

POLICY ISSUE  
(Notation Vote)

June 22, 2001

SECY-01-0112

FOR: The Commissioners

FROM: William D. Travers  
Executive Director for Operations

SUBJECT: NATIONAL MATERIALS PROGRAM: TRANSMITTAL OF THE  
FINAL WORKING GROUP REPORT PRESENTING OPTIONS  
FOR A NATIONAL MATERIALS PROGRAM

PURPOSE:

Respond to Commission direction in the November 23, 1999 Staff Requirements Memorandum (SRM), "SECY-99-250 - National Materials Program..." to examine the impacts of the increased number of Agreement States and to provide the Commission options for a National Materials Program. Request Commission approval for early release of the Working Group Report.

BACKGROUND:

Agreement State licenses currently comprise approximately 75% of the national total. With the forecast of three more States entering into agreements by the end of fiscal year 2003, Agreement State licenses will comprise more than 80% of the national total. In acknowledgment of this shift, larger portions of NRC resources have been devoted to activities in support of the national infrastructure rather than in direct interactions with applicants and licensees through licensing and inspection activities. These program activities include rulemaking and guidance development, technical support, development and maintenance of information technology systems, event follow up, and the Integrated Materials Performance Evaluation Program (IMPEP).

Although the Nuclear Regulatory Commission (NRC) and Agreement State staff have referred to a "National Materials Program," or have used similar references (e.g., coherent nationwide effort), no clear definition has been established to define what is meant by a National Materials Program (i.e., its structure, characteristics, makeup, functions and resources). To address this issue, the Commission directed the formation of an NRC/State Working Group to examine the impacts of the increased number of Agreement States and to develop options for Commission consideration. The Commission also directed that the Working Group coordinate with a Panel established by the Conference of Radiation Control Program Directors, Inc., (CRCPD), to

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examine the structure of a National Materials Program. Section I of the Working Group Report (Attachment 1) presents the history, current status and a prediction of future challenges for the national program.

#### DISCUSSION:

The National Materials Program Working Group, consisting of six representatives from States, six NRC representatives and an NRC advisor, first met in early 2000. The Working Group sought guidance from its Steering Committee, input from internal and external stakeholders at several meetings, and conducted a tabletop exercise at the October 2000 Organization of Agreement States (OAS) meeting to test one of the options - a consensus-based national structure. Working Group members also made presentations and held discussions at the 2000 and 2001 annual CRCPD meetings. Office of Inspector General staff also attended Working Group and Steering Committee meetings as part of their audit of this program area.

The Working Group decided, based on an initial analysis of the issues, to develop possible options from a functional, "bottom-up" analysis rather than a programmatic "top-down" approach. This allowed the Working Group to first define the elements essential to a radiation control program and then determine how those elements could best be accomplished in a national materials program.

These elements included, but were not limited to, licensing and inspection programs, rule and guidance development, and mechanisms for communicating with stakeholders. The current methods for implementing various program elements were compared with possible alternatives using the following evaluation criteria:

- Protect Public Health and Safety
- Optimize resources of Federal, State, professional, and industrial organizations;
- Account for individual agency needs and abilities;
- Promote consensus on regulatory priorities;
- Promote consistent exchange of information;
- Harmonize regulatory approaches; and
- Recognize State and Federal needs for flexibility.

Information on this process and evaluation is contained in Section II of the Report.

Once basic program elements were identified, the Working Group next developed and evaluated a range of possible options for a national program. After defining the current national regulatory program (the base case option), five other options were developed and evaluated. Options ranged from allowing all States to independently regulate all radioactive materials without Federal oversight, to a structure with only one regulatory entity having jurisdiction over all radioactive material in the United States. The presentation and evaluation of options is contained in Section III of the Report. A matrix which summarizes and compares the options is attached (Attachment 2). The resources presented in Attachment 2 represents estimates of NRC resources under each option and do not include estimates of Agreement State resources.

Attachment 3 provides additional information on the option and resource estimates.

After evaluating comments from stakeholders, considering the advantages and disadvantages of each option, and considering potential resource implications, the Working Group recommends that the Commission adopt a cooperative, consensus option for a national program. The Working Group believes that this recommendation, the Alliance Option, has the best potential for achieving NRC's current strategic goals, as well as the goals and objectives of a future National Materials Program. The Working Group believes the Alliance Option offers the prospect of leveraging NRC's program by joining in a continuing collaborative process with other regulators (the Agreement States) to jointly establish national priorities and agendas, share resources, and develop regulatory products.

