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March 10, 1994

Mr. Samuel J. Chilk
Secretary
U. S. NUCLEAR REGULATORY COMMISSION
Washington, DC 20555

Attention: Docketing and Service Branch

Dear Mr. Chilk:

COMMENTS ON NRC STAFF DRAFT ON
RADIOLOGICAL CRITERIA FOR DECOMMISSIONING

Wisconsin Electric Power Company is submitting the following comments in response to the Federal Register notice (February 2, 1994, 59 Fed. Reg. 4868) announcing the availability of the Nuclear Regulatory Commission's "staff draft" on radiological criteria for decommissioning. The NRC is proposing to amend 10 CFR Part 20 to provide specific radiological criteria for decommissioning. The NRC released a staff draft to the public for comment as part of its enhanced public participatory rulemaking process. We fully support the enhanced public participatory rulemaking process and appreciate the opportunity to comment on the staff draft in advance of formal Commission approval of the proposed rule. We understand that the proposed rule is expected to be issued for comment in the summer of 1994.

Wisconsin Electric supports the NRC in its efforts to establish a clear and consistent regulatory basis for determining the extent to which lands and structures must be remediated before a site can be determined decommissioned. We believe that successful rulemaking must result in a standard which assures public health and safety while allowing site cleanup in a cost effective manner. Codifying radiological criteria for decommissioning is expected to ensure a uniform, equitable, and predictable approach to site cleanup resulting in more efficient use of NRC and licensee resources.

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The NRC expects to publish a number of guidance documents which are intended to delineate acceptable methodologies for performing analyses required to demonstrate compliance with the proposed rule. These guidance documents may have a significant effect on the actual level of cleanup required to conform to the regulation. Therefore, we suggest that the NRC make available these associated guidance documents at the time the proposed rule is issued for comment. Our comments which follow are in response to the staff draft in support of the enhanced participatory process and are formulated without the opportunity to review associated guidance documents.

PROPOSED DOSE LIMIT

The staff draft proposes a limit of 15 mrem per year total effective dose equivalent (TEDE) for residual radioactivity distinguishable from background. If doses from residual radioactivity are less than 15 mrem per year TEDE the NRC will terminate the license and authorize release of the site for unrestricted use. A proposed goal for decommissioning is to reduce the concentration of each radionuclide which could contribute to residual radioactivity at a site to a level which is indistinguishable from background. To release sites for unrestricted use between the 15 mrem per year limit and the 3 mrem per year goal, an ALARA review must be conducted.

The NRC and its predecessor agency, the Atomic Energy Commission, have in the past generally followed the basic radiation protection recommendations of the ICRP and its U.S. counterpart, the NCRP, in formulating basic radiation protection standards. The ICRP and the NCRP have recommended a limit of 100 mrem per year for members of the public. The staff draft states that the Commission has determined that decommissioning activities should not be allowed the entire dose limit of 100 mrem per year. In proposing a 15 mrem per year limit, the Commission has selected a relatively small fraction of the ICRP recommended limit. The staff draft provides minimal technical or cost benefit justification for the proposed 15 mrem per year limit and does not satisfactorily explain the staff's decision to deviate from the recommendations of the ICRP and the NCRP.

Wisconsin Electric recommends that the NRC establish site decommissioning standards which are based on the recommendations of the ICRP and the NCRP. The ICRP and NCRP recommendations are the culmination of years of effort by many highly regarded experts in radiation protection. The ICRP and the NCRP recommendations on exposure to the public should form the basis for development of a decommissioning standard.

Wisconsin Electric recommends a 100 mrem per year total effective dose equivalent limit for any member of the public. We suggest a compliance screening level of 25 mrem per year be applied to the mean annual total effective dose equivalent to the average member of the critical population. The critical population is considered the most highly exposed homogeneous group affected by the restored site. Conformance to this screening level will ensure that no member of the critical group will exceed the 100 mrem per year limit.

GOAL FOR DECOMMISSIONING

Wisconsin Electric believes the optimum regulatory approach is a single dose limit, based upon recommendations of the ICRP and NCRP, combined with the requirement that decommissioning be achieved such that exposures to the public be kept as low as reasonably achievable (ALARA). In establishing the proposed criteria, the NRC has apparently drawn upon elements of traditional radiation protection criteria based upon recommendations of the ICRP and NCRP, the ALARA philosophy, and the lower dose limits associated with EPA's traditional system of linear no-threshold dose limits. This approach has resulted in a proposal to establish a decommissioning "goal" to return to background. The staff draft proposes a goal for decommissioning which is to reduce radionuclide concentrations to a level indistinguishable from background.

