

AUG 9 1984

MEMORANDUM FOR: Donald A. Nussbaumer
Assistant Director for State Agreements Program
Office of State Programs

FROM: William J. Olmstead
Director and Chief Counsel
Regulations Division
Office of the Executive Legal Director

SUBJECT: REVIEW OF ILLINOIS ENABLING LEGISLATION REGARDING
AGREEMENT STATE STATUS

In response to your request of July 23, 1984, we have examined the texts of the Illinois laws relating to the powers of the Illinois Department of Nuclear Safety which you furnished to us for the purpose of determining whether these laws provide adequate legal authority for Illinois to become an Agreement State. Based on this review, which is described more fully below, it is our conclusion that the Illinois statutes provide sufficient legal authority to enable Illinois to establish and maintain a radiation control program in accordance with the provisions of a section 274 Federal/State agreement.

In reviewing the Illinois laws, we have used as criteria those portions of the NRC Statement of Policy containing criteria for guidance of the States and NRC with respect to Federal/State agreements (46 FR 7540, January 23, 1981, 46 FR 36969, July 16, 1981 and 48 FR 33376, July 21, 1983) which specify functions for which adequate legal authority must be provided. We have also compared the provisions of the Illinois statutes with those of the Model State Radiation Control Act as published by The Council of State Governments in the 1983 edition, Vol. 42, of Suggested State Legislation, at pp. 27-43. In accordance with this approach, our review covers the following topics: enabling legislation, radiation control program, rulemaking, inspections, fees, and enforcement. It is our understanding that Illinois does not wish at this time to assume responsibility for regulating uranium mills and mill tailings, or in situ extraction of source material, and that the NRC will retain this regulatory authority under the provisions of any Federal/State Agreement entered into between the U.S. Nuclear Regulatory Commission and the State of Illinois.

Illinois has enacted several laws which address matters affecting nuclear power reactors and various aspects of the nuclear fuel cycle. These include:

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Boiler and Pressure Vessel Safety Act, Ill. Rev. Stat.,
ch. 111½, §§ 3201-3217.

Nuclear Safety Preparedness Act, Ill. Rev. Stat.,
ch. 111½, §§ 4301-4309, as amended.

- Ill. Rev. Stat., ch. 111½ § 1025b, which requires persons intending to construct a nuclear steam generating facility or a nuclear fuel reprocessing plant to file an environmental feasibility report with the Department of Nuclear Safety.
- Ill. Rev. Stat., ch. 111½, § 218b, which requires all intrastate and interstate carriers of spent nuclear reactor fuel in Illinois to notify the Department of Nuclear Safety 24 hours prior to any transportation of spent nuclear reactor fuel within the State of the proposed route, the place and time of entry into the State, and the amount and the source of fuel.

In April 1984, NRC and Illinois entered into a broad Memorandum of Understanding (49 FR 20586, May 15, 1984) which sets forth mutually agreeable principles of cooperation between the State and NRC in areas relating to the regulation of nuclear activities which are subject to the jurisdiction of the State or the NRC or both in order to minimize duplication of effort, avoid delays in decisionmaking, ensure the exchange of needed information, and carry out the goals and policies of State and Federal law. Although the laws identified above contain provisions which could impinge on the NRC's responsibilities for the regulation of nuclear power reactors, we believe any difficulties could be resolved under the principles of cooperation set out in the Memorandum of Understanding.

Enabling Legislation.

The Illinois Radiation Protection Act, which contains general authority to establish, carry out and enforce a radiation control program, authorizes the Governor of the State of Illinois to enter into agreements with the Federal Government providing for discontinuance of certain of the Federal Government's responsibilities with respect to sources of ionizing radiation and the assumption thereof by the State. 1/ The Illinois Low-Level Radioactive Waste Management Act contains similar authority with respect to certain responsibilities of the Federal Government for the disposal of low-level waste. 2/ That Act also makes clear that it is the intent of the

1/ Ill. Rev. Stat., Ch. 111½, § 216b.

2/ Ill. Rev. Stat., Ch. 111½, § 241-19.

Illinois General Assembly that the Department of Nuclear Safety pursue agreement state status. ^{3/} Unlike section 2 of the Model State Radiation Control Act, these Illinois laws do not state that Illinois will institute and maintain a regulatory program for sources of radiation "so as to provide for compatibility and equivalency with the standards and regulatory programs of the federal government," However, section 2 of the Radiation Protection Act ^{4/} does declare that it is the public policy of Illinois

"to advise, consult and cooperate with other agencies of the State, the Federal Government, other States and interstate agencies and with affected groups, political sub-divisions and industries; and, in general, to conform as nearly as possible to nationally accepted standards in the promulgation and enforcement of codes, rules and regulation."

In our opinion, this enabling legislation appears to be adequate, although note should be taken of the fact that the Radiation Protection Act, including § 216b which relates to Federal/State Agreements, is subject to the provisions of the Illinois Regulatory Agency Sunset Act (Ill. Rev. Stat., ch. 127, §§ 1904 and 1904.7) which provide for the repeal of the Radiation Protection Act on December 31, 1993 unless the General Assembly enacts legislation providing for its continuation.

Radiation Control Program.

