Abstract
Fire protection engineers use math and science to protect people from the risk of fire and explosions. The practice is based upon the fundamentals of heat transfer, thermal dynamics, and structural mechanics. Everyday fire engineers contribute to the design of the most important buildings in the world. This presentation will showcase the application of fire engineering to such issues as energy storage system fire protection (including structural fire exposure) and wildland fire exposure. Included will be examples of the use of Computational Fluid Dynamic modeling to evaluate fire conditions.

Biography
Mr. Palenske brings more than thirty-two years of experience in the fire protection and life safety consulting field. His experience includes building and fire code analysis, performance-based design, fire modeling, fire testing, wildland fire analysis, origin and cause, and other forensic work. His publications include numerous projects exploring ESFR sprinkler performance, high-piled storage fire behavior, and lithium-ion Energy Storage System fire hazard analysis.

Mr. Palenske has a Bachelor of Science, Civil-Structural Engineering from California State University, Fullerton. He is also a Spring 2019 graduation candidate of the Master of Science, Fire Protection Engineering program, at California Polytechnic State University, SLO.