



# DOE Occupational Competency Models

A Response to the GAO Report to NNSA - Modernizing  
the Nuclear Security Enterprise

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# GAO Report to NNSA - Findings

- NNSA workforce
    - 34,000 M&O contractor employees
    - 2,400 federal employees
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# GAO Report to NNSA - Findings

- **NNSA Workforce**

- Workers possess skills not readily available in the job market
- Often have advanced degrees in scientific or engineering fields

# GAO Report to NNSA - Findings

- **NNSA Workforce**
  - Certain skills unique to the enterprise and can only be developed within its secure, classified environment
    - Takes 3 years of on-the-job training to achieve skills necessary to succeed in critical skills positions
    - Takes 5 to 10 years to train a scientist or engineer with an advanced degree to be fully qualified nuclear weaponeer

# GAO Report to NNSA - Findings

- NNSA
  - Relies primarily on two related programs to develop federal workforce with requisite critical skills
    - FTCP
    - TQP



# GAO Report to NNSA - Findings

- NNSA and its M&O contractors face challenges in recruiting, retaining, deploying, and developing their workforces
  - Shortage of qualified candidates
  - Aging workforce
  - Variable funding
    - Newer weaponeers denied significant training opportunities
  - Competition from science and technology-related companies in the private sector



# GAO Report to NNSA - Findings

- NNSA and its M&O contractors face challenges in recruiting, retaining, deploying, and developing their workforces
  - Use training and project assignments to ensure that critical skills are being developed and preserved
  - Succession planning can inform pipeline decisions
  - Analyze potential skills gaps
  - Without common enterprise-wide definitions of human capital performance metrics, NNSA may not be able to collect consistent and comparable M&O contractor HC data



## GAO Report to NNSA - Recommendations

- NNSA should consider developing standardized definitions across the enterprise, especially M&O contractors
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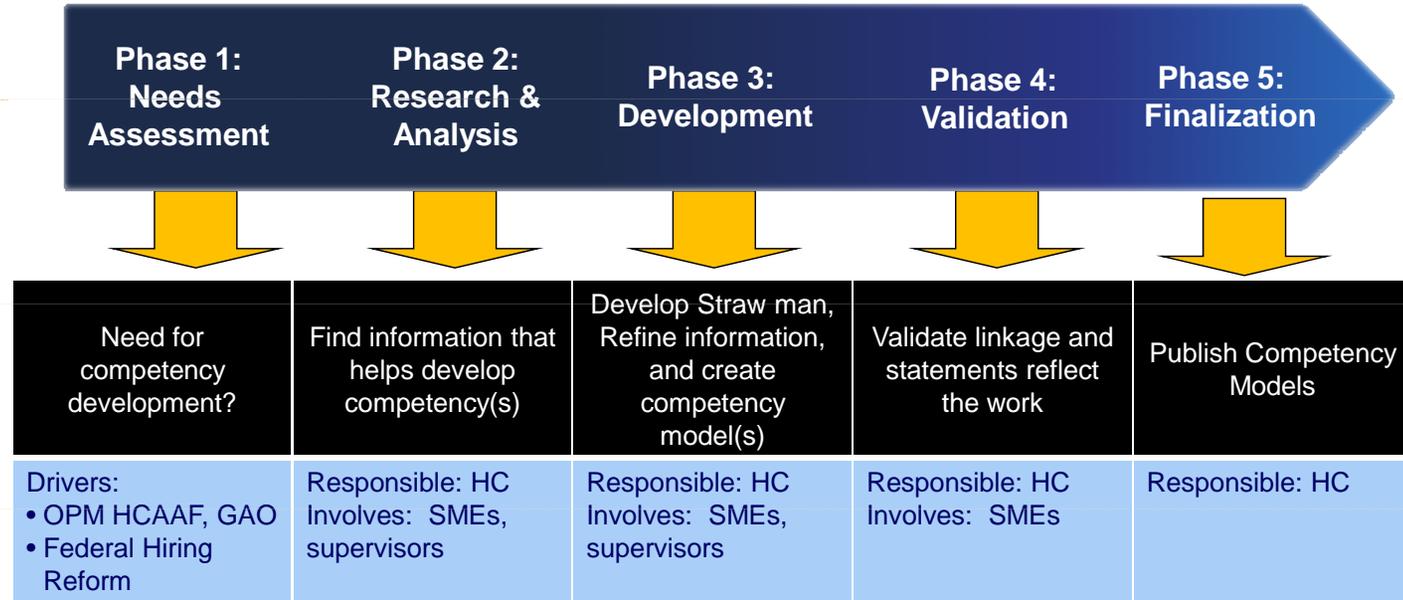
# DOE Occupational Competency Model Development: How Can they Help?

## Overview:

- Competencies - can be characteristics that drive outstanding performance in a given job, role, or function
- DOE occupational competency model - a group of competencies associated with a given occupational specialty (Nuclear, Fire Protection, etc.)

# DOE Occupational Competency Model Development

## Competency Model Development & Proficiency Mapping Process



Only Here ...





# DOE Occupational Competency Model Development

## Intended Outcomes:

- Huge cost-savings/cost-avoidance through improved ability to identify and address workforce development skills gaps and developmental needs.
- Employees will have better tools for professional and career development.
  - A set of standardized competencies and behaviors aligned by grade and proficiency level
  - Workforce development activities aligned to validated competencies



# DOE Occupational Competency Model Development

## Intended Outcomes:

- **Employees will have better tools for professional and career development.**
  - Career Development Roadmaps aligned to their specific occupational competencies (Pending)
  - An automated assessment tool and improved process for identifying and addressing skills gaps and developmental opportunities



# DOE Occupational Competency Model Development

## Completed YTD:

- Estimated time investment of 1-6 hours - includes:
  - Initial data gathering
  - Review position descriptions and sanitized performance plans
  - Identify Subject-matter-experts (SMEs) to assist with the development
  - Participants complete a voluntary, occupational, questionnaire
  - Follow-on focus group work by a subset of survey population to vet draft models and help develop proficiency statements



# DOE Occupational Competency Model Development

## Completed YTD:

- Estimated time investment of 1-6 hours - includes:
  - Engineering competencies developed
    - Nuclear
    - Fire Protection
    - Safety Engineering
    - Mechanical
    - Environmental
    - General (prototype)
- How FTCP contributed to the success of this effort?
  - Championship
  - Collaboration
  - Active Participation from SMEs
- EM pilot to assess efficacy of competency assessment system (September 17, 2012)



# DOE Occupational Competency Model Development

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## Questions?



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