

DOC-NO: ELD-662, SUBJECT: QUESTION OF JURISDICTION OVER CERTAIN MATERIALS POSSESSED BY CONSTRUCTORS OR OPERATORS OF POWER REACTORS IN AGREEMENT STATES, DATE: 12/18/69 Page 1

\*10866 DOC-NO: ELD-662

DATE: 12/18/69

TYPE: Internal ELD

TO: Mr. Shapar

FROM: Charles S. Sloss

SUBJECT: Question of jurisdiction over certain materials possessed by Constructors or operators of power reactors in agreement states

PAGES: 004

The attached memos from the Director, Division of Compliance (dated November 10 and December 9, 1969, respectively) request the advice of OGC as to whether an Agreement State or AEC has jurisdiction to regulate possession and use of certain byproduct materials by holders of construction or operation license for power reactors in Agreement States.

The byproduct materials under consideration here are used for several purposes. During the latter stages of reactor construction, for one thing, byproduct material is used for the calibration and testing of parts of the reactor apparatus such as radiation monitors, portable monitoring equipment, laboratory counting equipment, and continuous in-line-sample monitors. In addition, the constructor may require large reactor-startup sources containing byproduct material, for use even before issuance of the facility license. After the completion of the construction stage, moreover, the reactor operator may utilize byproduct material for continued instrument calibration and checking, standardization of radiochemical techniques, and related activities. In all of these situations, during construction and also during operation, the quantities and forms of materials mentioned are such that a specific license is required for their possession and use. The question which the referenced memos raises, and which this note discusses, is: should such licenses be sought from the local Agreement State, or from the AEC?

In attempting to answer this question, I have reviewed the statute and our legal files, and have discussed the matter with SLR to gain information

regarding AEC's past practices and interpretations on the point. As a result of my researches, I conclude that the best interpretation of the law is that AEC has exclusive jurisdiction in this area, and is required to regulate possession and use of the materials under discussion.

Section 274 of the Atomic Energy Act establishes the system of Agreements subject to which State regulation of certain quantities of radioactive materials (otherwise subject to AEC regulation) can take place. This Section of the Act is the basic 'charter' under which an Agreement State obtains such authority as it may have over such materials, and all such

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authority is obtained by the State through the Agreement in which the AEC relinquishes that authority into the hands of the State. Subsection 274 b. of the Act is the basic authority under which this is done, and it provides (in relevant part) as follows:

'Except as provided in subsection c., the Commission is authorized to enter into agreements . . . providing for discontinuance of the regulatory authority of the Commission under chapters 6, 7, and 8, and section 161 of this Act, with respect to any one or more of the following materials within the State . . .' (Emphasis added.)

And in turn, subsection c. of section 274 limits the grant of authority and thus limits the ability of the AEC to turn over authority to an Agreement State as follows:

'c. No agreement . . . shall provide for discontinuance of any authority and the Commission shall retain authority and responsibility with respect to regulation of

(1) the construction and operation of any production or utilization facility. . . .' (Emphasis added.)

Thus it follows, that the AEC has no power to deliver into the hands of an Agreement State any authority to regulate construction or operation of a production or utilization facility; in other words, the AEC retains, even in an Agreement State, all the authority which it possessed, before the Agreement,

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over construction or operation of such a facility.

Given this situation, the question posed by the referenced memos can be stated as follows: Are the materials described in the memos, as they are possessed and used, part of the construction and/or operation of any production or utilization facility? I believe that in each case described by the memos, the answer is yes.

First, let us examine the situation described in the memo of December 9. Possessors of the materials are the holders of facility licenses for operation of two power reactors in California. The materials are 'byproduct material for instrument calibration and checking, standardization of radiochemical techniques, and related activities.' In the opinion of the Director, Division of Compliance, such use of byproduct material 'should be considered as a use of the materials in the operation of the reactor,' and with that I would concur. It seems clear to me that calibration and checking of instrumentation is an activity essential to the continued safe operation of a power reactor, whose activities must be constantly monitored in order to assure that the public health and safety are

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maintained at all times. Similarly, standardization of radiochemical techniques would appear to be a normal function of reactor operation, and therefore under the exclusive regulatory jurisdiction of the AEC.

