



NUCLEAR ENERGY INSTITUTE

Alexander Marion
SENIOR DIRECTOR, ENGINEERING
NUCLEAR GENERATION DIVISION

July 2, 2004

Mr. Sunil Weerakkody
Fire Protection Section Chief, DSSA
U.S. Nuclear Regulatory Commission
Mail Stop O11-A11
Washington, DC 20555-0001

PROJECT NUMBER: 689

Dear Mr. Weerakkody:

As discussed during our meeting with you on June 22, 2004, we have evaluated the NRC concern related to manual lockout of automatic CO₂ systems. We conducted a survey of licensee plans to change current CO₂ system designs and found that such lockouts are of low risk significance. Adequate defense-in-depth is maintained if appropriate compensatory actions are taken and adequate suppression capability is assured.

The following points summarize our position:

1. Automatic CO₂ systems present a potential for personnel hazard, and licensees are justified in considering alternative means for suppression
2. Alternatives that may achieve an appropriate measure of fire protection defense-in-depth include the following:
 - a. Conversion of an automatic system to a manual system
 - b. Replacement of an automatic CO₂ system with another form of automatic fire suppression
3. The plant risk studies performed to date indicate that there is no significant impact on plant risk from automatic CO₂ system conversion or replacement with alternative means of suppression
4. Plant evaluations to date have not indicated an adverse impact on the ability to achieve safe shutdown that would require prior NRC approval of the modification via an exemption or license amendment.

Mr. Sunil Weerakkody
July 2, 2004
Page 2

We propose to develop guidelines for licensees who are considering alternatives to automatic CO₂ systems. These guidelines would focus on design and licensing considerations and be in the form of a white paper. We would submit a draft of this white paper to NRC for review and comment prior to distribution to the industry in final form.

Please contact me (202-739-8080; am@nei.org) or Fred Emerson (202-739-8086; fae@nei.org) with any questions.

Sincerely,



Alex Marion

c: Mr. John Hannon, NRC
Mr. Dan Frumkin, NRC