EWI (ewi.org) created the NFC (nuclearfabrication.org) in response to the need for a pre-competitive, collaborative industry wide approach that would allow for the rapid vetting of the past several decades of technology development, test the practical aspects of deployment, and ensure that the technology improvements pursued will be cost effective as well as safe and of the highest quality. EWI’s expertise in materials, joining and manufacturing technology made it uniquely qualified to lead the nuclear industry to implement the critical technology advancements necessary to be competitive in this international arena. Over the last two years, the NFC has become an essential entity for a true and broad US nuclear renaissance which will result in globally competitive plants being built, coming online safely, creating long term jobs, and ultimately providing reliable, cost effective baseline power to grid. The presentation will highlight the needs of industry and the paths being taken to address these needs.

About Nathan Ames

Nate Ames is recognized by industry as an authority in weldability of non-ferrous alloys. As Director of the NFC, he manages a team of world renowned experts in the areas of metallurgy, plastics, welding, structural integrity and NDE. Nate’s B.S. was completed with a concentration in welding metallurgy. The major focus for his M.S. was solidification mechanisms. Nate has participated in numerous national and international committees to develop automated high-productivity and high-integrity welding processes for tubing and pipe applications.

Nate Ames’ current responsibilities at EWI include leading the Nuclear Fabrication Consortium core research program, supporting graduate level research programs with partner universities, managing the development of new technologies in support of the Nuclear Industry, and ensuring that EWI’s members continue to gain value from their membership.

Nate’s areas of expertise include weldability, filler metal development, failure investigations, fatigue design/assessment, and distortion management. He also has experience in design reviews, design of welded structures, residual stresses, and fitness for service/reliability.

Nate also co-founded APEKS LLC, APEKS specializes in helping small to mid-size company’s transition their products from conceptual feasibility to production-ready products. He has since sold APEKS to focus more attention on his career at EWI.

Prior to joining EWI, Nate was employed by Swagelok Company as a research engineer in the Advanced Technology and Material Science department, during which he was the primary point of contact for the organization for deepwater oil and gas applications development and weldability.

Nate has authored 40 papers on the development and application of welding and inspection technology for energy applications. In 2008, he was recognized as the Best Young Engineer by Deep Offshore Technology International.