In the same way, I would view the activities described in the memo of November 10, as being an integral part of the construction of a production or utilization facility and thus beyond the power of an Agreement State to regulate. Possessor of the materials are holders of construction permits for power reactors being built in Agreement States. These possessors use the byproduct material for calibration of equipment ('such as area radiation monitors, portable monitoring equipment, and continuous in-line sample monitors') which will form an integral part of the reactor. Such proper calibration would appear to be essential to the normal and safe operation of the reactor when completed, and would also appear to be an indispensable step in the construction of the reactor.

In a nonagreement State, of course, possession and use of the byproduct material involved in such activity would be regulated by the AEC -- but I believe that it is fair to argue that such regulation would be done only as part and parcel of the regulation of other construction activities; such regulation of construction is of the type which the Act forbids AEC to relinquish to the hands of an Agreement State (remember that the Act requires the AEC to retain all authority over construction and operation of a production or utilization facility).

Even more clearly, I think, the AEC must have exclusive jurisdiction over the possession (by the construction-permit holder) of the 'large (multicurie) reactor-startup sources' described in the memo of November 10. These would appear to be, in their possession and use, an integral part of both construction and operation of a reactor, thus a fortiori beyond the ability of an Agreement State to regulate.

As the two memos indicate, and as my research confirms, practice with regard to the possession and use of the described materials for the described purposes, has been inconsistent. Niagara Mohawk Power Corp., for example, applied for and received AEC Byproduct Material License No. 31-7489-2 (July 7, 1967) to cover their use of materials such as those described in construction of a reactor: at that time, the company indicated that they had consulted with the local (New York) Agreement State officials, who had directed them to the AEC. However, the Consumers Public Power District has applied to the State of Nebraska and has received from that Agreement State a byproduct material license for similar construction purposes -- although it is true that Nebraska has suggested that an application should be made to AEC, and has agreed with the AEC to keep their license in effect only until the jurisdictional question is settled. At the operating stage, it appears, AEC has taken jurisdiction over the

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possession of the described materials and their use in the described activities, in all but two cases of operating power reactors located in Agreement States. In the case of two California power reactors, the State of California has assumed such

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jurisdiction.

In view of the cited provisions of the Atomic Energy Act, it would appear that the better rule would be for the AEC to assume exclusive jurisdiction over the possession of the materials described when they are used in the activities described. Furthermore, assertion of exclusive AEC jurisdiction would be consistent with our past interpretation of the AEC's authority over facility sites, which has drawn a geographical boundary around the area of exclusive AEC regulation, in the following manner:

'In general, the use and possession of source and byproduct materials in hot cells, laboratories, and shops located outside the reactor building and excluded from the site description in the applicable Price-Anderson indemnity agreement are not considered to be associated with the facility operation and, accordingly, are regulated by the Agreement States rather than by the AEC.' (Shapar, 'Federal-State Cooperation in Regulation of Peaceful

Uses of Atomic Energy,' address before 62nd annual meeting of National Association of Attorneys-General; published in Proceedings, 62nd Annual Meeting, etc., Boston, 1968, p.86) (emphasis added)

This interpretation clearly would mean that the use of byproduct materials described in the subject memos, which are used within the reactor building itself, or during its construction, are not within the jurisdiction of the Agreement States, and therefore must be within the exclusive jurisdiction of the AEC.

On the basis of the foregoing, I would advise the Director, Division of Compliance, that it is the opinion of the Office of the General Counsel, that the possession and use of the materials described in his memoranda, by the persons and for the purposes described therein, is within the exclusive regulatory jurisdiction of the AEC, and beyond the regulatory authority of any Agreement State.

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\*6869 DOC-NO: ELD-246

DATE: 04/11/83

TYPE: Other Office

TO: Donald A. Nussbaumer

FROM: William J. Olmstead

SUBJECT: LICENSING OF UTILITY RADIOGRAPHIC OPERATIONS AT REACTOR SITES

PAGES: 018

ATTACH-INCLUDE: Attach - 1; Attach - 2; Attach - 3; Attach - 4; Attach - 5; Attach - 6

This responds to your memorandum of March 14, 1983, in which you request our views concerning the licensing of utilities who conduct their own radiographic operations at reactor sites located in Agreement States. According to the information contained in your memorandum, the utilities are doing the radiography in order to satisfy certain NRC quality assurance requirements for reactor components. In one case, the utility is conducting radiographic operations at a construction site. In the other case, the utility is conducting the radiographic operations at the site of an operating reactor. In both cases, the radiography is being performed under an Agreement State license. Given these circumstances, you ask the following questions:

1. Is the utility is required to obtain an NRC license authorizing the performance of this radiography?
2. If the utility is required to obtain an NRC license to perform radiographic operations at a reactor site located in an Agreement State, should this license be made a part of any Part 50 license issued to the utility, or should a separate materials license be issued under 10 CFR Part 34?
3. Is the following statement which appeared in your memorandum of March 31, 1980 to Guy H. Cunningham, III, then Director of the Regulations Division, OELD, correct?

