RAS 4130 **DOCKETED 03/20/02**

March 19, 2002

Charles Bechoefer, Chairman
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Charles N. Kelber
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Richard F. Cole
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

In the Matter of
DOMINION NUCLEAR CONNECTICUT, INC.
(Millstone Nuclear Power Station, Unit No. 3)
Docket No. 50-423-LA-3

Dear Administrative Judges:

The affidavit of Dr. Anthony C. Attard, included as an enclosure to the NRC Staff Brief and Summary of Relevant Facts, Data, and Arguments Upon Which the Staff Proposes to Rely at Oral Argument on Contention 4 in the Reopened Proceeding, was not properly executed. Dr. Attard's executed affidavit is attached hereto. The Staff requests that the properly executed affidavit of Dr. Attard be substituted for the affidavit previously submitted.

Sincerely,

/RA/
Sara E. Brock
Counsel for NRC Staff

Enclosures: As stated

cc w/encls: Service List

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
DOMINION NUCLEAR CONNECTICUT, INC	)	Docket No. 50-423-LA-3
	)	
(Millstone Nuclear Power Station, Unit No. 3	)	

AFFIDAVIT OF ANTHONY C. ATTARD IN SUPPORT OF
NRC STAFF'S BRIEF AND SUMMARY IN THE REOPENED PROCEEDING

Anthony C. Attard, being duly sworn, does hereby state as follows:

1. My name is Anthony C. Attard. I have been employed as a reactor Physicist/Engineer by the U.S. Nuclear Regulatory Commission (NRC) for almost twelve years. My tenure at the NRC has been spent exclusively in the Reactor Systems Branch (SRXB) in the Office of Nuclear Reactor Regulation. My assignments cover a wide range of licensing and operating reactor issues, such as reloads, technical specification changes, accident analysis, advanced reactors, boron dilution transients and probabilistic risk assessment methods. I have a Ph. D. in Nuclear Physics and Engineering from Carnegie-Mellon University and a Bachelor of Science in Mathematics and Physics from the University of Michigan. I have 25 years experience in the nuclear power industry, commercial and military reactors. A statement of my Professional Qualifications is attached hereto as Exhibit G.

2. Dr. Laurence I. Kopp and I provided an affidavit in support of the NRC Staff's Brief and Summary of Relevant Facts, Data and Arguments, filed June 30, 2000, in this proceeding. On January 8, 2001, we provided an additional affidavit in support of the NRC Staff's Opposition to the Intervenors' Motion to Reopen and Vacate, filed December 18, 2000. Dr. Kopp is now retired.

3. The purpose of this affidavit is to update the previously filed affidavits referenced above.

4. I note that in paragraph 25 of our affidavit filed in support of the Staff's Brief and Summary, filed June 30, 2000, referenced above, we discussed criticality concerns. In paragraph 25 we stated:

> As part of the NRC review of the NNECO amendment request to establish three regions (Regions 1, 2 and 3) for fuel storage in the spent fuel pool, the Staff reviewed the Holtec report, which presented the criticality evaluation for the misloading of a fresh fuel assembly in the Millstone 3 spent fuel pool. Application, Exh. 1, Att. 5. Based on the analysis described in this report, NNECO has determined that a soluble boron concentration of only 425 ppm would be sufficient to maintain a 5% subcriticality margin in the event of a fuel assembly misloading event (i.e., a fresh PWR assembly enriched to 5 weight-percent U-235 inadvertently loaded into an empty cell in Region 3 with the remainder of the rack fully loaded with fuel of the highest permissible reactivity). The Staff noted that, for conservatism, NNECO has chosen a value of 800 ppm in the proposed TS. Based on experience in evaluating the criticality safety of spent fuel pools, we find the calculational methods and assumptions made in these analyses to be acceptable and conservative.

5. NNECO's inability to confirm the location of two BWR (boiling water reactor) fuel rods at its Millstone Unit 1 spent fuel pool (SPF) does not pose a criticality concern. Even if, hypothetically, these two rods were in the Millstone Unit 3 SPF, as Dr. Kopp and I attested to in our affidavit filed January 8, 2001, the proposed concentration for the Millstone Unit 3 SFP effectively precludes criticality in the event of an error that results in a misplaced fuel assembly. The reopened issue concerns only two fuel rods at Millstone Unit 1. Two fuel rods are a small fraction of a fuel assembly. Thus, the analysis contained in paragraph 25 of the June 30, 2000 affidavit bounds the effect of the two fuel rods that are of concern here. Further, the two fuel rods in question are less reactive than any fuel in the Millstone Unit 3 SPF. The previous testimony on criticality issues regarding the Millstone Unit 3 SPF remains valid.

6. I hereby certify that the foregoing is true and correct to the best of my knowledge, information and belief.

/RA/

Anthony C. Attard

Subscribed and sworn to before me
this day of March 2002.

Circe E. Martin

Notary Public

My commission expires: 03/01/03