The Illinois Radiation Protection Act (Ill. Rev. Stat., ch. 111½, §§ 211-229, as amended) gives the Illinois Department of Nuclear Safety broad authority to establish, administer and enforce a program for the effective regulation of radiation sources. Among other things, the Act authorizes the Department to promulgate rules and regulations, issue general or specific licenses for source, byproduct or special nuclear materials or for devices or equipment utilizing or producing those materials, establish standards and instructions to govern the possession and use of radiation sources, review and approve plans and specifications for radiation installations and radiation sources, conduct inspections and tests, collect fees, take needed enforcement action, and conduct studies, investigations, training, research and demonstrations relating to the control or measurement of radiation and the effects on health of exposure to radiation. This broad authority appears to be adequate.

^{3/} See id. at § 216²(b).

§ 241-2(b)

^{4/} Ill. Rev. Stat., ch. 111½, § 212

Rulemaking.

Section 8 of the Radiation Protection Act (Ill. Rev. Stat., ch. 111, § 218) authorizes the Department of Nuclear Safety to promulgate by rules or regulations

"such standards and instructions to govern the possession and use of any radiation source as the Department may deem necessary or desirable to protect the public health, welfare and safety."

Under section 8.8 (Ill. Rev. Stat., ch. 111, § 218.8) the Department is authorized to promulgate rules and regulations respecting the review and approval of plans and specifications for radiation installations and radiation sources for which regulatory responsibility has been transferred to the State by the Federal Government. Section 6 (Ill. Rev. Stat., ch. 111, § 216) provides that no person shall use radiation in contravention of the rules of the Department. Under the provisions of the Personnel Radiation Monitoring Act, (Ill. Rev. Stat., ch. 111, §§ 230.11-230.14) the Department is authorized to issue regulations relating to radiation monitoring.

In addition to this general authority, the Department of Nuclear Safety is authorized by the Radioactive Waste Act (Ill. Rev. Stat., ch. 111, §§ 230.1-230.6) to promulgate regulations for the operation of all sites acquired by the State for the concentration and storage of radioactive wastes (Ill. Rev. Stat., ch. 111, § 230.4). The Department also has broad rulemaking authority under the Illinois Low-Level Radioactive Waste Management Act (Ill. Rev. Stat., ch. 111, §§ 241-1-241-24), including authority to promulgate rules establishing standards for the selection of waste facility contractors (Ill. Rev. Stat., ch. 111, § 241-5), rules relating to the management, operation, closure and decommissioning of low-level radioactive waste facilities (Ill. Rev. Stat., ch. 111, § 241-6) 5/ and to the issuance of licenses to persons to operate these facilities (Id., and see Ill. Rev. Stat., ch. 111, § 241.8), rules establishing standards for the treatment of low-level radioactive wastes (Ill. Rev. Stat., ch. 111, § 241.7) and rules relating to the transportation of low-level radioactive waste to an Illinois storage, treatment or disposal facility (Ill. Rev. Stat., ch. 111, § 241.9.) The powers of the Department also include the authority to promulgate rules and regulations for the reporting by public utilities of radioactive emissions from nuclear power plants (Ill. Rev. Stat., ch. 127, § 63b171.)

b/ Section 241-6(d) states that "[a]ll rules and regulations promulgated pursuant to this Section shall be at least as stringent as those promulgated by the U.S. Nuclear Regulatory Commission under the Atomic Energy Act of 1954 . . . and any other applicable federal laws."

Rules and regulations issued by the Department of Nuclear Safety are subject to the provisions of the Illinois Administrative Procedure Act. However, section 8.15 of the Radiation Protection Act (Ill. Rev. Stat., ch. 111½ § 218.15) contains two exceptions. In the case of conflict between the Radiation Protection Act and the Illinois Administrative Procedure Act, the provisions of the Radiation Protection Act shall control. The rulemaking procedures in section 5 of the Illinois Administrative Procedure Act do not

"apply to the adoption of any rule required by federal law in connection with which the Department is precluded by law from exercising any discretion."

In our opinion, the legal authority of the Department of Nuclear Safety to promulgate rules and regulations is adequate.

Inspections.

Section 63b17 of Chapter 127 of the Illinois Revised Statutes provides that the Department of Nuclear Safety shall exercise, administer and enforce all rights, powers and duties vested in the Department of Public Health by certain named acts and that the Department of Nuclear Safety shall inspect radiation sources in lieu of the Department of Health.

Under the provisions of the Radiation Protection Act, the Department of Nuclear Safety has broad authority to inspect and test radiation installations and radiation sources, their immediate surroundings and records concerning their operation to determine whether any radiation resulting therefrom is or may be detrimental to health (Ill. Rev. Stat., ch. 111½, § 218.9). Section 8.11 of that Act (Ill. Rev. Stat., ch. 111½, § 218.11) authorizes the Department

"to enter at all reasonable times upon any private or public property for the purpose of determining whether or not there is compliance with or violation of the provisions of this Act and rules and regulations issued thereunder, except that entry into areas under the jurisdiction of the Federal Government shall be effected only with the concurrence of the Federal Government or its duly designated representative."

The Department of Nuclear Safety also has additional authority to conduct inspections under the provisions of the following acts:

- An Act to require the registration of radiation installations, Ill. Rev. Stat., ch. 111½, §§ 194-200.

