POLICY ISSUE
NOTATION VOTE

September 20, 2005 SECY-05-0170

FOR: The Commissioners

FROM: Luis A. Reyes
Executive Director for Operations

SUBJECT: PROPOSED AGREEMENT BETWEEN THE STATE OF MINNESOTA AND THE COMMISSION PURSUANT TO SECTION 274 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED

PURPOSE:

To request Commission approval to continue with Agency actions to complete processing of the State of Minnesota agreement application, based on a determination made by a majority of the Minnesota Review Team, and to inform the Commission of a different determination made by the Team Leader.

BACKGROUND:

The Atomic Energy Act of 1954, as amended, (Act) provided the Commission with the sole authority to regulate radiological hazards associated with byproduct, source, and special nuclear materials. The Act was amended in 1959 to provide a role for the States in the regulation of the radiological hazards of nuclear materials by adding Section 274, Cooperation with States. Section 274b authorizes the Commission to enter into an agreement with the Governor of a State whereby the Commission relinquishes some of its authority for certain materials, and the State assumes that authority.

The Commission, in 1981, adopted the revised policy statement entitled, “Criteria for Guidance of States and NRC in Discontinuance of NRC Regulatory Authority and Assumption Thereof by States Through Agreement” published on January 23, 1981 (46 FR 7540), as amended by statements published on July 16, 1981 (46 FR 36969), and on July 21, 1983 (48 FR 33376), referred to hereafter as the “Criteria Policy Statement.” Office of State and Tribal Programs (STP) Procedure SA-700, “Processing an Agreement,” issued on April 2, 2001, has been adopted pursuant to this Criteria Policy Statement and is consistent with the legal authorities of the Commission and the Agreement States.

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DISCUSSION:

By letter dated July 6, 2004, Governor Tim Pawlenty requested that the Commission enter into an Agreement with the State of Minnesota pursuant to § 274b of the Act. The letter requested that NRC authority be discontinued and assumed by the State of Minnesota for: (1) byproduct materials as defined in 11e.(1) of the Act; (2) source materials; and (3) special nuclear materials in quantities not sufficient to form a critical mass. Governor Pawlenty certified that Minnesota has a program for the control of radiation hazards which is adequate to protect public health and safety within the State with respect to the materials covered by the proposed Agreement. The Governor further certified that the State wishes to assume the regulatory responsibility for those materials. In response, Chairman Diaz sent an acknowledgment letter dated July 27, 2004. Copies of Governor Pawlenty's letter, and Chairman Diaz's response are at: ADAMS: ML041960496 and ML042020640, respectively.

The application for the proposed Agreement does not request authority over production or utilization facilities, or independent spent fuel storage installations (ISFSIs) within Minnesota. These activities involve facilities, or special nuclear materials in critical mass quantities, which may not be relinquished to the State and must be retained by the Commission in accordance with the Act, the Agreement, and 10 CFR 150, "Exemptions and Continued Regulatory Authority in Agreement States and in Offshore Waters Under Section 274."

In accordance with STP Procedure SA-700, an NRC review team was established to review the Minnesota Agreement application, to prepare a Draft Staff Assessment and to provide a recommendation on the Agreement. The Minnesota Review Team consisted of staff from STP, the Office of Nuclear Material Safety and Safeguards (NMSS), Region III, the Office of Nuclear Security and Incident Response, and the Office of the General Counsel (OGC). The Team completed a review of the application including a review of Minnesota statutes and regulations provided in the application. In a letter dated October 19, 2004, comments on the application were provided to the State.

Subsequent to completion of the October 19, 2004 comment letter, the Minnesota Review Team became aware through an inquiry from the Minnesota Department of Health (MDH) staff of the 0.054 millirem per year public radiation dose standard applied by the State at the Prairie Island Nuclear Power Plant (Prairie Island) ISFSI through the State's Certificate of Need process. (See October 27, 2004 memorandum from Luis Reyes to the Commission entitled: "Communication Plan Regarding the State of Minnesota's Plan to Set a More Stringent Radiation Dose Standard.") The dose standard is different than NRC's dose standard.

At a later date, in a conference call, MDH staff indicated that an application for the Monticello Nuclear Power Plant (Monticello) ISFSI was under review, and noted possible plans to apply the 0.054 millirem per year radiation dose standard to the proposed facility. During the discussion, NRC staff raised concerns to the State regarding the more stringent ISFSI standard, and noted that NRC staff would need to consider the possible effect of the standard on the Minnesota Agreement application. In response to the concerns, the MDH staff worked closely with the Minnesota Environmental Quality Board and the Minnesota Public Utility Commission (MPUC) to insure that the Minnesota Environmental Impact Statement Scoping Document for the Monticello ISFSI acknowledged and accepted areas of exclusive NRC jurisdiction. [ADAMS: ML0522004240]

The Minnesota Review Team conducted a broad-based review of Minnesota's regulations and statutes to determine the basis for the State's ISFSI radiation dose standard. In the course of this review, the Team identified over 40 statutes and regulations that could potentially intrude into areas reserved to the Commission along with reports documenting their implementation. A summary of these statutes and regulations is available at: ADAMS: ML051610220 and the reports are available upon request.

By letter dated November 18, 2004, Minnesota staff requested an Agreement effective date of September 6, 2005. In an August 1, 2005 conference call, Minnesota staff provided further guidance to NRC staff on the proposed effective date. Minnesota staff indicated that they do not want Minnesota licensees to have to pay two fee bills during the year the Agreement is effective. Minnesota staff indicated that if the Agreement effective date would fall after March 31, 2006, they would delay the effective date until September 1, 2006, to eliminate billing of Minnesota licensees by both NRC and Minnesota.

MINNESOTA REVIEW TEAM DETERMINATION:

Based on its review, the majority of the Minnesota Review Team members and the Director of STP determined that the Minnesota Program meets requirements of the Act and the Commission's criteria, and is therefore adequate to protect the public health and safety and is compatible with the NRC's program for the regulation of agreement materials. This determination is based on the Draft Staff Assessment of the proposed Minnesota Program contained in Attachment 1.

One member of the Team, the Team Leader, is unable to support this determination. The basis for the Team Leader's determination, which provides additional information for five of the Commission's criteria for entering into agreements, and which is different than the staff recommendation below, is presented in Attachment 4.

STAFF ANALYSIS:

Staff acknowledges the concerns raised by the Team Leader in that it was the intent of the Congressional framers of Section 274 that radioactive materials and facilities covered by the Act should either be regulated by NRC, or the States, but not by both. This has been, and staff believes, will continue to be, an underlying fundamental principle of the Agreement State Program. However, based on the Draft Staff Assessment presented in Attachment 1, and current understanding of NRC's position on preemption, the staff concludes that the Minnesota request for an Agreement is consistent with the provisions of the Act and meets Agency criteria for entering into an agreement with the NRC. Thus, the NRC should continue activities to complete processing of the Agreement request. This conclusion is based on staff's view that a finding of compatibility of a State's program with NRC's program is a matter separate from the possible Federal preemption of certain State statutes or actions that are outside the State's program for the regulation of material under the proposed Agreement. This conclusion is also based on a previous Commission decision in denying a petition for rulemaking (67 FR 66076, October 30, 2002). The decision found that if a State adopts statutes or rules, or takes action in an area reserved to the NRC under the Act, the Agency need not take separate individual actions to preclude or vacate such statutes, rules or actions, but rather could rely on licensee's challenge in the Federal courts to have such provisions and actions eliminated. Whether or not Minnesota has statutes or has taken actions that potentially intrude into areas of exclusive NRC

jurisdiction, the staff finds that these actions, statutes, and regulations are outside the Minnesota Program for the regulation of agreement material and the staff concludes that such statutes, rules, and actions will not affect the regulation of material under the proposed Agreement. Staff recognizes that, historically in the 1960's, the Atomic Energy Commission may have taken a different action on preemption issues, such as with the New York Agreement (i.e., for details, see Section D to Appendix A to Attachment 4, "The New York Agreement Precedent").

This conclusion is also based on staff's review and determination that there are no safety, security, or compatibility issues or concerns presented by the Minnesota statutes and regulations. See memorandum from Paul Lohaus to Karen Cyr, Brian Sheron, Margaret Federline, and Michael Weber dated June 24, 2005, [ADAMS: ML0517901380], and responses to Paul Lohaus from Margaret Federline dated July 11, 2005, [ADAMS: ML0518700876], from Michael Weber dated July 12, 2005, [ADAMS: ML051920134], and Brian Sheron dated July 15, 2005, [ADAMS: ML0518802680]. A security concern identified in the Michael Weber July 12, 2005 response has been communicated to Minnesota regarding potential safeguards information. On September 9, 2005, the MN State Liaison Officer responded to the concern.

STAFF RECOMMENDATION:

That the Commission:

1. Continue with Agency actions to complete processing of the Minnesota Agreement application to include: (a) publication of the proposed Agreement in the Federal Register (FR) Notice (Attachment 2) for public review and comment; (b) placing a copy of the Draft Staff Assessment (Attachment 1) in the NRC's Public Electronic Reading Room on the Internet at http://www.nrc.gov/NRC/ADAMS/index.html and into ADAMS; (c) dispatching a letter to the cognizant Congressional Committees by the Office of Congressional Affairs informing them that the Commission is considering entering into an Agreement with Minnesota; and (d) issuing a press release by the Office of Public Affairs.

2. Approve the proposed letter to the Governor from the Chairman, Attachment 3, that would be dispatched in parallel with publication of the proposed Agreement in the FR to discuss: (a) the limits of authority that Minnesota would assume under the Agreement; and (b) areas of regulatory authority reserved to NRC.

3. Provide direction to staff that its decision on the Minnesota Agreement should be incorporated into Agency policies and procedures.

RESOURCES:

A savings of 1.2 FTE was originally anticipated for FY 2006 based on the assumption that Minnesota would become an Agreement State within FY 2005. Due to an extension in the schedule for completion of the Minnesota Agreement, Region III anticipates expending this 1.2 unbudgeted FTE to complete its materials licensing, inspection, and allegation casework in FY 2006. Region III currently has the resources to complete these tasks; however, if the FY 2006 workload significantly exceeds earlier projections for completing the Minnesota Agreement,

Region III and NMSS will develop a prioritization plan to ensure significant products remain on schedule.

COORDINATION:

This paper has been coordinated with OGC and it has no legal objection to the staff recommendation. OGC does not agree with the analysis, views and recommendations presented by the Team Leader. The Office of the Chief Financial Officer has reviewed this paper for resource implications and has no objections.

/RA/

Luis A. Reyes
Executive Director
for Operations

Attachments:
1. Draft Staff Assessment of the Minnesota Program
2. Federal Register Notice
3. Proposed Letter to the Governor
4. Information in Support of Team Leader's View

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DRAFT STAFF ASSESSMENT
OF THE PROPOSED
MINNESOTA PROGRAM FOR THE REGULATION OF AGREEMENT MATERIALS
AS DESCRIBED IN THE
REQUEST FOR AN AGREEMENT

This Draft Staff Assessment examines the proposed Minnesota Program with respect to the ability of the program to regulate the possession, use, and disposal of radioactive materials subject to the Atomic Energy Act of 1954 (Act), as amended.[1] The Draft Staff Assessment was performed using the criteria in the Commission's policy statement "Criteria for Guidance of States and NRC in Discontinuance of NRC Regulatory Authority and Assumption Thereof by States Through Agreement" (referred to below as the "criteria")[2] using an internal procedure developed by the Office of State and Tribal Programs (STP). Each criterion, and the NRC Draft Staff Assessment related thereto, is addressed separately below.

OBJECTIVES

1. **Protection. A State regulatory program shall be designed to protect the health and safety of the people against radiation hazards.**

The proposed Minnesota Program for regulating agreement materials would be located within the existing Radiation Control Unit (RCU) of the Section of Asbestos, Indoor Air, Lead, and Radiation, in the Division of Environmental Health, an organizational unit of the Minnesota Department of Health (MDH). The Department's current radioactive materials program has responsibility for registration, inspection, emergency response, and fee collection for naturally-occurring or accelerator-produced radioactive materials (NARM). The RCU also has responsibility for the regulation of electronic product radiation and non-ionizing radiation at academic, medical, and industrial facilities. The RCU also conducts environmental sampling statewide and near the two Minnesota nuclear power plants. Under the proposed Agreement, the RCU would assume responsibility for licensing and inspecting byproduct, source, and small quantities of special nuclear material.

An Intra-Agency Agreement between the RCU and the Public Health Laboratory within the MDH has been established to provide laboratory analysis of radioactive material samples. In addition, an Interagency Agreement between the MDH and the University of Minnesota, Department of Environmental Health and Safety, ensures that the RCU has radiological waste disposal support.

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[1]According to paragraph (a) of § 274, the radioactive materials subject to the Act are byproduct, source and special nuclear materials.

[2]NRC Statement of Policy published in the Federal Register, January 23, 1981 (46 FR 7540-7546), a correction was published July 16, 1981 (46 FR 36969) and a revision of Criterion 9 published in the Federal Register, July 21, 1983 (48 FR 33376).

The authority to issue, amend, suspend, or revoke licenses, place conditions and to issue orders or assess administrative fines is vested by Statute in the Commissioner of the MDH.

The NRC staff review verified that the Minnesota Program design for distributing regulatory responsibilities to the program staff is similar to designs used successfully in other Agreement States, and that all necessary program elements have been addressed.

Although there are other Minnesota agencies, besides the MDH, that have been historically delegated by the State certain authority to regulate activities involving radioactive materials, those other agencies are not given any authority under the Agreement. The staff has determined that activities by these other agencies will not impact the Agreement.

The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.1.1, Statutory Authority and Section 4.1.2, Program Organization, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and the Section 4.1.1 reference to Internet site: http://www.revisor.leg.state.mn.us/stats. At this Internet site see the following Mn. Stats. 115.069,116C.705 through 116C.83, 216B.1691, 216B.243, 216B.2421 through 216B.2423, and Minnesota Regulations 4410.4300 and 4410.4400. In addition, see Minnesota documents at: http://www.me3.org/issues/nuclear/eqbnukes1.html
http://www.me3.org/issues/nuclear/eqbnukes2.html
http://www.me3.org/issues/nuclear/eqbnukes3.html
http://www.leg.state.mn.us/lrl/issues/prairieisland.asp
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http://www.house.leg.state.mn.us/hrd/pubs/nucwaste.pdf
http://www.puc.state.mn.us/docs/briefing_papers/b05-0022.pdf
http://www.house.leg.state.mn.us/hrd/pubs/nucxcel.pdf.

RADIATION PROTECTION STANDARDS

2. **Standards. The State regulatory program shall adopt a set of standards for protection against radiation which shall apply to byproduct, source and special nuclear materials in quantities not sufficient to form a critical mass.**

Under the proposed Minnesota Program, the authority to promulgate rules for the control of radiation rests with the MDH in accordance with Mn. Stat. 144.12, *Regulations, enforcement, licensees, fees*. The MDH is also provided radiation control authority by Mn. Stats., 144.1202, and 144.1203, Training, rulemaking. Minnesota also has ancillary statutes that relate to MDH activities, dealing with record and data keeping, giving false information, surety requirements, inspection, fees, and other matters.

The NRC staff verified that the MDH adopted the relevant NRC regulations in 10 CFR Parts 19, 20, 30, 31, 32, 33, 34, 35, 36, 39, 40, 70, 71, and 150 into Minnesota Rules Chapter 4731, Radiation Safety, June 24, 2004 and January 1, 2005. Therefore, MDH has adopted an

adequate and compatible set of radiation protection regulations which apply to byproduct, source, and special nuclear materials in quantities not sufficient to form a critical mass.

Minnesota does have additional statutes, identified in the staff's review, which are not part of its program for the regulation of agreement materials but which potentially intrude upon areas reserved to the NRC. Whether or not these Minnesota statutes are preempted by Federal law, they concern areas over which Minnesota is not seeking authority as part of this Agreement, and the staff is satisfied that these statutes will not affect Minnesota's regulation of agreement material. The staff view is that these statutes are outside the scope of the Agreement and therefore, not within the scope of inquiry as to this criterion.

The staff has, however, considered these statutes and program elements in making its determination as to this criterion. For example, a radiation dose standard of 0.054 millirem/year for the Prairie Island Nuclear Power Plant (Prairie Island) independent spent fuel storage installation (ISFSI) appears to have been agreed upon as the result of a negotiation between the State of Minnesota and the licensee and was memorialized in an order by the Minnesota Public Utility Commission (MPUC). In December 2004, NRC initiated discussions with the MDH regarding the radiation dose standard at the Prairie Island ISFSI and a potential similar radiation dose standard at the proposed Monticello Nuclear Power Plant (Monticello) ISFSI. When the MDH became aware of NRC's concerns with respect to the proposed Monticello ISFSI, they interacted with the Minnesota Environmental Quality Board (MEQB). MDH informed the MEQB that radiation dose standards at the proposed Monticello ISFSI would be reserved to the NRC. Based on this information, the MEQB revised the Environmental Impact Statement Scoping Decision to reflect NRC's jurisdiction at the ISFSI. The Monticello Decision provides that Federal regulations preempt State regulation of radiological health and safety standards applicable to nuclear power plants and ISFSIs. This effort by the MDH iterates a proactive approach with respect to assuring that preemption issues are dealt with in an acceptable manner. Therefore, the staff is satisfied that Minnesota will not regulate in areas reserved to the NRC in matters concerning or affecting the proposed Agreement or materials regulated under the Agreement.

Therefore, the staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.1.1 and Section 4.1.2, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and the Section 4.1.1 reference to Internet site: http://www.revisor.leg.state.mn.us/stats . (At this Internet site see the following Mn. Stats.115.069,116C.705 through 116C.83, 216B.1691, 216B.243, 216B.2421 through 216B.2423, and Minnesota Regulations 4410.4300 and 4410.4400) and history of law at: http://www.leg.state.mn.us/lrl/issues/prairieisland.asp.)
In addition, see Minnesota documents at: http://www.me3.org/issues/nuclear/eqbnukes1.html
http://www.me3.org/issues/nuclear/eqbnukes2.html
http://www.me3.org/issues/nuclear/eqbnukes3.html
http://www.leg.state.mn.us/lrl/issues/prairieisland.asp
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http://www.house.leg.state.mn.us/hrd/pubs/nucxcel.pdf

3. **Uniformity of Radiation Standards. It is important to strive for uniformity in technical definitions and terminology, particularly as related to such things as units of measurement and radiation dose. There shall be uniformity on maximum permissible doses and levels of radiation and concentrations of radioactivity, as fixed by 10 CFR Part 20 of the NRC regulations based on officially approved radiation protection guides.**

Minnesota, by statute, must promulgate and enforce rules for the regulation of byproduct, source, and special nuclear material that are in accordance with Section 274 of the Act, as amended. The State has adopted a rule compatible with 10 CFR Part 20. The staff review verified that the Minnesota rules' technical definitions and terminology; units of measurement and dose; and permissible doses, levels of radiation and concentrations of radioactivity are consistent with those in NRC regulations.

Minnesota has applied a 0.054 millirem/year radiation dose standard to the Prairie Island ISFSI facility, which is discussed in the staff's analysis of Criterion 2, above. For the reasons stated there, the NRC staff is satisfied that this radiation dose standard will not affect regulation of material under the proposed Agreement.

