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POLICY ISSUE
(Notation Vote)

April 28, 1999

SECY-99-123

FOR: The Commissioners

FROM: William D. Travers
Executive Director for Operations

SUBJECT: OKLAHOMA AGREEMENT STATE NEGOTIATIONS: STATE PROPOSAL TO LIMIT SCOPE OF AGREEMENT

PURPOSE:

To obtain Commission direction on Oklahoma's request to limit the scope of their proposed Agreement (Attachment 1).

BACKGROUND:

Oklahoma Proposal

Oklahoma has proposed entering into an Agreement pursuant to Section 274b. of the Atomic Energy Act (AEA) under which the State would assume regulatory responsibility for:

- 11e.(1) byproduct material,
- less than critical mass quantities of special nuclear material (SNM), and
- source material used to take advantage of its density and high mass properties where the use of the specifically licensed source material is subordinate to the primary specifically licensed use of either 11e.(1) byproduct material or SNM.

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Contact: Patricia M. Larkins, OSP
415-2309

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The Agreement would exclude jurisdiction over all other source material. Examples of excluded source material are:

- source material used under a general license in medical and educational research subject to use and transfer of not more than fifteen (15) pounds of source material at one time, and receipt of not more than 150 pounds in any one calendar year;
- other types of source material or source material uses in products that are subject to exemption or general licensing;
- the manufacture and distribution of source material, or products containing source material;
- the extraction of rare earth elements from source material;
- the chemical, physical or metallurgical conversion of source material; and
- processing of ore for the recovery of source material.

Under the Agreement, Oklahoma would assume jurisdiction over the licensed use of 11e.(1) byproduct material, less than critical mass quantities of SNM, and source material used to take advantage of its density and high mass properties where the use of the source material is subordinate to the primary specifically licensed use of either 11e.(1) by product material or SNM. Some examples of uses in the latter category include, but are not limited to, shielding or counterweights in applications such as source material shielding in industrial radiography cameras; shielding in irradiators, teletherapy units, and radionuclide generators; and, as well-logging sinker bars.

Historical Considerations

Agreements signed between 1962 and 1974 specify in Article 1 three categories of material that are assumed by the State, i.e. byproduct material, source material and SNM in quantities not sufficient to form a critical mass. Subcategories within these broader material categories have been added that have allowed States to enter into more specific Agreements tailored to States' needs (termed limited Agreements). For example, a State can elect to obtain authority to regulate byproduct, source, and limited amounts of SNM in all activities, regulate these materials only with respect to disposal of low-level radioactive waste or elect to exclude low-level radioactive waste. Another example includes the return by the New Mexico Agreement State Program of authority for the regulation of uranium mills to the NRC and decisions by some Agreement States to return jurisdiction to NRC for evaluation and approval of sealed sources and devices. In addition, some States have suggested a further division of regulatory jurisdiction, such as Utah's request to assume regulatory jurisdiction over disposal of 11e(2) byproduct material at a single facility. Such a proposal was found to be inconsistent with Section 274b. of the AEA. A listing of current Agreements and their scope is attached (Attachment 2). Staff has also developed a model Agreement (Management Directive 5.8), which contains six categories of materials that may be specified in an Agreement.

The Commission previously considered and denied a request from Oklahoma for a limited Agreement to exclude complex Site Decommissioning Management Plan (SDMP) sites undergoing decommissioning (SECY 97-087). That paper also described the approach staff would follow in the future to address similar requests for limited Agreements. SECY-97-087, indicated that the evaluation of proposals for limited Agreements should include whether or not the proposal for a limited program would be consistent with Subsection 274a(3) of the AEA which identifies one of the purposes of Section 274 as promoting "an orderly regulatory pattern between the Commission and State governments with respect to nuclear development and use and regulation of byproduct, source, and special nuclear materials." In particular, the staff evaluation should include whether the proposal identifies discrete categories of material or classes of licensed activity that: (1) can be reserved to NRC authority without undue confusion to the regulated community or burden to NRC resources; and (2) can be applied logically, and consistently to existing and future licensees over time. Under this approach, NRC would not reserve authority over a single license unless that licensee clearly constituted a single class of activity or category of material meeting the two criteria described above.

In the June 19, 1998 Staff Requirements Memorandum (SRM) for SECY-97-087, the Commission directed staff to consult with the Commission prior to proposing a final limited Agreement in instances where there is not a clear precedent, and that staff should provide the Commission with a full discussion of the request, potential impacts, and a recommendation to grant or deny the request. The staff analysis of Oklahoma's proposal to "limit" source material is presented below.

DISCUSSION:

Staff has examined the Oklahoma proposal against the following criteria.

1. Promotes an orderly regulatory pattern between the Commission and State governments with respect to nuclear development and use and regulation of byproduct, source, and SNM.

