

Abstract for my presentation at **The 3<sup>rd</sup> U.C. Forum on the Future of Nuclear Power:**

**Emerging Trends for Physical Protection – Mark Snell, Sandia National Laboratories.**

**This paper reviews systems-level Physical Protection (PP) requirements for Nuclear Energy Systems and summarizes international PP recommendations from international instruments such as the International Atomic Energy Agency's (IAEA's) INFCIRC/225. It describes several nuclear PP trends:**

- **Increasing PP requirements over time;**
- **The need for reactor designs currently in research and development to reflect PP requirements for plants that will be operating 80 years or more from now;**
- **Research efforts to lower life-cycle PP costs by exploring alternative nuclear power plant and fuel cycle options and through looking for synergy between safety, security, and safeguards**