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NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

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May 31, 1991

Docket No. 50-423
B13436

Re: ISAP

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Gentlemen:

Millstone Nuclear Power Station, Unit No. 3
Integrated Safety Assessment Program
Initial Submittal Report

During the past several years, Northeast Nuclear Energy Company (NNECO), Connecticut Yankee Atomic Power Company (CYAPCO), and the NRC have been developing and implementing the Integrated Safety Assessment Program (ISAP) at Millstone Unit No. 1 and the Haddam Neck Plant. Our experience to date with ISAP has demonstrated the program to be a resource efficient and cost-effective process for enhancing nuclear power plant safety and operation. We are firmly committed to continued participation in the ISAP at these units. In addition, this submittal supports our previous commitment to expand participation in the ISAP to Millstone Unit No. 3.

We believe that the ISAP has been and continues to be very beneficial to both NNECO and the NRC. The NRC Staff has extended various opportunities to licensees to take advantage of integrated assessment type methodologies. Beyond the ISAP pilot program, the Staff issued Generic Letter (GL) 88-02, Integrated Safety Assessment Program II, as a derivitive of ISAP, to again ascertain utility interest on participating in the program. Later, during the course of the Individual Plant Examination (IPE) for Severe Accident Vulnerabilities, the Staff reintroduced the integrated assessment concept, in GL 88-20 and NUREG-1335, as a means for scheduling the potentially resulting modifications. Most recently, the Staff response to licensees on the Regulatory Impacts Survey identified several issues, which the Staff proposed to address. The first being "the Cumulative Effect of [NRC] Requirements" and a recognition of the need for a means to evaluate and schedule the Staff generic issues. The Integrated Regulatory Requirements Implementation Schedule (IRRIS) is a new version of an ISAP-like integrated assessment and scheduling process. Since we consider IRRIS and ISAP as conceptionally similar, we view the new IRRIS proposal as an affirmation of our ISAP experience.

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As part of our experience with ISAP, NNECO and CYAPCO have developed, in conjunction with the NRC, a sophisticated ISAP methodology known as the Analytical Ranking Methodology (ARM). This has allowed us to achieve an integrated evaluation and prioritization of proposed and ongoing plant-specific modifications and engineering evaluations at Millstone Unit No. 1 and the Haddam Neck Plant. The prioritizations have subsequently been utilized in developing Integrated Implementation Schedules (IIS) for each plant, which are routinely submitted to the NRC and most recently on May 31, 1991 and March 28, 1991, respectively. NNECO has, for some time, been taking steps toward applying the ISAP to Millstone Unit No. 3, by identifying topics to be evaluated and defining the scope for those topics. We are very encouraged by the results of the ISAP and are now extending this methodology to Millstone Unit No. 3.

Continuation and expansion of the ISAP, as stated in our response[1] to GL 88-02 (ISAP II), further demonstrates the program to be a mutually efficient regulatory and utility process for enhancing safe reactor operations on a properly prioritized and resource effective basis. The enhanced interactive approach between NNECO and the NRC, as discussed with the NRC Staff during the June 28, 1990, November 8, 1990, and May 23, 1991 counterparts meetings, continues to evolve toward enhanced understanding and issue resolution. The ISAP has helped to foster this environment of cooperation where we can jointly review and evaluate issues.

In GL 88-02, the NRC Staff stated that the ISAP could be incorporated into a licensee's plant-specific response to the Severe Accident Policy Statement. On July 27, 1989[2] and October 31, 1989,[3] NNECO and CYAPCO submitted comprehensive responses to IPE Severe Accident Vulnerabilities (GL 88-20).

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(1) E. J. Mroczka letter to U.S. Nuclear Regulatory Commission, "Haddam Neck Plant, Millstone Nuclear Power Station, Unit Nos. 1, 2, and 3, "Integrated Safety Assessment Program II, Response to Generic Letter 88-02," dated February 19, 1988.

(2) E. J. Mroczka letter to U.S. Nuclear Regulatory Commission, "Haddam Neck Plant, Millstone Nuclear Power Station, Unit Nos. 1, 2, and 3, Response to Generic Letter 88-20, Individual Plant Examinations for Severe Accident," dated July 27, 1989.

(3) E. J. Mroczka letter to U.S. Nuclear Regulatory Commission "Haddam Neck Plant, Millstone Nuclear Power Station, Unit Nos. 1, 2, and 3, Response to Generic Letter 88-20, Supplement 1, Individual Plant Examination for Severe Accident Vulnerabilities," dated October 31, 1989.

Later, NNECO submitted the Millstone Unit No. 3 IPE summary report,(4) in which the ISAP/IPE relationship was again discussed. As discussed in the July 27, 1989 letter, and again in the previously submitted IPE summary report, Millstone Unit No. 3 currently has a completed, well-exercised and updated Probabilistic Risk Assessment. This capability provides the basis for the public safety attribute evaluation, within the ARM, of unit-specific ISAP topics. This ISAP/IPE linkage further demonstrates the "integrated safety assessment" benefit when evaluating and scheduling the results of the plant-specific IPE.

In conclusion, this expansion of the ISAP to Millstone Unit No. 3 is the next logical step in our continued endorsement and application of the ISAP concept at Northeast Utilities. Since the ISAP process is now being formally applied to Millstone Unit No. 3, only a portion of the list of potential modifications has been evaluated through the ARM. The IIS, depicted in this first submittal, represents implementation dates for only those projects for which ARM evaluations have been completed. As more topics undergo cyclic ARM evaluations, their respective implementation status will be included, thus increasing the comprehensiveness of the IIS. Subsequent ISAP update reports will be submitted approximately every 6 months with updated information, including the IIS.

As always, if you have any questions on the material contained in the report, please feel free to contact my staff.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

FOR: E. J. Mroczka
Senior Vice President

BY: _____
W. D. Romberg
Vice President

cc: See Page 4

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(4) E. J. Mroczka letter to U.S. Nuclear Regulatory Commission, "Millstone Nuclear Power Station, Unit No. 3, Response to Generic Letter 88-20, Individual Plant Examination for Severe Accident Vulnerabilities Summary Report Submittal," dated August 31, 1990.

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Table of Contents