The Oklahoma proposal appears to provide for an orderly pattern between the Commission and the State by placing jurisdiction over 11e.(1) byproduct material, less than critical mass quantities of SNM, and 11e.(1) byproduct material or SNM licensees who also possess specifically licensed source material used to take advantage of its density and high mass properties, under one regulatory body. The proposal to limit source material to a specific subcategory also appears consistent with past Commission decisions to limit Agreements with States (e.g., allowing States to return SS&D evaluation authority). The Oklahoma proposal would avoid dual regulation for those licensees, (e.g. hospitals, radiographers, and well-logging facilities), where the license authorizes the use of byproduct material for a specified purpose (e.g., industrial radiography) and where the license also includes authorization for source material that is used solely for its density or high mass properties (e.g., shielding in industrial radiography exposure devices). Licensing for all such activities would be carried out by the Oklahoma Department of Environmental Quality, under its Agreement with NRC. The absence of dual regulation would promote an orderly pattern and minimize confusion among those licensees who would otherwise be subject to regulation by both the State and NRC. The NRC preferred licensing practice is to include the source material under the primary byproduct

material license, but due to historical practice, some separate specific licenses for possession of the source material used as shielding for the byproduct material still exist. Under Oklahoma's proposal, both licenses would be transferred to Oklahoma.

2. The proposal identifies discrete categories of material or classes of licensed activity that can be reserved to NRC authority without undue confusion to the regulated community or burden to NRC resources.

The Oklahoma proposal delineates a clear subcategory of source material that can be reserved to NRC authority (i.e., all source material uses will be subject to NRC regulatory jurisdiction except for a narrow subcategory of use). Material regulated by the State will involve the specifically licensed use of source material as shielding in industrial or medical devices or for counterweights in sinker bars associated with well logging. It is clear that these specific licensees have as their primary objective the use of byproduct and/or SNM. The source material, used solely for its high density or high mass properties, is subordinate to or contingent upon the use of byproduct material in the system, device, equipment, or component. Under the Oklahoma proposal, any individual license authorizing possession of source material, that is not subordinate to the use of byproduct material, would not transfer to Oklahoma. All other source material is reserved to NRC authority. The absence of dual regulation would reduce the regulatory burden on those licensees who would otherwise be subject to regulation by both the State and NRC.

Note: Of the 234 NRC material licenses in Oklahoma, one is for possession only of source material that is not part of a byproduct material license (i.e., accelerator shielding).

3. The proposal can be applied logically, and consistently to existing and future licensees over time.

The proposal presents a clear, narrowly defined category of material that can be applied logically and consistently to existing and future licensees over time who: (1) hold a primary specific byproduct material license; and (2) who also possess specifically licensed source material used solely for its high density high mass properties where the use of the source material is subordinate to the use of the byproduct material. Such uses include shielding or counterweights in applications such as source material shielding in industrial radiography cameras; shielding in irradiators, teletherapy units, and radionuclide generators; and, well-logging sinker bars.

4. Resource and Policy Considerations.

Staff has also examined the resource and policy impacts of the Oklahoma proposal. Staff finds that from a resource perspective, the Oklahoma proposal would result in only a small incremental resource savings to NRC, compared to NRC retention of all regulatory authority for source material. NRC would retain authority for five SDMP sites located in Oklahoma. If the State made a request for "full" authority to regulate source material, then the transfer of authority would result in Oklahoma assuming regulatory authority for four of the five SDMP sites located in Oklahoma (i.e., Fansteel, Inc., Kerr-McGee Cimmaron, Kaiser Aluminum (inactive license), and Sequoyah Fuels). The Kerr-McGee Cushing site would remain under

NRC regulatory jurisdiction since the quantity of SNM exceeds that which an Agreement State can regulate under an Agreement. To continue regulatory oversight of the four SDMP sites that would not transfer to the State under the Oklahoma proposal, the staff estimates a resource effort of approximately 22 FTE and $3M over a period of 3-12 years for decommissioning, and an additional $200K if hearings are conducted (Attachment 3). These resources are included in the FY 2000 - FY 2002 budget request for the Office of Nuclear Material Safety and Safeguards.

NRC currently regulates 234 material licensees in the State of Oklahoma. Of the 234 material licensees, 199 are byproduct material licensees, 25 are byproduct and source material licensees, and 10 are source or source and SNM licensees. The ten (10) source or source and SNM licensees include the five SDMP sites. The resource savings if Oklahoma assumed responsibility for 199 byproduct material licensees and 25 byproduct and source material licensees is estimated to be approximately 2.3 direct FTE per year.[1] These savings have been factored into the Agency's 2000 President's budget beginning in FY 2001. The savings estimate was based on 6.8 FTE of materials licensing, inspection, allegation, and enforcement costs for Region IV in FY 2001, as compared to 9.1 FTE for these activities if all Oklahoma licenses had remained under NRC jurisdiction. Some small amount of travel savings may also accrue based on the transfer.

