

served, by delivering it personally or by mail, to:

(1) The applicant, Atlas Corporation, Republic Plaza, 370 Seventeenth Street, Suite 3050, Denver, Colorado 80202, Attention: Richard Blubaugh; and

(2) The NRC staff, by delivery to the Executive Director for Operations, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852, or by mail addressed to the Executive Director for Operations, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

In addition to meeting other applicable requirements of 10 CFR Part 2 of NRC's regulations, a request for a hearing filed by a person other than an applicant must describe in detail:

(1) The interest of the requestor in the proceeding;

(2) How that interest may be affected by the results of the proceeding, including the reasons why the requestor should be permitted a hearing, with particular reference to the factors set out in § 2.1205(g);

(3) The requestor's areas of concern about the licensing activity that is the subject matter of the proceeding; and

(4) The circumstances establishing that the request for a hearing is timely in accordance with § 2.1205(c).

The request must also set forth the specific aspect or aspects of the subject matter of the proceeding as to which petitioner wishes a hearing.

Dated at Rockville, Maryland, this 12th day of January 1999.

For the Nuclear Regulatory Commission.

**N. King Stablein,**

*Acting Chief, Uranium Recovery Branch,  
Division of Waste Management, Office of  
Nuclear Material Safety and Safeguards.*

[FR Doc. 99-1076 Filed 1-15-99; 8:45 am]

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## NUCLEAR REGULATORY COMMISSION

[Docket No. 50-309]

### Maine Yankee Atomic Power Company (Maine Yankee Atomic Power Station); Application of Exemption

#### Exemption

##### I

Maine Yankee Atomic Power Company is the holder of Facility Operating License No. DPR-36, which authorizes the licensee to possess the Maine Yankee Atomic Power Station (MYAPS). The license states, among other things, that the facility is subject to all the rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (the Commission or NRC) now or hereafter in effect. The facility

consists of a pressurized-water reactor located at the licensee's site in Lincoln County, Maine. The facility is permanently shut down and defueled, and the licensee is no longer authorized to operate or place fuel in the reactor.

##### II

Section 50.54(w) of 10 CFR Part 50 requires power reactor licensees to maintain onsite property damage insurance coverage in the amount of \$1.06 billion. Section 140.11(a)(4) of 10 CFR Part 140 requires a reactor with a rated capacity of 100,000 electrical kilowatts or more to maintain liability insurance of \$200 million and to participate in a secondary insurance pool.

NRC may grant exemptions from the requirements of 10 CFR Part 50 of the regulations, which, pursuant to 10 CFR 50.12(a), (1) are authorized by law, will not present an undue risk to public health and safety, and are consistent with the common defense and security and (2) present special circumstances. Special circumstances exist when (1) application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule (10 CFR 50.12(a)(2)(ii)) or (2) compliance would result in undue hardship or costs that are significantly in excess of those incurred by others similarly situated. The underlying purpose of Section 50.54(w) is to provide sufficient property damage insurance coverage to ensure funding for onsite post-accident recovery stabilization and decontamination costs in the unlikely event of an accident at a nuclear power plant.

NRC may grant exemptions from the requirements of 10 CFR Part 140 of the regulations, which, pursuant to 10 CFR 140.8, are authorized by law and are otherwise in the public interest. The underlying purpose of Section 140.11 is to provide sufficient liability insurance to ensure funding for claims resulting from a nuclear incident or a precautionary evacuation.

##### III

On January 20, 1998, the licensee requested exemption from the financial protection requirement limits of 10 CFR 50.54(w) and 10 CFR 140.11. The licensee requested that the amount of insurance coverage it must maintain be reduced to \$50 million for onsite property damage and \$100 million for offsite financial protection. The licensee stated that special circumstances exist because of the permanently shutdown and defueled condition of MYAPS.

