



October 4, 2001

C1001-05
10 CFR 50.12
10 CFR 50.82

Docket Nos: 50-315
50-316

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Stop O-P1-17
Washington, DC 20555-0001

Donald C. Cook Nuclear Plant Units 1 and 2
REQUEST FOR EXEMPTION FROM 10 CFR 50.82(a)(8)(i) AND (ii)

Pursuant to 10 CFR 50.12, Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant (CNP) Units 1 and 2, hereby requests an exemption from Nuclear Regulatory Commission (NRC) regulations to permit the immediate withdrawal of certain funds from the CNP decommissioning trust fund. Specifically, I&M requests an exemption from provisions of 10 CFR 50.82(a)(8)(i) and (ii) which restrict the withdrawal of funds from trusts containing NRC-required decommissioning funds until after permanent plant shutdown. The CNP decommissioning trust fund contains funds collected for, among other purposes, NRC-required decommissioning activities. The funds I&M seeks to withdraw were collected for, and will be used to finance, disposal of the steam generator lower assemblies (SGLAs) that were removed from CNP Unit 1 during the steam generator replacement project in 2000. This exemption is requested because it will be economically disadvantageous for I&M to store the SGLAs on site until the plant is decommissioned.

As described more fully in the attachment, the funds I&M proposes to withdraw were collected through rates for the defined purpose of paying for SGLA disposal. Upon collection, these funds were placed in the trust and commingled with funds collected for NRC-required decommissioning activities, with the intent of using part of the commingled funds for SGLA disposal. However, NRC regulations appear to prohibit the use of such commingled funds

prior to permanent shutdown of the plant. This prohibition appears to apply to any funds collected for both NRC-required decommissioning and other purposes. Thus, I&M is prevented from using the money collected for disposal of the SGLAs until after permanent plant shutdown unless this exemption is granted.

I&M requests that the NRC grant the exemption because:

- (1) The exemption, "will not present an undue risk to the public health and safety, and [is] consistent with the common defense and security," per 10 CFR 50.12(a)(1), and
- (2) Special circumstances are present that satisfy 10 CFR 50.12(a)(2).

I&M demonstrates in the attachment that the request satisfies these provisions.

A response from the NRC is requested by April 3, 2002, to allow I&M to complete the disposal of the SGLAs. This letter and attachment contain no new commitments. If you have any questions, please contact Ronald W. Gaston, Manager of Regulatory Affairs at 616-697-5020.

Sincerely,



A. C. Bakken III
Site Vice President

\dmb

Attachment

c: J. E. Dyer
MDEQ - DW & RPD, w/o attachment
NRC Resident Inspector
R. Whale, w/o attachment

ATTACHMENT TO C1001-05

REQUEST FOR EXEMPTION FROM 10 CFR 50.82(a)(8)(i) AND (ii)

Introduction

In 2000, Indiana Michigan Power (I&M) replaced the Donald C. Cook Nuclear Plant (CNP) Unit 1 steam generators, and the old CNP Unit 1 steam generator lower assemblies (SGLAs) are currently stored on site pending disposal. I&M is requesting an exemption to use funds in a trust that also contains Nuclear Regulatory Commission (NRC)-required decommissioning funds in order to finance the prompt disposal of the SGLAs. I&M recognizes that the SGLAs could be stored on site and ultimately disposed of as part of decommissioning activities. However, the cost estimates for site decommissioning submitted to and approved by the Indiana Utility Regulatory Commission and the Michigan Public Service Commission (the State Commissions) included the cost of SGLA disposal in the cost recovery through rates, but assumed they could be disposed of prior to the permanent plant shutdown. Current cost projections indicate that completion of this activity at this point in time will be more cost effective than waiting for future disposal with plant decommissioning.

In view of these facts, which are presented in detail below, I&M requests a specific exemption from the requirements in 10 CFR 50.82(a)(8)(i) and (ii) restricting the use of trust funds prior to cessation of operations.

As discussed herein, granting a specific exemption is warranted under 10 CFR 50.12 for this purpose. This exemption, as provided in 10 CFR 50.12(a)(1), “will not present an undue risk to the public health and safety, and [is] consistent with the common defense and security.” In addition, as provided in 10 CFR 50.12(a)(2), special circumstances are present. In particular, special circumstances as set forth in 10 CFR 50.12(a)(2)(ii) and (iv) exist. The application of the regulation preventing the expenditure of decommissioning trust funds in this circumstance is unnecessary to achieve the underlying purpose of the rule and allowing the exemption will actually result in a net benefit to the public health and safety. The purpose of the restrictions on fund withdrawal is to protect the health and safety of the public by assuring that there will be adequate funds available to complete NRC-required decommissioning activities following termination of the operating license. Due to the potential increase in disposal costs explained below, granting the exemption will actually provide greater assurance that adequate funds will be available for decommissioning.

