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EDUCATIONAL and SCIENTIFIC FOUNDATION

July 5, 2007

Dr. Brian Sheron
Director, Office of Nuclear Regulatory Research
US Nuclear Regulatory Commission
MS-T10F12
Washington DC 20555-0001

Subject: USNRC Collaboration with Society of Fire Protection
Engineers, Educational & Scientific Foundation

Dear Dr Sheron

The Society of Fire Protection Engineers, Educational & Scientific Foundation has initiated a project to improve available fire detector and sprinkler activation screening capability for practicing engineers. By this correspondence I invite USNRC to participate in the project. For this initiative, an expert panel has been convened to recommend necessary enhancements to the currently available computer software DETACT-QS which is a MS DOS based program developed by NIST in the early 1980's. The expert panel has concluded that the Fire Dynamics Tool (FDT) developed by USNRC staff would be an ideal basis for the improved product. Both DETACT-QS and FDT are based on correlations found in the SFPE Handbook of Fire Protection Engineering.

I have discussed the possibility of using the FDT spreadsheet for detector activation with Mark Sally, Jason Dreisbach and Gene Carpenter of the NRC staff. They expressed willingness to participate and agreement that the FDT could be useful in successful completion of this project. As part of this initiative the expert panel, which is comprised of the scientists who conducted the experimental fire research that was the basis of the correlations, developed the correlations and subsequently the DETACT-QS program, will contribute knowledge that they have acquired since DETACT-QS was published to enhance the correlations and provide updated information concerning limitations of the correlations. Additional fuel package and heat release information will be included for use in occupancies other than commercial nuclear power plants.

The finished product will be returned to USNRC for continued use and made available by SFPE as public domain software. SFPE will acknowledge USNRC's development of FDT and the contribution to the engineering profession through participation in this initiative.

If you need additional information or wish to discuss please feel free to contact me at, foundation@sfpe.org or Dave Evans, SFPE Executive Director at dave.evans@sfpe.org.

Very Truly Yours

Doug Brandes
Doug Brandes, P.E., FSFPE

Chairman, SFPE Educational & Scientific Foundation

CC: Mark Salley, USNRC
Dave Evans