

CONSTELLATION Nuclear Security:

Building a Technical Basis for Security Decisions

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BACKGROUND: Constellation Nuclear Security Strategic Initiatives

- Ongoing, focused effort over the last decade to optimize Nuclear Security
 - Senior Management understanding, engagement and resource investment
 - 3 Criteria: Positive impact on Defensive Strategy and Tactics / Physical Security Plan, Human Performance, and Net Present Value (\$100M+)
 - Share successes with Industry through direct interactions with Peers and NEI
- Multiple successful initiatives with NRC review / challenge
 - Handgun elimination (Exelon COI to NEI DNP)
 - Suppressor usage for range training, T&E and analysis
 - First (and only) successful Remote Operated Weapons System development and implementation in industry
 - Ammunition T&E and analysis
 - Defensive Strategy Optimization (fleet mods and PSP changes)
- Building on successful interaction with LWRS (T&E / analysis in progress)
 - Force-on-Force (FoF) control measures for mock explosive usage (informs timelines)
 - FoF control measures for precision marksmanship and other range activities

CURRENT STATE: Key Points for Building a Technical Basis

- Ongoing gap analysis
 - Definition of problems, goals, and success criteria
- Strategic planning and prioritization for resource allocation
 - SWOT and Cost / Benefit analysis, to include Net Present Value calculations
- Diversity of Subject Matter Expertise / prevention of “group think”
- Collective stakeholder engagement for development of final concept(s)
- Senior management challenge and select peer reviews
- Regulatory review and formal analysis
 - Objective, quantifiable, and repeatable
- Fleet implementation planning supports industry implementation and other key stakeholders’ priorities

ON-GOING AND FUTURE STATE: Constellation Strategic Initiatives

- Continued focus on long-term business goals with LWRS as a key partner
- Build on previous LWRS Security Pathway successes to define tactical realism
 - Common bulk explosives breaching charge:
 - Phase 1: Mock charge “right sizing” success with LWRS, complete with NEI / NRC (2Q24)
 - Phase 2: Explosive initiators T&E / analysis in progress (3Q24)
 - Phase 3: Blast effects, T&E complete, analysis in progress (4Q24)
 - Precision marksmanship testing and data analysis: Most T&E complete, analysis in progress (4Q24 and beyond, incrementally)
- Long-term planning (3-5 year) with LWRS/Industry to support Constellation/Industry Nuclear Security Strategic Initiatives
 - Including focus beyond traditional nuclear security
- Explore other LWRS pathways for potential model of security path forward

MOVING FORWARD: Key Lessons Learned

- No single issue, no single solution, no single resource
- LWRS T&E philosophy is synergistic with Constellation's, with proper communications
- Analysis to support change is regulatory responsibility of the licensee
- Long term process, with incremental successes, to reach cumulative goals

QUESTIONS / DISCUSSION

Thank You

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