'There may be other users of byproduct material during reactor construction by persons other than the

utility, e.g. performance of industrial radiography. We do not consider such use as subject to NRC licensing since the possession and use of the radioactive materials is not directly related to reactor operation.' (Emphasis supplied.)

In a memorandum to you dated April 8, 1980, Guy H. Cunningham, III, expressed the opinion that NRC retains exclusive jurisdiction to license the (2) possession and use of radioactive materials at reactor facilities located in Agreement States when the materials are directly connected with reactor operations and are needed during the construction and preoperational phases of a reactor. As explained in that memorandum, this conclusion flows from section 274c of the Atomic Energy Act of 1954, as amended, which provides in pertinent part that 'No agreement entered into (with a state) . . . shall provide for discontinuance of any authority and the Commission shall retain authority and responsibility with respect to regulation of (1) the construction and operation of any production or utilization facility; . . . .' Because of this statutory limitation, the NRC has no power to relinquish and an Agreement State has no power to assume any authority to regulate the construction or operation of a production or utilization facility. (FN1)

\*6870 This statutory framework is reflected in 10 CFR 150.15 of the Commission's regulations which states in part that:

'(a) Persons in Agreement States are not exempt from the Commission's licensing and regulatory requirements with respect to the following activities:

'(1) The construction and operation of any production or utilization facility. As used in this subparagraph (1), 'operation' of a facility includes, but is not limited to (i) the storage and handling of radioactive wastes at the facility site by the person licensed to operate the facility, and (ii) the discharge of radioactive effluents from the facility site. . . .'

While the regulations are clear that an NRC license must be obtained if the activity in question constitutes the construction or operation of a production or utilization facility, they are of limited use in identifying the types of activities which fall within this class.

In order to answer your questions, it is first

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necessary to determine whether the performance of radiography at a reactor site for the purpose of (3) satisfying NRC quality assurance requirements for reactor components constitutes the type of activity which falls within the class of activities generally characterized as construction or operation of a production or utilization facility.

The Commission's quality assurance requirements (10 CFR 50.34(a)(7) and 10 CFR Part 50, Appendix B - Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants) constitute an integral and important part of the licensing and regulation of utilization and production facilities, at both the construction and operating stage. Activities undertaken to comply with these requirements, including the performance of any needed radiography, would appear, therefore, to qualify as activities for the construction and operation of a production or utilization facility within the meaning of the statute and the Commission's regulations.

At the same time, however, it should be observed that radiography, (FN2) in and of itself, is not a licensable activity under 10 CFR Part 50. Instead, a byproduct material license, issued under 10 CFR Part 34 (FN3) of the Commission's regulations or under comparable regulations of an Agreement State, is required. It should also be observed that the performance of radiography for quality assurance purposes, without more, does not constitute and will not result in the construction or operation of a production or utilization facility.

\*6871 From a regulatory standpoint, the performance of radiography by a utility at a reactor site for the purpose of satisfying NRC quality assurance requirements for reactor components can be considered to be a (4) 'hybrid' activity in that the requirements of 10 CFR Part 34 for the issuance of licenses for the use of sealed sources in radiography and the quality assurance requirements applicable to holders of construction permits and operating licenses under 10 CFR Part 50 must both be satisfied.

Under the existing regulatory framework, authority to perform an activity at a reactor site is based primarily on the applicable provisions of the construction permit or operating license issued by NRC under 10 CFR Part 50. Each construction permit, for example, gives the holder, on his own

account or through his employees or agents, inherent authority to perform activities related to the construction of the reactor. Pursuant to this authority, persons holding materials licenses authorizing the performance of radiography may go on site and conduct radiography for quality assurance purposes.