The financial protection limits of 10 CFR 50.54(w) and 10 CFR 140.11 were established to require a licensee to maintain sufficient insurance to cover the costs of a nuclear accident at an operating reactor. Those costs were derived from the consequences of a release of radioactive material from the reactor. Although the risk of an accident at an operating reactor is very low, the consequences can be large. In an operating plant, the high temperature and pressure of the reactor coolant system, as well as the inventory of relatively short-lived radionuclides, contribute to both the risk and consequences of an accident. In a permanently shutdown and defueled reactor facility, the reactor coolant system will never again be operated, thus eliminating the possibility of accidents involving the reactor. A further reduction in risk occurs because decay heat from the spent fuel decreases over time. This reduction in decay heat reduces the amount of energy available to heat up the spent fuel to a temperature that could compromise the ability of the fuel cladding to retain fission products.

Along with the reduction in risk, the consequences of a release decline after a reactor permanently shuts down and defuels. The short-lived radionuclides contained in the spent fuel, particularly volatile components such as iodine-131 and most of the noble gases, decay away, thereby reducing the inventory of radioactive materials that are readily dispersible and transportable in air.

Although the risk and consequences of a radiological release decline substantially after a plant permanently defuels its reactor, they are not completely eliminated. There are potential onsite and offsite radiological consequences that could be associated with the onsite storage of the spent fuel in the spent fuel pool (SFP). In addition, a site may contain a radioactive inventory of liquid radwaste, activated reactor components, and contaminated structural materials. For purposes of modifying the amount of insurance coverage maintained by a power reactor licensee, the potential consequences, despite very low risk, are an appropriate consideration.

To determine the insurance coverage sufficient for a permanently defueled facility, the cost of recovery from potential accident scenarios must be evaluated. At MYAPS, spent fuel is the largest source term on the site. The spent fuel is stored in the SFP, which uses water to cool the fuel. Wet storage of spent fuel possesses inherently large safety margins because of the simplicity and robustness of the SFP design. The

design basis includes the ability to withstand an earthquake and to retain sufficient water to adequately cool and shield the stored spent fuel. In the MYAPS Defueled Safety Analysis Report, the licensee specifically states that the SFP structure is designed to Seismic Class I requirements and is capable of performing its intended safety function under the licensee's design-basis hypothetical earthquake with a 0.1-g peak ground acceleration. The floor and walls of the SFP are constructed of 6-ft thick reinforced concrete and are completely lined with 1/4-inch steel plates. To add to the robustness of the design, the pool is founded on bedrock and is embedded 12.5 feet below grade level. Since the analyses used in designing the capability of structures, systems, and components (SSCs) to perform their safety function under a hypothetical earthquake have significant margin in them, it is expected that an SSC built to withstand the hypothetical design-basis earthquake actually will be able to withstand a larger earthquake. Thus, the loss of coolant from the Maine Yankee SFP, which partially or completely uncovers the fuel, is a beyond-design-basis event with a very low probability of occurrence.

The NRC staff has determined that a significant accident sequence for a permanently shutdown reactor involves the loss of water from the SFP and subsequent heatup of the fuel. If the decay heat is high enough, oxidation of the zirconium fuel clad could become self-sustaining, resulting in a zirconium clad fire. Although the zirconium clad fire may not be included in the design basis of the facility, the NRC staff considers it among those accidents that are "reasonably conceivable" and that should be considered in determining whether there is undue risk to the public from a permanently shutdown reactor facility. Analysis sponsored by the NRC in the late 1980s identified approximately 2 years after shutdown as the critical decay time necessary for pressurized-water reactor fuel to reach a decay power below the minimum decay power for self-sustaining oxidation. Additional NRC-sponsored analysis completed in 1997 identified 17 months as the critical decay time for pressurized-water reactors. On December 6, 1998, Maine Yankee had been shut down for 24 months. Because of the robust design and construction of the SFP and the fuel's having exceeded the critical decay time for the representative pressurized-water reactor, the staff has determined that there is reasonable assurance that rapid

zirconium oxidation of the fuel cladding is no longer possible. The staff has also concluded that the cost of recovering from a loss of SFP water would be bounded by other accidents that may occur at a permanently defueled site.