Section 4 (Ill. Rev. Stat., ch. 111½, § 197) authorizes the Department of Nuclear Safety to inspect and investigate the premises, operations and personnel of all radiation installations in Illinois, "whether or not such installations are required to be registered by this Act, for the purpose of studying and evaluating

"the past, current and potential hazard to the health of the people ...[Illinois] caused by the increasing use and operation of radiation machines and radioactive materials...."

Section 4 also provides that "[r]eports of inspections conducted at installations licensed or otherwise regulated by the United States Nuclear Regulatory Commission, or its successor agency, under the authority of the Federal Atomic Energy Act of 1954, as amended, shall be made by the Department on a monthly basis to the United States Nuclear Regulatory Commission, and shall be made available to the public."

- Illinois Low-Level Radioactive Waste Management Act, Ill. Rev. Stat. ch. 111½, §§ 241-1--241-24.

Section 9(d) (Ill. Rev. Stat., ch. 111½, § 241-9(d)) authorizes the Department of Nuclear Safety to inspect shipments of low-level radioactive wastes received at a licensed storage, treatment or disposal facility.

- An Act to protect the environment of the State and repeal certain Acts therein named approved July 1, 1970, as amended, Ill. Rev. Stat., ch. 111½, §§ 1004 and 1030-1045.

To the extent needed to carry out the regulations of the Pollution Control Board requiring any person "intending to construct a nuclear steam-generating facility or a nuclear fuel reprocessing plant [to] file with the Department [of Nuclear Safety] an environmental feasibility report which incorporates the data provided in the preliminary safety analysis required to be filed with the United States Nuclear Regulatory Commission" (Ill. Rev. Stat., ch. 127, § 63b17K) or to implement any standards adopted by the Board "to protect the health, safety and welfare of the citizens of Illinois from the hazards of radiation to the extent that such powers are not preempted under the federal constitution" (Ill. Rev. Stat., ch. 111½, § 1025b) the Department of Nuclear Safety may exercise the authority accorded the Illinois Environmental Protection Agency to enter upon any private or public property at all reasonable times to conduct inspections and investigations to ascertain possible violations of the Act, the regulations, or any permits issued thereunder or to take necessary preventive or corrective action whenever there is a release or a substantial threat of a release of a hazardous substance (Ill. Rev. Stat., ch. 111½, § 1004(d)).

In our opinion, this authority is adequate to comply with Criterion 17 in the NRC Statement of Policy providing guidance to the states and NRC with respect to Federal/State agreements, which states that "[l]icensees shall be under obligation by law to provide access to inspectors." (46 FR 7540 at 7542, January 23, 1981).

Fees.

Many of the statutes which the Illinois Department of Nuclear Safety is required to administer require or authorize the collection of user fees. These include:

-- Radiation Protection Act, III. Rev. Stat., ch. 111½

- § 214.2 - Application fees for accreditation or renewal of accreditation to administer radiation to human beings.
- § 216b - Authority, effective after Illinois becomes an Agreement State, to collect license fees from persons operating radiation installations and having devices or equipment using or producing radioactive materials.
- § 216c - Application fees for licenses to use radioactive materials.
- § 216c - Application fees for licenses to manufacture or distribute radioactive materials or devices or equipment using or producing these materials.
- § 218.9 - Inspection fees for radiation installations and radiation sources and fees for filing radiation inspection reports.

-- An Act in relation to the concentration and storage of radioactive waste. III. Rev. Stat. ch. 111½

- §§ 230.5 and 230.6 - Authority to assess fees to cover the anticipated reasonable cost necessary to maintain, monitor and otherwise supervise and care for lands and facilities dedicated as sites for the concentration and storage of radioactive wastes.

-- Low-Level Radioactive Waste Management Act. III. Rev. Stat., ch. 111½

- § 241-13 - Authority to collect fees from generators of low-level radioactive waste shipped for storage, treatment or disposal.
- § 241-13 - Authority to propose to the Illinois General Assembly for adoption, a system of fees for the disposal of low-level radioactive waste at a waste storage, treatment or disposal facility.

In our opinion, the Illinois Department of Nuclear Safety has adequate legal authority to impose radiation user fees.

Enforcement.

The statutes which the Illinois Department of Nuclear Safety is required to administer provide criminal penalties and give the Department broad authority to take enforcement action. However, the Low-Level Radioactive Waste Management Act is the only statute which authorizes the imposition of civil penalties.

The Act to require the registration of radiation installations provides for injunctive relief (Ill. Rev. Stat., ch. 111½, § 198) against any operator of a radiation installation who conducts business or carries on activities within the installation without registering the installation or who fails to comply with the provisions of the Act with regard to such installation. The Act also provides that any operator who fails to comply with the provisions of the Act is guilty of a Class B misdemeanor. (Ill. Rev. Stat., ch. 111½, § 199.)