A similar situation exists in the case of an NRC operating license. In this case, also, subject to any minor amendments which may be required pursuant to 10 CFR 50.59, the holder of the operating license is authorized to do whatever may be needed, including any necessary repair and maintenance, to keep the reactor in operation. Towards this end, the reactor licensee, either on his own account or through others in accordance with the provisions of the applicable materials license, may go on site and perform the requisite radiography. However, in some instances, because of stringent radiological health and safety requirements applicable to specific areas or parts of the reactor, this procedure cannot be followed. In these situations, which are highly fact specific and would be classified as facility operation under the law, the licensee may need to obtain a specific amendment to the facility license authorizing performance of the radiography before the radiography can be carried out.

On balance, despite the existence of a strong nexus between the utility's performance of radiography at the reactor site for quality assurance purposes and the utility's activities and responsibilities with respect to the construction and operation of the nuclear power reactor, and subject to the caveat that there may be some circumstances in which an amendment to the facility operating license may be all that is required, it is our view that the performance of radiography for quality assurance purposes at a reactor site constitutes a separate activity which is not directly connected to the construction or, in most cases, to the operation of a nuclear power reactor and that therefore the utility cannot be required to obtain an NRC radiography license when the reactor site at which the radiography is to be performed is located in an Agreement State. This analysis is consistent with the law in that the Commission's authority to issue radiography licenses is based on the provisions of the Atomic Energy Act of 1954, as amended, which authorize the Commission to license and regulate byproduct material, not on the provisions of the Act

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which authorize the Commission to license and regulate utilization and production facilities.

\*6872 In the usual case, following the execution of a section 274b Federal-State Agreement, the NRC relinquishes and the Agreement State assumes responsibility for issuing and regulating radiography licenses. A person in an Agreement State who wishes to provide radiography services in (5) that state, including services needed by a utility at a reactor site located in the Agreement State, must first obtain the requisite radiography license from the Agreement State. As an applicant for a radiography license, a utility is no different from any other applicant in an Agreement State, notwithstanding the fact that the utility may also be an applicant for or holder of a construction permit or operating license under 10 CFR Part 50 of the Commission's regulations.

A respectable argument can be made that regulatory efficiency would be enhanced if a utility needing a radiography license to perform radiography for quality assurance purposes at a reactor site located in an Agreement State were required to obtain that license from the NRC. In this way, regulatory responsibility for the utility's activities would remain in one place instead of being split between two regulatory bodies.

Under section 274 of the Atomic Energy Act of 1954, as amended, an Agreement State may elect to limit its regulatory responsibilities to certain classes of materials. It may, for example, decide not to assume responsibility for the regulation of mill tailings (byproduct material, as defined in section 11(e)(2) of the Atomic Energy Act.) Under the statutory scheme, however, an Agreement State is not permitted to confine its regulatory responsibilities to a portion of the licenses within a given class. It cannot, for example, limit its acceptance of applications for radiography licenses to persons who are not utilities. To characterize radiography performed by a utility for quality assurance purposes at a reactor site in an Agreement State as an activity which is directly connected to the construction and operation of a utilization facility and for which, therefore, an NRC license is required, would result in dividing the regulatory responsibility for radiography licenses between NRC and the Agreement State. This result is not acceptable as a matter of regulatory practice.

In light of this discussion, our views on the questions which you ask are as follows:

1. A utility is not required to obtain an NRC license to perform radiography for quality assurance purposes at a reactor site located in an Agreement State while the reactor is under construction or, in most cases, after the reactor has commenced operation. In certain special circumstances, the utility may need to amend its operating license in order to perform the requisite radiography.

\*6873 2. In view of our response to question 1., the issue of combining licenses does not arise in the case of a utility with a reactor site located in an Agreement State. Since this issue can arise when the reactor site at which the utility plans to perform radiography is located in a non-Agreement State, we offer the following comments.

Section 161h of the Atomic Energy Act of 1954 authorizes the Commission to 'consider in a single application one or more of the activities for which a license is required by this Act, combine in a single license one or more of such activities, and permit the applicant or licensee to incorporate by reference pertinent information already filed with the Commission.' This (6) provision, which has remained unchanged since it was enacted on August 30, 1954, was included in the Act at the instance of members of the utility industry who objected to the complexity of the power reactor licensing requirements on the ground that they would be a burden to applicants and extremely difficult to administer and proposed, as an alternative, that the facility applicant should submit a single application and receive a single license, appropriately conditioned, containing all the authority needed for an integrated power facility. (FN4)

Since we have already concluded that the performance of radiography for quality assurance purposes at a reactor site constitutes a separate activity which is not directly connected to the construction or, in most cases, to the operation of a nuclear power reactor, it does not appear to be necessary from the standpoint of administrative convenience or within the legislative intent of section 161h to issue a single license covering these activities. Although section 161h permits the Commission as a matter of procedure to issue a

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single license authorizing several licensable activities, it does not change the substantive requirements for licensing those activities. In the instant case, these requirements, set out in Part 34 for radiography licenses and in Part 50 for facility construction permits and operating licenses, must be fully satisfied. Finally, in view of the extensive procedural requirements associated with the issuance and amendment of facility licenses, specifically public hearings, we believe it would be more satisfactory to issue separate licenses to the utility for these activities.

