

Blue Ribbon Commission on America's Nuclear Future
Reactor and Fuel Cycle Technology Subcommittee
Summary of Testimony of Dr. Henry J. Cialone, President & CEO – EWI
on behalf of the Nuclear Fabrication Consortium
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EWI works with manufacturers in all sectors of industry from aerospace and automotive to consumer products and shipbuilding to help them be more competitive through the use of advanced manufacturing technologies. Two years ago, EWI created the Nuclear Fabrication Consortium to advance new nuclear fabrication technology that helps its members to support the domestic and international nuclear markets.

EWI is pleased to provide the following recommendations to the Commission.

Recommendations

In terms of domestic fabrication and manufacturing resources, I do not suggest that the sky is falling. Rather that this moment affords us an opportunity to reinvigorate our manufacturing base and its capabilities, increase our domestic capacity and improve our national security with the same set of measures.

National Lab for Transitioning Technologies. Our recommendation is that the Department of Energy create a new type of National Lab that looks and feels like a ManTech center. A lab where new technology is not developed (because that's already being addressed by the existing National Lab system) but transitioned to a manufacturable and deployable state. This lab would be a place where high quality, high productivity manufacturing technologies would either be developed for nuclear applications or transitioned from other industries into nuclear construction, and demonstrated at scale. This would be a new entity that does what the National Labs were not designed to do, thereby allowing them to continue doing what they do best – world class R&D.

Repurposing Existing Assets. The other trend we've seen across the US is that as industries restructure, they often leave in their wake a variety of physical and human capital assets. A mechanism should be established to create a pool of these assets and transition them to meet current and future needs. Part of that effort could include stop gap measures to immediately shore up these resources in a way that prevents them from being dismantled and lost forever. The country needs a systematic approach to capture all of these opportunities and evaluate them.

Coordination for Success. One of the challenges to introducing new manufacturing technologies into the nuclear industry is regulatory acceptance. The NRC leverages independent consensus standards bodies like ASME, for example to build its regulatory framework. There needs to be coordination between these entities and developers of these new manufacturing technologies so that technologies that work can be used. A National Lab for Transitioning Technologies could provide this function.

There must be a plan to take advantage of opportunities, create alignment, connect the dots and identify and address overarching needs in this re-emerging industry sector.