The exemption request also satisfies the special circumstance criterion of 10 CFR 50.12(a)(2)(vi) in that this particular situation was not considered when the regulation was adopted. Specifically, it was not contemplated when this rule was adopted that funds collected for purposes not specifically associated with NRC-required decommissioning activities would be commingled with the NRC-required decommissioning funds and that preventing the use of those funds solely because they are commingled could adversely impact licensees’ costs.

Background

Most pressurized water reactors in service have replaced their SGLAs. It has been generally, but not universally, an industry practice to store the old SGLAs on site until plant decommissioning primarily because there have been limited treatment or disposal options. In recent years, industry vendors have developed methods to dispose of this waste. However, the cost of the disposal is still very high. The old Unit 1 SGLAs can be disposed of now or stored and disposed as part of the plant decommissioning effort. The cost of disposing of the SGLAs in 2001 is estimated at \$10 million. However, a financial analysis presented below projects the future value cost of disposing the SGLAs in 20 years to be up to \$63 million in current dollars. This is because the rate of increase in disposal costs is projected to be much greater than the rate of earnings licensees are allowed to assume on the decommissioning trust funds.

Another consideration is the limited availability of burial space. The Barnwell disposal site is the primary alternative for disposal of the Unit 1 SGLAs. There are several changes taking place at Barnwell that will limit the space in the near future and eliminate this option in a few years. The reasons for the limitation of the Barnwell site include:

- South Carolina is entering a low-level waste disposal compact with Connecticut and New Jersey, which will reduce the space available to other states.
- South Carolina has announced they will reduce the volume of low-level waste allowed to be disposed at the Barnwell Site in preparation for closing the site.

I&M Decommissioning Trust Fund

I&M has been funding the decommissioning trust fund for many years. Funding was required by the State Commissions prior to the NRC establishing a requirement. I&M funding is based on a much broader definition of decommissioning than the NRC decommissioning definition. NRC regulations first required licensees to report their plans for funding trust funds in 1990. I&M's 1999 and 2001 biennial updates to the 1990 report have informed the NRC that I&M was using a much broader definition of decommissioning than the NRC definition.

Based on site-specific cost estimates, I&M has been funding the trust fund at a level that exceeds NRC requirements. For example, I&M's decommissioning cost estimate not only includes the radiological cleanup required by the NRC, but also includes dismantling the facilities and restoring the site as closely as possible to its natural state. The estimate also includes funds intended for ultimate storage and monitoring of spent nuclear fuel remaining on site following shutdown in the event the U.S. Department of Energy has not fulfilled its obligation to take custody of the spent fuel. Further, the most recent cost estimate filed by I&M with the State Commissions, on which current fund collections are based, specifically included the disposal cost for these replaced SGLAs.

Specific Provisions from Which an Exemption is Requested

I&M requests an exemption from the NRC restrictions on decommissioning fund withdrawals set forth in 10 CFR 50.82(a)(8)(i) and (ii), as necessary, to permit the use of these specific SGLA disposal funds prior to cessation of operations and commencement of decommissioning.

Section 10 CFR 50.82(a)(8)(i) states:

“(8)(i) Decommissioning trust funds may be used by licensees if –

- (A) The withdrawals are expenses for legitimate decommissioning activities consistent with the definition of decommissioning in § 50.2;
- (B) The expenditure would not reduce the value of the decommissioning trust below an amount necessary to place and maintain the reactor in a safe storage condition if unforeseen conditions or expenses arise and;
- (C) The withdrawals would not inhibit the ability of the licensee to complete funding of any shortfalls in the decommissioning trust needed to ensure the availability of funds to ultimately release the site and terminate the license.”

I&M considers the disposition of the SGLAs to be primarily an operational, as opposed to a decommissioning, activity. The NRC definition of "decommission" is, as follows:

Decommission means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits—

- (1) Release of the property for unrestricted use and termination of the license;
or
- (2) Release of the property under restricted conditions and termination of the license.
[10 CFR 50.2.]

That definition focuses on activities that permit the removal of the facility from service, which is not the case here. Further, when the NRC promulgated the decommissioning rule in 1988, it noted in the statements of consideration to the final rule that "[d]ecommissioning activities are initiated when a licensee decides to terminate licensed activities. Decommissioning activities do not include ...operational activit[ies] (using spent fuel disposal as an example)..." (53 Fed Reg. 24018, 24019 (July 27, 1988)). In this case, the proposed disposal of the SGLAs is being addressed by I&M during operation as opposed to waiting until site decommissioning. Accordingly, I&M believes that an exemption with respect to 10 CFR 50.82(a)(8)(i)(A) is necessary in that the proposed withdrawal would not be for a "legitimate decommissioning

activity." However, if the NRC considers this activity to be a decommissioning activity,¹ then I&M believes that an exemption from 10 CFR 50.82(a)(8)(i)(A) is not needed.

