

US NUCLEAR REGULATORY COMMISSION

August 9, 2005

In the Matter of Re-Licensing  
Monticello Nuclear Generating Plant

Docket No. 50-263-LR

DOCKETED  
USNRC

REPLY COMMENT  
of the  
NORTH AMERICAN WATER OFFICE

August 9, 2005 (3:48pm)  
OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

The North American Water Office (NAWO) offers this reply to the August 3, 2005 submission of Nuclear Management Company, and the August 8, 2005 submission of the NRC staff, regarding the NAWO Petition for Hearing and Contentions.

The responses of Nuclear Management and its regulator have all the differences of Tweedledee and Tweedledum. Such work is indicative of a dying industry that, even after 40 years of massive subsidization, is still utterly dependent on public dole to maintain a meager pulse. But to uniformly misapply regulations to deny standing to NAWO in this proceeding is akin to Jim Crow application of law thus assuring Caucasian dominance. NAWO represents people who will suffer when reactor operations fail at Monticello. NAWO represents people who may benefit from the more responsible delivery of electric utility services. NAWO members are in each category. Warping procedures so that there is no voice for these interests in this proceeding may be more subtle than institutionalized racism, but it stinks of nuclear fascism.

The dismissal of NAWO contentions by NMC and staff is equally disgusting. If the proffered contentions are so weak, why do both NMC and staff prattle on page after

page, attempting arbitrary and preemptive dismissal? What makes their unexamined and mistaken presumptions regarding scope and substance carry greater weight than NAWO contentions? If not sham and charade, the reason for a hearing process would seem to be to prevent such abuse by creating a record upon which decisions can be rationally based.

For example, NAWO Contention 5 regarding drinking water *is* related to management of aging in that certain passive components are not subject to any aging management review process (see below), yet could fail causing site specific drinking water contamination issues for people in the Twin Cities, including NAWO members. NMC finally dismisses the contention with the notion that such a matter would be resolved by simply closing water intakes (p. 23). But would it? That's the issue then, isn't it, considering that virtually all the water for Minneapolis must come through an intake that would have to be closed.

NAWO contends that in fact there are critical components that *are* escaping aging management review. If this and related contentions are not addressed, this proceeding is truly sham and charade preparing damnable consequences. Consider:

1. The Monticello application contains no identification of pump mounting base plates, grout, or mounting hardware as being within the scope of 10 CFR Part 54, no aging management review of these components, nor an aging management program to address these components. While the Monticello application specifically identifies pump casings as being passive components within the scope of the rule, the application fails to address other passive

aspects of the pump component type. Proper structural mounting of pumps, with functions within the scope of the rule, is critical to the performance of pump function during design basis events and specifically seismic events. However the application does not address this passive critical component and component function to ensure that there is no loss of function as a result of aging prior to loss of intended function. Failure to address these items is contrary to the scope of the license renewal rule as established by 10 CFR Part 54.

2. Similar to above; for components such as heat exchangers, compressors, tanks, turbines, and motors the Monticello application fails to identify mounting plates, grout, or mounting hardware for these components as being within the scope of 10 CFR Part 54, does not include an aging management review of these critical components, nor is an aging management program to address these critical components identified within the Monticello application.
3. Valve Stem and Pump Shaft packing provide a critical function to prevent system leakage to the environment along these shafts where the shafts penetrate through a pump casing or valve body/bonnet. This packing material performs its function in a passive manner without change in materials properties or state and without moving parts. The Monticello application states that packing material is addressed as a subcomponent with the aging management review of these subcomponents addressed during the review of

the component that the packing material supports. The Monticello application further indicates that if the packing materials perform a function to maintain leakage limits per the plant current licensing basis that the packing material would not be addressed as a subcomponent, inferring that a component specific aging management review would be performed.

Concerning the first manner that Monticello states packing material is to be addressed, a review of section 3.0 of the Monticello application failed to identify a component type of valve stem packing or pump shaft packing and the associated aging management review of materials, environments, aging effects and identification of an aging management program. While Monticello has specifically addressed valve bodies and pump casings, contrary to the statements in section 2.0 of the application, no aging management review of the valve or pump packing material was identified in the aging management review results of the Monticello application.

Concerning the second manner that Monticello states packing material is to be addressed, in which it is inferred that a separate aging management review would be performed if the packing material maintains system leakage limits, a review of the Monticello application failed to identify an aging management review concerning packing and gasket materials. However, as required by the plant Technical Specifications and 10 CFR Part 50, Appendix J, limits are established on the leakage that is permitted for the plant's primary

containment as well as piping and associated isolation valves, and other components that penetrate and/or form the primary containment isolation boundary. The primary containment and the primary containment isolation boundary performs a critical safety function during plant design basis events to ensure that system leakage is not released to the environment should a pipe break occur within the primary containment structure. The primary containment and the primary containment isolation boundary provide the primary boundary to protect the public from a radiological release during postulated plant accidents and abnormal events.