The Radiation Protection Act authorizes the Department to institute circuit court proceedings to compel compliance with the provisions of the Act and any rules, regulations or orders issued thereunder (Ill. Rev. Stat., ch. 111½, § 218.3.) Under section 6a of the Act (Ill. Rev. Stat., ch. 111½, § 216a) the Department of Nuclear Safety is authorized to issue regulations providing for the suspension or revocation of licenses. The Department is also authorized to issue orders for the abatement or discontinuance of a violation, subject to the right of any party affected by such an order to request a public hearing (Ill. Rev. Stat., ch. 111½, § 219.) In addition, the Department may request the Attorney General to bring an injunction against any person violating the provisions of the Act or any determination or order of the Department (Ill. Rev. Stat., ch. 111½, § 224.) The Department is authorized to hold public hearings and conduct investigations concerning violations of the Act (Ill. Rev. Stat., ch. 111½, §§ 218.2 and 218.10.)

In cases where the violation constitutes an immediate threat to health, the Department may either take summary action to abate the violation or direct the Attorney General to obtain an injunction against the violator (Ill. Rev. Stat., ch. 111½, § 222.) (also § 224.)

Violations of the Radiation Protection Act or of any order issued thereunder are considered Class A misdemeanors (Ill. Rev. Stat., ch. 111½, § 223.)

Section 16 of the Low-Level Radioactive Waste Management Act provides that

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"[u]nless otherwise exempt by Federal or State law or regulation, no person shall dispose of any low-level radioactive waste in Illinois other than at a facility licensed by the Department pursuant to section 8 [of the Act.]" Ill. Rev. Stat., ch. 111½, § 241-16.

Persons found to be in violation^{6/} of section 16 are guilty of a Class 4 felony and are also subject to civil penalties not to exceed \$100,000 per day of violation. Persons who are engaged in the operation of a waste treatment, storage or disposal facility in violation of the licensing requirements of section 8 (Ill. Rev. Stat., ch. 111½, § 241-8) are subject to civil penalties not to exceed \$100,000 per day of violation. In addition, licensed operators who are determined to be in substantial noncompliance may have their licenses revoked (Ill. Rev. Stat., ch. 111½, § 241-8(d).) The Director of the Department of Nuclear Safety may also revoke a waste facility license upon a determination that an emergency exists posing a significant hazard to public health and the environment (id.)

Persons who fail to pay the waste fees prescribed in section 13 (Ill. Rev. Stat., ch. 111½, § 241-13) are liable to civil penalties not to exceed four times the amount of the fees not paid (Ill. Rev. Stat., ch. 111½, § 241-17(c).)

Section 9 (Ill. Rev. Stat., ch. 111½, § 241-9) provides that no person shall transport any low-level radioactive waste to a licensed storage, treatment or disposal facility in Illinois without a permit granted by the Department of Nuclear Safety or without a manifest document. The Director of the Department of Nuclear Safety is authorized to issue transportation permits to applicants who have met and who he believes will comply with the requirements of the Illinois Hazardous Materials Transportation Act and any other applicable State or Federal laws or regulations. The Department is also required to notify the State Attorney General of any apparent violations for possible prosecution under sections 11 and 12 of the Illinois Hazardous Materials Transportation act.

In our opinion, the legal authority of the Illinois Department of Nuclear Safety to take enforcement action is adequate to meet Criterion 19 of the NRC Statement of Policy (45 FR 7540 at 7542, January 23, 1981.)

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 Regulations Division
 Office of the Associate Legal Director

cc: John McGrath, SP

6/ See, Ill. Rev. Stat., ch. 111½, § 241-17, Penalties.

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Enclosure C

OELD ANALYSIS OF ILLINOIS STATUTES AND REGULATIONS FROM
STANDPOINT OF NRC CRITERIA

CAVEAT: We express no opinion on whether Illinois exercises its statutory and regulatory authorities in an effective manner. We also have no comments on Criteria 1, 13, 14, 20 and 21. Since Illinois does not wish to assume regulatory control over uranium milling activities (§ 11e(2) byproduct material) at this time, Criteria 29 through 36 were not considered.

Criterion 2 - Standards.

Criterion 3 - Uniformity in Radiation Standards

Par. 212 of the Illinois Radiation Protection Act states that it is the policy of the State "to conform as nearly as possible to nationally accepted standards in the promulgation and enforcement of codes, rules and regulations." Par. 1025b of the Illinois Environmental Protection Act authorizes the State Pollution Control Board "to adopt standards to protect the health, safety and welfare of the citizens of Illinois from the hazards of radiation to the extent that such powers are not pre-empted under the federal constitution."

The regulations in Part 340, which prescribe standards for protection against radiation hazards, apply to byproduct, source and special nuclear material in quantities not sufficient to form a critical mass. For the most part, there is uniformity between the provisions of Part 340 and the parallel provisions of 10 CFR Part 20. We have, however, identified several discrepancies (described more fully in Enclosure A at pp. 8-11) which must be remedied if Criterion 3 is to be met.

Criterion 4 - Total Occupational Radiation Exposure

Section 340.100, which sets out the purpose and scope of Illinois' radiation protection standards, makes clear that the State's regulatory responsibilities will be carried out in a manner which takes into consideration the total occupational radiation exposure of individuals. In addition to incorporating the ALARA guideline, § 340.100 states in part:

"It is the purpose of the regulations in this part to control the possession, use, and transfer of sources of radiation by any licensee or registrant in such a manner that the total dose to an individual does not exceed the standards of radiation protection prescribed in this part. Nothing in this part shall be interpreted as limiting the intentional exposure of patients to radiation for the purpose of medical diagnosis or therapy."

