MEETING SUMMARY

PUBLIC MEETING BETWEEN THE NUCLEAR REGULATORY COMMISSION STAFF AND REPRESENTATIVES OF THE GAS TECHNOLOGY INSTITUTE (GTI) REGARDING GTI RESEARCH ON HIGH-DENSITY POLYETHYLENE (HDPE) PIPING

SEPTEMBER 27, 20011
9:00 AM to 11:30 AM

Agenda

Item	Presenter	Duration (approximate)
Introductions	E.Focht, E. Lever	5 minutes
GTI Piping Infrastructure Research - Overview	E. Lever, et al.	20 minutes
HDPE Piping Research GTI NIST	 E. Lever A. Forster	 30 minutes 30 minutes
Discussion	NRC, GTI, NIST	40 minutes
Public Comments	Public	20 minutes
Action Items	E. Focht, E. Lever	5 minutes
Adjourn		

Meeting Summary

The Gas Technology Institute (GTI) presented its research plans to address NRC concerns regarding the use of high density polyethylene piping in safety-related nuclear applications. GTI's proposes to develop a probabilistic risk assessment (PRA) framework that utilizes science-based materials models, materials processing models (i.e. extrusion, fusing) and incorporates component design requirements, threat assessments, operational requirements and regulatory requirements. Please refer to GTI's slides for more details. GTI is partnering with the National Institute of Standards Technology (NIST) to conduct the research. The roles of each organization are spelled out in their presentations. GTI will perform most of the larger scale testing and modeling while NIST will be handling most of the materials characterization and standards development.

NIST presented an overview of tasks they plan to conduct that include failure process characterization on a microstructural level, microstructural characterization of the fusion joint and identification of microstructural factors that influence the service life of HDPE pipes and fusion joints. Please refer to NIST's presentation for more details.

GTI and NIST are seeking funding for the research. Once funding is obtained, they expect actionable results in three to five years and comprehensive PRA tools to be available in five to ten years.

List of Attendees

Name	Organization
Eric Focht	U.S. NRC
Ernest Lever	GTI
Matthew Kerr	U.S. NRC
Don Naujock	U.S. NRC
Eric Reichelt	U.S. NRC
Tim Lupold	U.S. NRC
Prasad Kadambi	Consultant
Prabhat Krishnaswamy	EMCC
Daniel Ersoy	GTI
Chad Snyder	NIST
Adrian DeWald	Hill Engineering
Aaron Forster	NIST
Jana Bergman	Scientech, CWFC
Adel Haddad (via phone)	Consultant