\*6874 (7) 3. The views expressed in this memorandum and not inconsistent with the statement quoted in question 3.

Attachment 1 to DOC-NO: ELD-246

ELD-246

(1) Attachment - 1

March 14, 1983

MEMORANDUM FOR: Guy H. Cunningham,  
Executive Legal Director, ELD

FROM: Donald A. Nussbaumer, Assistant Director  
for State Agreements Program, Office of State  
Programs

SUBJECT: LICENSING OF UTILITY  
RADIOGRAPHIC OPERATIONS AT REACTOR  
SITES

Recently, we reminded Agreement States of an interpretative letter concerning the licensing of radioactive materials at reactor sites (enclosure). In response, we have received inquiries from Agreement States personnel concerning the licensing of utilities who conduct their own radiographic operations at reactor sites in Agreement States. In one case the operations are at a construction site and in another at an operating site. In both cases, the radiography is apparently performed to satisfy NRC requirements, e.g., quality assurance for reactor components. Currently both utilities possess Agreement State licenses for this purpose.

Technical staff views are that there are strong health and safety reasons to support the issuance of a

separate materials license (whether by NRC or an Agreement State) to cover radiographic operations (as opposed to having it covered under a Part 50 license) in view of the specialized requirements in Part 34 for this type of activity.

With this background, we would appreciate your views on whether or not NRC licenses are required of utilities performing their own radiography at reactor sites (operating or under construction) when located in a Agreement State.

(2) In my memo to you dated March 31, 1980 (see enclosure) I cited an example of persons other than utilities performing radiography during reactor construction and expressed the view that such use would not be subject to NRC licensing. Confirmation of this view would be appreciated as regards construction and operating reactor sites.

We appreciate your assistance.

Attachment 2 to DOC NO: ELD-246

ELD-246

(1) Attachment - 2

February 24, 1983

ALL AGREEMENT STATES

LICENSING OF RADIOACTIVE MATERIALS AT  
REACTOR CONSTRUCTION SITES

\*6875 On March 24, 1981, we provided you as interpretive letter clarifying the licensing of the use of radioactive materials at reactor facilities prior to issuance of operating licenses (Enclosure). Briefly, in such cases, NRC retains exclusive jurisdiction to license materials possessed and used by the utility which are 'directly connected with operations and are needed during the construction and preoperational phases of a reactor.'

We believe some Agreement State licenses still exist which authorize utilities to use radioactive materials (covered by the Atomic Energy Act) at reactor construction sites. We ask that you review your license files to identify any such cases. If you have issued such a license, please notify the utility that an NRC license will be needed. Applications for such

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licenses should be submitted to:

John W. N. Hickey, Chief, Industrial Licensing Section, NRSS, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Telephone - 301-427-4288

Our Regional State Agreements Representatives will work with you and NRC staff to coordinate NRC and State regulatory actions including timing the termination of the State license with the issuance of the NRC license. If, in the interim, incidents or enforcement problems occur involving these licenses, please inform the Regional Agreement State Representative promptly.

If you have any questions, please call our regional staff or Joel Lubenou.

Attachment 3 to DOC-NO: ELD-246

ELD-246

(1) Attachment - 3

March 24, 1981

ALL AGREEMENT STATES

FROM: Donald A. Nussbaumer, Assistant Director for State Agreements Program, Office of State Programs

SUBJECT: INTERPRETIVE LETTER 81-1

Enclosed is a staff opinion of NRC's Office of the Executive Legal Director concerning the licensing of the use of radioactive materials at reactor facilities prior to issuance of operating licenses. The opinion states that NRC retains exclusive jurisdiction to license such materials where the materials possessed and used by the utility are directly connected with reactor operations and are needed during the construction and preoperational phases of a reactor. The rationale for this view is included in the enclosure.