I&M would meet the particular restrictions in 10 CFR 50.82(a)(8)(i) subparts (B) and (C) regardless of the characterization of this expense. In particular, the expenditure will not reduce the value of the decommissioning trust below an amount necessary to place and maintain the reactor in a safe storage condition. As of July 1, 2001, the balance of the trust was in excess of \$575 million. This fund is projected to grow to \$1,143 million (2001 dollars) by the end of the CNP Units 1 and 2 current operating licenses in 2014 and 2017, respectively. This is based on planned contributions from rates, an assumed 2% real rate of return, and a \$10 million withdrawal for the SGLA disposal.

The minimum NRC funding requirement pursuant to 10 CFR 50.75 is \$634 million in 2001 dollars, or \$624 million in 2000 dollars, for decommissioning of the radiological contaminated areas of the plant. In addition, the I&M site-specific estimate for radiological decommissioning is \$569 million (2000 dollars). Even with the requested withdrawal, I&M not only has sufficient funds to place and maintain the reactor in a safe storage condition, but I&M reasonably expects to have more than sufficient funds to complete the NRC-required radiological decommissioning.

Finally, the withdrawal of these funds would not inhibit I&M's ability to complete funding of a hypothetical shortfall in the decommissioning trust. The trust is being funded at a rate greater than required to meet the minimum requirements in 10 CFR 50.75, and using trust funds to dispose of the SGLAs now will actually enhance the financial strength of the trust funds at the time of decommissioning (discussed below).

In addition, I&M requests an exemption from 10 CFR 50.82(a)(8)(ii) related to the restriction on the withdrawal of any funds, irrespective of whether the funds were collected for decommissioning-related purposes, prior to shutdown and commencement of decommissioning (except for the funds used for planning). Section 10 CFR 50.82(a)(8)(ii) states:

"Initially, 3 percent of the generic amount specified in §50.75 may be used for decommissioning planning. For licensees that have submitted the certifications required under §50.82(a)(1) and commencing 90 days after the NRC has received the [post-shutdown decommissioning activities report] PSDAR, an additional 20 percent may be used. A site-specific decommissioning cost estimate must be submitted to the NRC prior to the licensee using any funding in excess of these amounts."

The expenditures for which the exemptions are being requested are those necessary to remove SGLAs from the plant site and dispose of them, and the exemption request is to permit the funds

¹ The NRC definition, in 10 CFR 50.2, of "major decommissioning activity" does include "any" activities which result in the "permanent removal of major radioactive components," which components are in turn defined to include "steam generators" (id.).

necessary for that purpose to be withdrawn immediately from the trust irrespective of the 10 CFR 50.82(a)(8)(ii) restrictions.

Financial Analysis of Disposal Costs Demonstrating Cost Savings

Assumptions regarding the cost of waste disposal to be used for NRC decommissioning purposes is documented in NUREG-1307, "Report on Waste Burial Charges." In NUREG-1307 the cost of waste disposal is reported as rising at a rate much greater than inflation and much greater than a utility's ability to earn a return on that money. Conservatively, the real rate of disposal costs has risen almost 10% per year over the last 15 to 20 years. The real rate of return the NRC generally allows licensees to assume for external trust funds is 2% per year.

The CNP licenses currently expire in 2014 and 2017. According to I&M's latest decommissioning cost studies, the SGLAs would be shipped for disposal in about 20 years. Disposing of the SGLAs today is expected to cost \$10 million. Based on an annual cost escalation of approximately 10%, the future value of that disposal would be \$63 million. If the \$10 million remain in the trust fund with a 2% earning rate, it would grow to \$15 million over the same period of time. Therefore, failure to dispose of the SGLAs now is equivalent to adding \$48 million (\$63M - \$15M) in current dollars to future decommissioning expenses. However, permitting the use of the funds now removes that potential increased liability. This provides additional assurance that the trust fund will remain viable at the time of decommissioning.

Conclusion

Special circumstances for granting this exemption are present in accordance with 10 CFR 50.12(a)(2)(ii). Specifically, the application of the regulation in this case is unnecessary to achieve the underlying purpose of assuring that funds will be available to decommission the facility at the end of its license term.

In addition, as also noted previously, the cost estimate on file with the State Commissions on which current collections and funding levels are based specifically includes disposal costs for these SGLAs. However, NRC regulations prohibit withdrawal of the SGLA funds prior to plant shutdown because these funds are commingled with NRC-required funds in the decommissioning trust. It is not apparent that this situation was considered at the time the regulation was adopted and – because of the ultimate financial benefit and the early removal from the site of contaminated material – it is in the public interest to grant the exemption. Thus, this exemption is further warranted under the special circumstances set forth in 10 CFR 50.12(a)(2)(vi).

For the above stated reasons, I&M has demonstrated the requirements for this exemption have been met.