Criterion 5 - Surveys, Monitoring

Illinois has adequate regulatory authority to conduct surveys and perform personnel monitoring. The Illinois Personnel Radiation Monitoring Act requires employers to provide "persons subject to the radiation monitoring requirements of the Department of Nuclear Safety . . . [with] a type of personnel radiation monitoring service acceptable to the Department . . .". In addition, each employer is required to "maintain a record of the radiation exposure of each employee as reported by the monitoring service on forms prescribed by the Department and . . . [to] forward such forms to the Department . . . according to a schedule prescribed by the Department . . . and at the termination of employment of any monitored employee. The record of each employee shall include the name and Social Security number of the employee." Paragraph 230.13 of this Act states that "[no] person or firm shall furnish a personnel radiation monitoring service in this State without approval from the Department of Nuclear Safety." See also Illinois regulations § 340.201, Surveys, and § 340.202, Personnel Monitoring.

Criterion 6 - Labels, Signs, Symbols

Sections 340.203 and 340.204 of the Illinois regulations prescribe requirements for the design and posting of caution signs, labels and signals and for certain exceptions from these requirements. The texts of §§ 340.203 and 340.204 are identical to those in §§ D.203 and D.204 of the SSR which are based on 10 CFR §§ 20.203 and 20.204. The definition of "Airborne radioactivity area" used in 10 CFR Part 20 (see, § 20.203(d)) is set out in § 310.2 of the Illinois regulations at pp. 310-1 - 310-2.

We note two minor discrepancies between the text of the Illinois regulations and the text of the parallel provisions of 10 CFR Part 20. The latter part of 10 CFR § 20.203(a)(2) reads "in aiding individuals to minimize exposure to radiation or to radioactive material." The words "or to radioactive material" do not appear in § 240.203(a)(2), the parallel provision of the Illinois regulations. Section 20.203(c)(5) authorizes applicants for licenses as well as licensees to apply for approval of alternative methods of control to prevent unauthorized entry into a high radiation area. Section 340.203(c)(5) of the Illinois regulations only extends this privilege to licensees and registrants. While § 340.203(c)(7) of the Illinois regulations and 10 CFR § 20.203(c)(7) are similar in purpose and intent, the former does not include the following requirement found in § 20.203(c)(7):

"At least one of the alternative measures must include an entry-preventing interlock control based on a physical measurement of radiation that assures the absence of high radiation levels before an individual can gain access to an area where such sources are used."

Section 350.302 of the Illinois regulations contains additional requirements for posting areas where radiography is being performed. Section 351.109 prescribes labeling requirements for well-logging sources.

Criterion 7 - Instruction

As indicated in § 340.205 of the Illinois regulations, instructions required for individuals working in or frequenting any portion of a restricted area are specified in Part 400 of those regulations, specifically § 400.12. Section 400.16 authorizes workers to request the Division of Nuclear Materials of the Illinois Department of Nuclear Safety to perform inspections. Section 400.14 authorizes representatives of workers to be present during inspections. Part 400 of the Illinois regulations is identical to Part J of the SSR which is based on 10 CFR Part 19.

We note the following discrepancies between 10 CFR Part 19 and parallel provisions in Part J of the SSR and Part 400 of the Illinois regulations.

Section J.11(d) of the SSR and § 400.11(d) of the Illinois regulations both specify that certain documents must be posted "within 5 working days" after receipt or dispatch, as appropriate. Section 19.11(e), the parallel provision in 10 CFR Part 19, provides that documents must be posted "within 2 working days."

There appears to be some redundancy between §§ 400.13(c) and (e) of the Illinois regulations since both concern the reports to be given to workers upon termination of employment. This redundancy is not found in §§ 19.13(c) and (e) of 10 CFR Part 19, on which the provisions of the SSR and the Illinois regulations are based. Section 19.13(c) specifies requirements for providing reports to workers at any time upon request. Section 19.13(e) specifies requirements for termination reports.

Criterion 8 - Storage

Section 340.206 of the Illinois regulations (see p. 340-22) prescribes requirements for the control of sources of radiation which are equivalent to those in 10 CFR § 20.207.

Criterion 9 - Waste Disposal

See, generally, the Illinois Radioactive Waste Act, including par. 230-6 which provides for the establishment of a special "Radioactive Waste Site Perpetual Care Fund," and the Illinois Low-Level Radioactive Waste Management Act. Par. 241-6 of the latter Act requires the Department of Nuclear Safety to "promulgate rules and regulations establishing standards applicable to facilities for the storage, treatment or disposal of low-level radioactive wastes away from the point of generation necessary to protect human health and the environment. . . ." These rules and regulations must "reflect the best available management technologies which are economically reasonable, technologically feasible and environmentally sound. . . ." They are also required to be "at least as stringent as those promulgated by the U.S. Nuclear Regulatory Commission under the Atomic Energy Act of 1954 . . . and

any other applicable federal laws." The Department of Nuclear Safety also has authority under its Enabling Act, par. 63b18, to conduct a survey and prepare and publish a list of sites in the State where nuclear waste has been deposited, treated or stored and to monitor nuclear waste processing, use, handling, storage and disposal practices in the State and to determine existing and expected rates of production of nuclear wastes.

