



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO.119 TO FACILITY OPERATING LICENSE NO. DPR-58
AND AMENDMENT NO.105 TO FACILITY OPERATING LICENSE NO. DPR-74
INDIANA MICHIGAN POWER COMPANY
DONALD C. COOK NUCLEAR PLANT, UNITS NOS. 1 AND 2
DOCKETS NOS. 50-315 AND 50-316

1.0 INTRODUCTION

By letter dated February 1, 1988, the Indiana Michigan Power Company (the licensee) requested amendments to the Technical Specifications (TSs) appended to Facility Operating Licenses Nos. DPR-58 and DPR-74 for the Donald C. Cook Nuclear Plant, Units Nos. 1 and 2. The proposed amendments would correct the current TSs relating to milk sampling. The proposed changes would make the TSs more consistent with the NRC guidelines concerning milk sampling. In addition, the proposed changes would modify the Bases for TS 3/4.11.2.1, "Dose Rate". The proposed changes would make the TS bases more consistent with the guidance provided in the Bases Section of NUREG-0472, Revision 3, and NUREG-0452, Revision 5. The proposed TS changes would also correct an editorial error by deleting redundant \leq signs.

2.0 EVALUATION

The proposed changes to the milk sampling TSs are intended to correct problems with the current TSs. Item 4a of Table 3.12-1 of the TSs requires that milk samples be collected for radiological analysis from the following specific areas:

- A. Stevensville, Michigan
- B. Bridgman, Michigan
- C. Galien, Michigan
- D. Dowagiac, Michigan
- E. South Bend, Indiana

However, no milk samples are collected in Stevensville or South Bend or sectors in which these cities are located because there are no willing farmers who wish to participate in the milk sampling program. Literal TS noncompliance was caused by listing the specific towns where samples were to be taken.

The proposed changes to the TSs are more consistent with the NRC guidelines. Specifically, the proposed changes require sampling at each indicator farm and each background farm. Indicator farm and background farm are defined as follows:

8812130209 881206
PDR ADOCK 05000315
P PDC

Indicator Farm Nearest milk producer in each of the land sectors within 8 miles of the plant site who is willing to participate in the radiological environmental monitoring program.

Background Farm A milk producer in one of the less prevalent wind directions at a distance greater than 15 miles but less than 25 miles who is willing to participate in the radiological environmental monitoring program.

The number of locations sampled may vary due to the number of sectors which contain farms willing to participate in the milk sampling program. The possibility exists that no willing participants may be found within 8 miles of the plant site. In order to address this possibility, the proposed TSs require broad leaf vegetation sampling. Specifically, if fewer than three willing indicator farms are found, broad leaf vegetation samples will be collected and analyzed when available. The proposed changes constitute an improvement over the current TSs. In addition, the proposed changes will make the TSs more restrictive than the current TSs and are more in line with NRC guidance.

The proposed TS changes also would modify the Bases for TS 3/4.11.2.1, "Dose Rate". This change would require the licensee to base the thyroid dose rate limits on the child inhalation pathway rather than the cow-milk-infant pathway. The child inhalation pathway is a more direct pathway which results in less decay time and correspondingly higher calculated doses and is therefore more conservative than the less direct (longer decay time) cow-milk-infant pathway. Further, the distance to the nearest residence in each of the land covered sections is significantly closer to the point of discharge than the nearest commercial dairy farm. Thus, the concentration which would be inhaled is greater than the quantity which would be deposited on the ground to be incorporated into the grass-cow-milk-infant pathway. Accordingly, the proposed change to the bases makes the requirements more stringent than the existing requirements and will make the TSs more consistent with NRC guidance.

The proposed TS changes will also remove redundant \leq signs from Bases Section 3/4.11.2.1. This is an editorial change and does not affect the safe operation of the plant.

Based on the above evaluation, we find that the proposed changes to the TSs are acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

An Environmental Assessment and Finding of No Significant Impact has been issued for these amendments (53 FR 46132), November 16, 1988).

4.0 CONCLUSION

We have concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: December 6, 1988

Principal Contributors: Wayne Meinke, John Stang