In addition, the staff review further noted that Mn. Stat. 116C.71 contains definitions different from the NRC definitions with respect to the terms "Byproduct Material," "Disposal," "High Level Waste," "Radiation," and "Radioactive Waste." However, the statute states that these definitions are applicable only for the purposes of sections 116C.71 to 116C.74 of the Minnesota Statutes, which do not relate to the MDH, the State agency responsible for carrying out the proposed Agreement, or to the regulation of materials under which Minnesota is seeking authority under this Agreement. MDH's regulations, which do apply to agreement material, contain definitions of these terms compatible with those of the Commission. In addition, RCU has in writing assured the staff that it will not apply the definitions in Mn. St. 116C.71 to the regulation of agreement material, and will inform other Minnesota State agencies of the need to conform the statutory definitions to the NRC definitions. Therefore, the staff is satisfied that the Minnesota Program provides for the uniformity of radiation standards and definitions.

Therefore, the staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.1.1 and Section 4.1.2, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and the Section 4.1.1 reference to Internet site: http://www.revisor.leg.state.mn.us/stats . (At this Internet site see the following Mn. Stats.115.069,116C.705 through 116C.83, 216B.1691, 216B.243, 216B.2421 through 216B.2423, and Minnesota Regulations 4410.4300 and 4410.4400) and history of law at: http://www.leg.state.mn.us/lrl/issues/prairieisland.asp.)
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4. **Total Occupational Radiation Exposure. The regulatory authority shall consider the total occupational radiation exposure of individuals, including that from sources which are not regulated by it.**

The NRC staff review verified that Minnesota has adopted rules equivalent to the NRC regulations in 10 CFR Part 20, including Subpart C, the occupational dose limits and Subpart D, the dose limits to individual members of the public. Minnesota licensees are required to consider the radiation doses to individuals from all sources of radiation, except background radiation and radiation from medical procedures. Like NRC licensees, Minnesota licensees are required to consider the radiation dose whether the sources are in the possession of a licensee or not.

The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.2, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and Chapter 4731 Radiation Safety, §§ 4731.2020 through 4731.2095.

5. **Surveys, Monitoring. Appropriate surveys and personnel monitoring under the close supervision of technically competent people are essential in achieving radiological protection and shall be made in determining compliance with safety regulations.**

NRC requires surveys and monitoring pursuant to Subpart F of 10 CFR Part 20. The NRC staff review verified that Minnesota has adopted a rule compatible with Subpart F. Therefore, Minnesota licensees are required to conduct surveys and personnel monitoring to the same standards required of NRC licensees.

The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.2, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and Chapter 4731 Radiation Safety, §§ 4731.2220 and 4731.2230.

6. **Labels, Signs, Symbols. It is desirable to achieve uniformity in labels, signs and symbols, and the posting thereof. However, it is essential that there be uniformity**

in labels, signs, and symbols affixed to radioactive products which are transferred from person to person.

The NRC staff review verified that Minnesota has adopted regulations compatible with NRC regulations in Subpart J of 10 CFR Part 20. Therefore, the radiation labels, signs and symbols, and the posting and labeling requirements in the Minnesota rules are identical to those contained in the NRC regulations.

The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.2, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and Chapter 4731 Radiation Safety, §§ 4731.2300 through 4731.2350.

7. **Instruction. Persons working in or frequenting restricted areas shall be instructed with respect to the health risks associated with exposure to radioactive materials and in precautions to minimize exposure. Workers shall have the right to request regulatory authority inspections as per 10 CFR 19, Section 19.16 and to be represented during inspections as specified in Section 19.14 of 10 CFR 19.**

The NRC staff review verified that Minnesota has adopted regulations compatible with 10 CFR Part 19.

The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.2, and additional related correspondence between the NRC and the State(ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and Chapter 4731 Radiation Safety, §§ 4731.1040 through 4731.1060.

8. **Storage. Licensed radioactive material in storage shall be secured against unauthorized removal.**

The NRC staff review verified that Minnesota has adopted a rule compatible with Subpart I of 10 CFR Part 20.

The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.2, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and Chapter 4731 Radiation Safety, §§ 4731.1040 through 4731.1060.

9. **Radioactive Waste Disposal. (a) Waste disposal by material users. The standards for the disposal of radioactive materials into the air, water and sewer, and burial in the soil shall be in accordance with 10 CFR Part 20. Holders of radioactive material desiring to release or dispose of quantities or concentrations of radioactive materials in excess of prescribed limits shall be required to obtain special permission from the appropriate regulatory authority. Requirements for transfer of waste for the purpose of ultimate disposal at a land disposal facility (waste transfer and manifest system) shall be in accordance with 10 CFR 20. The waste disposal standards shall include a waste classification scheme and provisions for waste form, applicable to waste generators, that is equivalent to that contained in 10 CFR Part 61.**

The NRC staff review confirmed that Minnesota has adopted rules that are compatible with Subpart K of 10 CFR Part 20 - Waste Disposal. This regulation deals with general requirements for waste disposal including waste classification, transfer and waste manifests and are applicable to all licensees.

The staff's analysis of Criterion 3, above, identifies Minnesota statutory definitions, separate from the program for the regulation of agreement material (MDH), which are different from NRC definitions of those terms. For the reasons discussed under Criterion 3, the staff is satisfied that those definitions will not affect the regulation of material under the Agreement.

The staff therefore concludes that Criterion 9(a) is satisfied.

(b) Land Disposal of waste received from other persons. The State shall promulgate regulations containing licensing requirements for land disposal of radioactive waste received from other persons which are compatible with the applicable technical definitions, performance objectives, technical requirements and applicable supporting sections set forth in 10 CFR Part 61. Adequate financial arrangements (under terms established by regulation) shall be required of each waste disposal site licensee to ensure sufficient funds for decontamination, closure and stabilization of a disposal site. In addition, Agreement State financial arrangements for long-term monitoring and maintenance of a specific site must be reviewed and approved by the Commission prior to relieving the site operator of licensed responsibility (Section 151(a)(2), Pub. L. 97-425).

The NRC staff review confirmed that Minnesota is not seeking authority to regulate the land disposal of low-level radioactive waste. Therefore, Criterion 9(b) does not apply to Minnesota.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.2, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and Chapter 4731 Radiation Safety, §§ 4731.2400 through 4731.2450.

10. **Regulations Governing Shipment of Radioactive Materials. The State shall, to the extent of its jurisdiction, promulgate regulations applicable to the shipment of**

radioactive materials, such regulations to be compatible with those established by the U. S. Department of Transportation and other agencies of the United States whose jurisdiction over interstate shipment of such materials necessarily continues. State regulations regarding transportation of radioactive materials must be compatible with 10 CFR Part 71.

The NRC staff verified that Minnesota has adopted regulations compatible with 10 CFR Part 71 - Transportation. Minnesota does have statutes, separate from its program for the regulation of agreement materials, that pertain to the transportation of radioactive material; however, those statutes do not apply to the transportation of agreement material. Minnesota's regulations specifically exempt areas of exclusive NRC jurisdiction.

Therefore, the staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.1 and Section 4.2, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and Chapter 4731 Radiation Safety, 4731.0400 through 4731.0424, the Section 4.1.1 reference to Internet site: http://www.revisor.leg.state.mn.us/stats. (At this Internet site see the following Mn. Stats.115.069,116C.705 through 116C.83, 216B.1691, 216B.243, 216B.2421 through 216B.2423, and Minnesota Regulations 4410.4300 and 4410.4400) and history of law at: http://www.leg.state.mn.us/lrl/issues/prairieisland.asp.)

11. **Records and Reports. The State regulatory program shall require that holders and users of radioactive materials (a) maintain records covering personnel radiation exposures, radiation surveys, and disposals of materials; (b) keep records of the receipt and transfer of the materials; (c) report significant incidents involving the materials, as prescribed by the regulatory authority; (d) make available upon request of a former employee a report of the employee's exposure to radiation; (e) at request of an employee advise the employee of his or her annual radiation exposure; and (f) inform each employee in writing when the employee has received radiation exposure in excess of the prescribed limits.**

The NRC staff review verified that Minnesota has adopted rules compatible with 10 CFR Parts 19, 20, 30, 31, 32, 33, 34, 35, 36, 39, 40, 70, 71, and 150. The records and reports referenced in Criterion 11 are regulatory requirements in these parts. Minnesota has adopted the record and reporting requirements.

The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.2, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and Chapter 4731 Radiation Safety.

12. **Additional Requirements and Exemptions. Consistent with the overall criteria here enumerated and to accommodate special cases and circumstances, the State regulatory authority shall be authorized in individual cases to impose additional requirements to protect health and safety, or to grant necessary exemptions which will not jeopardize health and safety.**

The NRC staff review confirmed that Minnesota State law provides the radiation control agency authority to impose, by order or license condition, additional health and safety requirements beyond the requirements specified in law and the rules. The agency also has the legal authority to grant reasonable and necessary exceptions to the regulatory requirements, either by order or license condition. Minnesota has adopted a rule which is compatible with 10 CFR 30.34, Terms and conditions of licenses.

The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.1 and 4.2, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), Mn. Stats. 144.12 and 144.99 and Chapter 4731 Radiation Safety, Section 4731.3075.

PRIOR EVALUATION OF USES OF RADIOACTIVE MATERIALS

13. **Prior Evaluation of Hazards and Uses, Exceptions. In the present state of knowledge, it is necessary in regulating the possession and use of byproduct, source and special nuclear materials that the State regulatory authority require the submission of information on, and evaluation of, the potential hazards, and the capability of the user or possessor prior to his receipt of materials. This criterion is subject to certain exceptions and to continuing reappraisal as knowledge and experience in the atomic energy field increase. Frequently there are, and increasingly in the future there may be, categories of materials and uses as to which there is sufficient knowledge to permit possession and use without prior evaluation of the hazards and the capability of the processor and user. These categories fall into two groups-- those materials and uses which may be completely exempt from regulatory controls, and those materials and uses in which sanctions for misuse are maintained without pre-evaluation of the individual possession or use. In authorizing research and development or other activities involving multiple uses of radioactive materials, where an institution has people with extensive training and experience, the State regulatory authority may wish to provide a means for authorizing broad use of materials without evaluating specific use.**

Minnesota has adopted regulations containing regulatory requirements for applying for and issuing licenses, which are compatible with NRC's regulations.

The NRC staff review confirmed that the Minnesota rules provide that a license authorizing the distribution of agreement materials that will subsequently be exempt from regulatory control may only be issued by the NRC.

Since Criterion 13 was adopted, the Commission has determined that the regulatory authority to conduct safety evaluations of sealed sources and devices may be retained by the NRC, unless the State requests assumption of the authority and has in place an adequate and compatible program to implement the authority. Minnesota has decided not to seek authority for evaluation of sealed sources and devices.

The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.2, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), Chapter 4731 Radiation Safety.

14. **Evaluation Criteria. In evaluating a proposal to use radioactive materials, the regulatory authority shall determine the adequacy of the applicant's facilities and safety equipment, his training and experience in the use of the materials for the purpose requested, and his proposed administrative controls. States should develop guidance documents for use by license applicants. This guidance should be consistent with NRC licensing regulatory guides for various categories of licensed activities.**

The NRC staff review determined that the Minnesota Program has established series of checklists, regulatory guides and licensing procedure guides and a set of applicable forms. Minnesota has developed a series of State developed regulatory guides for use by license applicants. The NRC staff determined that the licensing procedure guides cover the handling of license applications from the point of submittal through issuance of the completed license. The Minnesota licensing procedures are similar to NRC's procedures.

The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.3, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240).

15. **Human Use. The use of radioactive materials and radiation on or in humans shall not be permitted except by properly qualified persons (normally licensed physicians) possessing prescribed minimum experience in the use of radioisotopes or radiation.**

In April 2004, the NRC amended 10 CFR Part 35 to change its requirements for recognizing specialty boards whose certifications may be used to demonstrate the adequacy of the training and experience (T&E) of individuals to serve as Radiation Safety Officers, authorized medical physicists, authorized nuclear pharmacists, or authorized (physician) users. The final rule also revises the requirements for demonstrating the adequacy of T&E for pathways other than the board certification pathway. Agreement States are required to adopt a compatible rule. In a letter dated May 25, 2005, the Manager of the Asbestos, Indoor Air, Lead and Radiation

Section, responding to NRC staff comments, committed to incorporating the new Part 35 requirements in their program as a license condition and in their appropriate guidance documents.

Based on this commitment, the staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.2, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), Chapter 4731 Radiation Safety, §§ 4731.4400-4731.4527.

INSPECTION

16. **Purpose, Frequency. The possession and use of radioactive materials shall be subject to inspection by the regulatory authority and shall be subject to the performance of tests, as required by the regulatory authority. Inspection and testing is conducted to determine and to assist in obtaining compliance with regulatory requirements. Frequency of inspection shall be related directly to the amount and kind of material and type of operation licensed, and it shall be adequate to insure compliance.**

The NRC staff confirmed that the Minnesota Program has statutory authority to conduct inspections of licensees. Minnesota has adopted regulations compatible with equivalent parts of 10 CFR containing provisions relating to inspections and tests.

Minnesota has adopted a schedule for inspection of licensees at least as frequent as the schedule used by NRC. The Program staff has developed internal procedures and accompanying forms for the inspection areas which cover scheduling, preparation, performance basis, tracking and documentation of inspection results. The Program staff has also established a computerized tracking system. The inspection procedures are similar to NRC procedures.

The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Sections 4.1, Mn. Stat. 144.99, and Section 4.4, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240).

17. **Inspections Compulsory. Licensees shall be under obligation by law to provide access to inspectors.**

The NRC staff review confirmed that Minnesota law provides authority for radiation control Program inspectors to enter public or private property at all reasonable times for the purpose of investigating conditions related to radiation use.

The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.1, Mn. Stat. 144.99, and Section 4.4, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240).

18. **Notification of Results of Inspection. Licensees are entitled to be advised of the results of inspections and to notice as to whether or not they are in compliance**.

The NRC staff review determined that Minnesota has adopted procedures to convey a copy of the formal inspection report to the licensees, both when violations are found, and when no violations are found. The procedures identify the staff responsible and specify the time limit for preparing the inspection report, the process for management review and approval, and provide instructions for distribution of the report to the licensee and to the State's official files.

The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.4, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240).

ENFORCEMENT

19. **Enforcement. Possession and use of radioactive materials should be amenable to enforcement through legal sanctions, and the regulatory authority shall be equipped or assisted by law with the necessary powers for prompt enforcement. This may include, as appropriate, administrative remedies looking toward issuance of orders requiring affirmative action or suspension or revocation of the right to possess and use materials, and the impounding of materials; the obtaining of injunctive relief; and the imposing of civil or criminal penalties.**

The NRC staff review confirmed that the Minnesota Program is authorized by law to enforce the State rules using a variety of sanctions, including the imposition of administrative fines, and the issuance of orders to suspend, modify or revoke licenses, or to impound materials. The Program may assess civil penalties in accordance with State Law and Department regulations.

The Program has adopted policies and procedures to implement the enforcement authority. The Minnesota enforcement procedures are similar to the NRC procedures with regard to the use of severity levels for violations.

The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.1, Mn. Stats. 144.12, 144.99, and Section 4.5, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499,

ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240).

PERSONNEL

20. **Qualifications of Regulatory and Inspection Personnel. The regulatory agency shall be staffed with sufficient trained personnel. Prior evaluation of applications for licenses or authorizations and inspections of licensees must be conducted by persons possessing the training and experience relevant to the type and level of radioactivity in the proposed use to be evaluated and inspected. This requires competency to evaluate various potential radiological hazards associated with the many uses of radioactive material and includes concentrations of radioactive materials in air and water, conditions of shielding, the making of radiation measurements, knowledge of radiation instruments–their selection, use and calibration–laboratory design, contamination control, other general principles and practices of radiation protection, and use of management controls in assuring adherence to safety procedures. In order to evaluate some complex cases, the State regulatory staff may need to be supplemented by consultants of other State agencies with expertise in geology, hydrology, water quality, radiobiology and engineering disciplines.**

To perform the functions involved in evaluation and inspection, it is desirable that there be personnel educated and trained in the physical and/or life science, including biology, chemistry, physics and engineering, and that the personnel have had training and experience in radiation protection. For example, the person who will be responsible for the actual performance of evaluation and inspection of all of the various uses of byproduct, source and special nuclear material which might come to the regulatory body should have substantial training and extensive experience in the field of radiation protection. It is desirable that such a person have a bachelor's degree or equivalent in the physical or life sciences, and specific training - radiation protection.

It is recognized that there will also be persons in the program performing a more limited function in evaluation and inspection. These persons will perform the day-to-day work of the regulatory program and deal with both routine situations as well as some which are out of the ordinary. These people should have a bachelor's degree or equivalent in the physical or life sciences, training in health physics, and approximately two years of actual work experience in the field of radiation protection.

The foregoing are considered desirable qualifications for the staff who will be responsible for the actual performance of evaluation and inspection. In addition, there will probably be trainees associated with the regulatory program who will have an academic background in the physical or life sciences as well as varying amounts of specific training in radiation protection but little or no actual work experience in the field. The background and specific training of these persons will indicate to some extent their potential role in the regulatory program. These

trainees, of course, could be used initially to evaluate and inspect those applications of radioactive materials which are considered routine or more standardized from the radiation safety standpoint, for example, inspection of industrial gauges, small research programs, and diagnostic medical programs. As they gain experience and competence in the field, the trainees could be used progressively to deal with the more complex or difficult types of radioactive material applications. It is desirable that such trainees have a bachelor's degree or equivalent in the physical or life sciences and specific training in radiation protection. In determining the requirement for academic training of individuals in all of the foregoing categories, proper consideration should be given to equivalent competency which has been gained by appropriate technical and radiation protection experience.

It is recognized that radioactive materials and their uses are so varied that the evaluation and inspection functions will require skills and experience in the different disciplines which will not always reside in one person. The regulatory authority should have the composite of such skills either in its employ or at its command, not only for routine functions, but also for emergency cases.

Based on the review of the organizational charts and position descriptions for the Minnesota Program, training and qualification plan, and the curricula vitae for the current staff members, the NRC staff concludes that the RCU has a staffing plan that provides a sufficient number of adequately trained and qualified technical staff.

1. Draft Staff Assessment of the Agreement Materials Staffing

There are approximately 167 NRC specific licenses in Minnesota. The RCU also conducts a registration and inspection program for NARM users which accounts for approximately 45 registrants.

The staff of the RCU will be responsible for implementing the agreement materials program. The Minnesota staffing plan allocates a total of approximately 5.0 full-time equivalent (FTE) staff for the agreement materials program, including the Program Supervisor. Since submission of the Agreement request, one staff member has left the Program. This position was filled with a new hire in December 2004. The RCU supervisor plans to devote 50% of his time to the agreement materials program, including management review of licensing and inspection actions, personnel responsibilities, rules development, accompaniment of inspectors for annual management review, general supervision, and other management duties. Four staff members will devote 100% of their time to the Agreement State Program activities and one other staff member will provide 30%. Minnesota's staff assessment used 80% of the full-time employees' time in their staffing analysis. They assume that the other 20% of the employees' time will be devoted to radiological response, instructional opportunities and training. One full-time administrative assistant provides support to the Program.

Based on the RCU staffing allocation of 5.0 technical and administrative FTE for the Program, and subtracting the Program Supervisor and administrative assistants, the technical/ professional staffing level devoted to the Agreement State Program is 3.5 FTE. The Team's evaluation of the State's staffing analysis concludes that adequate staffing exists without the

new hire's FTE. The RCU supervisor is using this additional FTE to provide flexibility and backup to the radioactive materials program.