Attachment 4 to DOC-NO: ELD-246

ELD-246

(1) Attachment-4

April 18, 1980

\*6876 MEMORANDUM FOR: Donald A. Nussbaumer, Assistant Director, for Material Safety & Licensing, Division of Fuel Cycle & Material Safety

FROM: Guy H. Cunningham, III, Director & Chief Counsel, Regulations Division, Office of the Executive Legal Director

SUBJECT: LICENSING OF REACTOR FACILITIES PRIOR TO ISSUANCE OF OPERATING LICENSES

This is in response to your memorandum of March 31, 1980 concerning the licensing of utilities located in Agreement States to possess and use radioactive materials at reactor facilities prior to the issuance of operating licenses. The particular question you raise is whether NRC or the Agreement State is authorized to issue licenses for radioactive materials possessed and used at such facilities when the materials are directly connected with reactor operations and are needed during the construction and preoperational phases of a reactor.

It is my opinion that NRC retains exclusive jurisdiction to license such materials when the materials are possessed and used by the utility for the purposes described. This conclusion flows from Section 274c of the Atomic Energy Act of 1954, as amended, which provides in pertinent part that 'No agreement entered into (with a state) . . . shall provide for discontinuance of any authority and the Commission shall retain authority and responsibility with respect to regulation of (1) the construction and operation of any production or utilization facility; . . .'. The attached informal legal memo, prepared in 1969, sets forth the rationale for this conclusion. That memo addressed the precise question you raise.

If I can be of further assistance, please do not hesitate to call.

Attachment 5 to DOC-NO: ELD-246

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(1) Attachment-5

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March 31, 1980

MEMORANDUM FOR: Guy Cunningham, Director, Regulations Division, OELD

FROM: Donald A. Nussbaumer, Assistant Director for Material Safety and Licensing, Division of Fuel Cycle and Material Safety

SUBJECT: LICENSING OF REACTOR FACILITIES PRIOR TO ISSUANCE OF OPERATING LICENSES

A question has arisen concerning the licensing of utilities located in Agreement States to possess radioactive materials at reactor facilities prior to issuance of an operating license.

For several years, we have been issuing materials licenses which provide for possession and use of radioactive materials at reactor facilities prior to issuance of operating licenses. An example of such a license is attached for your information.

\*6877 The materials provided for in such licenses are directly connected with reactor operations and are needed during the construction and preoperational phases of a reactor. Section 150.15(a)(1) of 10 CFR Part 150 states that persons in Agreement States are not exempt from the Commission's licensing and regulatory requirements with respect to the construction and operation of any production or utilization facility. Since the radioactive materials are needed during construction of a reactor, we believe that Section 150.15(a)(1) could be broadly interpreted to include NRC licensing of radioactive materials at the reactor facility.

There may be other users of byproduct material during reactor construction by persons other than the utility, e.g. performance of industrial radiography. We do not consider such use as subject to NRC licensing since the possession and use of the radioactive materials is not directly related to reactor operation.

(2) We would appreciate your opinion concerning licensing jurisdiction in Agreement States for radioactive materials possessed and used at reactor facilities prior to issuance of operating licenses.

Attachment 6 to DOC-NO: ELD-246

ELD-246

(1) Attachment-6

NOTE TO: Mr. Shapar

SUBJECT: QUESTION OF JURISDICTION OVER CERTAIN MATERIALS POSSESSED BY CONSTRUCTORS OR OPERATORS OF POWER REACTORS IN AGREEMENT STATES

The attached memos from the Director, Division of Compliance (dated November 10 and December 9, 1969, respectively) request the advice of OGC as to whether an Agreement State or AEC has jurisdiction to regulate possession and use of certain byproduct materials by holders of construction or operation licensee for power reactors in Agreement States.

The byproduct materials under consideration here are used for several purposes. During the latter stages of reactor construction, for one thing, byproduct material is used for the calibration and testing of part of the reactor apparatus such as radiation monitors, portable line-sample monitors. In addition, the constructor may require large reactor-startup sources containing byproduct material, for use even before issuance of the facility license. After the completion of the construction stage, moreover, the reactor operator may utilize byproduct material for continued instrument calibration and checking, standardization of radiochemical techniques, and related activities. In all of these situations, during construction and also during operation, the quantities and forms of materials mentioned are such that a specific license is required for their possessions and use. The question which the referenced memos raises, and which this note discusses, is: should such licenses be sought from the local Agreement State, or from the AEC?

