

Control Number: 55421

Item Number: 36



TEXAS ADVANCED NUCLEAR REACTOR WORKING GROUP **PUC PROJECT #55421** December 5, 2023, 9:30 am CDT **Agenda & Minutes**

AGENDA:

- Call To Order (Glotfelty)
- Opening Comments from Mike Kotara, Derek Haas, Doug Robison
- Remarks from The Honorable David Wright, Commissioner, Nuclear Regulatory Commission (NRC) –NRC regulatory and licensing procedures, followed by Q&A.
- Update on Subgroups and assignments (Derek).
- Discussion on how Subgroups will define work product and topics to be studied and recommended (All WG members).
- Public comment.
- Closing remarks & next steps/schedule (Commissioner Glotfelty).

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Minutes:

Commissioner Glofetly called the meeting to order at 9:33 am. Approximately fifty people joined in person, with 132 watching/listening online through AdminMonitor (the PUCT's livestream broadcast site). The meeting can be watched at:

https://www.adminmonitor.com/tx/puct/workshop/20231205/

The meeting began with introductions around the room. PUCT Interim Chair Kathleen Jackson was in attendance along with working group members and stakeholders.

Jimmy introduced Mike Kotara (Zachry Group), Derek Haas (University of Texas at Austin), and Doug Robison (Natura Resources) referred to as the 'Three Amigos' who he has asked to take on leadership roles. The remarks focused on the importance of this working group to ensure Texas is competitive with other states and countries in the nuclear space. For Texas to be a leader there are many facets to consider, including the ERCOT market, workforce needs, funding, and siting.

Doug - experience with TX Energy Planning Council in 2004 (Gov Perry). This is harder because is an empty canvas, and competition with other states and other countries. Texas could/should be leader and has the need to support growth.

Derek - physics are on our side. Let's get going!

Mike -Zachry has 20,000 employees and 200 working just on SMR buildout. Workforce needs as part of the vision. The four areas of focus will help us drill in.

Interim Chair Jackson - we are Texans and want to be first, prize innovation. Jimmy walking through a power room is like a celebrity.

The Honorable David Wright, Commissioner, Nuclear Regulatory Commission (NRC), made remarks on the role of the NRC as an agency focused on safety, and informed the group that his remarks were his opinion, not necessarily reflective of the whole NRC. A summary of Commissioner Wright's remarks and the discussion are as follows:

Wright: Looking forward to having fun discussion today. Live in SC and work in Maryland at the NRC. Always nice to get out of DC. Wants to learn from others like this group. Independent Commission. DOE more the 'salesmen' and NRC is purely

safety. In the past design has been 'one off' and are now doing good things. Doing a lot to get ready for new reactor applications. Recent rule enacted on performance-based emergency plan, a big step for siting – not necessarily need twenty mile buffer zone. Part 53 rules for new technologies for advanced designs. Allow for all design types to respond to Congressional request. NRC staff may have missed the mark. He provided a different way - allow applicant to proposed their own pathway. Many of these new companies are not deep in nuclear safety technology. Hopefully out for public comment early next year. Essentially trying not to gum up the works. Potential applicants are engaging early and is making a difference.

Andy (Constellation) - part 53 should be helpful and Wright's vote key. First part of next year? Trying for clear guidance to staff (hopes other Commissioners will agree).

Jimmy - question about how Part 50 & 52 might be helping current developers.

The early involvement get a lot of answers/work done before application license even being submitted. Kairos went from expected 36 to actual 18 months. Not picking winners and losers. Very hands on between staff and applicants. TVA and Ontario partnership example.

Doug - Natura has had similar timelines to Kairos.

NuScale was a learning experience - maybe how not to do it.

Jimmy - asked if State or university lands could be site specific. To jump start projects.

Wright: YES, with caveats. New York Power Authority, TVA examples of early site permits.

Jimmy - looking at our university folks to see if they have state lands for siting. Sean, Derek? YES.

Doug - also talk to GLO Commissioner Dawn Buckingham. A type of limited delegated authority possible? Once NRC has proven design?

Wright - May need Congressional action to delegate to states. Desire for energy independence from China and Russia. NRC responsible for not hindering this. Money is not the issue. DOE has the money to try and help. First of kind most expensive. \$300 billion from DOE they are trying to get out there. Need to look at ratepayers' impact too. (GA experience). Some of these are 'boardroom' decisions. Paper designs, fuels, making the widgets.

Derek - the time and review for license is one thing but the cost benefit is part of this. Can we help for more cost/benefit analysis up front?

Wright - not new question. NRC's reasonable assurance standard. Not perfection. NRC is now more open minded (swung one way after Three Mile Island etc). Once you have a paper/plan, stick with it.

Doug asking Sean (A&M) about amending their operating license almost 20 times.

Sean - understanding the strike zone is critical. - students view the NRC has already has/should have the certainty of design.

Wright - hold us accountable to the strike zone. Efficiency is not cutting corners. NRC has been hiring new employees and getting them trained up.

Doug- Natura alone has 80 examiners. Nuclear no longer an option, a necessity due to coal's role now.

Pablo – is there an advantage to looking at brownfield sites, such as retiring coal? WV and other states have passed legislation- if utilities want to be there, it does make sense.

Jimmy - as Texas looks at market design, we know this needs attention. Glad Pablo is here.

Wright - Vertically integrated has advantage and likely be first, but Texas might have other advantages. Up to DOE and States to look at economic incentives.

Jimmy - I see state leadership as open to incentivizing firmer fuel. So Samsungs etc can say they believe in and need high quality power.