The Report recommends that an Implementation Plan be developed to guide and evaluate the transition to the alliance structure, or to develop implementing details of another option or blending of options (see discussion below).

The Working Group's Report also recommends several components (i.e., enhancements) that could be used with or without changes to the current national structure. The feasibility of these types of enhancements is also being evaluated by the staff as part of other ongoing initiatives. The recommendations and components are contained in Sections IV and V of the Report. Enhancements to the current program are also discussed in Section II of the Report.

In developing options for the Commission's consideration, the Working Group also addressed the following six issues as specified in SECY-99-250:

1. Development of an overall program mission statement with defined "top level" goals and objectives.
2. Delineation of the respective roles and legal responsibilities of NRC and the Agreement States, including the Organization of Agreement States (OAS) and the CRCPD.
3. Delineation of the scope of activities to be covered by the program and the need for statutory changes at both State and Federal levels.
4. Establishment of formal program coordination mechanisms.
5. Establishment of performance indicators and a program assessment process to both measure program performance and to ensure program evolution.
6. Provision/Budgeting of resources at both State and Federal levels.

Section VI of the report provides the Working Group's response to these issues.

## **COMMISSION CONSIDERATION OF THE WORKING GROUP REPORT**

The Working Group Report represents a major milestone in the process of examining options and helping determine the future framework for a National Materials Program. The options reflect a range of possibilities from all States independently assuming regulatory responsibility to NRC reasserting regulatory jurisdiction across the nation. The Report also examines options between these extremes, such as the Alliance option. In addition, each option can be varied to create unique "sub-options" within an option, or program details of individual options can be combined to create an entirely new option. Therefore, the Commission may want to consider the larger universe of options that may be possible through such blending of

individual program details within each option when examining the report, its recommendations, and when examining possible options for a National Materials Program.

Blending of the program details of one or more option into a new option will change the relative level of NRC resources that might be needed to implement that new option. The resources in Attachment 2 only represent NRC's resources under each option. The matrix does not make any assumption about how each Agreement State would participate if the option was selected and thus does not include an estimate of Agreement State resources. This could have a significant implication for the net national program.

The resource estimates are directly dependent on the specific program assumptions reflected in each option. These assumptions can be varied, or individual assumptions can be combined which, in turn, will reflect a corresponding difference in the resource estimate. Thus, the Commission could examine, for example, the relative change in resources that could result from variations in the Current (Base Case) Program option by selecting different assumptions. (e.g., The Commission could choose to move towards the Alliance option only for certain activities such as guidance development and maintenance.) The matrix in Attachment 2 can be expanded to represent such other options and can help identify the resulting relative resource differences if such decisions were to be considered or directed by the Commission.

Depending on the option selected, or the blending of options selected by the Commission, additional work will be needed to further evaluate and develop implementing details for that option. To assist in helping develop additional supporting information, the Commission may wish to consider selecting an option or sub-option for further analysis through a pilot program. For example, the OAS, working through an alliance process, could be requested to assume responsibility for maintaining one or more (or all) of the NUREG-1556 consolidated materials guidance series up-to-date and available to both NRC and the Agreement States. Other examples, such as Agreement State assumption of responsibility for the development of amendments to certain materials rules, could also be considered as additional pilot programs. Continued development and testing of the approach selected for working with the Agreement States is important to gaining an understanding of the processes needed, and the resources necessary to conduct work in an efficient and effective manner. In addition, it will allow all of the organizations to understand the roles, responsibilities, and level of commitment that will be necessary for success.

#### **PUBLIC AVAILABILITY OF THE WORKING GROUP REPORT**

At the public meeting held in Arlington, Texas in February 2001, stakeholders, including individual Agreement State representatives, suggested that the Working Group's Report be released as soon as it is completed. The Working Group agrees with this suggestion and asks that the Commission give priority to releasing the Report as soon as possible.