From a policy perspective, Oklahoma's proposal could result in similar requests, from other existing Agreement States, or States undergoing negotiation for an Agreement. In this regard, the proposal appears to raise a new issue with potential resource implications. Past history, however, does not support an assumption that States would request amendments to their Agreements to exclude or limit source material. Currently, all State Agreements include source material (see Attachment 2). With respect to future requests for Agreements, only five States that are not presently Agreement States or already negotiating Agreements, have source material licensees located within their boundaries with potential resource implications. The States and the number of source material licensees with potential resource implications are identified as follows: Connecticut (1), Michigan (4), Minnesota (1), Missouri (1), and New Jersey (2). Seven of the nine licensees are currently on the SDMP site list.

Based on the above analysis, the staff concludes that the findings of the Oklahoma proposal meet the criteria in SECY-97-087, which includes a clear subcategory of material or class of licensed activity that can be transferred to State authority without undue confusion to the regulated community, and can be applied logically and consistently. The staff also concludes that although the proposal results in NRC retention of individual source material licenses, including five specific SDMP sites, the current proposal is based on defining a narrow subcategory of source material use, as opposed to the earlier proposal identifying five specific licensees to be excluded from the Agreement. The earlier proposal was inconsistent with the AEA. The current proposal is consistent with the AEA and the criteria set out in SECY-97-087.

Staff also notes that Oklahoma staff has also informally indicated that if they have no option other than an "all or none" approach (i.e., assume regulatory jurisdiction over the entire source

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[1] The actual number of licenses that will transfer will be dependent on the NRC licenses in effect at the time of the Agreement.

material category, or exclude the source material category altogether) they would likely reassess whether to continue efforts to obtain an Agreement.

RECOMMENDATION:

That the Commission approve the Oklahoma request to enter into an Agreement which would include responsibility for:

- 11e.(1) byproduct material;
- less than critical mass quantities of SNM; and
- source material used to take advantage of its density and high mass properties where the use of the specifically licensed source material is subordinate to the primary specifically licensed use of either 11e.(1) byproduct material or SNM.

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objection. The Office of the Chief Financial Officer has reviewed this Commission paper for resource implications and has no objections.

William D. Travers
Executive Director
for Operations

Attachments:
1. Letter dated November 12, 1998 from M. Coleman to R. Bangart
2. List of Scope of Current Agreement States
3. Resource Estimates for the SDMP Sites

Commissioners' completed vote sheets/comments should be provided directly to the Office of the Secretary by COB Friday, May 14, 1999.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT May 7, 1999, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

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MARK COLEMAN
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

FRANK KEATING
Governor

November 12, 1988

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Richard Bangart, Director
Office of State Programs
U. S. Nuclear Regulatory Commission
Washington, DC 20501

Dear Mr. Bangart:

The Atomic Energy Act, as amended, makes provision for states to achieve Agreement Status while exempting Source, Byproduct, and/or Special Nuclear Material from the Agreement. As discussed with the OSP staff, Oklahoma wishes to use this authority to become an Agreement State while exempting Source Material from the scope of the Agreement. The Commission has expressed concern that the terms of any Agreement should minimize confusion for licensees, and Oklahoma holds the same view.

In most cases, excluding source material is a simple matter, however there is a class of source material which requires some consideration. Source material is used in certain limited applications to take advantage of its density, not its radioactivity. Specifically, certain licensees use source material as shielding from the radiation produced by special nuclear materials and byproduct materials, or for sinker bars associated with well logging using byproduct and special nuclear materials. These licenses have as their primary object the use of byproduct material and/or special nuclear material, but include the use of source material for ancillary purposes not related to its radioactivity.

Licensees in these subclasses will possess source material used only for these limited purposes, while few (if any) would have source material for any other purpose. When used in these limited purposes, source material does not constitute a significant radiation safety or national security concern tnat would justify separate consideration from byproduct or special nuclear materials.

If exclusion of source material was blindly followed, Oklahoma's licensees in this category would be required to shift their licenses covering byproduct and special nuclear material to Oklahoma's jurisdiction, but would have to maintain a separate license for source material with the NRC. This would create difficulties for Oklahoma, NRC, and the licensees. We do not believe it is desirable. Without a substantial reason, existing licenses should not be split.

Double regulation of this class would be an unfounded and unnecessary regulatory burden and fee expense. It would have no basis in radiation safety or in national security

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ATTACHMENT

concerns. The industrial radiography and well logging subcategories have large numbers of small entities, which would be particularly hard-hit by this requirement.

