

INMM Workshop on the Quantification of the Likelihood of Attack

There is one question in the nuclear security arena that has never been successfully addressed. “Can we quantify the likelihood of attack on a nuclear facility?” Over the last several decades, this question has been discussed, but with little real analysis. It does not fit into textbook solutions. It isn’t random, so we can’t estimate it. The adaptive adversary makes it impossible.

In the end, this makes the life of security professionals more difficult. How can you determine if there is enough security without understanding the risk? As a result, security programs react to events, rather than assessing the appropriate level of risk. The longer we are beyond a major terrorist event, funds for security dry up. In the reactor world, how can we allocate resources between safety and security if we cannot compare the risks?

The INMM in cooperation with its Penn State Student Chapter have taken on the challenge of answering this age-old question. They are convening a workshop that will bring together some of our nation’s top experts in the field of security and safety risk. The following experts have confirmed their participation in the workshop:

- Matt Bunn, The Belfer Center, Harvard University
- George Apostolakis, Former Commissioner, USNRC
- Joe Rivers, Consultant
- Mark Snell, Consultant
- Grant Teagarden, Jensen Hughes
- Vicki Bier, University of Wisconsin
- Bob Youngblood, Idaho National Laboratory
- Joe Sandoval, Sandia National Laboratories
- Rick Grantom, Co-Chair, Joint Committee on Nuclear Risk Management
- Rob White, Xcel Energy
- Carl Pocratsky, US Department of Energy
- Susan Caskey, Sandia National Laboratories
- Nathan Siu, USNRC
- Donnie Harrison, USNRC

The following draft agenda is provided for your information:

Tuesday am

Presentations on panelists’ thoughts on the issue

Presentation on the Joint Committee on Nuclear Risk Management (JCNRM) effort to better quantify security risk using safety risk information and approaches.

Tuesday pm

Presentations on Safety and security risk approaches and a discussion of where comparisons might be made

Wednesday am

Discussions of approaches that might be considered for quantification

Discussions of how good the quantification needs to be to enable comparisons that have value

Discussions of related industries and whether insights on risk in these industries might inform the quantification

Wednesday pm

Can it be quantified?

If so, what are the possible ways it can be?

What comparisons can be made with safety risk as a result?

Thursday am

Development of outline of workshop product to be developed into a paper.

We encourage you to participate, to be a part of this very important discussion. If a quantification can be developed, it could transform how our community assesses the adequacy of security.