RESOURCES:

Staff estimates that about 2-3 FTE (NMSS, STP and OGC) would be required to work with the Agreement States to further develop the next steps following Commission direction, such as development of an implementation plan for a specific option. Staff estimates that about 0.5-1.0 FTE would be required to work with the Agreement States on an additional pilot program, such as transferring one or more of the NUREG-1556 guidance documents to the Agreement States for maintenance. Resources for such follow-on work are not explicitly reflected in the Materials Arena budget, and would need to be reprogrammed from the existing budget.

COORDINATION:

The National Materials Program Steering Committee has reviewed the Report and believes it provides a sufficient range of options and analysis to facilitate Commission consideration. Committee members include the Deputy Executive Director for Materials, Research and State Programs (DEDMRS); the Chief Financial Officer; the Associate General Counsel for Licensing and Regulation; the Directors of Nuclear Material Safety and Safeguards (NMSS) and State and Tribal Programs (STP); the Director of the Division of Industrial and Medical Nuclear Safety (IMNS); Division of Nuclear Materials Safety (DNMS) Directors from Regions II and III; and Agreement State Program Managers from Massachusetts and California.

RECOMMENDATION:

Staff requests that the Commission approve the Working Group's request for early release of the Report.

*/RA/*

William D. Travers  
Executive Director for Operations

Attachments:

1. Final Working Group Report
2. Comparison of Options Table
3. Description of Options and Assumptions  
for Resource Estimate

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ATTACHMENT 1

FINAL REPORT OF THE WORKING GROUP  
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ATTACHMENT 2

COMPARISON OF OPTIONS TABLE

## Comparison of Options Table

	<b>Current Program (Base Case)</b>	<b>Independent States</b>	<b>Minimum NRC Involvement</b>	<b>Alliance</b>	<b>Delegated Program</b>	<b>Single Regulatory Agency</b>
<b>Change in AEA required</b>	No	Yes (Agreements)	No	Yes (NARM)	Yes (Agreements and NARM)	Yes (Agreements and NARM)
<b>Agreement States</b>	Yes	No	Yes	Yes	No	No
<b># of Agreement States Assumed</b>	32	0	32	32/50	0	0
<b>NRC jurisdiction over federal facilities</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>No. of state programs possible</b>	32	50	32	32/50	0	0
<b>No. of states where NRC has jurisdiction</b>	18	0	18	18/0	50	50
<b>NRC licensing</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>NRC physical inspection</b>	Yes	Yes	Policy Dependent	Yes	Yes	Yes
<b>Guidance development</b>	Yes	Yes	Policy Dependent	Yes	Yes	Yes
<b>Rule development</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Evaluation of state regulatory programs</b>	Yes	No	Yes	Yes	Yes	Yes
<b>IMPEP</b>	Yes	No	No	Yes	No	No
<b>Estimated NRC resources in millions and (FTE)</b>	\$55(336)	\$3.7(23)	min. support \$36.7(269) min. program \$32.0(200)	32 states - \$51.6(315)/ 50 states - \$24.7(135)	\$76(368)	\$113(744)

ATTACHMENT 3

DESCRIPTION OF OPTIONS AND ASSUMPTIONS FOR RESOURCE ESTIMATE

## DESCRIPTION OF OPTIONS AND ASSUMPTIONS FOR RESOURCE ESTIMATES

**Base Case.** To estimate resources for the various options, the Working Group first defined the Base Case. The Working Group began with the resource numbers in the NRC FY 2001 budget in the Materials Arena. In its Base Case the Working Group did not include resources for activities that would not be subject to regulation by Agreement States (fuel cycle activities and support for spent nuclear fuel). The Working Group then added resources for low-level waste, decommissioning, and uranium recovery activities from the Waste Arena because those activities are subject to regulation by Agreement States. The Base Case also includes resources to maintain the framework for materials regulation (State and Tribal Programs, legal advice and support, research, enforcement, investigations and event assessment) and the NRC efforts to support the materials program (resources providing policy, financial, administrative, information technology infrastructure, personnel support, rent, utilities, building maintenance). The Base Case is estimated to be about \$55 million, including salaries and benefits for 336 FTE.

**Independent States Option.** The first option compared to the Base Case is the Independent States option. This option assumes that a change in the Atomic Energy Act (AEA) abolishes NRC's materials program for those categories of materials which are currently subject to regulation by agreements with States. The option assumes NRC would maintain its authority over Federal entities, in areas of exclusive Federal jurisdiction and over AEA materials in Guam, Puerto Rico, U. S. Virgin Islands, and the District of Columbia (unless those entities desired to become an Agreement "State" as provided by Section 274 (n)). The Working Group included this as an extreme to bound the options, though the group determined that it probably would not meet the mandatory goal of protecting public health and safety. Resource estimates do not consider the effort necessary to achieve this statutory condition.