Minnesota estimates they will have responsibility for 210 licenses (167 from NRC and 45 existing NARM registrants). The RCU Staff Resource Analysis projects that approximately 172 licensing staff days will be needed and 259 licensing staff days are available; 368 inspection staff days are needed and 531 are available each year. This projection is based on data from the NRC Region III Office. This level of inspection effort will keep the inspection program current.

Based on the workload analysis, NRC staff concludes the initial 3.5 FTE qualified technical\professional staff provides an adequate level of staffing to handle anticipated licensing, inspection, reciprocity, allegations and incident response workload satisfactorily.

The staff concludes that the proposed Minnesota agreement materials program has an adequate number of staff to meet the anticipated Program needs.

2. Draft Staff Assessment of Staff Qualifications

The NRC staff review considered the qualifications of the individuals currently on the RCU's professional/technical staff that would be involved in the agreement materials program, and the procedures for training and qualifying new staff members. Under the proposed Agreement, the RCU Supervisor would direct the agreement materials program and would be primarily responsible for the Program's administration and will provide the immediate day-to-day supervision of the agreement materials program. He holds a Bachelor's degree in Physics and Philosophy. He has over 20 years of experience in health physics and supervision. He has 10 years of experience in an agreement material program from another State and 10 years of radiological experience in the U.S. Navy.

Based on the NRC staff review, three of the five non-supervisory staff members have at least a Bachelor's degree in physical life sciences or engineering. One staff member has a Master's degree in public health and a Bachelor's degree in engineering; one staff member has a Bachelor's degree in applied studies concentration in radiological science and an Associate degree in radiologic technology; one staff member has a Master's degree in materials science engineering, a Bachelor's degree in chemistry, and a Bachelor's degree in chemical engineering; and the two other staffers are former radiologic technologists with significant experience and training in radiation protection.

The RCU technical staff members have extensive radiation science experience. This includes work in health physics and nuclear power in private industry, the military and in State regulatory agencies. Technical staff members have completed the NRC-recommended core courses or have received waivers from the RCU manager, based on their training and prior experience. The new hire has taken the inspection and licensing courses and is scheduled to attend the remaining core training courses in the next year.

Two technical staff have had on-the-job training working with NRC license reviewers in the NRC Region III Office and all of the fully qualified technical staff members have accompanied NRC staff on inspections of NRC licensees in Minnesota. Several of the technical staff have also spent time in neighboring Agreement States receiving licensing and inspection training.

The NRC staff believes that the RCU technical staff identified by the State to participate in the agreement materials program are trained and qualified in accordance with the RCU plans, have sufficient knowledge and experience in radiation protection, the use of radioactive materials, the standards for the evaluation of applications for licensing, and the techniques of inspecting licensed users of agreement materials.

The staff concludes that the proposed Minnesota Program has a sufficient number of adequately trained staff to meet the anticipated program needs. The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Sections 4.6, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240).

21. **Conditions Applicable to Special Nuclear Material, Source Material and Tritium. Nothing in the State's regulatory program shall interfere with the duties imposed on the holder of the materials by the NRC, for example, the duty to report to the NRC, on NRC prescribed forms, (1) transfers of special nuclear material, source material and tritium, and (2) periodic inventory data.**

The NRC staff review did not note any aspects of the Minnesota Program that could potentially interfere with duties imposed on a holder of materials by the NRC. In addition, Minnesota's regulations specifically exempt areas of exclusive NRC or other Federal jurisdiction from State regulation. The staff is therefore satisfied that the Minnesota Program will not interfere with duties imposed on the holder of materials by the NRC.

Therefore, the staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.1.1, Statutory Authority and Section 4.1.2, Program Organization, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and the Section 4.1.1 reference to Internet site: http://www.revisor.leg.state.mn.us/stats. (At this Internet site see the following Mn. Stats. 115.069,116C.705 through 116C.83, 216B.1691, 216B.243, 216B.2421 through 216B.2423, and Minnesota Regulations 4410.4300 and 4410.4400) and history of law at: http://www.leg.state.mn.us/lrl/issues/prairieisland.asp and http://www.house.leg.state.mn.us/hrd/pubs/nucxcel.pdf.

22. **Special Nuclear Material Defined. Special nuclear material, in quantities not sufficient to form a critical mass, for present purposes means uranium enriched in the isotope U-235 in quantities not exceeding 350 grams of contained U-235; uranium 233 in quantities not exceeding 200 grams; plutonium in quantities not exceeding 200 grams; or any combination of them in accordance with the following formula: For each kind of special nuclear material, determine the ratio between the quantity of that special nuclear material and the quantity specified above for the same kind of special nuclear material. The sum of such ratios for all**

kinds of special nuclear material in combination should not exceed "1" (i.e., unity). For example, the following quantities in combination would not exceed the limitation and are within the formula, as follows:

175 (grams contained U-235)/350 + 50 (grams U-233)/200 + 50 (grams PU)/200 = 1

The NRC staff determined that Minnesota's definition of special nuclear material in critical mass quantities in 4731.0315,*Critical Mass,* is compatible with that of the Commission's.

The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.1.1, Statutory Authority and Section 4.1.2, Program Organization, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and the Section 4.1.1 reference to Internet site: http://www.revisor.leg.state.mn.us/stats. (At this Internet site see the following Mn. Stats. 115.069,116C.705 through 116C.83, 216B.1691, 216B.243, 216B.2421 through 216B.2423, and Minnesota Regulations 4410.4300 and 4410.4400) and history of law at: http://www.leg.state.mn.us/lrl/issues/prairieisland.asp and http://www.house.leg.state.mn.us/hrd/pubs/nucxcel.pdf.

ADMINISTRATION

23. **Fair and Impartial Administration. State practices for assuring the fair and impartial administration of regulatory law, including provision for public participation where appropriate, should be incorporated in procedures for:**

a. Formulation of rules of general applicability;
b. Approving or denying applications for licenses or authorization to process and use radioactive materials; and
c. Taking disciplinary actions against licensees.

The NRC staff review confirmed that the MDH is bound by general statutory provisions with respect to providing the opportunity for public participation in rulemaking, licensing actions, and disciplinary actions. These general statutory provisions also apply to the protection of personnel radiation exposure records from public disclosure, maintaining the confidentiality of allegers, and administrative and judicial requirements for requesting and holding hearings on enforcement matters.

The staff concludes that this criterion is satisfied

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.1, Mn. Stat. 144.99, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240),

and the Section 4.1.1 reference to Internet site: http://www.revisor.leg.state.mn.us/stats. (At this Internet site see the following: Mn. Stat. 14.05 through 14.28.)

24. **State Agency Designation. The State should indicate which agency or agencies will have authority for carrying on the program and should provide the NRC with a summary of that legal authority. There should be assurances against duplicate regulation and licensing by State and local authorities, and it may be desirable that there be a single or central regulatory authority.**

The NRC staff determined that the MDH is designated by Mn. Stat. 144.1202 to be the lead agency for the carrying out the terms of the proposed Agreement, which will assure against duplicate regulations or licensing by State and local authorities. In addition, to the extent that this criterion deals with duplicate regulation between a State and the NRC (see STP Procedure SA-700 Handbook, Evaluation Criteria 4.1.1.2., paragraph b, and 4.2.2.2), the staff determined that the Minnesota Program, which specifically excludes from State regulation any areas in which the jurisdiction of the NRC or another Federal agency is exclusive, gives sufficient assurance against duplicate regulation between Minnesota and the NRC in the regulation of agreement material.

Therefore, the staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.1.1, Statutory Authority and Section 4.1.2, Program Organization, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and the Section 4.1.1 reference to Internet site: http://www.revisor.leg.state.mn.us/stats. (At this Internet site see the following Mn. Stats. 115.069,116C.705 through 116C.83, 216B.1691, 216B.243, 216B.2421 through 216B.2423, and Minnesota Regulations 4410.4300 and 4410.4400) and history of law at: http://www.leg.state.mn.us/lrl/issues/prairieisland.asp and http://www.house.leg.state.mn.us/hrd/pubs/nucxcel.pdf.

25. **Existing NRC Licenses and Pending Applications. In effecting the discontinuance of jurisdiction, appropriate arrangements will be made by NRC and the State to ensure that there will be no interference with or interruption of licensed activities or the processing of license applications by reason of the transfer. For example, one approach might be that the State, in assuming jurisdiction, could recognize and continue in effect, for an appropriate period of time under State Law, existing NRC licenses, including licenses for which timely applications for renewal have been filed, except where good cause warrants the earlier reexamination or termination of the license.**

The NRC staff review confirmed that Mn. Stat. 144.1202 contains a provision that deems the holder of an NRC license on the effective date of the proposed Agreement to possess a like license under the Minnesota Radiation Safety Code. The license will expire on the expiration date on the NRC license.

The staff concludes that this criterion is satisfied

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.1. Mn. Stat. 144.1202, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240).

26. **Relations with Federal Government and Other States. There should be an interchange of Federal and State information and assistance in connection with the issuance of regulations and licenses or authorizations, inspection of licensees, reporting of incidents and violations, and training and education problems.**

The NRC staff review verified that the proposed Agreement commits Minnesota to cooperate with the NRC and the other Agreement States in the formulation of standards and regulatory programs for the protection against hazards of radiation and to assure that the Minnesota Program will continue to be compatible with the NRC's program for the regulation of agreement materials.

In a revised Policy Statement on Adequacy and Compatibility of Agreement State Programs (published September 3, 1997 at 62 FR 46517), the Commission determined that providing reports to NRC of Agreement State licensee incidents, accidents and other significant events is a matter of compatibility. Minnesota has adopted procedures to provide such reports to NRC.

Therefore, the staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.1, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and the Section 4.1. reference to Internet site: http://www.revisor.leg.state.mn.us/stats. (At this Internet site see the following Mn. Stats.115.069,116C.705 through 116C.83, 216B.1691, 216B.243, 216B.2421 through 216B.2423, and Minnesota Regulations 4410.4300 and 4410.4400), and history of law at: http://www.leg.state.mn.us/lrl/issues/prairieisland.asp and http://www.house.leg.state.mn.us/hrd/pubs/nucxcel.pdf. The Minnesota response to NRC's comments on the final application dated December 14, 2004 (ADAMS: ML050130375).

27. **Coverage, Amendments, Reciprocity. An amendment providing for discontinuance of NRC regulatory authority and the assumption of regulatory authority by the State may relate to any one or more of the following categories of materials within the State, as contemplated by Public Law 86-373 and Public Law 95-604:**

    a. Byproduct material as defined in Section 11e(1) of the Act,
    b. Byproduct material as defined in Section 11e(2) of the Act,
    c. Source material,
    d. Special nuclear material in quantities not sufficient to form a critical mass,
    e. Low-level wastes in permanent disposal facilities, as defined by statute or Commission rules or regulations containing one or more of the materials

stated in a, c, and d above but not including byproduct material as defined in Section 11e(2) of the Act;

but must relate to the whole of such category or categories and not to a part of any category. If less than the five categories are included in any discontinuance of jurisdiction, discontinuance of NRC regulatory authority and the assumption of regulatory authority by the State of the others may be accomplished subsequently by an amendment or by a later Agreement.

Arrangements should be made for the reciprocal recognition of State licenses and NRC licenses in connection with out-of-jurisdiction operations by a State or NRC licensee.

The NRC staff review verified that the proposed Agreement provides for the Commission to discontinue, and the State of Minnesota to assume, regulatory authority over the types of material defined in categories a, c, and d above.

Since this criterion was adopted, the Commission has determined that the Agreement States may assume the authority to evaluate the safety of sealed sources and devices to be distributed in interstate commerce as a separate portion of the Agreement, or to allow NRC to retain that authority. Minnesota has chosen not to assume that authority.

References: Proposed Agreement between the State of Minnesota and the Nuclear Regulatory Commission, Articles I, II, and III in the request for an Agreement by Governor Pawlenty.

The proposed Agreement stipulates the desirability or reciprocal recognition of NRC and other Agreement State licenses, and commits the Commission and the State to cooperate to accord such reciprocity. Minnesota's regulation provides for the reciprocal recognition of licenses from other jurisdictions.

References: Proposed Agreement between the State of Minnesota and the Nuclear Regulatory Commission, Article VII; Mn. Reg. 4731.0355.

Therefore, the staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.1, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and the Section 4.1. reference to Internet site: http://www.revisor.leg.state.mn.us/stats. (At this Internet site see the following Mn. Stats.115.069,116C.705 through 116C.83, 216B.1691, 216B.243, 216B.2421 through 216B.2423, and Minnesota Regulations 4410.4300 and 4410.4400), and history of law at: http://www.leg.state.mn.us/lrl/issues/prairieisland.asp and http://www.house.leg.state.mn.us/hrd/pubs/nucxcel.pdf.

28. **NRC and Department of Energy Contractors. The State should provide exemptions for NRC and DOE contractors which are substantially equivalent to the following exemptions**:

a. Prime contractors performing work for the DOE at U.S. Government-owned or controlled site;

b. Prime contractors performing research in, or development, manufacture, storage, testing, or transportation of, atomic weapons or components thereof;

c. Prime contractors using or operating nuclear reactors or other nuclear devices in a U.S. Government-owned vehicle or vessel; and

d. Any other prime contractor or subcontractor of DOE or NRC when the State and the NRC jointly determine (i) that, under the terms of the contract or subcontract, there is adequate assurance that the work thereunder can be accomplished without undue risk to the public health and safety; and (ii) that the exemption of such contractor or subcontractor is authorized by law.

The NRC staff review verified that Minnesota has adopted 10 CFR Parts 30, 40 and 70 compatible rules including §§ 30.12, 40.11 and 70.11 wherein the specified exemptions are contained. Based on this, the NRC staff concludes that the Minnesota regulations do provide for exemptions from the State's requirements for licensing of sources of radiation for NRC and DOE contractors or subcontractors in accordance with the criterion.

The staff concludes that this criterion is satisfied.

References: Letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, request for an Agreement, Section 4.2, and additional related correspondence between the NRC and the State (ADAMS: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240), and Chapter 4731 Radiation Safety.

STAFF CONCLUSION

The NRC staff has reviewed the proposed Agreement, the certification by Minnesota in the application for an Agreement in letter dated July 6, 2004, from Governor Pawlenty to Chairman Diaz, and the supporting information provided by the staff of the RCU of the MDH.

Subsection 274d of the Act provides that the Commission shall enter into an Agreement under Subsection 274b with any State if:

(a) The Governor of the State certifies that the State has a program for the control of radiation hazards adequate to protect public health and safety with respect to the agreement materials within the State, and that the State desires to assume regulatory responsibility for the agreement materials; and

(b) The Commission finds that the State program is in accordance with the requirements of Subsection 274o, and in all other respects compatible with the NRC's program for the

regulation of materials, and that the State program is adequate to protect public health and safety with respect to the materials covered by the proposed Agreement.

The staff concludes that:

On the basis of the Draft Staff Assessment, the State of Minnesota meets the requirements of the Act. The Minnesota Program, as defined by its statutes, regulations, personnel, licensing, inspection, and administrative procedures, is compatible with the program of the NRC and adequate to protect public health and safety with respect to the materials covered by the proposed Agreement. Although the State has statutes, not a part of the Minnesota Program, which potentially intrude on matters reserved to the NRC, these statutes do not deal with the regulation of agreement materials, and the staff is satisfied that these statutes will not affect or interfere with the regulation of materials under the proposed Agreement.

As a policy matter, if the NRC enters into an Agreement with the State of Minnesota, it will not in any way be precluded in the future from taking up with the State its regulation in matters potentially reserved to the NRC, because the NRC is ceding no authority to Minnesota in the areas covered by the Minnesota statutes in question. There is no indication that Minnesota statutes have actually interfered with the regulation of reactors or other matters in which the NRC has exclusive jurisdiction, and the staff is satisfied that there is no actual or potential health, safety, or security significance with respect to the Minnesota statutes in question, nor have affected licensees raised any preemption issues with respect to the Minnesota statutes.

In addition, the policy consequences of refusing to enter into an Agreement with Minnesota on the basis of these statutes are considerable. First of all, to do so would contradict the Commission's stated policy on compatibility, as found in the Commission's 1997 Policy Statement, which in the definition of compatibility restricts the scope of compatibility to the regulation of agreement materials. Second, to consider statutes which are not part of a State's submitted program for the regulation of material under the Agreement would go beyond the scope of the Agreement itself and force the staff, before entering into an Agreement, to perform a wide-ranging search of State statutes and regulations that have little or nothing to do with regulation of materials under the proposed Agreement. In addition, this experience will likely prove extremely frustrating to Minnesota and could potentially discourage other States to enter into Section 274b agreements with the NRC, being that State executive governments will often have little direct control over statutes enacted by the State Legislatures that are separate from the States' proposed program for the regulation of agreement materials.

NRC will continue the formal processing of the proposed Agreement which includes publication of a Federal Register Notice of the proposed Agreement once a week for four consecutive weeks for public review and comment.

NUCLEAR REGULATORY COMMISSION [7590-01-P]

State of Minnesota: NRC Draft Staff Assessment of a Proposed Agreement Between the Nuclear Regulatory Commission and the State of Minnesota

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice of a Proposed Agreement with the State of Minnesota.

SUMMARY: By letter dated July 6, 2004, Governor Tim Pawlenty of Minnesota requested that the U. S. Nuclear Regulatory Commission (NRC) enter into an Agreement with the State as authorized by Section 274 of the Atomic Energy Act of 1954, as amended (Act).

Under the proposed Agreement, the Commission would discontinue, and Minnesota would assume, portions of the Commission's regulatory authority exercised within the State. As required by the Act, NRC is publishing the proposed Agreement for public comment. NRC is also publishing the summary of a Draft Staff Assessment of the Minnesota Program. Comments are requested on the proposed Agreement and the NRC Draft Staff Assessment which finds the Program adequate to protect public health and safety and compatible with NRC’s program for regulation of agreement material.

The proposed Agreement would release (exempt) persons who possess or use certain radioactive materials in Minnesota from portions of the Commission's regulatory authority. The

ATTACHMENT 2

Act requires that NRC publish those exemptions. Notice is hereby given that the pertinent exemptions have been previously published in the Federal Register and are codified in the Commission's regulations as 10 CFR Part 150.

DATES: The comment period expires (insert date 30 days after date of publication). Comments received after this date will be considered if it is practical to do so, but the Commission cannot assure consideration of comments received after the expiration date.

ADDRESSES: Written comments may be submitted to Mr. Michael T. Lesar, Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, Washington, DC 20555-0001. Comments may be submitted electronically at nrcrep@nrc.gov.

The NRC maintains an Agencywide Documents Access and Management System (ADAMS), which provides text and image files of NRC's public documents. The documents may be accessed through the NRC's Public Electronic Reading Room on the Internet at http://www.nrc.gov/reading-rm/adams.html. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC Public Document Room (PDR) reference staff at (800) 397-4209, or (301) 415-4737, or by e-mail to pdr@nrc.gov.

Copies of comments received by NRC may be examined at the NRC Public Document Room, 11555 Rockville Pike, Public File Area O-1-F21, Rockville, Maryland. Copies of the request for an Agreement by the Governor of Minnesota including all information and documentation submitted in support of the request, and copies of the full text of the NRC Draft Staff Assessment are also available for public inspection in the NRC's Public Document Room -

ADAMS Accession Numbers: ML041960496, ML041960499, ML052440344, ML050130375, ML050140452, ML051330043, ML051740384, ML051650073, ML0522004240, and MLXXX.

FOR FURTHER INFORMATION CONTACT: Cardelia Maupin, Office of State and Tribal Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Telephone (301) 415-3340 or e-mail CHM1@nrc.gov.

