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Expert system for evaluating the physical protection system for nuclear and radioactive materials and associated facilities.

This application serves as an audit tool for sensitive sites using nuclear or radioactive materials. It evaluates their physical protection systems through expert-formulated questionnaires tailored for each organizational category. It provides privileges to users as administrators (experts) or standard users (site managers) and facilitates information exchange between them. The application also allows for automated site audits based on data provided by the site operator. The expert system facilitates autonomous decision-making based on site-specific security needs, provides comprehensive risk assessment, clarifies appropriate security policies and procedures, and enables updates to adversary capabilities and preventive measures. Planned improvements include user self-registration for site specification and integration with other analysis tools for enhanced risk quantification.
Key words : Nuclear security, Nuclear materials, Python

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