

Transcribed: U.S. Senate Committee on Environment and Public Works Hearing from 2/9/2010

This is the link to the video in which you can scroll to the appropriate time as indicated:

[http://epw.senate.gov/public/index.cfm?FuseAction=Hearings.Choose&Hearing\\_id=969c15c4-802a-23ad-4ef0-715d1b05cd6c](http://epw.senate.gov/public/index.cfm?FuseAction=Hearings.Choose&Hearing_id=969c15c4-802a-23ad-4ef0-715d1b05cd6c)

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116:10-119:35

Senator Merkley:

I wanted to ask about the exploration of different designs that might inherently increase the safety of nuclear power and therefore also might subsequently reduce its cost. There is a group of engineers in Oregon working under the title NuScale Power and it's a complete redesign of a nuclear reactor and it essentially creates a silo in the ground. The reactor core is hung in a manner that reduces its vulnerability to earthquakes. It has all gravity fed waters systems, there is no pump for failure. It has the ability to remove the copper tubing design if you will, a major design that shut down Trojan. And replace as a complete tubing replacement almost like an element that is pulled out and inserted. And because it's below ground it may provide greater ability to provide protection from terrorist threats. Such designs, I'm sure there are other groups around the country looking at significantly different approaches, but what degree does the NRC in each of your visions should they be promoting or exploring designs that may differ substantially from commercial reactors of today, but might hold promise for far greater security in the future?

William Magwood:

I think this type of work is very important, in fact, NuScale began as a research program that I started when I was back at the DOE. It's the type of research that can really set the stage for the longer term future; today there is a lot of work to do. But, 10 from now, 20 years from now, who knows, that may be the standard for nuclear power in the future. I think we need to encourage this and look forward to seeing these types of activities move towards the commercial spirit.

George Apostolakis:

I believe the commission and its staff should be informed about times on the activities that you mentioned in Oregon and other places. Be prepared; make sure that the commission and the staff are prepared to do a good review of an application when it comes to the commission for a design certification or for maybe a combined license application. So as a commissioner, if confirmed, I will make sure that this happens.

William Charles Ostendorff:

Senator, I am not familiar with NuScale design but I will look into it if I am confirmed. I think it's the commissioned job writ large to ensure that they are up to speed on the current thinking of industry and design engineers what might be in the realm of the possible to be actively engaged in understanding technically what is being worked on so that they are prepared to deal with licensing application.

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44:10-45:10

Senator Voinovich:

Senator Carper and I have been talking about the nuclear renaissance for quite some time, haven't we Senator Carper? You guys are coming in at the right time! I think this is important, having a fully staffed NRC commission is paramount to maintaining our safety goals and it's not just our large existing light water fleet, but the new light water reactors, modular reactors and even generation four reactors. Upon their successful confirmation, these new commissioners will become part of what I believe will be the busiest commission in decades and they will likely oversee real movement in the US nuclear renaissance! I believe these nominees are exceptional individuals all leaders and nuclear technology issues and they have the depth and breadth of experience necessary to successfully lead the nation's commercial nuclear industry. Their dedicated professionalism will be needed now more than ever. I wish you all very very well.

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96:38-97:46

Senator Kolbuchar:

My first question is about a bill that a number of us bipartisan senators are supporting offered by Senator Mark Udall, to increase support of R&D for small modular nuclear reactors, they could be manufactured on assembly lines and therefore could be much cheaper than large scale reactors that we are used to. Any thoughts on prospects of these type of nuclear reactors becoming more mainstream?

William Charles Ostendorff

Senator, I understand that the small modular reactors are being looked at by industry. There are several designs being considered. I also understand that the existing commission is taking a look to ensure that its licensing procedures are set up and ready to receive any licenses that they may receive for a small reactor. It is something that we will be watching very closely over the next few years as industry comes forward with some ideas. Hopefully there will be some R&D efforts that advance those initiatives.