SUPPLEMENTARY INFORMATION: Since Section 274 of the Act was added in 1959, the Commission has entered into Agreements with 33 States. The Agreement States currently regulate approximately 17,200 agreement material licenses, while NRC regulates approximately 4,700 licenses. Under the proposed Agreement, approximately 167 NRC licenses will transfer to Minnesota. NRC periodically reviews the performance of the Agreement States to assure compliance with the provisions of Section 274.

Section 274e requires that the terms of the proposed Agreement be published in the Federal Register for public comment once each week for four consecutive weeks. This Notice is being published in fulfillment of the requirement.

I. Background

(a) Section 274d of the Act provides the mechanism for a State to assume regulatory

authority, from the NRC, over certain radioactive materials[1] and activities that involve use of the materials.

In a letter dated July 6, 2004, Governor Pawlenty certified that the State of Minnesota has a program for the control of radiation hazards that is adequate to protect public health and safety within Minnesota for the materials and activities specified in the proposed Agreement, and that the State desires to assume regulatory responsibility for these materials and activities. Included with the letter was the text of the proposed Agreement, which is shown in Appendix A to this Notice.

The radioactive materials and activities (which together are usually referred to as the "categories of materials") which the State of Minnesota requests authority over are: (1) the possession and use of byproduct materials as defined in Section 11e.(1) of the Act; (2) the possession and use of source materials; and (3) the possession and use of special nuclear materials in quantities not sufficient to form a critical mass, as provided for in regulations or orders of the Commission.

(b) The proposed Agreement contains articles that:

--Specify the materials and activities over which NRC's authority is discontinued and transferred;

--Specify the activities over which the Commission will retain regulatory authority;

[1]The radioactive materials are: (a) byproduct materials as defined in Section 11e.(1) of the Act; (b) byproduct materials as defined in Section 11e.(2) of the Act; (c) source materials as defined in Section 11z. of the Act; and (d) special nuclear materials as defined in Section 11aa. of the Act, restricted to quantities not sufficient to form a critical mass.

--Continue the authority of the Commission to safeguard nuclear materials and restricted data;

--Commit the State of Minnesota and NRC to exchange information as necessary to maintain coordinated and compatible programs;

--Provide for the reciprocal recognition of licenses;

--Provide for the amendment, suspension or termination of the Agreement; and

--Specify the effective date of the proposed Agreement.

The Commission reserves the option to modify the terms of the proposed Agreement in response to comments, to correct errors, and to make editorial changes. The final text of the Agreement, with the effective date, will be published after the Agreement is approved by the Commission, and signed by the Chairman of the Commission and the Governor of Minnesota.

(c) Minnesota currently registers users of naturally-occurring and accelerator-produced radioactive materials. Authority for Minnesota's radiation control unit and proposed Agreement State activities is primarily found in Minnesota Statutes, Sections 144.12-144.121, and in the Minnesota Rules Chapter 4731. Section 144.1202 provides the authority for the Governor to enter into an Agreement with the Commission and contains provisions for the orderly transfer of regulatory authority over affected licensees from NRC to the State. After the effective date of the Agreement, licenses issued by NRC would continue in effect as Minnesota licenses until the licenses expire or are replaced by State-issued licenses.

(d) The NRC Draft Staff Assessment finds that the Minnesota Program is adequate to protect public health and safety, and is compatible with the NRC program for the regulation of agreement materials.

II. Summary of the NRC Draft Staff Assessment of the Minnesota Program for the Control of Agreement Materials

NRC staff has examined the Minnesota request for an Agreement with respect to the ability of the Minnesota radiation control program to regulate agreement materials. The examination was based on the Commission's policy statement “Criteria for Guidance of States and NRC in Discontinuance of NRC Regulatory Authority and Assumption Thereof by States Through Agreement” (referred to herein as the “NRC criteria”), published on January 23, 1981 (46 FR 7540), as amended by policy statements published on July 16, 1981 (46 FR 36969), and on July 21, 1983 (48 FR 33376).

(a) Organization and Personnel. The agreement materials program will be located within the existing Environmental Health Division (Program) of the Minnesota Department of Health (MDH). The Program will be responsible for implementation of all regulatory activities related to the proposed Agreement.

The educational requirements for the Program staff members are specified in the Minnesota State personnel position descriptions, and meet the NRC criteria with respect to formal education or combined education and experience requirements. All current staff members hold at least bachelor's degrees in physical or life sciences, or have a combination of education and experience at least equivalent to a bachelor's degree.

Several staff members hold advanced degrees, and all staff members have had additional training plus working experience in radiation protection. The Program supervisor has more than 20 years work experience in radiation protection.

The Program performed, and NRC staff reviewed, an analysis of the expected Program workload under the proposed Agreement. Based on the NRC staff review of the State's staff analysis, Minnesota has an adequate number of staff to regulate radioactive materials under the terms of the Agreement. The Program will employ a staff of 3.5 full-time professional/technical and administrative employees for the agreement materials program. The distribution of the qualifications of the individual staff members will be balanced to the distribution of categories of licensees transferred from NRC.

(b) Legislation and Regulations. The MDH is designated by law in Section 144.1202 of the Minnesota Statutes to be the radiation control agency. The law provides the MDH the authority to issue licenses, issue orders, conduct inspections, and to enforce compliance with regulations, license conditions, and orders. Licensees are required to provide access to inspectors. The MDH is authorized to promulgate regulations.

The State's regulations are found in Minnesota Rules Chapter 4731 effective June 2004. The NRC staff reviewed and forwarded comments on these regulations to the Minnesota staff. The NRC staff review verified that, with the comments incorporated, the Minnesota rules, and with the addition of legally binding requirements to incorporate recent changes to 10 CFR Part 35 and 71 contain all of the provisions that are necessary in order to be compatible with the regulations of the NRC on the effective date of the Agreement between the State and the Commission. The MDH has extended

the effect of the rules, where appropriate, to apply to naturally-occurring or accelerator-produced radioactive materials (NARM), in addition to agreement materials. The NRC staff is satisfied that the Minnesota Program, will not regulate in areas reserved to the NRC in matters concerning or affecting the proposed Agreement.

(c) Storage and Disposal. Minnesota has also adopted NRC compatible requirements for the handling and storage of radioactive material. Minnesota will not seek authority to regulate the land disposal of radioactive material as waste. The Minnesota waste disposal requirements cover the preparation, classification and manifesting of radioactive waste, generated by Minnesota licensees, for transfer for disposal to an authorized waste disposal site or broker.

(d) Transportation of Radioactive Material. Minnesota has adopted regulations compatible with NRC regulations in 10 CFR Part 71. Part 71 contains the requirements that licensees must follow when preparing packages containing radioactive material for transport. Part 71 also contains requirements related to the licensing of packaging for use in transporting radioactive materials.

(e) Recordkeeping and Incident Reporting. Minnesota has adopted the sections compatible with the NRC regulations which specify requirements for licensees to keep records, and to report incidents, accidents, or events involving materials.

(f) Evaluation of License Applications. Minnesota has adopted regulations compatible with the NRC regulations that specify the requirements which a person must meet in order to get a license to possess or use radioactive materials. Minnesota has also developed a

licensing procedures manual, along with the accompanying regulatory guides, which are adapted from similar NRC documents and contain guidance for the Program staff when evaluating license applications.

(g) Inspections and Enforcement. The Minnesota radiation control program has adopted a schedule providing for the inspection of licensees as frequently as the inspection schedule used by NRC. The Program has adopted procedures for the conduct of inspections, the reporting of inspection findings, and the reporting of inspection results to the licensees. The Program has also adopted, by rule based on the Minnesota Statutes, procedures for the enforcement of regulatory requirements.

(h) Regulatory Administration. The MDH is bound by requirements specified in State law for rulemaking, issuing licenses, and taking enforcement actions. The Program has also adopted administrative procedures to assure fair and impartial treatment of license applicants. Minnesota law prescribes standards of ethical conduct for State employees.

(I) Cooperation with Other Agencies. Minnesota law deems the holder of an NRC license on the effective date of the proposed Agreement to possess a like license issued by Minnesota. The law provides that these former NRC licenses will expire on the date of expiration specified in the NRC license.

Minnesota also provides for “timely renewal.” This provision affords the continuance of licenses for which an application for renewal has been filed more than 30 days prior to the date of expiration of the license. NRC licenses transferred while in timely renewal are included under the continuation provision. Minnesota Rules Chapter 4731 provides

exemptions from the State's requirements for licensing of sources of radiation for NRC and U.S. Department of Energy contractors or subcontractors. The proposed Agreement commits Minnesota to use its best efforts to cooperate with the NRC and the other Agreement States in the formulation of standards and regulatory programs for the protection against hazards of radiation and to assure that the Minnesota Program will continue to be compatible with the NRC's program for the regulation of agreement materials. The proposed Agreement stipulates the desirability of reciprocal recognition of licenses, and commits the Commission and Minnesota to use their best efforts to accord such reciprocity.

III. Staff Conclusion

Subsection 274d of the Act provides that the Commission shall enter into an agreement under Subsection 274b with any State if:

(a) The Governor of the State certifies that the State has a program for the control of radiation hazards adequate to protect public health and safety with respect to the agreement materials within the State, and that the State desires to assume regulatory responsibility for the agreement materials; and

(b) The Commission finds that the State program is in accordance with the requirements of Subsection 274o, and in all other respects compatible with the NRC's program for the regulation of materials, and that the State program is adequate to protect public health and safety with respect to the materials covered by the proposed Agreement.

On the basis of its Draft Staff Assessment, the NRC staff concludes that the State of Minnesota meets the requirements of the Act. The State's program, as defined by its statutes, regulations, personnel, licensing, inspection, and administrative procedures, is compatible with the program of the NRC and adequate to protect public health and safety with respect to the materials covered by the proposed Agreement.

NRC will continue the formal processing of the proposed Agreement which includes publication of this Notice once a week for four consecutive weeks for public review and comment.

IV. Small Business Regulatory Enforcement Fairness Act

In accordance with the Small Business Regulatory Enforcement Fairness Act of 1996, the NRC has determined that this action is not a major rule and has verified this determination with the Office of Information and Regulatory Affairs of the Office of Management and Budget (OMB).

Dated at Rockville, Maryland, this ___ day of _____, 2005.

For the Nuclear Regulatory Commission

Annette L. Vietti-Cook,
Secretary of the Commission

APPENDIX A

AN AGREEMENT
BETWEEN
THE UNITED STATES NUCLEAR REGULATORY COMMISSION
AND
THE STATE OF MINNESOTA
FOR THE
DISCONTINUANCE OF CERTAIN COMMISSION REGULATORY AUTHORITY
AND
RESPONSIBILITY WITHIN THE STATE PURSUANT TO
SECTION 274 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED

WHEREAS, The United States Nuclear Regulatory Commission (hereinafter referred to as the Commission) is authorized under Section 274 of the Atomic Energy Act of 1954, as amended (hereinafter referred to as the Act), to enter into agreements with the Governor of any State providing for discontinuance of the regulatory authority of the Commission within the State under Chapters 6, 7, and 8, and Section 161 of the Act with respect to byproduct materials as defined in Sections 11e.(1) and (2) of the Act, source materials, and special nuclear materials in quantities not sufficient to form a critical mass; and,

WHEREAS, The Governor of the State of Minnesota is authorized under §144.1202, Subdivision 1, Minnesota Statutes, to enter into this Agreement with the Commission; and,

WHEREAS, The Governor of the State of Minnesota certified on July 6, 2004, that the State of Minnesota (hereinafter referred to as the State) has a program for the control of radiation hazards adequate to protect public health and safety with respect to the materials within the State covered by this Agreement, and that the State desires to assume regulatory responsibility for such materials; and,

WHEREAS, The Commission found on [date] that the program of the State for the regulation of the materials covered by this Agreement is compatible with the Commission's program for the regulation of such materials and is adequate to protect public health and safety; and,

WHEREAS, The State and the Commission recognize the desirability and importance of cooperation between the Commission and the State in the formulation of standards for protection against hazards of radiation and in assuring that State and Commission programs for protection against hazards of radiation will be coordinated and compatible; and,

WHEREAS, The Commission and the State recognize the desirability of the reciprocal recognition of licenses, and of the granting of limited exemptions from licensing of those materials subject to this Agreement; and,

WHEREAS, This Agreement is entered into pursuant to the provisions of the Atomic Energy Act of 1954, as amended;

NOW, THEREFORE, It is hereby agreed between the Commission and the Governor of the State acting in behalf of the State as follows:

ARTICLE I

Subject to the exceptions provided in Articles II, IV, and V, the Commission shall discontinue, as of the effective date of this Agreement, the regulatory authority of the Commission in the State under Chapters 6, 7, and 8, and Section 161 of the Act with respect to the following materials:

A. Byproduct materials as defined in Section 11e.(1) of the Act;

B. Source materials;

C. Special nuclear materials in quantities not sufficient to form a critical mass.

ARTICLE II

This Agreement does not provide for discontinuance of any authority and the Commission shall retain authority and responsibility with respect to:

A. The regulation of the construction and operation of any production or utilization facility or any uranium enrichment facility;

B. The regulation of the export from or import into the United States of byproduct, source, or special nuclear materials, or of any production or utilization facility;

C. The regulation of the disposal into the ocean or sea of byproduct, source, or special nuclear materials waste as defined in the regulations or orders of the Commission;

D. The regulation of the disposal of such other byproduct, source, or special nuclear materials as the Commission from time to time determines by regulation or order should, because of the hazards or potential hazards thereof, not be so disposed without a license from the Commission;

E. The evaluation of radiation safety information on sealed sources or devices containing byproduct, source, or special nuclear materials and the registration of the sealed sources or devices for distribution, as provided for in regulations or orders of the Commission.

F. The regulation of the land disposal of by-product, source, or special nuclear materials waste received from other persons;

G. The extraction or concentration of source material from source material ore and the management and disposal of the resulting byproduct material.

ARTICLE III

With the exception of those activities identified in Article II, paragraphs A through D, this Agreement may be amended, upon application by the State and approval by the Commission, to include one or more of the additional activities specified in Article II, paragraphs E, F, and G, whereby the State may then exert regulatory authority and responsibility with respect to those activities.

ARTICLE IV

Notwithstanding this Agreement, the Commission may from time to time by rule, regulation, or order, require that the manufacturer, processor, or producer of any equipment, device, commodity, or other product containing source, byproduct, or special nuclear materials shall not transfer possession or control of such product except pursuant to a license or an exemption from licensing issued by the Commission.

ARTICLE V

This Agreement shall not affect the authority of the Commission under Subsection 161b or 161i of the Act to issue rules, regulations, or orders to protect the common defense and security, to protect restricted data, or to guard against the loss or diversion of special nuclear materials.

ARTICLE VI

The Commission will cooperate with the State and other Agreement States in the formulation of standards and regulatory programs of the State and the Commission for protection against hazards of radiation and to assure that Commission and State programs for protection against hazards of radiation will be coordinated and compatible. The State agrees to cooperate with the Commission and other Agreement States in the formulation of standards and regulatory programs of the State and the Commission for protection against hazards of radiation and to assure that the State's program will continue to be compatible with the program of the Commission for the regulation of materials covered by this Agreement.

The State and the Commission agree to keep each other informed of proposed changes in their respective rules and regulations, and to provide each other the opportunity for early and substantive contribution to the proposed changes.

The State and the Commission agree to keep each other informed of events, accidents, and licensee performance that may have generic implication or otherwise be of regulatory interest.

ARTICLE VII

The Commission and the State agree that it is desirable to provide reciprocal recognition of licenses for the materials listed in Article I licensed by the other party or by any other Agreement State. Accordingly, the Commission and the State agree to develop appropriate rules, regulations, and procedures by which such reciprocity will be accorded.

ARTICLE VIII

The Commission, upon its own initiative after reasonable notice and opportunity for hearing to the State, or upon request of the Governor of the State, may terminate or suspend all or part of this Agreement and reassert the licensing and regulatory authority vested in it under the Act if the Commission finds that (1) such termination or suspension is required to protect public health and safety, or (2) the State has not complied with one or more of the requirements of Section 274 of the Act. The Commission may also, pursuant to Section 274j of the Act, temporarily suspend all or part of this Agreement if, in the judgment of the Commission, an emergency situation exists requiring immediate action to protect public health and safety and the State has failed to take necessary steps. The Commission shall periodically review actions taken by the State under this Agreement to ensure compliance with Section 274 of the Act which requires a State program to be adequate to protect public health and safety with respect to the materials covered by this Agreement and to be compatible with the Commission's program.

ARTICLE IX

This Agreement shall become effective on [date], and shall remain in effect unless and until such time as it is terminated pursuant to Article VIII.

Done at [City, State] this [date] day of [month], [year].

FOR THE UNITED STATES NUCLEAR REGULATORY COMMISSION

_____, Chairman
Nils J. Diaz

FOR THE STATE OF MINNESOTA

_____, Governor
Tim Pawlenty

NRC STAFF RECOMMENDED LETTER

The Honorable Tim Pawlenty
Governor of Minnesota
St. Paul, Minnesota 55155

Dear Governor Pawlenty:

I am pleased to inform you that the U.S. Nuclear Regulatory Commission (NRC) has completed its review of your application for an Agreement submitted on July 6, 2004. Under the proposed Agreement, NRC would discontinue and the State of Minnesota would assume authority over: (1) byproduct materials as defined in Section 11e.(1) of the Atomic Energy Act of 1954, as amended (Act); (2) source materials; and (3) special nuclear materials in quantities not sufficient to form a critical mass.

NRC staff is publishing notice of the proposed Agreement for 30 days public review and comment. A copy of the Federal Register notice is enclosed which provides the Commission's determination that the proposed Minnesota Program is both adequate to protect the public health and safety and compatible with the NRC's regulatory program. Publication of the proposed Agreement and the Commission's findings for public review and comment is required by Section 274 of the Act.

Your request for an Agreement, and the materials over which Minnesota will assume regulatory jurisdiction under the proposed Agreement, are clear and consistent with provisions of the Act. However, NRC staff, during its review of the Minnesota application, became aware of a past action taken by Minnesota State agencies to establish a public radiation dose standard to the Prairie Island Nuclear Power Plant independent spent fuel storage installation. During review of a website provided in the Minnesota application: http://www.leg.state.mn.us/leg/statutes.asp), NRC staff also identified statutes and regulations such as the Radioactive Waste Management Act codified at Mn. Stat. §§ 116C.705 to 116C.76, which, while not applicable to the regulation of materials under the Agreement, could be interpreted as attempting to assert authority in areas reserved to the NRC. Under Section 274 of the Act, the NRC retains authority and responsibility with respect to regulation of the construction and operation of any production or utilization facility from a radiological health and safety standpoint, including the high level waste generated from such facilities.

I want to assure you that NRC shares the interest and commitment of the State of Minnesota to ensure protection of public health and safety, and the Commission looks forward to continuing to work with Minnesota in completing the proposed Agreement. My staff contact is: Mr. Paul H. Lohaus, Director, Office of State and Tribal Programs. He can be reached at (301) 415-3340.

