

Best Practice #146

Best Practice Title: PNNL uses readiness methodology to stand up security officer protective force

Facility: Pacific Northwest National Laboratory, operated by Battelle.

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Brief Description of Best Practice: Pioneered at PNNL to help launch new facilities, systems or research capabilities without rework or other delays, the readiness process was designed to mitigate risks by following a systematic methodology that prevents oversights by involving the customer, the project team and other experts in planning well before the project begins. This holistic approach enhances and expedites project execution and assures successful completion, while helping to avoid mistakes that can cause delays. Used successfully for modifying lab space, starting new research capabilities, and operating an entire facility, the readiness process was used to stand up a Security Officer Protective Force at PNNL that was prepared for effective operations on day one. Once again, the process demonstrated its value as another completed projects was turned over to customers on time and ready to support operations.

Why the best practice was used: Readiness has been used successfully in planning and executing about 140 non-nuclear and radiological projects at PNNL over the last three years. When PNNL's Safeguards & Security Services Division first considered launching a Security Officer Protective Force, management turned to readiness because of its excellent track record. They incorporated the process from the outset because of its success in:

- Satisfying customers,
- Defining and mitigating risks
- Saving time and costs.

Readiness provides a framework that integrates seamlessly into a project, helping the team discover what they "don't know" or may have overlooked and to build every detail into the plan, avoiding omissions that can cause rework or delays later in the project.

The readiness process played a key role in standing up PNNL's "Contractor Protective Force," helping to secure Department of Energy certification to perform Security Officer (SO) duties previously performed by an outside contractor. With DOE's approval and certification, PNNL now has a full campus security force to respond to all security alarms. Using the readiness process helped the Lab launch the new force with no errors or delays.

What are the benefits of the best practice: Readiness addresses the entire project scope. To stand up a qualified "ProForce," prepared for duty on day one, Safeguards and Security (S&S) wanted to be certain all aspects of this new Protective Force were in place beforehand, including:

- The right people;
- The right operational procedures;
- The right training for officers and staff members;
- The correct understanding of how to respond to emergencies and other situations;
- The right facilities and infrastructure;
- The right equipment

To monitor project progress, the project team built tabletop response exercises into the readiness process, creating a feedback loop to assure that procedures were effective and clearly understood and that security officers were adequately prepared to handle events they might encounter on duty.

What problems/issues were associated with the best practice: While the readiness process helps to identify problems and issues in advance, it also reveals details that may have been overlooked during planning. As the project got underway, it became obvious that more preparations were needed than originally expected. Laying the groundwork required great effort and coordination with multiple organizations. The group started by studying relevant sections of the Code of Federal Regulations to include specific procedural details in the readiness process. Then they translated these requirements into

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procedures, training and exercises and drills to verify readiness. All of these steps proved to be worthwhile, at the Protective Force project met time commitments. The project team learned the great value of planning well ahead of time.

Readiness is a mindset and a knowledge-driven approach that involves commitment. It is based on the involvement of experts. As the Protective Force project moved forward the readiness process continually evolved as the team discovered details that needed attention and gaps that needed filling. The Readiness plan is a living document that can be amended throughout the project to meet new needs and identify and mitigate newly discovered risks. The process helped PNNL's Safeguards and Security group identify the program's strengths and weaknesses ahead of time and start operations with confidence.

How the success of the Best Practice was measured: Several methods have been used to measure success. Periodically, SOs are required to participate in "Alarm Response Performance Tests" involving every security location at the Laboratory. These tests verify that the SOs understand where to go, what to do and whom to notify. If SOs cannot demonstrate adequate performance of their duties, the Lab could be at risk of no longer being authorized to work with, store or handle classified matter. These tests are measured on a pass/fail criteria. During each performance test, our SOs have either met or exceeded expectations. In addition, third-party assessors have conducted independent reviews of our Protective Force program using Code of Federal Regulations (CFR) and DOE guidance. Coming from other DOE facilities, the SMEs who conduct the third-party assessments have an excellent background in protective force operations. After undergoing these assessments, we have determined that our Protective Force is compliant with CFR and DOE requirements. We have also conducted our own internal assessments and, again, our SO program has proved to be operating in a compliant manner and within parameters initially established during our readiness review. Later this year, we will undergo our first full-fledged survey by DOE's Pacific Northwest Site Office, our federal oversight authority. This will be the ultimate measure of the success of our force.

Description of process experience using the Best Practice: Following are examples of how readiness helped the PNNL Protective Force prepare for its new scope of work:

- **Procedures:** The team developed or modified protocols for radio operations, facility checks, 2400 calls and reporting, supervisor responsibilities and other functions.
- **Training:** Officers received training in radio operations, command and control, traffic control, and alarm response to national security alarms, familiarization with sabotage, and theft or unauthorized control of special nuclear material. Their mindset had to change from being OCTs to thinking like SOs, meaning they needed to recognize and understand the types of tactical responses they would be required to make to alarmed locations.
- **Assessment:** Dry runs, such as tabletop exercises, drills and role-playing revealed how well officers were trained and whether procedures would produce desired results as written or if clarification would be needed.
- **Methodology:** The Readiness Process provided the framework that helped assure that nothing was missed.