Illinois regulations relating to the disposal of waste by materials users are set out in Part 340, specifically §§ 340.301, 340.302, 340.303, 340.304, 340.305, 340.306. The parallel provisions in 10 CFR Part 20 are §§ 20.301, 20.302, 20.303, 20.305 and 20.306. Part 601, which is patterned on 10 CFR Part 61, sets out licensing requirements for the land disposal of radioactive waste received from others. Sections 340.307, 340.308 and 340.309, which track 10 CFR §§ 61.55, 61.56 and 61.57, contain requirements respecting the classification, characteristics and labeling of radioactive wastes for land disposal. Section 340.11, which is based on 10 CFR § 20.311, prescribes requirements for the waste transfer and manifest system applicable to generators and transporters of radioactive wastes sent to a licensed facility for land disposal. Section 601.10 requires applicants for licenses for low-level radioactive waste burial sites to submit financial information sufficient to demonstrate that the financial qualifications of the applicant are adequate to carry out licensed activities. Section 601.30 requires applicants for licenses to show that they either possess or have reasonable assurance of obtaining the necessary funds to cover the estimated costs of conducting all licensed activities over the planned operating life of the project, including costs of construction and disposal. Section 601.31 contains requirements for funding for disposal site closure and stabilization; Section 601.32 specifies requirements relating to financial assurances for institutional controls.

Although Illinois regulations relating to the disposal of radioactive wastes conform generally to those promulgated by the Commission, they do contain certain discrepancies which should be corrected. See Enclosure A at pp. 9-11 and 14-15.

Criterion 10 - Regulations Governing Shipment of Radioactive Materials

Subject to the detailed comments on Part 341 set out on pp. 11-13 of Enclosure A. and subject to comment 1. ^{1/} in the September 6, 1985 Memorandum from James G. Keppler to G. Wayne Kerr, it is our opinion that the Illinois regulations regarding the transportation of radioactive material are

^{1/} "1. On pages 310-10, 310-11, and 310-17 of Volume III, Regulations, the concept of 'transport groups' is discussed. This concept is no longer used by the NRC and has been replaced by the 'A1' and 'A2' maximum activity values described on page 341-1 of Volume III."

compatible with 10 CFR Part 71. Pursuant to par. 218b of the Illinois Radiation Protection Act, "[a]ll intrastate and interstate carriers of spent nuclear reactor fuel in the State of Illinois are . . . required to notify the Department of Nuclear Safety 24 hours prior to any transportation of spent nuclear reactor fuel within . . . [the] State of the proposed route, the place and time of entry into the State, and the amount and the source of the fuel."

Criterion 11 - Records and Reports

Under par. 218.12 of the Illinois Radiation Protection Act, the Department of Nuclear Safety must require each person who possesses or uses a source of ionizing radiation to maintain records relating to its receipt, storage, transfer or disposal. Under par. 218.13 of that Act, the Department must also require each person who possesses or uses a source of ionizing radiation to maintain appropriate records showing the radiation exposure of all individuals for whom personnel monitoring is required by the rules and regulations of the Department. Par. 218.13 also provides that "[a]ny person possessing or using a source of ionizing radiation shall furnish to each employee for whom personnel monitoring is required a copy of such employee's personal exposure record at any time such employee has been exposed to radiation in excess of limits prescribed by the Department, upon termination of employment, and annually at his request."

The Illinois regulations contain extensive provisions which require holders and users of radioactive material to keep records and make reports.

Section 310.4 requires licensees and registrants to "maintain records showing the receipt, transfer, use, storage and disposal of all sources of radiation." Section 310.4 also informs licensees and registrants that "[a]dditional record requirements are specified elsewhere in these regulations." Record-keeping and reporting requirements may be found, for example, in Parts 330, 340, 350, 351, 370, 400 and 601 (see e.g., § 601.33.)

Requirements to maintain records covering personnel radiation exposures are set out in the following sections:

- § 340.102, Determination of Accumulated Dose, see pars. (a)(2), (c).
- § 340.103, Exposure to Individuals to Concentrations of Radioactive Material in Air in Restricted Areas, see par. (b)(2).
- § 340.401, Records of Surveys, Radiation Monitoring and Disposal, see par. (a)(1), (c)(1).
- § 350.203, Personnel Monitoring Control, see par. (e).
- § 351.203, Personnel Monitoring, see par. (b).

Requirements to maintain records or submit reports relating to radiation surveys may be found in the following sections:

- § 330.32, Expiration and Termination of Licenses, see par. (d)(1)(E).
- § 340.401, Records of Surveys, Radiation Monitoring and Disposal, see par. (b), (c)(2).
- § 350.304, Records Required at Temporary Job Sites, see, e.g., par. (d).
- § 351.401, Radiation Surveys, see par. (e).
- § 351.402, Documents and Records Required at Field Stations, see par. (i).
- § 351.403, Documents and Records Required at Temporary Jobsites, see par. (b).
- § 370.3, Interstitial, Intracavitary, and Superficial Applications, see par. (c).