Sincerely,

Nils J. Diaz

ATTACHMENT 3

INFORMATION IN SUPPORT OF TEAM LEADER'S VIEW

The Team Leader determined that historically, the Minnesota Program's actions, statutes and regulations have not been in concert with the provisions of the Atomic Energy Act of 1954, as amended (Act), the NRC's regulatory program, and the 33 other Agreement State Programs. At present, there are existing Minnesota statutes and regulations in areas reserved to the NRC. The Commission by Staff Requirements Memorandum (SRM) dated June 30, 1997, SECY 97-054, Final Recommendations on Statement of Principles and Policy for the Agreement State Program (Statement of Principles and Policy) and Policy Statement on Adequacy and Compatibility of Agreement State Programs (Policy Statement on Adequacy and Compatibility), indicated that States that adopt program elements in areas reserved to the Commission are not compatible with NRC's regulatory program. These program elements are designated "Compatibility Category NRC." The June 30, 1997 SRM also indicated that "Many program elements for compatibility also impact public health and safety; therefore, they may also be considered program elements for adequacy."

In light of the Commission's direction, the Team Leader is of the view that a compatibility determination relative to the Minnesota Program should be made by the Commission as opposed to the staff based upon the significant national policy implications associated with the existing Minnesota statutes and regulations in areas reserved to the NRC. The Team Leader's view is based on the handling of similar Agreement State policy decisions, for example: (1) SECY-04-0130, "Response to State of Texas Request for Comments on a Proposed Rule Establishing Requirements for the Release of Material for Unrestricted Use and for Disposal of Low Activity Material in a Hazardous Waste Disposal Facility, dated July 22, 2004; (2) SECY-04-0128, "Amendment to Section 274b Agreement with the State of Utah and Approval of Alternative Groundwater Standards," dated July 19, 2004; (3) SECY-03-0025, "Utah Alternative Groundwater Protection Standards; Process for Implementation of the Alternative Standards Provision in Section 274o of the Act," dated February 18, 2003; (4) SECY-02-0127, "Proposed Response to State of Ohio on Its Assured Isolation Storage Facility Draft Rules," dated July 11, 2002; (5) SECY-00-0066, "Proposed Response to State of Utah on Re-Examination of the Utah Land Ownership Exemption for the Envirocare Site," dated March 15, 2000; (6) SECY-99-002, "Agreement State Compatibility Designation for NRC Employee Protection Regulations," dated January 5, 1999; (7) SECY-99-049, "Compatibility of Agreement State Programs that Prohibit the Disposal of Mixed Waste," dated February 12, 1999; (8) SECY-98-209, "Proposed Agreement with the State of Ohio and Compatibility Requirements of 10 CFR Part 20, Subpart E," dated September 8, 1998; (9) SECY-97-087, "Oklahoma Agreement State Negotiations: State Requests that Major Facilities Undergoing Site Decommissioning not be Relinquished to the State," dated April 22, 1997; (10) SECY-93-080, "Re-evaluation of the Compatibility Divisions Assigned to the Performance Objectives in 10 CFR 61.41 through 61.44 and Evaluation of the Illinois 1 millirem," dated March 2, 1993; and (11) SECY-91-047, "Draft Proposal from Pennsylvania for a Limited Agreement under Section 274b to regulate Low-Level Waste Disposal;" dated February 21, 1991.

The Team Leader determined that the State has demonstrated a desire to cooperate with the Commission to eliminate areas of potential concern, including those in Compatibility Category NRC, if they are brought to their attention [ADAMS: ML051740384 and ML0522004240]. The Team Leader further determined that absent communications between the Commission and Minnesota, as indicated in the August 5, 2005 letter, the State may unknowingly promulgate and enforce statutes and regulations that create duplications in areas reserved to the Commission. The Minnesota staff has requested that potential compatibility concerns be provided to them in writing from the NRC so they can be addressed. In an August 15, 2005 teleconference, the State staff also indicated that their commitments in a May 25, 2005 letter [ADAMS: ML051740384] to resolve incompatible definitions, cannot be properly addressed without a letter from the NRC. The staff has determined that the State should not be required to address the compatibility concerns, and specifically omits opening a discussion with the State on the concerns in their proposed letter to the Minnesota Governor in Attachment 3. Whereas, the Team Leader determined that, in accordance with the provisions of the Act and statements from the State staff, communication and coordination with the State would ensure resolution of the potential compatibility concerns.

The Team Leader also determined that there is additional information (Appendices A and B) that the Commission should consider as a part of its decisions regarding the compatibility of the proposed Minnesota Agreement Program: (1) whether to defer action on the Minnesota Agreement application; and (2) whether to send a letter to the Governor to open dialogue with the State on the potential Compatibility Category NRC concerns. This additional information is based on the policy statement "Criteria for Guidance of States and NRC in Discontinuance of NRC Regulatory Authority and Assumption Thereof by States Through Agreement."

I. **Criterion 2: Standards**. The State regulatory program shall adopt a set of standards for protection against radiation which shall apply to byproduct, source and special nuclear materials in quantities not sufficient to form a critical mass.

A. According to the above criterion, the Minnesota Program should not adopt radiation standards addressing activities involving critical mass quantities of special nuclear material. The regulation of reactor operations and independent spent fuel storage installations (ISFSIs) involves critical mass quantities and is reserved to the NRC. Thus, Minnesota's actions, statutes, and regulations in these areas conflict with the following past guidance relative to the Agreement State Program.

1. Historically, the application of the term "programs," as used in §274 has been applied to mean all of the State's actions, statutes, and regulations relative to the control of materials subject to the Act. The amendment in §274a.(3) provides for an orderly regulatory pattern between the "Commission and State governments," as opposed to a single State agency. Prior to September 2000, compatibility of Agreement State Programs were determined using the January 25, 1984, State Agreements Program Division I, Internal Procedures, B.7 *Criteria for Compatibility Determinations*, which provided:

   "Sections 274d(2) and 274g. are the only sections of the Act that address the concept of compatibility of 'programs.' It is evident that Congress intended that the Commission address more than just regulations in its review, and since the earliest days of the State

Agreements Program, the Commission used the term 'compatibility' in relation to not only regulations, but also to such program areas as licensing and compliance."

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The procedure also indicated:

"Division 4 rules. There are certain regulatory functions which are reserved to the NRC pursuant to the Atomic Energy Act and 10 CFR Part 150. Rules pertaining to these areas are designated Division 4 rules. Such rules include those concerning reactor regulation, distribution of consumer products, exports and imports, and high level waste disposal. State regulations should not address these areas."

2. Memorandum dated December 28, 1990 to Martin G. Malsch, Deputy General Counsel for Licensing and Regulation, from Jane R. Mapes, Senior Attorney, *Agreement State Compatibility Issues Identified in Topic 5 of Staff Requirements Memorandum of October 5, 1990 (Ref: M900816A*), indicated:

"As memorialized in section 274a., the purpose of the amendment was to recognize the interests of the States in the peaceful uses of atomic energy, clarify the respective responsibilities of the States and the Commission with respect to the regulation of byproduct, source, and special nuclear materials, promote an orderly regulatory pattern between the Commission and the State governments respecting radiation hazards and nuclear development and use, and establish procedures for the discontinuance of certain of the Commission's regulatory responsibilities and the assumption thereof by the States. By enacting section 274, Congress made quite clear that the regulation and control of radiation hazards from source, byproduct, and special nuclear materials are preempted by the Federal government and that such preemption would end '. . .in any State only upon the effective date of an agreement between the State and the Commission under subsection b. and only to the extent provided in the agreement.' Unlike an earlier proposal which would have permitted Federal and State governments to exercise dual regulatory authority over these materials, it was not the intent of section 274 '. . .to leave any room for the exercise of concurrent jurisdiction by the States to control radiation hazards from these materials.'"

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> "g. The Commission is authorized and directed to cooperate with the States in the formulation of standards for protection against hazards of radiation to assure that State and Commission programs for protection against hazards of radiation will be coordinated and compatible."

"These provisions make clear that compatibility determinations are not confined to State statutes and regulations but apply more broadly to radiation protection 'programs.'"

3. Additional guidance was provided by memorandum dated November 1, 1990 to William C. Parler, General Counsel from Stuart A. Treby, Assistant General Counsel for Rulemaking and Fuel Cycle, *Remedies of Incompatibility* provides:

"In the Atomic Energy Act of 1954, Congress provided no explicit statutory language which would have given states the regulatory jurisdiction over source, byproduct, and special nuclear material. The nuclear field was preempted by the federal government and the states could not regulate radiation protection.[2] However, in 1959, Congress established a statutory framework under which states could assume certain regulatory jurisdiction over source, byproduct and special nuclear material less than a critical mass. According to the new section 274 to the Act of 1954, as amended, the states could assume licensing and related regulatory responsibility over certain nuclear materials only upon entering into an agreement with the Commission whereby the Commission would discontinue its regulatory authority under chapters 6, 7, 8 and section 161of the Act with respect to byproduct, source and limited quantities of special nuclear material. Thus, the states derive their authority to regulate nuclear materials only through the agreement with the Commission and can exercise that authority only to the extent provided in the agreement."

B. Minnesota actions, statutes, and regulations also conflict with the following presently implemented Commission decisions, polices, principles, and/or procedures:

1. The Commission by SRM dated June 30, 1997, SECY 97-054 - Final Recommendations on Statement of Principles and Policy for the Agreement State Program (Statement of Principles and Policy) and Policy Statement on Adequacy and Compatibility of Agreement State Programs (Policy Statement on Adequacy and Compatibility), clarified that States that adopt program elements reserved to the Commission are not compatible with NRC's regulatory program. The SRM provided,

"The 'NRC' compatibility category identifies regulations that are reserved to the NRC but allows states to adopt them for clarity, but the policy omits certain NRC regulations that Agreement States may not adopt because the areas in which they apply are reserved to the NRC. The Policy and procedure should be revised to identify specifically the regulations in the 'NRC' category that the States may adopt for clarity and a separate category ('NRC-X' or some similar designation) created for those regulations, such as 10 CFR Part 70.21 and much of 10 CFR Part 50 that are reserved for the NRC and that States may not adopt and still be found to have compatible regulatory programs. The flow chart in Appendix A to Handbook 5.9 should also be revised to reflect this distinction."

2. The "Policy Statement on Adequacy and Compatibility," and the associated

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[2]Case law establishes that Congress has pre-empted the field of nuclear safety. In Pacific Gas & Electric Co. V. State Energy Resources Conservation and Development Commission, 461 U.S. 190 (1983), the Court concluded that "State safety regulation is not pre-empted only when it conflicts with federal law. Rather, the Federal Government has occupied the entire field of nuclear safety concerns,…, When the Federal Government completely occupies a given field or an identifiable portion of it, … the test of pre-emption is whether 'the matter on which the State asserts the right to act is in any way regulated by the Federal Act.' Rice v. Santa Fe Elevator Corp., decided June 4, 1990, Slip Opinion No. 89-152, scrutinized the pre-emption theory of the field of nuclear safety concerns, and reaffirmed the holding in Pacific that the field of nuclear safety is pre-empted.

implementing procedures were revised to reflect Commission direction that States which exercise regulatory authority in areas reserved to the Commission are not compatible with NRC's regulatory program, as follows,

"Areas of Exclusive NRC Regulatory Authority. These are program elements that address areas of regulation that cannot be relinquished to Agreement States pursuant to the Act or provisions of Title 10 of the Code of Federal Regulations. However, an Agreement State may inform its licensees of certain of these NRC provisions through a mechanism that is appropriate under the State's administrative procedure laws as long as the State adopts these provisions solely for the purposes of notification, and does not exercise any regulatory authority pursuant to them." (Emphasis added.)

3. The Statements of Principles provide,

"Coherent Nationwide Effort. The mission of the NRC is to assure that civilian use of nuclear materials in the United States is carried out with adequate protection of public health and safety. NRC acknowledges its responsibility, shared with the Agreement States, to ensure that the regulatory programs of the NRC and the Agreement States collectively establish a coherent nationwide effort for the control of AEA materials.

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NRC and the Agreement States have the responsibility to ensure adequate protection of public health and safety in the administration of their respective regulatory programs controlling the uses of AEA materials.

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Under Section 274 of the Act of 1954, as amended, the Commission retains authority for ensuring that Agreement State Programs continue to provide adequate protection of public health and safety. In fulfilling this statutory responsibility, NRC will provide oversight of Agreement State radiation control programs to ensure that they are adequate and compatible prior to entrance into a Section 274b Agreement and that they continue to be adequate and compatible after an Agreement is effective. (Emphasis added.)

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Levels of Agreement State Program Review Findings . . . If the NRC determines that a State has a program that disrupts the orderly pattern of regulation among the collective regulatory efforts of the NRC and other Agreement States, i.e., creates conflicts, gaps, or duplication in regulation, the program would be found not compatible."

4. The SA-700, Processing an Agreement, Evaluation Criteria 4.1.1.2.b., provides, "State law must not create duplications, gaps or conflicts between the State and NRC, State agencies, or State and local agencies. The law must not seek to regulate materials or activities reserved to NRC." In addition, the SA-700 Evaluation Criteria

4.2.2.2., provides, “If the State adopts the NRC rule by reference, the State rule should disclaim any intent to regulate materials or activities over which NRC has jurisdiction.”

For example, the Wisconsin Agreement Assessment at ADAMS: ML031530264; the Oklahoma Agreement Assessment at ADAMS: ML003736485; and the Ohio Agreement Assessment at ADAMS: ML992290058, all included a verification by staff that the States would not regulate in areas reserved to the Commission, e.g., activities involving critical mass quantities of special nuclear material. In the Wisconsin Agreement Assessment, although the State did not adopt any NRC regulations by reference, the staff assessment indicated that Wisconsin did not attempt to regulate in matters reserved to the Commission and that the State had adopted a statute which specifically limited its authority to areas it could assume under the Section 274 Agreement.

Whereas, in the case of Minnesota, there is no such statute. In fact, the Minnesota Statute 144.12 Regulation, enforcement, licenses, fees, provides, that the State “. . . may control, by rule, by requiring the taking out of licenses or permits, or by other appropriate means . . . . Sources of radiation, and the handling, storage, transportation, use and disposal of radioactive isotopes and fissionable materials . . . .” In accordance with the provisions of 144.12, the State can regulate fissionable materials in critical mass quantities and used this provision to establish the 0.054 millirem ISFSI radiation dose standard for the Prairie Island Nuclear Power Plant (Prairie Island) ISFSI, which is not compatible with the NRC’s standard of 25 millirem per year.

II. **Criterion 3: Uniformity of Radiation Standards.** It is important to strive for uniformity in technical definitions and terminology, particularly as related to such things as units of measurement and radiation dose. There shall be uniformity on maximum permissible doses and levels of radiation and concentrations of radioactivity, as fixed by 10 CFR Part 20 of the NRC regulations based on officially approved radiation protection guides.

Some of Minnesota’s technical definitions and radiation dose standards are not compatible with NRC’s regulatory program. The State’s definitions in Minnesota Statute 116C.71 are not compatible with those of the NRC’s. These terms include byproduct material, disposal, high level waste, radiation and radioactive wastes. The comparison of the Minnesota's and the Commission’s definitions are as follows:

A. Byproduct Material:

The Minnesota definition provides,

> “By-product nuclear material" means any material, except special nuclear material, yielded in or made radioactive by: (a) Exposure to the radiation incident to the process of producing or utilizing special nuclear material; or (b) Exposure to radiation produced or accelerated in an atomic or subatomic particle accelerating machine.”

The Commission definition provides,

> “Byproduct material means– (1) Any radioactive material (except special nuclear

material) yielded in, or made radioactive by, exposure to the radiation incident to the process of producing or utilizing special nuclear material; and (2) The tailings or wastes produced by the extraction or concentration of uranium or thorium from ore processed primarily for its source material content, including discrete surface wastes resulting from uranium solution extraction processes. Underground ore bodies depleted by these solution extraction operations do not constitute byproduct material within this definition."

B. Disposal:

The Minnesota definition provides,

> "Disposal means the permanent or temporary placement of high level radioactive waste at a site within the state other than a point of generation."

The Commission definition provides,

> "Disposal means the isolation of radioactive wastes from the biosphere inhabited by man and containing his food chains by emplacement in a land disposal facility."

C. High Level Waste:

The Minnesota definition provides,

> "High level radioactive waste means: (1) irradiated reactor fuel; (2) liquid wastes resulting from reprocessing irradiated reactor fuel; (3) solids into which the liquid wastes have been converted; (4) transuranic wastes, meaning any radioactive waste containing alpha emitting transuranic elements that is not acceptable for near-surface disposal as defined in the Code of Federal Regulations, title 10, section 61.55; (5) any other highly radioactive materials that the Nuclear Regulatory Commission or Department of Energy determines by law to require permanent isolation; or (6) any by-product material as defined in section 11e.(2) of the Atomic Energy Act of 1954, United States Code, title 42, section 2014, as amended."

The Commission's definition provides,

> "High level radioactive waste means (1) the highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and (2) other highly radioactive material that the Commission, consistent with existing law, determines by rule requires permanent isolation.

D. Radiation:

The Minnesota definition provides,

> "Radiation means any or all of the following: alpha rays, beta rays, gamma rays, high energy neutrons or protons or electrons, and other atomic particles; but not X-rays

and electromagnetic radiations of wavelengths greater than 2,000 Angstrom units and sound waves."

The Commission's definition provides,

> "Radiation (ionizing radiation) means alpha particles, beta particles, gamma rays, x-rays, neutrons, high-speed electrons, high-speed protons, and other particles capable of producing ions. Radiation, as used in this part, does not include non-ionizing radiation, such as radio- or microwaves, or visible, infrared, or ultraviolet light."

E. Radioactive Waste:

The Minnesota definition provides,

> "Radioactive waste means: (a) Useless or unwanted capturable radioactive residues produced incidental to the use of radioactive material; or (b) Useless or unwanted radioactive material; or (c) Otherwise nonradioactive material made radioactive by contamination with radioactive material. Radioactive waste does not include discharges of radioactive effluents to air or surface water when subject to applicable federal or state regulations or excreta from persons undergoing medical diagnosis or therapy with radioactive material or naturally occurring radioactive isotopes."

The Commission's definition provides,

> "Waste means those low-level radioactive wastes containing source, special nuclear, or byproduct material that are acceptable for disposal in a land disposal facility. For the purposes of this definition, low-level waste has the same meaning as in the Low-Level Radioactive Waste Policy Act, that is, radioactive waste not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or byproduct material as defined in section 11e.(2) of the Atomic Energy Act (uranium or thorium tailings and waste)."

In a letter dated May 25, 2005, the Manager of the Asbestos, Indoor Air, Lead and Radiation Section, responding to NRC staff comments on the definitions, indicated that these definitions do not apply to the Minnesota Department of Health (MDH), that they are used for waste shipments through the State. MDH committed to informing the various State agencies of the inconsistencies with NRC definitions, which are designated a Category A or Category B and should be essentially identical to those of the Commission [letters dated May 25, 2005 and August 5, 2005; ADAMS: ML051740384 and ML0522004240]. However, during an August 15, 2005 conference call, Minnesota representatives indicated that a letter was needed from the NRC to ensure that these incompatible definitions are resolved.

III. **Criterion 10. Regulations Governing Shipment of Radioactive Materials.** The State shall, to the extent of its jurisdiction, promulgate regulations applicable to the shipment of radioactive materials, such regulations to be compatible with those established by the U. S. Department of Transportation and other agencies of the

United States whose jurisdiction over interstate shipment of such materials necessarily continues. State regulations regarding transportation of radioactive materials must be compatible with 10 CFR Part 71.

