they can better understand what is happening, how we are progressing towards our goals and in meeting our mission, and, in the end, what it is that they can do in support of our shared goals.

Let's also not forget that we are in the proposed rule stage of Part 53 – so let's not let perfection be the enemy of progress. We need to get the proposed rule out, let stakeholders comment, and go on from there. Let's not lose focus or overcomplicate things. We need to leverage the lessons learned from our experience with Part 52, where we were trying to simplify things with a one-step process. Our best intentions there notwithstanding, in my view, we created something far more complex and difficult to understand than the two-step Part 50 process – the process many of these new technology innovators

are using right now while Part 53 is being developed. We cannot do the same thing in developing Part 53 that happened with Part 52. The NRC cannot be a barrier to new technologies.

That is my challenge, and I know the NRC staff can meet it. Then, once we achieve that goal, we will need to face the challenge of being ready for the possibility of multiple applications from one or multiple utilities or other entities. We must have a plan to execute for that, as well.

Another challenge in meeting our transformation goals has been rhetoric about our efforts being intended to remove needed requirements or roll back safety.

Some areas in particular where we've received that feedback are the decommissioning rule, recommendations related to the reactor oversight process, and our response to COVID-19.

With respect to decommissioning, for example, there are claims that the decommissioning rule does not appropriately account for risk or involve the public.

With respect to reactor oversight, there are claims that staff's previous recommendations would remove necessary inspections.

Likewise, there have been concerns raised about our approach to licensing and inspection during COVID-19.

For the record, I would like to say that in my time and experience with the NRC, at no time have I felt that the staff put forward a recommendation that would remove needed requirements or did not provide reasonable assurance of adequate protection.

Our staff are highly trained professionals, with integrity and a focus on our safety mission.

Our staff doesn't always agree with HOW to meet our mission or what the appropriate response should be, nor would it be reasonable to expect them to do so. Professional judgements can and should differ. It's only healthy for those type of disagreements to be present in inclusive and learning organizations. However, when there are disagreements, the staff always presents its basis for the approach. The staff also typically does a great job responding to stakeholder feedback on why and how we are doing things, though there is always room for improvement in that area as communication issues can and do arise.

But I also need to take a moment to thank the staff. Thank you for considering operating experience, data, inspection findings, your professional judgment, risk information, public input, and stakeholder feedback – to come up with new approaches and ways of meeting our mission. Don't be dissuaded by some voices out there – avoid the noise – and simply keep on doing the good work you are doing and make sure you are telling your story so that it's not told for you.

In conclusion, I'm proud of the NRC for setting a goal to transform and become a more modern and risk informed regulator. That's not a one and done thing, either – it's a goal to change our behavior, our culture, our processes, in a way that doesn't change our ability to meet our mission. It's also the goal of achieving our mission in a more effective and efficient way that accounts for advances in technology and ensures that we are ready for any and all applications currently under review or coming.

In both planning and executing that goal, we face setbacks. And we have challenges. There are those that say transformation is wrong or an attempt to cut needed requirements. And some that support it claim that we are not doing enough and are not ready for advanced reactor concepts, fuels, technologies and are stuck in using only our old, deterministic way of doing things.

I encourage staff to take that feedback, adjust your plan accordingly, and execute! That might mean starting over in a particular area instead of continuing down a path that isn't working. In the end, starting with a clean sheet of paper can be more efficient than trying to rewrite something. And be ready for the next challenge and the next goal: which is being ready for what will happen after we license our first advanced reactor technology.

Are we ready for the possibility of multiple, possibly dozens, of applications coming in at once? I believe that we can be and if we aren't, we need to make that clear and develop a plan for what we'll need in order to be ready. I would argue that in many ways we have experience with licensing an advanced reactor technology: we did so with SHINE, which has essentially several small modular reactors and a production facility designed to produce Molybdenum 99 using low enriched uranium. And we had to be ready for other applications with different designs and concepts to do the same. In those instances, we leveraged existing regulations and processes and developed guidance to effectively and efficiently license advanced and novel technology.

I'm here to challenge both the NRC staff and stakeholders to continue to voice your opinions and ask the tough questions and respond to the challenges, because it's through these conversations and inclusive dialogues that the NRC can fine tune its approach and plan. In my view, success is not unanimity; that is a false hope and expectation. We aren't typically going to have 100% agreement on anything, either internally or from our stakeholders.

But we must, as a learning organization, hear and be responsive to feedback from our stakeholders, the public, the licensees, and Congress on what concerns them. It helps feed into our process and broadens our perspective on how we can achieve our mission in the most transparent, effective, and efficient way possible. Because I assure you, everyone – the NRC, the licensees, the public, Congress, federal partners, the international community, everyone, everyone wants and needs the NRC to meet our safety mission. And we must be ready.

We cannot be a barrier.

The beauty of goal planning is that the plan doesn't have to be big or complex. The NRC and the government in general get a bad rap for exactly this – overcomplicating or adding too much process to achieve a goal. But there is some truth to the criticism, too. In my opinion, a successful plan, even to a complex problem, can be very simple. In fact, I prefer plans that are simple because of their clarity.

Simple doesn't mean easy, though, nor does it guarantee success. A plan may not end up taking you where you thought it would take you, but a simple plan makes it easier to focus on what you need to do to accomplish your goal, including walking away from that plan if it is not working.