\*6878 In attempting to answer this question, I have reviewed the statute and our legal files, and have discussed the matter with SLR to gain information regarding AEC's past practices and interpretations on the point. As a result of my researches, I conclude that the best interpretation of the law is that AEC has exclusive jurisdiction in this area, and is required to regulate possession and use of the materials under discussion.

Section 274 of the Atomic Energy Act establishes the

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system of Agreements subject to which State regulation of certain quantities of radioactive materials (otherwise subject to AEC regulation) can take place. This Section of the Act is the basic 'charter' under which an Agreement State obtains such authority as it may have over such materials, and all such authority is obtained by the State through the Agreement in which the AEC relinquishes that authority into the hands of the State.

Subsection 274 b. of the Act is the basic authority under which this is done, and it provides (in relevant part) as follows:

(2) 'Except as provided in subsection c., the Commission is authorized to enter into agreements . . . providing for discontinuance of the regulatory authority of the Commission under chapters 6, 7, and 8, and section 161 of this Act, with respect to any one or more of the following materials within the State. . . .' (Emphasis added.)

And in turn, subsection c. of section 274 limits the grant of authority and thus limits the ability of the AEC to turn over authority to an Agreement State as follows:

'c. No agreement . . . shall provide for discontinuance of any authority and the Commission shall retain authority and responsibility with respect to regulation of --

(1) the construction and operation of any production or utilization facility. . . .' (Emphasis added.)

Thus it follows, that the AEC has no power to deliver into the hands of an Agreement State any authority to regulate construction or operation of a production or utilization facility; in other words, the AEC retains, even in an Agreement State, all the authority which it possessed, before the Agreement, over construction or operation of such a facility.

Given this situation, the question posed by the referenced memos can be stated as follows: Are the materials described in the memos, as they are possessed and used, part of the construction and/or operation of any production or utilization facility? I believe that in each case described by the memos, the answer is yes.

\*6879 First, let us examine the situation described in the memo of December 9. Possessors of the

materials are the holders of facility licenses for operation of two power reactors in California. The materials are 'byproduct material for instrument calibration and checking, standardization of radiochemical techniques, and related activities.' In the opinion of the Director, Division of Compliance, such use of byproduct material 'should be considered as a use of the materials in the operation of the reactor.' end with that I would concur. It seems clear to me that calibration and checking of instrumentation is an activity essential to the continued safe operation of a power reactor, whose activities must be constantly remembered in order to assure that the public health and safety are maintained at all times. Similarly, standardization of radiochemical technique would appear to be a normal function of reactor operation, and therefore under the exclusive regulatory jurisdiction of the AEC.

(3) In the same way, I would view the activities described in the memo of November 10, as being an integral part of the construction of a production or utilization facility and thus beyond the power of an Agreement State to regulate. Possessor of the materials are holders of construction permits for power reactors being built in Agreement States. These possessors use the byproduct material for calibration of equipment ('such as area radiation monitors, portable monitoring equipment, and continuous in-line sample monitors') which will form an integral part of the reactor. Such proper calibration would appear to be essential to the normal and safe operation of the reactor when completed, and should also appear to be an indispensable step in the construction of the reactor. In a non-agreement State, of course, possession and use of the byproduct material involved in such activity would be regulated by the AEC -- but I believe that it is fair to argue that such regulation would be done only as part and parcel of the regulation of other construction activities; such regulation of construction is of the type which the Act forbids AEC to relinquish into the hands of an Agreement State (remember that the Act requires the AEC to retain all authority over construction and operation of a production or utilization facility).

Even more clearly, I think, the AEC must have exclusive jurisdiction over the possession (by the construction-permit holder of the 'large (multi-curie) reactor-startup sources' described in the memo of November 10. These would appear to be, in their

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possession and use, an integral part of both construction and operation of a reactor, thus a fortiori beyond the ability of an Agreement State to regulate.