Minnesota promulgated and enforced the following statutes: Mn. Stat. 116C.705 *Findings*, provides that the Minnesota Legislature will regulate the disposal and transportation of HLW. Mn. Stat. 116C.73 *Transportation of radioactive wastes into state* provides that the Minnesota Legislature must authorize the transport of radioactive wastes into Minnesota for disposal or permanent storage within Minnesota. It also provides the Legislature authority to limit the storage of waste transported into the State to 12 months or less. Mn. Stat. 116C.776 *Alternative cask technology for spent fuel storage* provides that the Minnesota Public Utility Commission (MPUC) determines the casks to be used for the storage and transportation of the spent nuclear fuel at Prairie Island.[3] These Minnesota requirements are not compatible with NRC regulations in 10 CFR Part 71 and Part 72, and U.S. Department of Transportation regulations in 49 CFR . However, the State has demonstrated a willingness to eliminate these conflicting provisions, if they are brought to their attention through written correspondence from the NRC.

IV. **Criterion 21. Conditions Applicable to Special Nuclear Material, Source Material and Tritium.** Nothing in the State's regulatory program shall interfere with the duties imposed on the holder of the materials by the NRC, for example, the duty to report to the NRC, on NRC prescribed forms, (1) transfers of special nuclear material, source material and tritium, and (2) periodic inventory data.

In evaluating this criteria, SA-700 Handbook, Evaluation Criteria 4.1.1.2., paragraph b, provides, "State law must not create duplications, gaps or conflicts between the State and NRC, State agencies, or State and local agencies. The law must not seek to regulate materials or activities reserved to NRC." See the Wisconsin Agreement Assessment at ADAMS: ML031530264; Oklahoma Agreement Assessment at ADAMS: ML003736485; and the Ohio Agreement Assessment at ADAMS: ML992290058. For example, Wisconsin adopted a statute which specifically limited its authority to areas it could assume under the Section 274 Agreement and adopted portions of 10 CFR Part 150 by reference to the Act to inform persons of the exemptions and reservations of NRC authority under their Agreement.

In the past, Minnesota promulgated and enforced requirements that have caused duplication in areas reserved to the Commission. However, the State has demonstrated a willingness to eliminate these conflicting provisions, if they are brought to their attention through written correspondence from the Commission.

V. **Criterion 24. State Agency Designation.** The State should indicate which agency or agencies will have authority for carrying on the program and should provide the NRC with a summary of that legal authority. There should be assurances against duplicate regulation and licensing by State and local authorities, and it may be desirable that there be a single or central regulatory authority**.**

[3] IBID.

The SA-700 Handbook, Evaluation Criteria 4.1.1.2., paragraph b, provides, "State law must not create duplications, gaps or conflicts between the State and NRC, State agencies, or State and local agencies. The law must not seek to regulate materials or activities reserved to NRC." This Evaluation Criteria cites criteria 21 and 24 as references. See the Wisconsin Agreement Assessment at ADAMS: ML031530264; Oklahoma Agreement Assessment at ADAMS: ML003736485; and the Ohio Agreement Assessment at ADAMS: ML992290058.

The §274,*"Cooperation with States,"* provides for the establishment of an orderly pattern of regulation of AEA materials, while eliminating dual regulation. To achieve this orderly pattern, Congress indicated that there should be no concurrent Commission and State regulation of AEA materials. It is clear that the concept of dual and conflicting regulations was to be considered in determining whether a State's program was adequate to protect public health and safety. Numerous passages from the legislative history indicated a concern by Congress that ambiguous lines of authority between the State and the Federal government in radiation safety matters would diminish effective regulation to the detriment of public health and safety. In fact, the Commission's General Counsel, Mr. Robert Lowenstein, provided the following during the May 1959 hearings on Section 274,

> "We think it (concurrent jurisdiction) leads to divided responsibility and may lead to bad safety controls because you have too many cooks in the broth, so to speak, without any one level of government having a primary responsibility for it to assure that uses of materials are appropriately regulated." (1959 Hearings at page 315)

To further enforce this orderly pattern, the Act and Article VI of the Agreement provides cooperation as the means of assuring that the Commission and State programs are coordinated and compatible. As noted in SECY-97-145, "The Evaluation of Current State Agreements," dated July 11, 1997 (ADAMS: ML0201605470), Agreement documents were revised after the 1965 New York Agreement to provide "cooperation" between the State and the Commission as the means of resolving preemption concerns and facilitating compatible radiation standards. Thus, cooperation has always been an integral component of the Agreement State Program.

The State of Minnesota is supportive of the concept of cooperation as a means to achieve an orderly pattern of regulation of nuclear materials. Minnesota Statute 116D.03 and Minnesota regulation 4410.3900, Subpart 1. *Cooperative processes* both indicate that all Minnesota agencies are to coordinate with the Federal government to eliminate dual regulation. The effectiveness of coordination was demonstrated by Minnesota's handling of the proposed Monticello Nuclear Power Plant (Monticello) ISFSI.

In December 2004, NRC discussed with Minnesota staff the State's plans to impose a public radiation dose standard of 0.054 millirem/yr for the proposed ISFSI, which is more stringent than NRC's 25 millirem per year. After becoming aware of NRC staff's concerns, Minnesota took prompt actions to ensure that its review of the proposed ISFSI would not encroach upon areas reserved to the Commission. The State's willingness to cooperate with the Commission was also expressed in a letter dated August 5, 2005 from MDH [ADAMS: ML0522004240].

RECOMMENDATION

The Team Leader recommends that the Commission defer action on the proposed Minnesota Agreement until the compatibility and potential adequacy concerns are addressed by the State. The Team Leader recommends that the Commission approve the proposed letter to the Governor in Appendix C to open a dialogue with the State on these issues; and that the Commission provide staff direction on the handling of concerns in areas reserved to the Commission (Compatibility Category NRC), that would be incorporated into NRC policies and procedures.

The Team Leader recommends this approach because:

1. The Minnesota Program conflicts with the terms and purpose of the Act in Chapter 6 and §§ 2; 161; 274a.(1), 274a.(3); and 274b regarding the establishment of an orderly pattern of regulation of AEA materials and facilities based on common defense and security, radiological health and safety, and the elimination of dual regulation. It also conflicts with the provisions on discontinuance and assumption of authority in §274 c, Article II of the Agreement, and 10 CFR Part 150.

2. The Minnesota statutes and regulations in areas reserved to the Commission are not compatible with NRC's regulatory program (e.g., regulations, policies, and procedures) based upon the Commission's guidance. The SRM dated June 30, 1997, "Policy Statement on Adequacy and Compatibility," which provided that States that adopt requirements in areas reserved to the Commission are not compatible with NRC's regulatory program.

3. A letter dated August 5, 2005 from Minnesota staff indicates that the State was unaware that some of their actions were in areas reserved to the Commission and expressed a willingness to resolve concerns if they are brought to their attention [ADAMS: ML0522004240]. The State's view is also reflected in Minnesota Rule 4410.3900 which directs all Minnesota governmental units to cooperate with federal agencies to the fullest extent possible to reduce duplication in regulation.

4. It is consistent with the precedent set by the Commission in the handling of the New York Agreement. Through cooperation and coordination with the State, a moratorium was placed on the State regulations addressing areas reserved to the Commission before the signing of a conditioned Agreement in 1962. The Commission continued negotiations with the State resulting in a second Agreement in 1965 to completely resolve the concerns. The Agreement documents and the criteria for entering an Agreement were revised to reflect the actions relative to the New York Agreement. (ADAMS: ML051670319 and ML051660201).

5. The Commission regulations indicate that States cannot regulate certain materials and facilities. These regulations are: 10 CFR 8.4, "Interpretation by the General Counsel: AEC Jurisdiction Over Nuclear Facilities, and Materials Under the Act," 10 CFR 50, "Domestic Licensing of Production and Utilization Facilities," 10 CFR Part 71, "Packaging and transportation of radioactive material," 10 CFR Part 72, "Licensing requirements for the independent storage of spent nuclear fuel, high level waste, and

reactor-related greater than Class C waste," and 10 CFR 150, "Exemptions and Continued Regulatory Authority in Agreement States and in Offshore Waters Under Section 274." In addition, 10 CFR 150.15 specifically indicates that States cannot regulate reactor operations and ISFSIs, and the accompanying *Statement of Considerations* to the rule indicates that these exemptions to State regulation were issued to carry out Agreements between the Commission and the Governor of any State under §274 of the Act of 1954, as amended.

Appendices:

A. Legislative History in Support of the Team Leader's View
B. Overview of the Minnesota Program in Support of the Team Leader's View
C. Team Leader's Letter to the Governor

APPENDIX A
TO
ATTACHMENT 4

LEGISLATIVE HISTORY IN SUPPORT OF THE TEAM LEADER'S RECOMMENDED APPROACH

A. General Background

The Atomic Energy Act of 1954 (Act), as amended, provided the Commission with broad and far reaching authority for the regulation of nuclear materials. The authority is so pervasive that the Commission was given exclusive jurisdiction to license the transfer, delivery, receipt, acquisition, possession and use of these materials. It even allows the Commission to establish the training and qualifications of persons using this material. ADAMS: ML050950152 and ML050950154

Prior to the 1954 Amendment of the Act, nuclear energy activities in the United States were largely confined to the Federal Government because it was created for the World War II defense effort. When the war ended, Congress' paramount concern was the protection of the common defense and security during the development and use of nuclear power because of its military purposes. Congress determined that it was in the national interest to reserve the regulation of nuclear materials to the Federal Government for the following reasons: (1) these materials are vital to common defense and security; (2) the processing and utilization of these materials affect interstate and foreign commerce; and (3) to protect the public health and safety from the hazards associated with these materials.[1] The Atomic Energy Commission (AEC), the predecessor to the Nuclear Regulatory Commission (NRC), was the Federal agency charged with this responsibility. In 1954, the Act was amended to allow commercial firms to enter the field for the first time.

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[1]Section 2. Findings of the Act:

"The Congress of the United States hereby makes the following findings concerning the development, use and control of atomic energy . . . a. The development, utilization, use and control of atomic energy for military and for all other purposes are vital to the common defense and security . . . c. The processing and utilization of source, byproduct, and special nuclear material affect interstate and foreign commerce and must be regulated in the national interest. d. The processing and utilization of source, byproduct, and special nuclear material must be regulated in the national interest and in order to provide for the common defense and security and to protect the health and safety of the public. e. Source and special nuclear material, production facilities, and utilization facilities are affected with the public interest, and regulation by the United States of the production and utilization of atomic energy and of the facilities used in connection therewith is necessary in the national interest to assure the common defense and security and to protect the health and safety of the public. f. The necessity for protection against possible interstate damage occurring from the operation of facilities for production or utilization of source or special nuclear material places the operation of those facilities in interstate commerce for the purposes of this Act . . ." 2 U.S.C. § 2012.

B. Pre-Section 274 - State Regulation of Nuclear Materials

The 1954 Amendment was silent on the role of States with respect to nuclear materials and production and utilization facilities. The protection of the public's health and safety had traditionally been a State responsibility. In light of this, between 1954 and 1959, many States were independently establishing regulatory programs for the control of nuclear materials. These State programs varied in scope and some times conflicted or duplicated the Federal regulations. There was no recognition by the States of areas reserved to the Federal Government. Minnesota was one of the first States to enact legislation and regulations addressing nuclear materials.

In 1957, the Minnesota Legislature amended Statute 144.12 to authorize the State Board of Health to adopt regulations to address the control of sources of ionizing radiation and adopted regulations in 1958, including requirements for nuclear power reactors. During the Congressional Hearings on the development of Section 274, concerns were raised by the Joint Committee on Atomic Energy (JCAE) regarding the Minnesota statutes and regulations. The hearing record before the JCAE on May 19, 1959 provides that on May 20, 1959, Dr. Hyderman, Co-Director Atomic Energy Research Project, University of Michigan Law School, stated,

> "Approximately 29 States have either legislated on the matter of controlling radiation activities or adopted regulations. Both the legislative actions and the regulations vary considerably in scope and approach . . . . In the case of Minnesota, the regulations specifically provide for licensing of reactors and other major nuclear facilities. In this instance, a complete hazard evaluation is required to be submitted prior to construction of the facility, and the facility cannot be operated without a license from the State agency. In all other cases, the regulations provide that registration of this activity does not constitute approval by the State Agency . . . . No effort is being made to limit the State regulation to activities other than those licensed by the Commission and in a few States a license or permit is required in addition to the AEC license. Moreover, in the reactor and high level waste disposal fields, a potential area of serious conflict exists since definitive standards have not been developed for controlling these activities either at the national or State level. More particularly, such conflict is likely to occur under the Minnesota-type licensing system . . . ." (Federal-State Relations in the Atomic Energy Field, Hearings before the JCAE, May 19, 1959, 86th Congress, 1st Session, pp. 123-131.)

The 1958 Minnesota Regulation 1158. "Nuclear reactors and facilities," provided:

> "b. Before the construction of any nuclear reactor or facility is started within this State a general description thereof shall be submitted to the Board of Health containing such information as may be necessary or appropriate to a determination of any actual or potential hazard to or effect upon the public health . . . c. No part of the construction of a nuclear reactor or facility shall be started within this State without the express approval of the Board of Health until 30 days after the submission to it of such description and information." (Federal-State Relations in the Atomic Energy Field, Hearings before the JCAE, May 19, 1959, 86th Congress, 1st Session, pp. 123-131.)

Representative Durham, who presided over the proceedings responded by indicating,

> ". . . I think the same thing concerns you concerns us on the committee, the fear of overregulation; the danger of duplication by the State agencies and by the Federal Government . . ." (Federal-State Relations in the Atomic Energy Field, Hearings before the JCAE, May 19, 1959, 86th Congress, 1st Session, pp. 123-131.)

On May 21, 1959, the JCAE continued to discussed the Minnesota regulation of areas reserved to the Commission with representatives from the Commission, Commissioner John S. Graham and General Counsel Robert Lowenstein. The record provides,

> "Mr. Toll (Counsel to JCAE Committee): Does this bill do anything to clarify this situation as to the Minnesota regulations for example? Minnesota has no indication from the Federal Government as to whether or not the State of Minnesota has legal authority to license reactors. Does this bill clear the air at all?
>
> Mr. Lowenstein (Commission General Counsel): In this bill, we were not trying to deal with any specific situation. An attempt to legislate generally regarding a specific situation in Minnesota might very well lead us into unanticipated problems.
>
> Mr. Toll (Counsel to JCAE Committee): Minnesota is just an example of the first State that has attempted to license reactors. It is clearly foreseeable, I would think, that other States are going to try to do this. Should this bill attempt to spell out whether or not they are encouraged or whether they have the legal authority to do this?
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> * * * * * * * * *
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> Mr. Lowenstein (AEC): We thought that this act without saying in so many words did make clear that there is preemption here, but we have tried to avoid defining the precise extent of that preemption feeling that it is better to leave these kinds of detailed questions perhaps to the courts later to resolve.
>
> Representative Durham (presiding Chair): I don't agree in writing an act like that. I think it should be clearly defined and understood what is our field and what is their field . . .I think that the law should be clear as possible to avoid litigation. I am not a lawyer, but I wonder if that is not a pretty clear statement of what we intended to do, and what we are writing into the Act." (Federal-State Relations in the Atomic Energy Field, Hearings before the JCAE, May 21, 1959, 86th Congress, 1st Session, pp. 306-309.)

When the JCAE resumed hearings on August 26, 1959, additional concerns were raised with representatives from the Commission with respect to Minnesota's regulation of areas reserved to the Commission. The representatives from the Commission included Chairman McCone, Mr. Nelson, Director of Inspection, Robert Lowenstein, General Counsel, and Neil Naiden, the Office of General Counsel. For context, during the August hearings, discussions were being held, on whether language would be included that would provide, "It is the intention of this Act that State laws and regulations concerning the control of radiation hazards from byproduct, source, and special nuclear material shall be applicable except pursuant to an Agreement."

The record provides,

> "Chairman Anderson: Does any State have a law that gives it control of byproduct, source, or special nuclear materials?
>
> Mr. Naiden (AEC): We are not aware of any, Mr. Anderson.
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> * * * * * * * * *
>
> Mr. Toll (Counsel to JCAE Committee): To my knowledge, this would not affect any State law. It might affect the regulations promulgated by the State of Minnesota.
>
> Chairman Anderson: Which requires something about the licensing of a reactor, which I think is just as wrong as it can be.
>
> Mr. Nelson (Commission Office of Inspection): So do I.
>
> Chairman Anderson: I think the State of Minnesota is wrong in this, and you are worried about this striking down some regulation . . . .
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> * * * * * * * * *
>
> Chairman Anderson: I am only worried about what happens in the Minnesota sort of situation. There they say you cannot locate a reactor no matter how you want to locate it unless the health commissioner of that State approves it. I think that becomes very serious because the Federal Government may decide to license a reactor as in Dresden, in Illinois, and then the State of Illinois says, 'Wait a minute. We ought to know how close this is going to be to population centers and we want to know all these things.' The State probably does not have the experience or the facilities of the Federal agency to do it, yet it seeks control of it . . . .
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> * * * * * * * * *
>
> Chairman Anderson: . . . Say the Northern States Power Co. or somebody builds a plant in South Dakota, and the legislature says, 'We are not going to pass a single thing for you. We are going to keep full control. We are going to decide all of these things.' Are we then going to say to the Northern States Power people, 'We will not furnish any fuels to run the reactor after putting millions of dollars in it'? I do not think so. After Commonwealth Edison puts $45 million in the plant at Dresden, in the State of Illinois, if the State should pass the regulation that they had to have 50 inspectors on the job at all times, all to be appointed politically by one party or the other, no matter which one, Commonwealth might decide to resist that. Would you say, 'You will comply with the Illinois law or we will not give you a nickel's worth of material and will not let you have it in your plant and we will confiscated your $45 million'? That is all we are trying to protect. I do not ordinarily believe in turning over control to the Federal Government, but I believe the Atomic Energy Commission has exercised its authority sensibly and reasonably . . . ." (Federal-State Relations in the Atomic Energy Field, Hearings before the JCAE, August 26, 1959, 86th Congress, 1st Session, pp. 485-497.)

C. The Amendment of 1959: Section 274

The language of the Amendment, read in light of the Act's history, makes it abundantly clear that the Commission possesses the sole authority to regulate radiation hazards associated with nuclear materials and to regulate the construction and operation of production and utilization facilities. The Amendment merely authorizes the Commission to cede some of its authority through an Agreement to the States. This is why the language of Section 274 repeatedly refers to a "discontinuance" of the Commission's authority in certain areas and to the "retention" or "continuance" of that authority in other areas. If concurrent regulation by the State and the Commission in areas was permissible by the Amendment, it would not have been necessary for Congress to recognize the State's authority through an Agreement; to limit the areas relinquished to the State; to establish an orderly regulatory pattern; and to clarify areas reserved to the Federal Government.

The JCAE Report, which accompanied the final Section 274 bill provided,

> "1. This proposed legislation is intended to clarify the responsibilities of the Federal Government, on the one hand, and State and local governments, on the other, with respect to the regulation of byproduct, source, and special nuclear materials, as defined in the Atomic Energy Act, in order to protect the public health and safety from radiation hazards . . . 2 . . .Licensing and regulation of more dangerous activities–such as nuclear reactors–will remain the exclusive responsibility of the Commission. Thus, a line is drawn between the types of activities deemed appropriate for regulation by individual States at this time, and other activities where continued AEC regulation is necessary . . .(c) . . . It is not intended to leave any room for the exercise of dual or concurrent jurisdiction by States to control radiation hazards by regulating byproduct, source or special nuclear materials. The intent is to have the material regulated and licensed either by the Commission or by the State and local governments, but not by both. The bill is intended to encourage States to increase their knowledge and capacities, and to enter into Agreements to assume regulatory responsibilities over such materials . . . . (5) The Joint Committee believes it important to emphasize that the radiation standards adopted by the State under the Agreements of this bill should either be identical or compatible with those of the Federal Government. For this reason, the Committee removed the language 'to the extent feasible' in subsection b. of the original AEC bill considered at hearings from May 19 to 20, 1959. The Committee recognizes the importance of the testimony before it by numerous witnesses of the dangers of conflicting, overlapping and inconsistent standards in different jurisdictions, to the hindrance of industry and jeopardy of public safety." (Federal-State Relations in the Atomic Energy Field, Hearings before the JCAE, September 2, 1959, 86th Congress, 1st Session, Report No. 1125, pp. 10-12.)