We are concerned that the return to background and the 3 mrem per year goal will become a de facto limit. We believe that the codification of a "goal" is inappropriate. The establishment of a return to background goal diminishes the benefits which are inherent in the protection approaches currently used by both the NRC and the EPA. The NRC's traditional use of a dose limit linked to the ALARA concept permits the flexibility to optimize actions taken to maximize benefit. The EPA's approach of using a linear no-threshold limit offers the simplicity of "get there and your done." We believe that it will be very difficult for a licensee to demonstrate compliance with the return to background goal. At the extremely low dose levels of 3 mrem per year, compliance demonstration costs would substantially increase due to the requirement for additional radiological measurements and analyses. These costs are not justified based upon the marginal dose/risk reduction which could be achieved. Resources should be applied to cleanup efforts to reduce levels to as low as reasonably achievable and not to analyses and compliance demonstration efforts which would be required to chase the 3 mrem per year goal.

The staff draft indicates that the 3 mrem per year goal was selected because variations of this magnitude are barely distinguishable from the dose from background radiation. The Health Physics Society published a Position Statement on background radiation in their February 1994 newsletter. The Health Physics Society concludes that 10-30 mrems is well within the natural variation of background and should be considered equivalent to background and without demonstrable increased risk. If the NRC defines background levels in the proposed rule, the NRC should consider the background values defined by the Health Physics Society.

COST BENEFIT ASSESSMENT

There is little evidence in the staff draft which suggest that any meaningful cost benefit analyses were performed to support the bases for the proposed criteria. We suggest that meaningful cost benefit assessments for the proposed criteria be included in the draft GEIS when it becomes available for public review.

Executive Order 122866, issued September 30, 1993, directs that "Each agency shall assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify costs." This order complements the NRC's own initiative to reduce regulatory requirements which are marginal to safety and the NRC's own "Principles of Good Regulation" which states "regulatory activities should be consistent with the degree of risk reduction achieved." It is not evident that these important responsibilities to perform cost benefit assessments have been completed.

RESTRICTED SITE RELEASE

The staff draft proposes criteria for license termination under restricted conditions. We believe that the requirements for restricted use of the site are excessive. Specifically, the requirements make consideration for continued utility land use so onerous that this option will likely be unavailable. Many utilities may select to retain the site and associated infrastructure for future electrical generation. Under such a scenario, the utility would still control and maintain the property and have large business incentives to care for and secure the property.

The proposed rule is drafted with the apparent assumption that the utility will totally forfeit control of the site. As an example, as proposed, why should a utility be required to fund an independent third party to maintain and control the site if the utility intends to continue to retain and control the site for future electric generation? We recommend that the rule be reassessed to consider more realistic criteria for restricted release of the site when the utility intends to continue to utilize and control the site for future electric generation.

SITE SPECIFIC ADVISORY BOARD

The staff draft proposes a requirement which would require the licensee to convene a Site Specific Advisory Board for the purpose of obtaining advice regarding the proposed decommissioning if the licensee expects to request license termination with land use restrictions. We are concerned that the role, authority, and accountability of the Site Specific Advisory Board has not been well defined, nor are the responsibilities of the licensee for implementing the Advisory Board recommendations.

Wisconsin Electric believes that public participation in the decommissioning process is important. The proposed rule will provide for public participation in the decommissioning process through three mechanisms. These proposed mechanisms include the notification of local and state governments, publication of notice in the Federal Register and local media, and the solicitation of public comment on the proposed decommissioning plan. These provisions, along with existing regulations, will provide affected individuals both information about the proposed decommissioning, and an opportunity to provide their comments on the licensee's proposal. These provisions provide a mechanism for early public involvement in the development of the decommissioning plan for the site.