\*6880 As the two memos indicate, and as my research confirms, practice with regard to the possession and use of the described materials for the described purposes, has been inconsistent. Niagara Mohawk Power Corp., for example, applied for and received AEC Byproduct Material License No. 31-7489-2 (July 7, 1967) to cover their use of materials such as those described in construction of a reactor; at that time, the company indicated that they had consulted with the local (New York) Agreement State officials, who had directed them to the AEC. However, the Consumers Public Power District has applied to the State of Nebraska and has received from that Agreement State a byproduct material license for similar construction purposes -- although it is true that Nebraska has suggested that an application should be made to AEC, and has agreed with the AEC to keep their license in effect only until the jurisdictional question is settled. At the operating stage, it appears, AEC has taken jurisdiction over the possession of the described materials and their use in the described activities, in all but two cases of operating power reactors located in Agreement States. In the case of two California power reactors, the State of California has assumed such jurisdiction.

In view of the cited provisions of the Atomic Energy Act, it would appear that the better rule would be for the AEC to assume exclusive jurisdiction over the possession of the materials described when they -- used in the activities described. Furthermore, assertion of exclusive AEC jurisdiction (4) would be consistent with our past interpretation of the AEC's authority over facility sites, which has drawn a geographical boundary around the area of exclusive AEC regulation, in the following manner:

'In general, the use and possession of source and byproduct materials in hot cells, laboratories, and shops located outside the reactor buildings and excluded from the site description in the applicable Price-Anderson indemnity agreement are not considered to be associated with the facility operation and, accordingly, are regulated by the Agreement States rather than by the AEC.' (Slager 'Federal-State Cooperation in Regulation of Peaceful Uses of Atomic Energy,' address before 62nd annual meeting of National Association of Attorneys-General;

published in Proceedings, 62nd Annual Meeting, etc., Bottom, 1968, p.86) (Emphasis added).

This interpretation clearly would mean that the use of byproduct materials described in the subject memos, which are used within the reactor building itself, or during its construction, are not within the jurisdiction of the Agreement States, and therefore must be within the exclusive jurisdiction of the AEC.

\*6881 On the basis of the foregoing, I would advise the Director, Division of Compliance, that it is the opinion of the Office of the General Counsel, that the possession and use of the materials described in his memoranda, by the persons and for the persons described therein, is within the exclusive regulatory jurisdiction of the AEC, and beyond the regulatory authority of any Agreement State.

FN1 See Informal Legal Memorandum from Charles S. Sloss to Howard K. Shapar, December 18, 1969 on Question of Jurisdiction over Certain Materials Possessed by Constructors or Operators of Power Reactors in Agreement States, especially page 2.

FN2 As defined in 10 CFR 34.2, 'radiography' means 'the examination of the structure of materials by nondestructive methods, utilizing sealed sources of byproduct materials.'

FN3 10 CFR Part 34, 'Licenses for Radiography and Radiation Safety Requirements for Radiographic Operations,' contains licensing requirements for the use of sealed sources in radiography and radiation safety requirements applicable to persons holding radiography licenses. The latter include requirements applicable to radiographic equipment and requirements relating to the training of radiographers and radiographers' assistants, personnel monitoring and operating and emergency procedures. As defined in 10 CFR 34.2, 'radiographer' means 'any individual who performs or who, . . . personally supervises radiographic operations and who is responsible to the (Part 34) licensee for assuring compliance with the requirements of the Commission's regulations and the conditions of the license.' 'Radiographer's assistant' means 'any individual who, under the personal supervision of a radiographer, uses radiographic exposure devices, sealed sources or related handling tools, or radiation survey instruments in radiography.'

FN4 'We think it might be helpful to indicate

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expressly that the Commission may consider in a single application both a request for a facility license--under Section 103 or 104--and a request for special nuclear material or for source material--under section 53 or 63. A facility license without an allocation of special nuclear material is useless. To get into business the applicant needs both. Therefore, we urge that, to the extent possible, the Commission should decide on the basis of a single application and in a single determination whether a facility should be licensed and whether and how much special nuclear material should be allocated.' Comments of General Electric Co. submitted by F.

K. McClune, General Manager, Atomic Products Division, June 17, 1954 in connection with Hearings before the Joint Committee on Atomic Energy on S. 3323 and H.R. 8862, 83rd Congress, 2d Session, May 1954, as printed in AEC Legislative History of the Atomic Energy Act of 1954 (Public Law 703, 83rd Congress) Vol. II at p. 1986. See also testimony of Walker L. Cisler, President, The Detroit Edison Co., *Ibid.* at pp. 1711 and 1713, and testimony of Paul W. McQuillen, Chairman, Legal Committee, Dow Chemical-Detroit Edison and Associates, Atomic Power Development Project, *Ibid.* at pp. 1747 and 1753.