In SECY 96-256, "Changes to the Financial Protection Requirements for Permanently Shutdown Nuclear Power Reactors, 10 CFR 50.54(w) and 10 CFR 140.11," dated December 17, 1996, the staff estimated the onsite cleanup costs of accidents considered to be the most costly at a permanently defueled site with spent fuel stored in the SFP. The staff found that the onsite recovery costs for a fuel-handling accident could range up to \$24 million. The estimated onsite cleanup costs to recover from the rupture of a large liquid radwaste storage tank could range up to \$50 million. The licensee's proposed level of \$50 million for onsite property insurance is sufficient to cover these estimated cleanup costs.

The offsite cleanup costs of the accident scenarios previously discussed are estimated to be negligible in SECY 96-256. However, a licensee's liability for offsite costs may be significant as a result of lawsuits alleging damages from offsite releases. Experience at Three Mile Island Unit 2 showed that significant judgments against a licensee are possible despite negligible dose consequences from an offsite release. An appropriate level of financial liability coverage is needed to account for potential judgments and settlements and to protect the Federal Government from indemnity claims. The licensee's proposed level of \$100 million in primary offsite liability coverage is sufficient for this purpose.

The staff has determined that participation in the secondary insurance pool for offsite financial protection is not required for a permanently shutdown and defueled plant after the time that air cooling of the spent fuel is sufficient to maintain the integrity of the fuel cladding. As previously noted, the staff finds that sufficient time has elapsed to ensure the integrity of the MYAPS spent fuel cladding.

#### IV

The NRC staff has completed its review of the licensee's request to reduce financial protection limits to \$50 million for onsite property insurance and \$100 million for offsite liability insurance. On the basis of its review, the NRC staff finds that the spent fuel stored in MYAPS's SFP is no longer susceptible to rapid zirconium oxidation. The requested reductions are consistent with SECY 96-256. The Commission informed the staff in a staff

requirements memorandum dated January 28, 1997, that it did not object to the insurance reductions recommended in SECY 96-256. The licensee's proposed financial protection limits will provide sufficient insurance to recover from limiting hypothetical events, if they occur. Thus, the underlying purposes of the regulations will not be adversely affected by the reductions in insurance coverage.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), an exemption to reduce onsite property insurance to \$50 million is authorized by law, will not present an undue risk to public health and safety, and is consistent with the common defense and security. Further, special circumstances are present, as set forth in 10 CFR 50.12(a)(2)(ii). Therefore the Commission hereby grants an exemption from the requirements of 10 CFR 50.54(w).

In addition, the Commission has determined that, pursuant to 10 CFR 140.8, an exemption to reduce primary offsite liability insurance to \$100 million, accompanied by withdrawal from the secondary insurance pool for offsite liability insurance, is authorized by law and is in the public interest. Therefore, the Commission hereby grants an exemption from the requirements of 10 CFR 140.11(a)(4).

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of these exemptions will not have a significant effect on the quality of the human environment (63 FR 67943, printed December 9, 1998).

These exemptions are effective upon issuance.

Dated at Rockville, Maryland, this 7th day of January 1999.

For the Nuclear Regulatory Commission.

**Samuel J. Collins,**

*Director, Office of Nuclear Reactor Regulation.*

[FR Doc. 99-1075 Filed 1-15-99; 8:45 am]

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## NUCLEAR REGULATORY COMMISSION

[Docket No. 50-213]

### Connecticut Yankee Atomic Power Co., Haddam Neck Plant; Issuance of Director's Decision Under 10 CFR 2.206

Notice is hereby given that the Director, Office of Nuclear Reactor Regulation, has issued a Director's Decision concerning a petition dated September 11, 1998, filed by Ms. Rosemary Bassilakis, pursuant to Title