The option assumes an NRC licensee population of about 500 licensees, with corresponding reductions in NRC licensing and inspection direct staff and support. Because NRC's oversight of State materials regulatory programs would no longer be required (there would be no Agreement States), and virtually all AEA materials licenses would be turned over to the States, many program elements currently residing at NRC, such as the Office of State and Tribal Programs and the Office of Nuclear Material Safety and Safeguards (NMSS) support of State activities would disappear completely. Additional resource decreases are found in the areas of research, investigations, and rule and guidance development.

**Minimum NRC Options.** During the course of its evaluations, the Working Group examined a number of options under which the NRC would minimize its activities in materials regulation. All of the options assume that NRC would maintain authority over AEA materials, including a voluntary Agreement State program. NRC would streamline its operations to continue to meet the minimum requirements of the AEA. The Minimal Options assume NRC makes dramatic policy changes in executing its obligations. For example, the AEA requires that the NRC take a leadership role in regulation of AEA materials throughout the U.S., but does not define the level of effort required to meet that statutory obligation.

The Working Group compared two Minimum NRC Options to the Base Case. The first option, the Minimum Support Option, assumes NRC's resources in support of the national program are

significantly reduced and efforts are focused on NRC's licensees. As a result, the NRC licensing and inspection programs do not change, but rule and guidance development are reduced substantially. The general license program is assumed to support follow-up activities for a second round of registrations. The Nuclear Materials Events Database (NMED) and event evaluation support only NRC's licensees, and resources are reduced accordingly. The orphan source and low-level radioactive waste programs are eliminated and State Program activities are limited to interactions with perspective Agreement States, review of Agreement States, and reduced interactions with the Organization of Agreement States (OAS) and the Conference of Radiation Control Program Directors, Inc. (CRCPD).

The second Minimum Option, the Minimum NRC Program Option, assumes reductions in support for elements of NRC's regulatory program not specifically identified in the AEA. Consequently, the NRC's onsite inspection program is eliminated with the exception of those inspection activities associated with NRC's response to licensee incidents. Additionally, the option assumes there is no materials research, guidance development, Integrated Materials Performance Evaluation Program (IMPEP), orphan source program, grants for terminated sites in Agreement States, and no NMED.

**Alliance Option.** The Alliance option is the option which is most similar to the Base Case. The option is characterized by the collaborative identification, prioritization and development of regulatory products (rules and guidance) necessary for support of the national program. NRC resource changes are characterized by reductions in rulemaking and the development of licensing and inspection guidance. The Working Group considered two options, one with the current number of Agreement States, the other assumes there are 50 Agreement States.

**Delegated Program.** The Delegated Program assumes the Agreement States program is abolished, leaving the entire materials regulatory program to be run by the NRC. NRC is given authority to delegate licensing and inspection activities to the States, and all States voluntarily enter into such agreements. The Delegated Program is assumed to be similar to the current FDA program for mammography. As with the Independent States option, the resource estimates do not include the efforts to achieve this statutory condition. NRC staff would negotiate the terms of a delegated program with each State and set up a policing function, similar to IMPEP, to assure consistency across the delegations. NRC would also develop licensing and inspection guidance, evaluate licensee events, take enforcement actions and conduct adjudications for all licensees. Because of their specialized nature, uranium recovery activities are assumed to be outside of the delegated program.

In estimating the costs of the delegated program, State FTE are assumed to be the same as NRC FTE to license and inspect an equivalent number of licensees and State salaries were assumed to be about 60 percent of the NRC's costs for salaries and benefits.

**Single Regulatory Agency Option.** Under the Single Regulatory Agency Option, NRC licensing and inspection resources are assumed to increase fourfold to accommodate the licensees in the former Agreement States. Resources for investigations, enforcement and adjudications also increase proportionately to the licensee increase. Resources do not change for rulemaking and guidance development. Resources for low-level radioactive waste regulation were estimated by summing identified current Agreement State resources in this area. The Agreement States program is eliminated.