Requirements to maintain records relating to the disposal of materials may be found in the following sections:

- § 330.104, Advance Notification of Transport of Nuclear Waste. Licensees are required to maintain copies of advance notifications to Governor for period of one year.
- § 340.311, Transfer for Disposal and Manifests. This section specifies requirements for the waste transfer and manifest system which apply to shipments of radioactive waste to a licensed land disposal facility.
- § 340.401, Records of Surveys, Radiation Monitoring and Disposal, see par. (b), (c)(3).

Requirements to maintain records relating to the receipt and transfer of materials may be found in the following sections:

- § 310.4, Records.
- § 330.26, Special Requirements for Issuance of Certain Specific Licenses for Radioactive Material, see par. (c)(6)(B) which requires certain licensees to conduct and keep records of a quarterly physical inventory to account for all sources received and possessed.
- § 330.27, Special Requirements for Specific Licenses of Broad Scope. This section contains provisions requiring applicants to keep records and establish administrative controls respecting material control and accounting.
- § 330.28, Special Requirements for a Specific License to Manufacture, Assemble, Repair, or Distribute Commodities, Products, or Devices which Contain Radioactive Material. This section contains numerous provisions requiring licensees to maintain records and make reports of transfers of radioactive material.
- § 350.106, Quarterly Inventory. The licensee is required to keep a quarterly inventory of all sealed sources received or possessed.

Requirements to report significant incidents involving radioactive materials may be found in the following sections:

- § 340.311, Transfer for Disposal and Manifests, see par. (h), requirement to make reports on shipments of radioactive waste for which acknowledgment is not received.
- § 340.402, Reports of Theft or Loss of Sources of Radiation.
- § 340.403, Notification of Incidents.
- § 340.405, Reports of Overexposures and Excessive Levels and Concentrations.
- § 351.501, Notification of Incidents, Abandonment, and Lost Sources.

Requirements to report employee's exposure to radiation may be found in the following sections:

- § 340.107, Orders Requiring Furnishing of Bioassay Services, authority to require licensee to make reports of bioassays available to individual.
- § 340.408, Notifications and Reports to Individuals.
- § 400.13, Notifications and Reports to Individuals.

Requirement to advise employee of his or her annual radiation exposure.

- § 400.13, Notifications and Reports to Individuals, see par. (b).

Requirements to inform employee in writing when employee has been exposed to radiation in excess of the prescribed limits may be found in the following sections:

- § 340.405, Reports of Overexposures and Excessive Levels and Concentrations.
- § 340.408, Notifications and Reports to Individuals.
- § 400.13, Notifications and Reports to Individuals, see par. (d).

Criterion 12 - Additional Requirements and Exemptions

Par. 216a(3) of the Illinois Radiation Protection Act authorizes the Department of Nuclear Safety to exempt certain sources of ionizing radiation or kinds of uses or users from licensing requirements when the Department makes a finding that the exemption will not constitute a significant risk to health and safety of the public. Par. 216c of the Act contains similar authority.

The following provisions of the Illinois regulations authorize the Department of Nuclear Safety to impose additional requirements to protect health and safety or to grant necessary exemptions:

- § 310.3, Exemptions, see par. (a).
- § 310.7, Additional Requirements.
- § 330.30, Issuance of Specific Licenses, see par. (b).
- § 601.12, Conditions of Licenses, see par. (g).

Criterion 15 - Human Use

Under par. 214 of the Illinois Radiation Protection Act, only properly qualified and accredited persons, such as licensed physicians and technicians accredited by the Illinois Department of Nuclear Safety, are authorized to intentionally administer radiation to human beings. See, also, par. 217.1 of the Radiation Protection Act establishing an advisory Radiologic Technology Accreditation Board and par. 218a(2) authorizing the Department of Nuclear Safety to "institute training programs for the purpose of qualifying personnel to carry out the provisions of . . . [the Radiation Protection] Act."

The following specific licenses authorizing the human use of radioactive material require that the physician designated on the application as the individual user have substantial experience in the handling and administration of radioactive material and, where applicable, in the clinical management of radioactive patients.

- § 330.26(a), Specific Licenses to Institutions for Human Use of Radioactive Material.
- § 330.26(b), Specific Licenses to Individual Physicians for Human Use of Radioactive Material.
- § 330.26(c), Specific Licenses for Certain Groups of Medical Uses of Radioactive Material.

In addition, § 330.22(h) of the Illinois regulations provides that the general license for medical diagnostic uses may only be issued to generally licensed physicians who are competent to use appropriate radiation measuring instruments to carry out the diagnostic procedures for which the radioactive material will be used. The general license for use of radioactive material for certain in vitro clinical or laboratory testing contains similar requirements, (see § 330.22(i).)

Inspection

Criterion 16 - Purpose, Frequency

Criterion 17 - Inspections Compulsory

Criterion 18 - Notification of Results of Inspection

As indicated in our memorandum of August 9, 1984, the Illinois statutes provide adequate authority to comply with Criterion 17 which states that "[l]icensees shall be under obligation by law to provide access to inspectors." (46 FR 7540 at 7542, January 23, 1981.) The Illinois regulations make clear that inspections are conducted in order to ensure compliance with the

Illinois Radiation Protection Act and the State's implementing regulations. The following sections of the Illinois regulations relate to inspections:

- § 310.5, Inspections.
- § 310.7, Additional Requirements, see par. (a).
- § 330.30, Issuance of Specific Licenses, see par. (b)(2).
- § 350.108, Inspection and Maintenance.
- § 400.14, Presence of Representatives of Licensees or Registrants and Workers During Inspection.
- § 601.12, Conditions of License, see par. (f), (g)(2).
- § 601.35, Department Inspections of Land Disposal Facilities.