Oklahoma proposes that the simplest way to address this problem is that jurisdiction over source material *inherently associated with byproduct or special nuclear material* should go with that material to Oklahoma. This proposal only involves source material which is intrinsically associated with byproduct or special nuclear material in an NRC license. Other source material users, where source material was central to the operation, and was the principal source of hazard or security concern in the license, would remain with NRC. This will mean that no licenses will be broken up because of source material unless there is a legitimate radiation safety or national security reason to do so.

We have identified the following subcategories that are of interest here:

- industrial radiography using source material for shielding purposes.
- medical licensees using source material for shielding in certain applications such as irradiators, teletherapy units, and radionuclide generators.
- well logging licensees using source material for sinker bars.

Please feel free to contact Mike Broderick of my staff for any clarification or assistance in this matter.

Sincerely,

Mark Coleman

Mark Coleman
Executive Director

AGREEMENT SUMMARY

STATE	DATE OF AGREEMENT	CATEGORIES OF MATERIAL[1]
ALABAMA	10/01/66	A, C, D, E, F
ARIZONA	05/15/67	A, C, D, E, F
ARKANSAS	07/01/63	A, C, D, E,
CALIFORNIA	09/01/62	A, C, D, E, F
COLORADO	02/01//68	A, B, C, D, E, F
FLORIDA	07/01/64	A, C, D, E, F
GEORGIA	12/15/69	A, C, D, E, F
IOWA	01/01/86	A, C, D,
ILLINOIS	06/01/87	A, B, C, D, E, F
KANSAS	01/01/65	A, C, D, E, F
KENTUCKY	03/26/62	A, C, D, E, F
LOUISIANA	05/01/67	A, C, D, E, F
MASSACHUSETTS	03/21/97	A, C, D, E, F
MAINE	4/01/92	A, C, D, F
MARYLAND	01/01/71	A, C, D, E, F
MISSISSIPPI	07/01/62	A, C, D, E, F
NEBRASKA	10/01/66	A, C, D, E, F
NEVADA	07/01/72	A, C, D, E, F
NEW HAMPSHIRE	05/16/66	A, C, D, E, F
NEW MEXICO	05/01/74	A, C, D, E,
NEW YORK	10/15/62	A, C, D, E, F
NORTH CAROLINA	08/01/64	A, C, D, E, F
NORTH DAKOTA	09/01/69	A, C, D, E,
OREGON	07/01/65	A, C, D, E,
RHODE ISLAND	01/01/80	A, C, D, E, F
SOUTH CAROLINA	09/15/69	A, C, D, E, F
TENNESSEE	09/01/65	A, C, D, E, F
TEXAS	03/01/63	A, B, C, D, E, F
UTAH	04/01/84	A, C, D, E,
WASHINGTON	12/31/66	A, B, C, D, E, F

[1]Categories of Materials Covered by the 274b Agreement per Management Directive a.) Handbook 5.8

A. Byproduct materials as defined in Section 11e.(1) of the Atomic Energy Action (Act)
B. Byproduct materials as defined in Section 11e.(2) of the Act
C. Source materials
D. Special nuclear materials in quantities not sufficient to form a critical mass
E. The regulation of the land disposal of byproduct, source or special nuclear waste materials received from other persons
F. The evaluation of radiation safety information on sealed sources or devices containing byproduct, source, or special nuclear materials and the registration of the sealed sources or devices for distribution, as provided for in regulations or orders of the Commission

March 1, 199

ATTACHMENT 2

Resource Estimates for the 4 SDMP Sites in Oklahoma

Fansteel **License status: Active, Operating (License termination estimated - 12 yrs.)**		
Activity	**Estimated Resources**	
Decommissioning plan review and licensing	5.4 FTE	$1M for EIS
Inspection	2.0 FTE	
Hearings	None Anticipated	
Fee structure	Fee chargeable	
Kaiser Aluminum **License status: Non-licensee (license terminated 1971; put on SDMP site list 1994)**		
Activity	**Estimated Resources**	
Decommissioning plan review and licensing	5.0 FTE	$1M for EIS
Inspection	1.0 FTE	
Hearings	None anticipated	
Fee structure	No fee	
Kerr McGee - Cimarron **License status: Active; possession only (mixed oxide license terminated 2/93); estimated termination full license - 2 yrs.**		
Activity	**Estimated Resources**	
Decommissioning plan review and licensing	1.0 FTE	
Inspection	0.5 FTE	
Hearings	None anticipated	
Fee structure	Fee chargeable	
Sequoyah Fuels Corporation **License status: Active; possession only. License termination estimated - 5 yrs.**		
Activity	**Estimated Resources**	
Decommissioning plan review and licensing	5.0 FTE (3.0 FTE if no EIS)	$1M for EIS (if required)
Inspection	1.0 FTE	
Hearings	1.0 FTE (if necessary)	$200K (if necessary)
Fee structure	Fee chargeable	

ATTACHMENT 3