The Amendment provides,

> ".a. It is the purpose of this section-
>
> (1) to recognize the interests of the States in the peaceful uses of atomic energy, and to clarify the respective responsibilities under this Act of the States and the Commission with respect to the regulation of byproduct, source, and special nuclear materials; (2) to recognize the need, and

> establish programs for cooperation between the States and the Commission with respect to control of radiation hazards associated with use of such materials; (3) to promote an orderly regulatory pattern between the Commission and State governments with respect to nuclear development and use and regulation of byproduct, source, and special nuclear materials; (4) to establish procedures and criteria for discontinuance of certain of the Commission's regulatory responsibilities with respect to byproduct, source, and special nuclear materials, and the assumption thereof by the States; (5) to provide for coordination of the development of radiation standards for the guidance of Federal agencies and cooperation with States; and (6) to recognize that, as the States improve their capabilities to regulate effectively such materials, additional legislation may be desirable."
> (42 U.S.C 2021)

According to the provisions of Section 274 and its legislative history, the concept of compatibility was essential to the establishment of an orderly regulatory pattern and to public health and safety. The legal basis for compatibility is found in §§ 274d.(2) and g. which provide,

> "d. The Commission shall enter into an Agreement under subsection b. of this section with any State if--
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> * * * * * * * * *
>
> (2) the Commission finds that the State program is in accordance with the requirements of subsection o. and in all other respects compatible with the Commission's program for regulation of such materials, and that the State program is adequate to protect the public health and safety with respect to the materials covered by the proposed Agreement.
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> * * * * * * * * *
>
> g. The Commission is authorized and directed to cooperate with the State in the formulation of standards for protection against hazards of radiation to assure that State and Commission programs for protection against hazards of radiation will be coordinated and compatible."

The legislative history in the analysis of these sections of the Act provided the following concerning the inclusion of Subsections d. and g. :

> "Subsection g. provides that the Commission is authorized and directed to cooperate with the States in the formulation of standards for the protection of public health and safety from radiation hazards and to assure that State and Commission programs for protection against radiation hazards will be coordinated and compatible. In most cases, it is intended that State and local standards should be the same as Federal standards in order to avoid conflict, duplication, or gaps." JCAE Report to accompany H.R. 8755 (H.R. Report No. 1125, September 2, 1959, 86th Congress, 1st Session) at p. 9.

> "5. The Joint Committee believe it important to emphasize that the radiation standards adopted by States under the Agreements of this bill should either be identical or compatible with those of the Federal Government. For this reason the Committee removed the language `to the extent feasible' in subsection g. of the original AEC bill considered at hearings from May 19 to 22, 1959. The Committee recognizes the importance of the testimony before it by numerous witnesses of the dangers of conflicting, overlapping, and inconsistent standards in different jurisdictions, to the hindrance of industry and jeopardy of public safety." JCAE Report to accompany H.R. 8755 (H.R. Report No. 1125, September 2, 1959, 86th Congress, 1st Session) at p. 9.

These provisions make clear that compatibility determinations are not confined to State statutes and regulations but apply more broadly to radiation programs. The legislative history of Section 274 makes clear, the concept of compatibility is closely related to one of the basic purposes of the Act , as amended, namely to provide for the regulation of atomic energy materials, e.g., byproduct, source, and special nuclear, so that the radiological health and safety of the public will be adequately protected. By enacting Section 274, Congress made it quite clear that the regulation and control of radiation hazards from source and special nuclear materials was preempted by the Federal Government and that such preemption would end ". . . in any State only upon the effective date of an Agreement between the State and the Commission under subsection b. and only to the extent provided in the Agreement."[2] (Emphasis added.)

On May 3, 1969, the Commission added section 10 CFR 8.4, *"Interpretation by the General Counsel: AEC jurisdiction over nuclear facilities and materials under the Act*, provides clarity on Section 274 Agreements and preemption issues as follows:

> "(a) By virtue of the Act of 1954, as amended, the individual States may not, in absence of an Agreement with the Atomic Energy Commission (Commission), regulate the materials described in the Act from the standpoint of radiological health and safety. Even States which have entered into Agreements with the Commission lack authority to regulate the facilities described in the Act, including nuclear power plants and the discharge of effluents from such facilities from the standpoint of radiological health and safety. (b) The Act of 1954 sets out a pattern for licensing and regulation of certain nuclear materials and facilities on the basis of the common defense and security and radiological health and safety. The regulatory pattern requires, in general, that the construction and operation of production facilities (nuclear reactors used for production and separation of plutonium or uranium-233 or fuel processing plants) and utilization facilities (nuclear reactors used for the production of power, medical therapy, research and testing) and the possession and use of byproduct material (radioisotopes), source material (thorium and uranium

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[2]Memorandum dated December 28, 1990 to Martin G. Malsch, Deputy General Counsel for Licensing and Regulation, OGC, from Jane R. Mapes, Senior Attorney, OGC, "Agreement State Compatibility Issues Identified in Topic 5 of Staff Requirements Memorandum of October 5, 1990 (REF: M900816A), Compatibility Determinations: Legal Basis, Scope, Relationship to Public Health and Safety Determinations. In addition, see Memorandum dated November 1, 1990, to William C. Parler, General Counsel, from Stuart A. Treby, Assistant General Counsel for Rulemaking and Fuel Cycle, OGC, "Remedies for Incompatibility."

ores), special nuclear material (enriched uranium and plutonium, used as fuel in nuclear reactors), be licensed and regulated by the Commission . . . .(c) The Act of 1954 had the effect of preempting to the Federal Government the field of regulation of nuclear facilities and byproduct, source, and special nuclear material. Whatever doubts may have existed as to that preemption were settled by the passage of the Federal-State Amendment to the Act of 1954 in 1959. . . . (d) . . . in 1959, legislation was enacted whose purpose was to promote an orderly regulatory pattern between the Federal and State governments with respect to regulation of byproduct, source, and special nuclear material, while avoiding dual regulation (see Section 274a). That legislation added Section 274, the so-called Federal-State Amendment to the Act. (e) Section 274 (42 U.S. C. 2021) authorizes the Commission to enter into an Agreement with the Governor of any State providing for the discontinuance of regulatory authority of the Commission with respect to byproduct materials, source materials, and special nuclear materials in quantities not sufficient to form a 'critical mass.'" However, Section 274c (42 U.S. C. 2021 (c)) provides that the Commission shall retain authority with respect to the regulation of: . . . (1) The construction and operation of production or utilization facilities (note: this includes construction and operation of nuclear power plants) . . . (f) The amendment, in providing for the discontinuance of some of the AEC's authority over source, byproduct and special nuclear material in States which entered into Agreements with the AEC, made clear that there should be no 'dual regulation' with respect to those materials for the purpose of protection of the public health and safety from radiation hazards. (g) Section 274b of the Act (42 U.S.C. 2021(b)) states that:

> During the duration of such an Agreement, it is recognized that the State shall have authority to regulate the materials covered by the Agreement for the protection of the public health and safety from radiation hazards.

* * * * * * * * *

(h) In its comments on the bill that was enacted as Section 274, the JCAE commented that:

> It is not intended to leave any room for the exercise of dual or concurrent jurisdiction by States to control radiation hazards by regulating byproduct, source or special nuclear materials. The intent is to have the material regulated and licensed either by the Commission or by the State and local governments, but not by both.

In explaining Section 274k, the JCAE said:

> As indicated elsewhere, the Commission has exclusive authority to regulate for protection against radiation hazards until such time as the State enters into an Agreement with the Commission to assume such responsibility.

(i) It seems completely clear that the Congress, in enacting Section 274, intended to preempt to the Federal Government the total responsibility and authority for regulating from the standpoint of radiological health and safety, the specified nuclear facilities and materials; that it stated that intent unequivocally; and that the enactment of Section 274 effectively carried out the Congressional intent, subject to the

arrangement for limited relinquishment of AEC's regulatory authority and assumption thereof by States in areas permitted, and subject to conditions imposed by Section 274.

(j) Thus, under the pattern of the Act, as amended by Section 274, States which have not entered into a Section 274 Agreement with the AEC are without authority to license or regulate, from the standpoint of radiological health and safety, byproduct, source, and special nuclear material or production and utilization facilities. Even those States which have entered into a Section 274 Agreement with the AEC (Agreement States) lack authority to license or regulate, from the standpoint of radiological health and safety, the construction and operation of production and utilization facilities (including nuclear power plants) and other activities reserved to the AEC by Section 274c. (To the extent that Agreement States have authority to regulate byproduct, source, and special nuclear material, their Section 274 Agreements require them to use their best efforts to assure that their regulatory programs for protection against radiation hazards will continue to be compatible with the AEC's program for the regulation of byproduct, source and special nuclear material.)

(k) The following judicial precedents and legal authorities support the foregoing conclusions: Northern California Ass'n, Etc. v. Public Utilities Commission, 37 Cal. Rep. 432, 390 P. 2d 200 (1964); Boswell v. City of Long Beach, CCH Atomic Energy Law Reports, par. 4045 (1960); Opinion of the Attorney General of Michigan (Oct. 31, 1962); Opinion of the Attorney General of South Dakota (July 23, 1964); New York State Bar Association, Committee on Atomic Energy, State Jurisdiction to Regulate Atomic Activities (July 12, 1963). No precedents or authorities to the contrary have come to our attention."

D. The New York Agreement Precedent

Minnesota is not the first State seeking Agreement State status which has purported to regulate in areas reserved to the Commission. During the processing of the New York Agreement, Federal preemption concerns arose with respect to the State's proposed regulatory program, which included:

(1) The New York State Department of Health (NYDOH) and the New York State Department of Labor (NYDOL) did not defer any of their authority to areas of exclusive Federal jurisdiction.

(2) The NYDOL asserted jurisdiction to regulate all discharges of wastes to the environment, including discharges of effluents from production and utilization facilities.

(3) The New York City Department of Health (NYCDOH) developed regulations to control the transport of nuclear fuel elements to and from reactors and reprocessing facilities, including Federal shipments.

In order to address the preemption concerns and move forward with the October 15, 1962 New York Agreement, the Commission and State agreed to a plan to resolve their jurisdictional disagreements. The plan included the following: (1) The State assumed regulatory authority where there were no preemption contentions; (2) The State discontinued the application of its regulations to areas of exclusive jurisdiction by the Commission; and (3) Article VII was added to the Agreement document to provide that both parties would work together to define their rights, powers, and responsibilities with respect to the regulation of nuclear materials.

Article VII of the 1962 New York Agreement:

> The Commission and the State recognize that the limits on their respective rights, powers and responsibilities under the Constitution, with respect to protection against radiation hazards arising out of the activities licensed by the Commission within the State, are not precisely clear. The Commission and the State agree to work together to define, within a reasonable time, the limits of, and to provide mechanisms for accommodating, such responsibilities of both parties. Without prejudice to the respective rights, powers and responsibilities of Federal and State authority, the State undertakes to obtain promptly and to maintain in effect while such cooperative endeavors are in progress, a modification of the Health, Sanitary and Industrial Codes which are to become effective within the State as of October 15, 1962, so as to exempt (except for registration; notification; inspection, not including operational testing but including sampling which would not substantially interfere with or interrupt any Commission licensed activities; and routing and scheduling of material in transit) licensees of the Commission from so much of such Codes as pertain to protection against radiation hazards arising out of activities licensed by the Commission within the State. While such cooperative endeavors are in progress, the existence or nonexistence of the exemptions and exceptions referred to above shall not prejudice the exercise by the Commission or the State, in an emergency situation presenting a peril to the public health and safety, of any constitutional rights and powers the Federal Government or the State may have now or in the future. If such cooperative endeavors do not result in a definition, within a reasonable time, of the limits of, and provision of mechanisms for accommodating, the responsibilities of the Commission and the State with respect to protection against radiation hazards arising out of the activities licensed by the Commission within the State, then the existence or nonexistence of the exemptions and exceptions referred to above shall not prejudice the exercise by the Commission or the State of any constitutional rights and powers the Federal Government or the State may have now or in the future.

Article VII was used as an interim measure and provided guidelines for both the Commission and State to operate pending the development of mechanisms for accommodating their respective responsibilities. After the signing of the 1962 Agreement, staff continued to negotiate with the State on the implementation of Article VII of the New York Agreement. To assist in this effort, the Committee on Atomic Energy of the New York State Bar Association Report (ADAMS: ML043490158), conducted a review which is referenced in paragraph (k) of 10 CFR 8.4 as a legal authority supporting the Office of General Counsel interpretation in this regulation.

As a result of the negotiation efforts, a Memorandum of Understanding Implementing Article VII of the New York Agreement was signed on May 13, 1965 (MOU). The MOU, referred to as the New York Agreement of 1965, provided: (1) cooperation as the mechanism of resolving concerns between the States and Commission; (2) the establishment of an exchange of information program between the State and Commission; and (3) that dual regulation of radiation hazards would be avoided. (ADAMS: ML051670319 and ML051660201).

APPENDIX B
TO
ATTACHMENT 4

OVERVIEW OF THE MINNESOTA RADIATION CONTROL PROGRAM IN SUPPORT OF TEAM LEADER'S APPROACH

The Section 274 legislation was called the Federal-State Amendment, and its purpose was to resolve the present Minnesota compatibility (preemption) concerns. The legislation was designed to promote an orderly regulatory pattern between the Federal and State governments with respect to the regulation of byproduct, source, and special nuclear materials, while avoiding dual regulation. During the hearings on the 1959 legislation, Minnesota regulation in areas reserved to the Commission was discussed, as an issue to be addressed and resolved by the passage of Section 274.

In the past, Minnesota's actions, statutes, and regulations have not been in concert with the Act, the NRC's regulatory program, and the 33 other Agreement State Programs. These historical aspects of Minnesota's regulation of areas reserved to the Commission are discussed below.

The Minnesota June 1996, "Staff Report to the Minnesota Environmental Quality Board (MEQB) on the Siting of a Dry Cask Storage Facility in Goodhue County," (Minnesota Staff Report), documents the State's action in areas reserved to the Commission:
http://www.me3.org/issues/nuclear/eqbnukes1.html
http://www.me3.org/issues/nuclear/eqbnukes2.html
http://www.me3.org/issues/nuclear/eqbnukes3.html

1. Minnesota Challenges NRC Authority to Regulate Reactors: Landmark Case of *Northern States Power Company v. Minnesota* D. Minn.1970), aff!d 447 F. 2d (8th Cir. 1971)

In the landmark case of Northern States Power Company v. State of Minnesota, Court of Appeals for the Eighth Circuit, 320 F. Supp. 172 (D. Minn.1970), aff!d 447 F. 2d (8th Cir. 1971) considered whether the Minnesota Pollution Control Agency had authority to regulate radioactive releases by nuclear plants and whether the Commission had exclusive authority to regulate radiation hazards so as to preclude the State action. The Eighth Circuit Court of Appeals decision, which was affirmed without opinion by the Supreme Court, aff!d 405 U.S. 1035 (1972), the Court's decision included the following:

> ". . . The District Court, Devitt, Chief Judge held that Congress expressed its unambiguous mandate to preempt field of regulation of radioactive releases by nuclear power plants by providing that Atomic Energy Commission (AEC) was to retain authority and responsibility with respect to construction and operation of any production or utilization facility, and Minnesota was without authority to enforce its regulations in this field . . . 1. . .Regulation of atomic energy is proper field for congressional control in regulation of interstate commerce, providing for common defense and security, and with respect to United States property and territory. 2 . . .Mere occupation by federal government does not necessarily preclude concurrent state regulation. 3 . . .Congress may expressly or impliedly preempt

subject, and may expand or contract scope of State's power to regulate in area properly subject to Congressional control. 4 . . .Congress expressed its unambiguous mandate to preempt field of regulation of radioactive releases by nuclear power plants providing that AEC was to retain authority and responsibility with respect to the construction and operation of any production or utilization facility, and Minnesota was without authority to enforce its regulations in this field. 5 . . .Administrative interpretation of the Act, to effect that States are without authority to regulate discharge of effluents from nuclear power facilities, was entitled to much weight in determining whether Congress preempted field. 6 . . .Factors favoring a finding of preemption by Congress of field of regulation of radioactive releases by nuclear power plants include pervasiveness of federal supervision over entire field of atomic energy, fact that Congress had directed and not merely authorized AEC to effect comprehensive licensing program, fact that diverse State laws would frustrate Congressional purpose to achieve uniformity, and Supreme Court expressions to effect that State health and safety requirements at variance with or more restrictive than Federal requirements would be viewed as obstacles to achievement of Congressionally expressed objectives." Northern States Power Company v. State of Minnesota, Court of Appeals for the Eighth Circuit, 320 F. Supp. 172 (D. Minn.1970).

The Courts, including the Supreme Court, determined that the regulatory actions attempted by the State were in direct conflict with the Atomic Energy Act of 1954 (Act), as amended, which provided the Commission with exclusive regulatory authority over reactor operations, including effluent releases.

2. Minnesota Challenges NRC Authority Over Spent Fuel at Prairie Island Nuclear Power Plant (Prairie Island): the Case of *Minnesota v. U.S. Nuclear Regulatory Commission, 602 F. 2d 412 (D.C. Cir. 1979)*

Subsequent to the1972 Supreme Court ruling in the case of Northern States Power Company, Minnesota continued to challenge the Commission's authority in areas of Federal preemption. In 1975, Northern States Power Company applied to the NRC for approval to increase the number of spent fuel rods in the existing pools at Prairie Island.

In 1977, although no State has regulatory authority for spent fuel, the Minnesota Environmental Quality Council (MEQC, formerly the MEQB) directed the Minnesota Pollution Control Agency (MPCA) to prepare an Environmental Assessment Worksheet on the reracking of the fuel. The MPCA concluded that a State environmental impact statement (EIS) should be prepared. The MEQC determined that there was no State authority to require the EIS; therefore no EIS was required.

However, during the NRC review process for the storage of spent fuel rods, the MPCA intervened in the proceedings before the NRC and sought more State control over nuclear power plants. The State challenged NRC's Federal preemption authority, and pushed for the NRC to develop a permanent storage solution. In contentions filed with the NRC, the MPCA sought further environmental review on the basis, among several, that pool storage was not temporary and the reracking did not address long-term needs, and that certain and incremental future expansions should be anticipated and analyzed. In 1977, the NRC amended Northern State Power Company's operating license to allow Prairie Island to expand the pool capacity to store 687 spent fuel assemblies. The State challenged the NRC licensing decision in court. The

U.S. Court of Appeals upheld the NRC's determination to allow the reracking. (See State of Minnesota v. U.S. Nuclear Regulatory Commission, 602 F. 2d 412 (D.C. Cir. 1979.))

The U. S. Court of Appeals determined that the regulatory actions attempted by the State were in direct conflict with the Atomic Energy Act which provided the Commission with exclusive regulatory authority over reactor operations, including spent fuel rods reracking.