Part 200 of the Illinois regulations provides that persons must have adequate notice of any complaint, petition or order issued against them.

Criterion 19 - Enforcement

The enforcement provisions of the Illinois statutes were examined in our memorandum of August 9, 1984 (Enclosure B) and determined to be adequate to meet Criterion 19. The following specific provisions of the Illinois regulations also relate to enforcement:

- § 310.8, Violations.
- § 310.9, Impounding.
- § 320.5, Noncompliance.
- § 330.50, which relates to the suspension and revocation of licenses.

Criterion 22 - Special Nuclear Material Defined

The definition of special nuclear material which is set out in Part 310, § 310.2 of the Illinois regulations (see p. 310-10) tracks the definition in Criterion 22.

Criterion 23 - Administration

Par. 218.15 of the Illinois Radiation Protection Act states that "[t]he provisions of 'The Illinois Administrative Procedure Act', . . . are hereby expressly adopted and shall apply to all administrative rules and procedures . . . under this Act, except that in case of conflict between 'The Illinois Administrative Procedure Act' and this Act the provisions of this Act shall control, and except that Section 5 of the Illinois Administrative Procedure Act relating to procedures for rule-making does not apply to the adoption of any rule required by federal law in connection with which the Department is precluded by law from exercising any discretion." The Illinois Personnel Radiation Monitoring Act contains a similar provision, see par. 230.14.

Part 200 of the Illinois regulations sets out general rules for the conduct of adjudicatory administrative hearings by the Illinois Department of Nuclear

Safety. These proceedings may relate to alleged violations or to denials of applications for licenses or license renewals (see §§ 200.60 and 200.150(a)). Part 200 does not apply to rulemaking proceedings which are covered by the provisions of the Illinois Administrative Procedure Act (IAPA). Under the procedures in Part 200, persons have 10 days after service of the Department's order in which to request a hearing (see § 200.70). Although the procedures do not permit members of the public to participate in hearings except as parties or witnesses, the hearings themselves are open to the public unless matters of confidentiality are involved (see § 200.130).

The procedures in Part 200 appear adequate to assure the fair and impartial administration of regulatory law and therefore satisfy Criterion 23.

Criterion 24 - State Agency Designation

The Illinois Department of Nuclear Safety has been designated as the State's radiation control agency. See Enabling Statute for Illinois Department of Nuclear Safety, Ill. Rev. Stat. 1983, ch. 127, par. 63b17.

Criterion 25 - Existing NRC Licenses and Pending Applications

Par. 216b(2) of the Illinois Radiation Protection Act provides that "[a]ny person who, on the effective date of an agreement under subsection (1) above, possesses a license issued by the Federal Government governing activities for which the Federal Government, pursuant to such agreement, is transferring its responsibilities to this State shall be deemed to possess the same pursuant to a license issued under this Act, which shall expire 90 days after the receipt from the Department of a notice of expiration of such license, or on the date of expiration specified in the Federal license, whichever is earlier.

Section 330.36 of the Illinois regulations provides that persons who, on the effective date of the Illinois regulations, hold general or specific materials licenses issued by the NRC, "shall be deemed to possess a like license issued under this part and the Act, such license to expire either 90 days after receipt from the Department of a notice of expiration of such license, or on the date or [sic, of] expiration specified in the U.S. Nuclear Regulatory Commission license, whichever is earlier."

Criterion 26 - Relations With Federal Government and Other States

Par. 212 of the Illinois Radiation Protection Act declares that it is the public policy of the State "to advise, consult and cooperate with other agencies of the State, the Federal Government, other States and interstate agencies and with affected groups, political sub-divisions and industries; . . ." Par. 212a states that it is the purpose of this Act to effectuate this policy "by providing for . . . a program to promote an orderly regulatory pattern within the State, among the States and between the Federal Government and the State and facilitate intergovernmental cooperation with

respect to use and regulation of sources of ionizing radiation to the end that duplication of regulation may be minimized; . . ." Par. 218.4 requires the Department of Nuclear Safety to "advise, consult, and cooperate with other agencies of the State, the Federal Government, other States and interstate agencies, and with affected groups, political subdivisions, and industries."

Criterion 27 - Reciprocity

Par. 216a(4) of the Illinois Radiation Protection Act provides that: "Rules and Regulations promulgated to this Act may provide for recognition of other State or Federal licenses as the Department may deem desirable, subject to such registration requirements as the Department may prescribe."

Section 330.90 of the Illinois regulations provides for reciprocal recognition by Illinois of NRC licenses and licenses issued by other Agreement States.

Criterion 28 - NRC and Department of Energy Contractors

The exemptions for NRC and DOE contractors found in § 310.3(b) of the Illinois regulations track § A.3(b) of the SSR and satisfy Criterion 28.