ABSTRACT

During the past three years Stone & Webster has performed a variety of process hazard analyses (PHAs) on projects for a variety of major clients, each with a different corporate PHA performance requirement. This paper discusses Stone & Webster’s experience with preliminary hazard reviews, safety integrity level (SIL) analyses, facility siting reviews, health safety & environmental reviews, HAZOPs, and vendor equipment HAZOPs during the life of a project. The paper then evaluates the successes and failures during the application of each of these methods and the respective advantages and disadvantages for both owners and engineering contractors. Finally, the paper presents Stone & Webster's current strategy for identifying health and safety concerns based upon these experiences.