## Jeffrey A. Julius Technical Manager, Scientech

PSAM12 Speaker Bio

#### [#494] Next Generation Human Reliability Analyses – Addressing Future Needs Today

# [#498] Advancing Human Reliability Analysis Methods for External Events with a Focus on Seismic

#### [#502] Insights & Improvements Based on Updates to Low Power and Shutdown PRAs

**Short Statement:** Co-author presenting on behalf of the Scientech HRA Team consisting of Parviz Moieni (paper #1), Jan Grobbelaar and Kaydee Kohlhepp (papers #2 and #3).

#### **BIOGRAPHY**

Mr. Julius is an internationally recognized human reliability analysis (HRA) expert with extensive experience in HRA methods development and application. He also has extensive experience in the development of Low Power and Shutdown PRA models.

General education and experience is summarized below.

- 1980 Graduate of the University of Washington.
- US Navy Nuclear Submarine program (6 years).
- 27 years developing and applying PRA models.
- Currently managing 2 Fire PRA projects that recently transitioned their plant's Fire Protection program to NFPA 805.



### HRA experience is summarized below.

- Developed, applied and/or trained human reliability analysis methods at over 25 nuclear plants in the United States, Europe, Africa and Asia.
- Project Manager / founding member of the EPRI HRA Users Group in 2000, the EPRI HRA Users Group currently supports all nuclear plants in the USA, the USNRC, vendors and plants in Europe and Asia.
- Co-Author on EPRI's Preliminary Approach to HRA for External Events with a Focus on Seismic (TR-1025294, 2012).
- Industry lead author of NUREG-1921 (Fire HRA Methodology & Guidelines, 2012).

Low Power and Shutdown PRA experience is summarized below.

- Supported LPSD PRA model development at 17 plants/11 sites over the last 20 years.
- Member of the ANS Low Power and Shutdown PRA Standard writing group.
- Supported IAEA Technical Documents on Low Power and Shutdown PRA.
- Project Manager of a full scope Level 1-3 LPSD PRA of internal and external initiating events which received an IPERS Peer Review in 2013.