Valve stem packing for isolation valves located outside of the primary containment plays a critical role to ensure the leak tightness of the primary containment and the primary containment isolation boundary to meet the leakage limits as established in the plant Technical Specifications and the Monticello current licensing basis. Despite the statements made in the Monticello application that a specific aging management review would be performed for sealing materials when the sealing materials maintain leakage below established limits, no such review for these materials could be located in the Monticello application for valve stem packing materials that support the critical function of maintaining the primary containment leakage within limits established in the plant licensing basis.

Failure of Monticello to consider the significant implications of sealing materials on the primary containment leakage limits as described in their integrated plant assessment methodology begs the questions as to what similar implications Monticello overlooked as parts of their application development process.

4. Concerning the discussion of consumable items in the Monticello application, a review of the aging management programs provided in the application failed to identify any program that provides for the continued periodic replacement or condition monitoring of these items. The application provides no detail concerning the activities currently being performed to ensure that the consumable items identified are being monitored and replaced based on criteria consistent with 10 CFR Part 54 to ensure no loss of intended function due to the effects of aging. No assurance is provided to the public concerning the adequacy of the current programs to ensure no loss of intended function for the parent components supported by such consumables nor is any assurance provided to the public that what ever actions the plant is currently performing can not be summarily discontinued in the future as increased cost pressures drive reductions in plant predictive and preventive maintenance activities.

For example, lubrication media such as oils and greases perform a passive function of lubrication for and heat removal from active components. As such, components relying on lubrication media have a passive function of lubrication

similar to valve bodies and pump casings having a passive function of pressure boundary maintenance. However, lubrication media are treated as consumables in the Monticello application and thus have been excluded from aging management review. Numerous tests can be performed to confirm the lubrication media will continue to perform its intended function. However, the frequency of these tests to ensure the identification of age related degradation of lubrication media prior to loss of functions relies on the service conditions the lubrication media is subjected to, as well as other factors such as the type of testing being performed and the quality of the testing results. The treatment in the Monticello application of lubrication media results in no formal aging management review contrary to 10 CFR Part 54 of the critical passive function of components in the scope of the rule, no independent assessment of the adequacy of the actions performed by Monticello to address age related degradation, and fails to meet the standards of 10 CFR Part 54, section 54.29(a)(1), for issuance of a new operating license.

5. The Monticello application contains no identification of valve internals flow isolation sealing subcomponents such as valve discs, plugs, or gates as being within the scope of 10 CFR Part 54, no aging management review of these components, nor an aging management program to address these components. While the Monticello application specifically identifies valve bodies as being passive components within the scope of the rule, the application fails to address other passive aspects of the valve component type. Numerous valves perform their function without any movement of parts or change in state or

configuration. Such valves are normally closed and are required to remain closed to perform their function and can be any of the various types of power operated valves or manually operated valves. The required functions of such valves includes functions such as to provide an isolation boundary between high pressure and low pressure systems during accident conditions and normal plant operations, to provide isolation of auxiliary or test configuration flow paths that do not support the safety function of the system, or as discussed above, support the highly critical function of maintaining primary containment and the primary containment isolation boundary. For all of these functions, similar to the valve body pressure boundary function specifically evaluated in the Monticello application, the valve disc performs a specific pressure boundary function without moving parts or change of state.

Further, for those valves that have a passive function to provide pressure or flow isolation, additional valve components such as the valve stem, valve actuator, and valve actuator to valve mounting hardware also support the passive flow/pressure isolation function. As noted above, while valve bodies are specifically identified in the Monticello application, no aging management review of these additional valve components could be identified. Failure to these components due to aging effects could result in inadvertent valve opening during postulated plant events and loss of the valve passive function to remain closed to maintain flow/pressure boundary.

Failure of Monticello to consider the significant implications of the valve disc for performing flow/pressure isolation functions without change of state or moving parts such as the critical function of maintaining the primary boundary begs the question as to what similar implications Monticello overlooked as parts of their application development process.

The issues noted above are significant and should be formally examined during the requested Hearing. Such examination should result in additional scrutiny on the Monticello application, as well as similar applications by the nuclear industry.

The Monticello application is seriously flawed. It is understandable why NMC and its regulatory agent wish to avoid the scrutiny required to shed light on those flaws, but such behavior is extremely short-sighted and ultimately not only self-destructive, but destructive of major societal interests as well. It is also not surprising that NMC and staff arguments focus on standing, scope and degree of documentation, rather than substance. But documentation is why a hearing process exists, and the risks and liabilities created by attempting to operate Monticello an additional 20 years are not better managed, mitigated or diminished just because some lawyers and bureaucrats want to stick our collective head in the sand. NAWO has standing and its contentions must be heard.

Most Sincerely,

A handwritten signature in cursive script, appearing to read "George Crocker".

George Crocker  
Executive Director