3. Minnesota Continues to Challenge NRC Authority Over Spent Fuel at Prairie Island

According to the Minnesota Staff Report, in 1979, the utility was facing pool storage limits that could shutdown Prairie Island by 1985. Therefore, the utility sought another NRC approval to store more spent fuel rods in the pools. However, this time, because of changes in Minnesota law, the State required the Northern States Power Company to apply for a Certificate of Need (CON) from the Minnesota Energy Agency (predecessor to the now Minnesota Public Utility Commission (MPUC)) to conduct a second reracking of fuel rods in the pools. In 1981, a CON was approved to permit the utility to expand the pool storage capacity to 1582 assemblies, but limited actual pool storage to 1386 assemblies.

The actions taken by the State and Licensee were in direct conflict with the Act which provided the Commission with exclusive regulatory authority over reactor operations, including spent fuel rods reracking.

4. Minnesota Challenges Congress' Direction in the *Nuclear Waste Policy Act of 1982* (NWPA)

The NWPA directed the development of repositories for high level waste and spent fuel. The Commission was directed to encourage and expedite the effective use of spent fuel pool storage at civilian Nuclear Power Plants, including the use of reracking, fuel compaction, transshipments and if needed, the addition of new storage capacity. The law also directed the Commission as a part of its regulation of spent fuel storage to: (1) protect public health and safety, and the environment; (2) consider economic impacts; (3) ensure continued operation of the reactor; (4) apply any applicable laws; (5) consider the public views of persons near facility; (6) develop regulations on spent fuel storage, which resulted in the regulations in 10 CFR Part 72. However, according to the Minnesota Staff Report, the State decided to take regulatory actions in direct conflict with the NWPA and the Act. Excerpts from the Minnesota Staff Report provides:

> "In 1984, the Minnesota Legislature, concerned about Minnesota becoming a national repository for nuclear wastes, responded to Congress and the DOE by passing its own law providing for state involvement in the siting process and over the transportation of high-level radioactive wastes. Minn. Law 1984, ch. 453. That law is known as the Radioactive Waste Management Act and is codified at Minn. Stat. §§ 116C.705 to 116C.76 (1994)."

The Minnesota Radioactive Waste Act provides the following: (1) Mn. Stat. 116C.705 *Findings*, provides the Minnesota Legislature will regulate the disposal and transportation of high level waste (HLW); (2) Mn. Stat. 116C.72 *Radioactive waste management facility* provides the Minnesota Legislature will approve the construction or operation of a radioactive waste management facility (including independent spent fuel storage installations ISFSIs); and

(3) Mn. Stat. 116C.73 *Transportation of radioactive wastes into state* provides that the Minnesota Legislature will regulate the transportation of radioactive wastes (including spent fuel) into the State.[1]

The fourth statute included in the Minnesota Radioactive Waste Act established a radiological groundwater standard for HLW facilities and ISFSIs. This statute is clearly preempted by the Act and the NWPA, and it conflicts with the Commission's groundwater standards. The Minnesota Statute 116C.76 *Nuclear waste depository release into groundwater* provides:

> "... HLW facilities or ISFSIs must be designed to provide a reasonable expectation that the undisturbed performance of the facility will not cause the radionuclide concentrations, averaged over any year, in groundwater to exceed: (1) five picocuries per liter of radium-226 and radium-228; (2) 15 picocuries per liter of alpha-emitting radionuclides including radium-226 and radium-228, but excluding radon; or (3) the combined concentrations of radionuclides that emit either beta or gamma radiation that would produce an annual dose equivalent to the total body of any internal organ greater than four millirems per year if an individual consumed two liters per day of drinking water from the groundwater."

Whereas, the Commission's HLW regulations in 10 CFR § 63.331*, "Separate standards for protection of groundwater*, adopted the U.S. Environmental Protection Agency (EPA) standards. This standard provides,

> "DOE must demonstrate that there is a reasonable expectation that for 10,000 years of undisturbed performance after disposal, releases of radionuclides from waste in the Yucca Mountain disposal system into the accessible environment will not cause the level of radioactivity in the representative volume of groundwater to exceed the limits . . . (1) the combined radium-226 and radium-228, including natural background radiation, of five picocuries per liter; (2) the gross alpha activity (including radium-226, but excluding radon and uranium), including the natural background, of 15 picocuries

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[1]This law presents potential preemption concerns. See the Courts ruling in the case of *Illinois v.General Electric Company*, 683 F. 2d. 206 (71h Cir 1982, cert. denied, 103 S. Ct. 1891 (1983). In this case Illinois attempted to prevent the shipment of spent fuel into the State for storage. The Court determined that the State's law placed an impressible burden on interstate commerce because of the clear discrimination against out-of-state spent fuel. The Court also held that the Atomic Energy Act preempts state regulation of the storage, and shipment for storage, interstate and intrastate alike, of spent nuclear fuel. 683 F. 2d, at 213-215. See the Courts ruling in the case of the *City of Philadelphia v. New Jersey*, 43 U.S. 617 (1978) in which the Court held that New Jersey could not confine the use of its landfill waste dump to New Jersey residents. 683 F. 2d at 214. Finally, see the case of Washington State Building and Construction Trades Council, *AFL-CIO v. Spellman.* This case involved the constitutionality of a Washington statute that closed the borders of the State to the entry of low-level radioactive waste originating outside the State, "The Washington Waste Storage and Transportation Act of 1980." The Ninth Circuit Court indicated that the State's initiative violates the Supremacy Clause because it seeks to regulate legitimate Federal activity and to avoid the preemption of the Atomic Energy Act.

per liter; and (3) the combined beta and photon emitting radionuclides, excluding background, of four millirems per year to the whole body or any organ based on drinking two liters of water per day from the representative sample."

With regards to the groundwater standard for ISFSIs, Minnesota's groundwater standards are less stringent than those of the Commission. The Commission's program for the regulation of ISFSIs is aimed at providing a total containment of the waste, including preventing releases to the groundwater. Thus, the Commission has essentially a zero release limit for ISFSI. The Commission's regulations in 10 CFR § 72.122 (b)(4), *"Protection against environmental conditions and natural phenomena,"* provide,

> ". . .if the ISFSI or MRS is located over an aquifer which is a major water resource (which may be interpreted as over any groundwater according to NUREG 1567-standard review plan for ISFSI), measures must be taken to preclude the transport of radioactive materials to the environment through this potential pathway."

These actions taken by the State are in direct conflict with the Act and the NWPA for the following reasons: (1) Absent an Agreement, a State cannot establish groundwater radiation dose standards. Minnesota has no Agreement. (2) Even with an Agreement, States cannot regulate HLW disposal and ISFSIs because it is preempted to the Federal Government by both the Act and the NWPA. (3) The Commission in the SRM for the Policy Statement on Compatibility clarified that States that adopt regulations in areas reserved to the Commission are not compatible. This Policy Statement on Compatibility also requires radiation dose standards to be the same as those of the NRC. The Minnesota groundwater radiation dose standard is less stringent than the NRC's. The NRC has essentially a limit of zero and the State's limit is five picocuries per liter; 15 picocuries per liter; and/or four millirems per year to the whole body or any organ based on drinking two liters of water per day from the representative sample. (4) In accordance with the compatibility concept in Section 274 of the Act, dual regulation of byproduct, source and special nuclear materials from a radiological aspect is not permitted; thus, the State's requirements are not in concert with the Act.

5. Minnesota Continues to Challenge *Nuclear Waste Policy Act of 1982* and the Commission's Authority over the Prairie Island

According to the Minnesota Staff Report, in 1987, the utility determined that additional storage was needed or Prairie Island would shutdown by 1994. In 1989, the utility sought to develop an ISFSI as opposed to reracking. From 1989 to 1991, the MEQB developed an EIS for the proposed ISFSI. The utility negotiated with the State, as the lead regulator for the development of the Prairie Island ISFSI instead of the Commission. The NRC was not involved in these proceedings and the utility had made no requests to the NRC regarding the development of an ISFSI.

The Minnesota Staff Report further indicates that in 1991, the State determined that exposure to radiation was a major issue associated with the storage of spent nuclear fuel. The 1991 Final EIS for the Prairie Island ISFSI contained a health risk assessment conducted by the Minnesota Department of Health (MDH), which concluded that the proposed ISFSI would deliver an annual dose of 0.35 millirem. The report noted that this dose was well below the NRC limit of 25 mrem. However, MDH determined that gamma radiation from the ISFSI would produce a lifetime risk of cancer incidence to the most exposed residents of 6 per 100,000.

This risk was higher than the MDH criterion of 1 per 100,000 for carcinogenic risk from any single source of exposure to an environmental carcinogen. The radiation dose rate for the ISFSI was changed to 0.054 mrem per year to be within the MDH cancer risk of less than 1 per 100,000.

According to the Minnesota Staff Report, in May 1991, after the finalization of the EIS, the utility applies to the MPUC for a CON. After four years of regulatory oversight from the State, the utility applied to the NRC for a site-specific ISFSI. In April 1992, the Administrative Law Judge for the MPUC approved the ISFSI, but limited the facility to 17 casks.

The actions by the State and Licensee are in direct conflict with the Act, the NWPA, and the NRC's regulatory program for the following reasons: (1) Absent an Agreement, a State cannot establish radiation dose standards. Minnesota has no Agreement. (2) Even with an Agreement, States cannot regulate ISFSIs because it is preempted to the Federal Government by both the Act and the NWPA. (3) The State's actions are in direct conflict with NRC regulations in 10 CFR 8.4, 72, and 150, which indicate that a State cannot regulate these activities. (4) The State's action conflict with NRC's regulatory program. The NRC's radiation dose standards provide an adequate level of safety based on current assessments of risks associated with radiation exposure and recommendations from national and international organizations. NRC regulations in 10 CFR § 72.104, *"Criteria for radioactive materials in effluents and direct radiation from an ISFSI or MRS,"* establish an annual dose of 25 millirem per year. Whereas, the Minnesota ISFSI standard of 0.054 millirem annual radiation dose standard is considerably more stringent than that of the NRC's. The Minnesota radiation dose standard is a magnitude of 463 times more stringent than NRC's standard. (5) The application of two concurrent radiation dose standards to the same facility by a State and the NRC is dual regulation and is not in concert with Section 274 of Act.

6. Minnesota Continues to Challenge *Nuclear Waste Policy Act of 1982* and the Commission's Authority By Placing Additional Regulatory Requirements of Prairie Island Units 1 and 2

According to the Minnesota Staff Report, the Minnesota Legislature during its 1994 Session, passed the "Prairie Island Legislation," Minnesota Laws 1994, ch. 641 (codified at Mn. Stat. §§ 116C.77, 116C.771, 116C.772, 116C.773, 116C.774, 116C.775, 116C.776, 116C.777, 116C.778, 116C.779, 116C.80, 216B.2423, 216B.2424, 216B.2425, 216B.243, 216B.244, and 216C.051). Through these series of laws, not only did Minnesota subject Prairie Island to dual regulation, but the State's requirements, in most instances, were far more stringent than those of the Commission.

The Prairie Island Legislation statutorily implemented the MPUC decision to limited the number of casks stored at the Nuclear Power Plant to only 17, while the NRC operating licenses authorized 48, which were issued in 1972 and 1973 (Mn. Stat. 116C.771 *Additional cask limitations).* In addition, the Legislation placed a number of conditions on the storage of the 17 casks. Initially, it approved the storage of five casks. To store the next four casks, the utility had to take steps to establish an alternative away-from-reactor ISFSI and purchase 100 megawatts of electricity from wind powered systems by December 31, 1996. To store the next eight casks, the utility had to purchase 225 megawatts of electricity from wind powered systems and 50 megawatts of electricity from biomass powered systems (Mn. Stat. 216B.2423 *Wind power mandate* and Mn. Stat. 216B.2424 *Biomass power mandate*), and have an away-from-

reactor ISFSI operational or under construction by June 1, 1999. The Legislation also required the signing of a contractual Agreement between the utility and Governor before any casks could be stored. As a part of the contractual requirements, the utility was required to: (1) submit a reevaluation of all alternatives to dry cask storage; (2) submit a detailed plan for the phase-out of all nuclear power generated by the utility; (3) and submit a decommissioning plan for the storage casks. (Mn. Stat.116C.772 *Public utility responsibilities* and Mn. Stat. 116C.773 *Contractual Agreement*.)

This Legislation also: (1) approved of ISFSIs at Monticello Nuclear Power Plant (Monticello) and Prairie Island; (2) required Prairie Island to ship dry casks off site before shipping from the spent fuel storage pool; and once waste was shipped, the cask was to be decommissioned and removed from use. (Mn. Stat. 116C.774 *Authorization* and Mn. Stat. 116C.775 *Shipment priorities; Prairie Island.*)

Minnesota Statue 116C.776 *Alternative cask technology for spent fuel storage*, provided the MPUC with authority to determined the type of cask used for spent fuel transportation and storage at Prairie Island. If the MPUC determined that a dual purpose cask was economically feasible, it would order their use, have the waste moved from the storage casks, and placed in the dual purpose cask. In addition, the law stipulated that the dual-purpose casks must have the same total storage capacity as the original cask, and the casks at Prairie Island had to remain at 17. Minnesota Statute 116C.778 *Reracking* limited the reracking of spent fuel at the Prairie Island to three, subject to State review and approval. Minnesota Statute 216B.243, *Certificate of need for large energy facility* required the utility to obtain approval from the MPUC for any additional spent fuel storage through the CON process. Minnesota Statute 116C.779 *Funding for renewable development* required as a condition of the storage of the 17 casks, the utility had to pay $500,000 per year for each spent fuel cask stored at the facility into an account for the development of renewable energy. In addition, Minnesota Statute 216B.244, *Nuclear Plant Capacity Requirements,* required the shutdown of the reactor if the annual load capacity was less than 55 percent for three consecutive years.

As noted above, in 1994 the Minnesota Legislature limited the storage of spent fuel at Prairie Island to 17 casks. The State thought this would keep the Nuclear Power Plant operating until 2001. However, the storage authorized by the State was not sufficient. In 2000, the MPUC issued a CON approving 195 temporary storage spaces in the cooling pool to provide for a full core offload. Prior to the MPUC's approval, the full core offload spaces were located in the permanent storage spaces in the cooling pools. After the approval, an additional 195 permanent storage spaces, approximately five casks of volume, were available. However, the utility could not use this space because the State by legislation restricted the facility to 17. The plant was facing a potential shutdown. The utility goes to the State instead of the NRC for approval of these actions. (See: http://www.house.leg.state.mn.us/hrd/pubs/nucxcel.pdf.)

In 2003, Prairie Island was again faced with storage concerns. The utility had been authorized in 1973 for 48 casks by its NRC operating license. However, it was not until the passage of the Prairie Island Legislation of 2004 that the utility was allowed to follow the provisions of its license and store up to 48 casks (Mn. Stat. 116C.83 *Authorization for additional dry cask storage*).

The 2004 Legislation also provided: (1) that all future spent fuel storage at Prairie Island and Monticello had to be approved by the MPUC through the CON process; (2) the authorization of

sufficient dry cask storage to allow Prairie Island to operate until the end of their current licenses (2013 for reactor Unit 1 and 2014 for reactor Unit 2); (3) that the storage of spent nuclear fuel in the pool and in dry casks at Prairie Island is to be managed to facilitate the shipment and continued operation of the plant; (4) that the MPUC through the CON process had the authority to shutdown the reactor; (5) any decision on a CON must be held until the Minnesota Legislature is in session, since they must ratify the Certificate; (6) that the storage capacity at facilities was limited to spent fuel storage generated by Minnesota Nuclear Power Plants and stored on the site of that facility; (7) required ISFSIs to operate in accordance with the water standards in Mn. Stat. 116C.76 (As discussed earlier, these standards are not compatible with those of the Commission**)**; (8) required that the siting, construction, and operation of Minnesota ISFSIs be subject to all the environmental review and protection of Minnesota provisions in 116C and chapters 115, 115B, 116, 116B, 116D, and 216B, and rules associated with those chapters; and (9) an EIS is required for the construction, operation or expansion of an ISFSI, which must be reviewed and approved by the MEQB.

The actions by the State are in direct conflict with the Act, the NWPA, and the NRC's regulatory program (e.g. the NRC issued Prairie Island operating license) for the following reasons: (1) Absent an Agreement, a State cannot regulate activities involving byproduct, source, and special nuclear materials, including the setting of dose limits for an ISFSI. Minnesota had no Agreement when the dose limit was established. (2) Even with an Agreement, States cannot regulate ISFSIs because it is preempted to the Federal Government by both the Act and the NWPA. (3) The State's actions are in direct conflict with NRC regulations in 10 CFR 8.4, 72, and 150, which indicate that a State cannot regulate these activities. (4) The State's action conflict with the responsibilities Congress gave to NRC in the NWPA, which directed the Commission to encourage and expedite the effective use of spent fuel pool storage at civilian Nuclear Power Plants, including the use of reracking, fuel compaction, transshipments and if needed, the addition of new storage capacity. The law also directed the Commission as a part of its regulation of spent fuel storage to: (a) protect public health and safety, and the environment; (b) consider economic impacts; (c) ensure continued operation of the reactor; (d) apply any applicable laws; (e) consider the public views of persons near facility; and (f) develop regulations on spent fuel storage, which resulted in 10 CFR Part 72, which provide an adequate level of protection. (5) The application of two concurrent radiation dose standards to the same facility by a State and the NRC is dual regulation and is not in concert with §274 of the Act.

APPENDIX C
TO ATTACHMENT 4

TEAM LEADER'S LETTER TO GOVERNOR

DRAFT

The Honorable Tim Pawlenty
Governor of Minnesota
St. Paul, Minnesota 55155

Dear Governor Pawlenty:

On July 6, 2004, you submitted an application to the U.S. Nuclear Regulatory Commission (NRC), requesting an Agreement between the NRC and the State of Minnesota under Section 274 of the Atomic Energy Act of 1954, as amended (Act). The letter requests that NRC authority be discontinued and assumed by the State in the following areas: (1) byproduct materials as defined in Section 11e.(1) of the Act; (2) source materials; and (3) special nuclear materials in quantities not sufficient to form a critical mass.

In the process of reviewing the Minnesota application, NRC staff discovered statutes and regulations areas potentially reserved to the NRC. For example, these statutes include the Radioactive Waste Management Act codified at Mn. Stat. §§ 116C.705 to 116C.76. It is unclear how these statutes are in concert with the Act and NRC's regulatory program. The Act prohibits State or local governments from regulating the operations of production or utilization facilities from a radiological health and safety standpoint, including any high level waste generated from these facilities.

Under Section 274 of the Act, ". . . the Commission is authorized to enter into Agreements with the Governor of any State providing for discontinuance of the regulatory authority of the Commission . . . with respect to . . . special nuclear materials in quantities not sufficient to form a critical mass. . ." However, under such Agreements, the NRC retains authority and responsibility with respect to regulation of the construction and operation of any production or utilization facility. In addition, under the Act, the NRC may enter into an Agreement only if the State program is adequate to protect the public health and safety and compatible with the NRC's regulatory program.

Before entering into an Agreement with Minnesota, the NRC must be satisfied that the Minnesota Program for the regulation of material under the Agreement will not conflict with the Act or intrude into areas of exclusive NRC jurisdiction. We would like to discuss this issue further. My staff contact is: Mr. Paul H. Lohaus, Director, Office of State and Tribal Programs. He can be reached at (301) 415-3340.

Sincerely,

Nils J. Diaz