We believe that existing NRC procedures which provide for public input into the regulatory process have been proven effective and afford satisfactory opportunity for early public involvement in the decommissioning process. The stated purpose of the Site Specific Advisory Board is to provide advice to the licensee. The rule proposes that the licensee would be obligated to disposition the advice provided by the Site Specific Advisory Board. We are concerned about the effectiveness of this process due to poorly defined responsibilities and authorities. We are not convinced that the proposed role of the Site Specific Advisory Board can effectively supplement or contribute considerable added value to the proven processes which currently exist for obtaining public review and comment on a proposed licensee action.

We are also concerned that the Site Specific Advisory Board would supplant the responsibilities of local officials, empowered to represent the local populace, to address the types of issues the staff draft proposes to assign to the Site Specific Advisory Board.

REQUIREMENTS TO MINIMIZE CONTAMINATION

The staff draft proposes requirements for minimizing contamination. These requirements would require license amendment requests that involve substantial modifications of the licensed facility to include a description of how the modification will minimize contamination of the facility or environment, facilitate eventual decommissioning, and minimize generation of radioactive waste. The proposed rule would also require each licensee, within three years of the effective date of the rule, to incorporate into its radiation protection program procedural modifications to minimize contamination of the facility or the environment, facilitate eventual decommissioning, and minimize generation of radioactive waste.

We believe that current industry programs and practices have been very successful in minimizing contamination and waste volumes. Economic incentives have contributed to substantial reductions in waste volumes. Current ALARA programs required by 10 CFR 20 have demonstrated effective reductions in personnel exposures and effectively address control of plant and site contamination.

The NRC believes that these new requirements are necessary to focus licensees attention on the type of facility design and good housekeeping practices needed to minimize the types of problems the Commission has had to face with problem sites like those addressed in the NRC's Site Decommissioning Management Plan. While the NRC is aiming these proposed requirements at sites on their problem list, the NRC appears to not recognize successful programs implemented by the nuclear industry to reduce waste volumes and to minimize contamination. Most sites are recognized by the Commission to be in acceptable states of radiological cleanliness. Imposing additional regulations on these successful performers will not contribute to solving the types of problems encountered by the problem plants and will divert resources from existing successful programs to activities required to pursue compliance demonstration with the new regulations. If the Commission has identified poor performers, we believe that these problems can be prevented and mitigated under existing regulations. Similarly, we believe that successful performance will be maintained due to economic forces and existing programs implemented by utilities as required by the ALARA provisions of 10 CFR Part 20.

DEFINITIONS

The staff draft defines residual radioactivity to include all radioactivity from all licensed and unlicensed sources used by the licensee. It also includes radioactive materials discharged from the site as effluents in accordance with 10 CFR Part 20. This definition, coupled with the proposed goal to reduce the concentration of residual radioactivity to a level indistinguishable from background could require licensees to account for and disposition, in accordance with the decommissioning rule, all radionuclides previously released as effluents.

We believe the NRC proposal to broadly include such effluent discharges in the decommissioning rule is inappropriate. Environmental Impact Statements and operating licenses for nuclear facilities permit the effluent discharge of small amounts of radioactive materials. To require these effluent discharges to be included under the provisions of the decommissioning rule, after permitting the discharges under the terms of the original license, is not appropriate. The staff draft does not provide any justification for the need to consider effluent discharges in terms of public health and safety.

CRITERIA TO REVISIT A SITE

The NRC staff draft includes a provision that once a site has been decommissioned and the license terminated in accordance with the criteria in the proposed rule, the NRC would require additional cleanup only if, based on new information, it determines that residual radioactivity remaining at the site could result in significant public or environmental harm.

Wisconsin Electric suggests that any decision to revisit a decommissioned site be based upon the following two criteria; (1) a demonstration that a substantial increase in overall public health and safety would be obtained through additional cleanup efforts, and (2) the benefits of the additional cleanup efforts would outweigh the costs and non-radiological impacts. These are similar criteria to those applied to a determination to add new requirements under the NRC backfit rule.

In summary, Wisconsin Electric encourages the NRC to reevaluate the bases for criteria in the proposed decommissioning rule with the objective of adopting standards which will protect public health and safety while permitting sites to be decommissioned in a cost effective manner. Wisconsin Electric appreciates the opportunity to submit these comments. Should you have any questions or require additional information regarding our comments, please contact Douglas Johnson at (414) 221-2084.

Sincerely,

for

Bob Link
Vice President
Nuclear Power

cc: NUMARC