

Criterion 1—The Proposed Change Does Not Involve a Significant Increase in the Probability or Consequences of an Accident Previously Evaluated

The PASS was originally designed to perform many sampling and analysis functions. These functions were designed and intended to be used in post accident situations and were put into place as a result of the TMI-2 accident. The specific intent of the PASS was to provide a system that has the capability to obtain and analyze samples of plant fluids containing potentially high levels of radioactivity, without exceeding plant personnel radiation exposure limits. Analytical results of these samples would be used largely for verification purposes in aiding the plant staff in assessing the extent of core damage and subsequent offsite radiological dose projections. The system was not intended to and does not serve a function for preventing accidents and its elimination would not affect the probability of accidents previously evaluated.

In the 20 years since the TMI-2 accident and the consequential promulgation of post accident sampling requirements, operating experience has demonstrated that a PASS provides little actual benefit to post accident mitigation. Past experience has indicated that there exists in-plant instrumentation and methodologies available in lieu of a PASS for collecting and assimilating information needed to assess core damage following an accident. Furthermore, the implementation of Severe Accident Management Guidance (SAMG) emphasizes accident management strategies based on in-plant instruments. These strategies provide guidance to the plant staff for mitigation and recovery from a severe accident. Based on current severe accident management strategies and guidelines, it is determined that the PASS provides little benefit to the plant staff in coping with an accident.

The regulatory requirements for the PASS can be eliminated without degrading the plant emergency response. The emergency response, in this sense, refers to the methodologies used in ascertaining the condition of the reactor core, mitigating the consequences of an accident, assessing and projecting offsite releases of radioactivity, and establishing protective action recommendations to be communicated to offsite authorities. The elimination of the PASS will not prevent an accident management strategy that meets the initial intent of the post-TMI-2 accident guidance through the use of the SAMGs, the emergency plan (EP), the emergency operating procedures (EOP), and site survey monitoring that support modification of emergency plan protective action recommendations (PARs).

Therefore, the elimination of PASS requirements from Technical Specifications (TS) (and other elements of the licensing bases) does not involve a significant increase in the consequences of any accident previously evaluated

Criterion 2—The Proposed Change Does Not Create the Possibility of a New or Different Kind of Accident from any Previously Evaluated.

The elimination of PASS related requirements will not result in any failure mode not previously analyzed. The PASS was intended to allow for verification of the extent of reactor core damage and also to provide an input to offsite dose projection calculations. The PASS is not considered an accident precursor, nor does its existence or elimination have any adverse impact on the pre-accident state of the reactor core or post accident confinement of radioisotopes within the containment building.

Therefore, this change does not create the possibility of a new or different kind of accident from any previously evaluated.

Criterion 3—The Proposed Change Does Not Involve a Significant Reduction in the Margin of Safety

The elimination of the PASS, in light of existing plant equipment, instrumentation, procedures, and programs that provide effective mitigation of and recovery from reactor accidents, results in a neutral impact to the margin of safety. Methodologies that are not reliant on PASS are designed to provide rapid assessment of current reactor core conditions and the direction of degradation while effectively responding to the event in order to mitigate the consequences of the accident. The use of a PASS is redundant and does not provide quick recognition of core events or rapid response to events in progress. The intent of the requirements established as a result of the TMI-2 accident can be adequately met without reliance on a PASS.

Therefore, this change does not involve a significant reduction in the margin of safety.

The NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Attorney for licensee: Jay E. Silberg, Esq., Shaw, Pittman, Potts and Trowbridge, 2300 N Street, NW., Washington, DC 20037.

NRC Section Chief: L. Raghavan.

Nuclear Management Company, LLC, Docket Nos. 50-266 and 50-301, Point Beach Nuclear Plant, Units 1 and 2, Town of Two Creeks, Manitowoc County, Wisconsin

Date of amendment request: March 27, 2003.

Description of amendment request: The proposed amendment would approve a selective scope application of an alternative source term (AST) for fuel handling accidents (FHAs). Specifically, the amendments would revise Technical Specification (TS) 3.9.3, "Containment Penetrations," to (1) change the Applicability statement to "During movement of recently irradiated fuel assemblies within containment," and (2) modify the Required Action for Condition A to eliminate the requirement to suspend core alterations

and add the requirement to suspend movement of recently irradiated fuel assemblies within containment if one or more containment penetrations are not in the required status.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration which is presented below:

1. Operation of the Point Beach Nuclear Plant in accordance with the proposed amendments does not result in a significant increase in the probability or consequences of any accident previously evaluated.

Selective implementation of the Alternative Source Term (AST) and those plant systems affected by implementing the proposed changes to the TS are not accident initiators and cannot increase the probability of an accident. The AST does not adversely affect the design or operation of the facility in a manner that would create an increase in the probability of an accident. Rather, the AST is a methodology used to evaluate the dose consequences of a postulated accident.

The fuel handling accident analysis has demonstrated that the dose consequences of a postulated fuel handling accident remain within the limits provided sufficient decay has occurred prior to the movement of irradiated fuel without taking credit for certain mitigation features such as ventilation filter systems and containment closure. Irradiated fuel that has not undergone the required decay period of 65 hours is defined as recently irradiated fuel and the currently approved TS requirements are applicable when this recently irradiated fuel is being handled.

This amendment does not alter the methodology or equipment used directly in fuel handling operations. Neither ventilation filter system (*i.e.*, the containment purge or drumming area vent stack) is used to actually handle fuel. Neither of these systems is an accident initiator. Similarly, neither the equipment hatch, personnel air locks, any other containment penetrations, nor any component thereof is an accident initiator. No other accident initiator is affected by the proposed changes.

The TEDE [total effective dose equivalent] doses from the analysis supporting this amendment request have been compared to equivalent TEDE doses estimated with the guidelines of RG [Regulatory Guide] 1.183 ["Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors"] Footnote 7. The new values are shown to be comparable to the results of the previous analysis.

Based on the aforementioned reasons, the proposed amendment does not involve a significant increase in the probability or consequences of a FHA as previously analyzed.

2. Operation of the Point Beach Nuclear Plant in accordance with the proposed amendments does not result in a new or different kind of accident from any accident previously evaluated.

The evaluation of the effects of the proposed changes indicates that all design