Let me end with a personal story about a goal I had in high school that still drives the way I think and act today. It's also something that I think applies to innovators, both those inside the NRC thinking of new approaches and applicants and licensees looking to adopt or create new technologies.

When I was a junior in high school, I wanted to play on the varsity basketball team. I had pretty good ball skills. I was quick. I could defend, and I had a decent shot. I worked out regularly, ran a lot, and I never missed an opportunity to practice.

But I had a problem.

I was very short and small.

I was, by far, the shortest and smallest guy trying out.

But I worked hard and got to the last day of tryouts, and well, I was the very last guy cut from the team.

That, by itself, hurt a lot, but things got even worse when a coach for both the football team and the basketball team told me that I was too small to be a good athlete.

I was devastated.

I went home, and my Mom was there waiting when I walked in. It's like she knew something. After I told her what had happened, she looked at me and asked, "So, David, what are you going to do about it?"

"What can I do about it, Mom?" I asked.

"Well, you can give up and quit trying, or you can prove him wrong," she said. "I know you're upset about not making the team, David, but there's nothing wrong with you. And, I can promise you this, this will not be the only time you will face adversity in your life, so, what are you going to do about it, David?"

Well, after a period, my mind cleared, and I knew she was right.

I had a goal of representing and competing for my high school. That's what I really wanted to do.

But basketball wasn't the only sport at my high school, so since basketball was out, what now?

In her own way, mom reminded me that my goal of representing and competing for my high school was still very much alive. I just had to adjust the plan, and hopefully, successfully execute the plan.

I decided to ask the track coach if he would let me try out for the track team, although I had missed initial track sign-up and workouts in order to try out for basketball. The coach allowed me to start coming to practices.

And I quickly realized that all the working out, running, and training I had done for basketball might help me in certain events on the track, so I decided to look at the distance team, the two-mile run, primarily, along with the mile and half-mile.

I trained every day, learning HOW to prepare for and run the different distances. When I finally got to compete, believe it or not, was in the conference championships at the end of the season – in the final of the two-mile run – and I found myself immediately near the back of the 24 runners when the race started.

But I didn't quit. As the race continued, I found myself coming up on other runners, so I started passing them, including one of my teammates, about a mile in.

About a mile-and-a-half into the race, I realized where I was – not too far behind the leaders—and I almost panicked. I had never been in that position before; it was uncharted territory for me and I was not sure what to do, so I just kept going.

I crossed the finish line and finished third overall, medaling in the conference final in my first official race for my high school.

I went on to represent and compete for my high school in my senior year, helping my cross-country and track teams win some awards and titles.

I even won a couple myself and I even went on to run for the Clemson Cross-Country and Track Team in college, earning three varsity letters in Cross Country during my time there. Go Tigers!

What the experience of being cut from the basketball team – and the challenge from my mom—did for me changed my life. And it wasn't about sports; it was about an attitude: “What are you going to do about it, David?” My mom's direct question to me is one I hear in my head any time I'm facing adversity or failure. Do I give up and quit trying or do I use the adversity as motivation to set a simple goal, develop a plan, and execute the plan?

The success of that plan in my first high school track season set me on a path that not only affected my running goals for years going forward, but what I learned from that experience I have been able to apply to every aspect of my life, even today.

The past can be a teacher, so I encourage you to learn from your past near-misses. That way, you likely won't repeat them, and, more likely, you will grow stronger and better through them.

Don't be afraid take risks just because you are afraid to risk failure. Embrace opportunities to achieve. I have seen so many examples of this at the NRC in my time here.

So keep setting goals.

Keep striving and don't take no as never. Take no as motivation to find a different way to meet your goal.

Some goals may appear easier to attain than others, but success in any of them requires a plan – an executable plan - because overcomplicating things can make things unworkable.

The NRC must be ready, not just for what is before us now, but also for what will happen next.

And if we aren't ready, what are we going to do about it?

For me, it is critical that the NRC continue to strive to do the things we do in a more educated, risk-informed and data driven way. This includes our licensing and oversight, but it also includes a focus on our most important asset, our people.

As I mentioned, the first transformation focus area is recruiting, developing, and retaining a strong workforce. It should come as no surprise that this is the first focus area, either, as our workforce is instrumental in achieving our goals.

The NRC is only as strong as its people. And the NRC has been leveraging its Strategic Workforce Planning process, which it repeats annually, to continually improve workforce development and readiness and knowledge management. In this process, the NRC does an Environmental Scan that projects the amount and type of work anticipated in the next five years and identifies the workforce needs in order to perform that work.

By analyzing the current workforce and comparing it to future needs, the agency can successfully identify skill gaps. The NRC then develops both short- and long-term strategies to enable the agency to recruit, retain, and develop a skilled and diverse workforce with the competencies and agility to address both current and emerging needs and workload fluctuations. This helps us reach our goal of having the skills we'll need to perform the work that we expect.

And the people that we have and the people that join our agency, whether for a rotation, an internship, or as a permanent hire, can and should look at risk-informed ways to simplify our processes. That should be our goal every day, because the future is going to require us to be aware, nimble, adaptive and responsive to the new frontier before us.

I'd like to end by saying that myself and each member of my team are only a phone call or an email away. Don't hesitate to reach out if there's an issue that you'd like to discuss.

Take care, and all the best in setting and accomplishing your goals in 2022 and beyond, and I hope to see you in person soon!