# National Materials Program Pilot Projects

CRCPD Conference Special Interest Meeting May 5, 2003

#### Agenda

- Introductions
- Meeting objectives
- General status of National Material Program activities
- Overview of pilot projects
- Discussion
- Closing remarks

#### Meeting Objectives

- Provide description and status of pilot projects
- Provide opportunity for interested parties to comment and ask questions on pilots
- Solicit specific input on each pilot from interested parties

### Major Milestones Completed

- □ Selected pilot project chairs (Oct 2002)
- Developed Implementation Plan (Jan 2003)
- Established working groups (Feb 2003)
- □ Finalized charter for each pilot (Mar 2003)
- Updated NMP web site http://www.hsrd.ornl.gov/nrc/materials.htm (Apr 2003)

### Major Milestones

Upcoming

- □ Complete detail work product plans (May 2003)
- ☐ Complete the pilots (Apr 2004)
- Evaluate pilot results against success criteria in SECY-02-0074 (Apr 2004)
- □ Prepare assessment for the Commission (Nov 2004)

# National Materials Program Pilot Project 1:

#### Establishment of Priorities

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#### Objective

To develop a collaborative process for NRC and Agreement States to identify priorities and develop work products

#### Work Products

Develop a process that NRC and Agreement States use to establish priorities

Develop a National Priority list

Examine processes to determine what work will be done and how that work will be shared by NRC and individual Agreement States

#### Current Activities

- □ Finalize Work Product Plan
- □ Researching the current processes utilized by NRC and Agreement States to set priorities

#### Focus Questions

- Does your State use a formal process to set priorities?
- ☐ If so, what is the process?

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# National Materials Program Pilot Project 2:

### A National Industrial Radiographer Certification Program

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#### Objective

G-34 Committee on Industrial
Radiography as lead group for the oversight of all activities associated with a national industrial radiographer certification program

#### Certification Oversight Activities

- Review and approval of initial applications to be recognized as certifying entities
- Review of certification program changes
- □ Follow-up evaluations of certification program status
  - Test administration
  - Program maintenance activities

#### Focus Question



How do you think the recognized certifying entities should be evaluated?

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### Scope of Activities

- Formalize initial review criteria and process based on nationally-accepted standards
  - 10 CFR Part 34 for RAM
  - Part E (SSRCR) for X-Ray
- Apply the criteria and the process for obtaining approval as a certifying entity

#### Work Products

- ☐ CRCPD Document:
  - Formalized criteria and process
  - Proposed strategies for follow-up program evaluations
- Evaluate and document the results of applying the criteria and process in a test case

Choose one of these 3 options for evaluation:

- A new certifying entity's application and proposed program
- ASNT's existing program
- A volunteer state with an existing certifying program

#### Schedule



- Charter and Work Product Plan submitted
- ☐ Finalize criteria and review process, June 2003
- Evaluate the application of the criteria and process, December 2003
- Complete draft pilot project reports and products, February 2004

# National Materials Program Pilot Project3:

## OPERATING EXPERIENCE EVALUATION

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#### Objectives

- Optimize the common use of operating experience information from licensed facilities
- Test a structured process for evaluating cumulative data and performance
- Develop strategies to make the process more transparent
- Produce consistent results when implemented by NRC or Agreement States

## What do we Mean by Operating Experience?

- Domestic and foreign event data
- Inspections, special studies, and generic reviews
- Industry-wide analyses
- □ Risk insights and metrics
- Performance indicators and associated thresholds for regulatory action

#### Scope of Activities

- Examine the evaluation process used to identify generic issues and possible regulatory action
- □ Identify gaps in NRC and Agreement State processes and opportunities for improvement
- ☐ Consider process for providing the Commission information on significant nuclear materials issues and adverse licensee performance

### Scope of Activities-continued

- Develop tools and metrics to test the use of cumulative data, a standard format, and decision criteria
- Examine lessons learned from past operating experience and associated root causes, risk insights, and corrective actions

#### Proposed Regulatory Framework

- Propose enhancements to procedures, organizational review and evaluation methods, sources of information, and methods to better communicate operating experience information
- Provide recommendations to enhance the efficiency and effectiveness of materials oversight programs, including matters related to duplication of effort and burden reduction

#### Focus Questions

- □ How can operating experience information be better communicated between NRC and Agreement States?
- ☐ How can operating experience information and trending optimize NRC and Agreement State resource utilization?
- □ How can risk insights be better integrated into regulatory decision making?

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# National Materials Program Pilot Project 5:

Implementation of Phase II Recommendations NRC Inspection Manual, Temporary Instruction 2800/033, Revised Materials Inspection Program

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#### Phase I and II Reports

- □ The Phase I Report (11/00) identified specific recommendations for materials licensing & inspection programs
- Phase II (8/01) resulted in staff initiatives, benchmarking with other federal agencies, National Materials Working Group, and specific recommendations for changes to the Materials Inspection Program

## Phase II Recommendations for IMC 2800

The following were selected as "quick hits":

- □ II-5 Revise inspection priorities
- □ II-9 Empower inspectors
- II-10 Streamline inspection preparation
- II-11 Revise initial inspections
- □ II-12 Revise field office inspections
- II-16 Expand the use of NRC Form 591

## 7 Risk-Informed Focus Elements INSPECTION PROCEDURES

- □ 1) Security and control of licensed material;
- 2) Shielding of licensed material;
- □ 3) Comprehensive safety measures;
- 4) Radiation dosimetry program;
- 5) Radiation instrumentation and surveys;
- 6) Radiation safety training and practices; and
- 7) Management oversight

# How do These Changes Affect the Inspection Process

- Inspection remains a performance-based evaluation of licensee activities rather than a review of records
- Changes were instead made in the preparation and documentation of inspections
- Evaluation of data generated to date has indicated 14 % FTE reduction overall for the materials inspection program

#### Revised Materials Inspection Program--Next Steps

- 2002-03, NRC field testing
  - Revised IMC 2800
  - 12 Inspection Procedures
  - Preliminary Analyses
- 2003
  - Summer, Final Analysis
  - Fall, Final Versions of IMC 2800 and 12 IPs
- 2004
  - NMP-Pilot Project Final Report

#### Focus Questions

- What risk-informed or performancebased changes have been implemented in Agreement State materials inspection programs?
- What inspection data analyses have been completed to measure effectiveness and efficiency of Agreement States materials inspection programs?