States need to be looking at environmental, DOE engagement, changes in law/regs.

Wright - example of NIECA (Congressional act) for more DOE money. Possible DOE/MOU for technology review for applicants willing to invite a portion. Maybe specifically for fusion. TX brainpower here to engage with Congress.

Derek - nuclear data from teaching reactors be helpful? Wright - yes and national labs.

Elizabeth with Entergy. Worked at Westinghouse for their engine development. How could their challenges be avoided?

Wright - sticking to same engineering design, can/may be more efficient and focus on environmental.

Wright - yes this is the challenge. Possibly where DOE loan or grant on building, but safety review cannot be short circuited. NRC staff is listening in today and hearing this discussion.

Elizabeth (Entergy) - dynamic probably risk assessment? Generation trip model being looked at. GE also still looking at this with national labs.

Wright - yes, being looked at.

Jimmy - we have both XCel Energy and Entergy (also have vertically integrated utilities).

Andy Meyers (Ft. Bend County) – have looked at legislation for industrial development zones. Could be helpful. Ft Bend County drafting the legislation already.

Wright – as a former legislator, I think of these things. Need to be talking to people like Dow to help with legislation. Can't think like we've always thought and need to look at what others are doing.

Tim (NOV) - question about licensing and ongoing fees. Maintenance fee discussion at NRC?

Wright - yes. Need to look all the way from start to lifetime, annual fees? For reactor? Inspectors?

Jimmy - NOV is primarily oil & gas and look at modular formulas for buildings.

Wright - no circumstance or conversation is too much information.

Sean (A&M) - other styles of production? All NRC regulation? Materials side, NRC does lots of medical safety etc. looking not just at electricity?

Stephanie (TAB) - we appreciate chance to be groundbreakers. We are state chamber, education on approval process is important to all of us. We also want to disarm the fear factor.

Wright – visited the Univ of Tennessee recently with their reactors. Involved cross sector. Probably leading an agency not qualified to work at. Need whole sector-wide. University systems are key, not just the nuclear engineering, also business wide. Everyone here is not just business, but member of the community, others will define you and the process if you don't.

Chair Jackson - management of risk? Performance based approach. Expectation?

Wright - a lot still to be known, is why data is good. 'Trust but verify'. We want everyone to get there, but then it's every man for themselves. We are partners, our office and doors are open.

Short break from 11:01-11:11 am.

The Working Group re-convened and discussed next steps for the Working Group. Commissioner Glotfelty discussed the subgroups consolidation from seven to four. The four subgroups are Development and Manufacturing, Market Demand/End User, State and Federal Regulatory, and Higher Education and Research and Development. Each subgroup will have a chair and a vice chair.

Derek (UT) presented a draft template agenda and desired categorical outcomes for each group ensure the effort sticks to the goals laid out in the directive from Governor Abbott, followed by discussion among the group.

Commissioner Glotfelty adjourned the meeting at 11:43 am.

VS 12/8/2023 2:41 PM

Attachment (subgroups)

Development and Manufacturing	Market Demand/End Users	State & Federal Regulatory	Higher Ed/R&D
Advanced Reactor Development	Financial Incentives (differing	ERCOT Market Changes,	R&D and Higher Ed.,
and R&D, Financial Incentives,	from incentives on the	Other State Regulatory	National Labs, and
Workforce, Supply Chain, Siting	development end),	systems, and Federal	Workforce.
Brownfields.	Brownfield Siting, Coal to	Regulatory systems.	
	Nuclear, End Users (both on		
	the grid and behind the		
	meter).		
Douglass Robison (Chair)	Andy Nguyen (Chair)	Jimmy Glotfelty (Chair)	Derek Haas (Chair)
Mike Kotara	Mike Kotara (Co-Chair)	Pablo Vegas (Co-Chair)	Sean McDeavitt (Co-Chair)
Ben Reinke	Pablo Vegas	Andy Meyers (Co-Chair)	Bobby Janecka
Bobby Janecka	Ben Reinke	Ben Reinke	Brett Rampal
Brett Rampal	Bobby Janecka	Bobby Janecka	Drew Scheberle
Chrissy Borskey	Bret Colby	Bret Colby	Jimmy Glotfelty
Clayton Scott	Brett Rampal	Brett Rampal	Pavel Tsvetkov
Derek Haas	Chrissy Borskey	Brooke Trammell	Phillip Spenrath
Dillon Allen	Clayton Scott	Chrissy Borskey	Rusty Towell
Drew Scheberle	Derek Haas	Derek Haas	Stephanie Matthews
Jimmy Glotfelty	Dillon Allen	Dillon Allen	Yassin Hassan
Marilyn Kray	Douglass Robison	Douglass Robison	Betsy Madru
Matt Ballew	Frank New	Eugene Preston	
Maynard Holt	Jeff Hoffa	Frank New	
Phillip Spenrath	Jim Stanway	Justin Sink	
Riley Choquette	Jimmy Glotfelty	Kyle Olson	
Rita Baranwal	Justin Sink	Mike Kotara	
Rusty Towell	Kyle Olson	Ned Bonskowski	
Ryan Duncan	Marilyn Kray	Pavel Tsvetkov	
Sean McDeavitt	Matt Ballew	Preeti Patel	
Stephanie Matthews	Matthew S.Handel	Riley Choquette	
Yassin Hassan	Maynard Holt	Sean McDeavitt	
	Michael Gruener		
	Mike Kotara		
	Preeti Patel		
	Riley Choquette		
	Rita Baranwal		
	Ryan Duncan	<u></u>	
	Sean McDeavitt		
	Yassin Hassan		