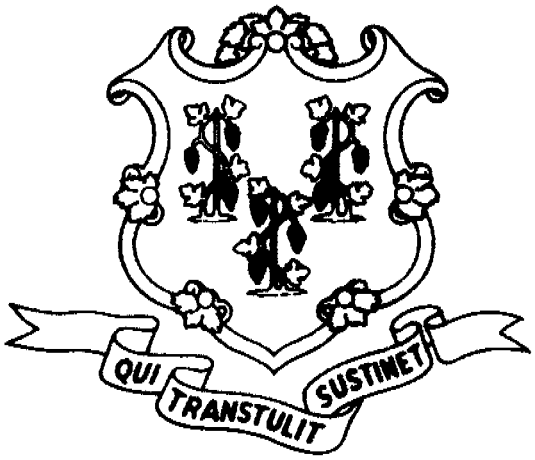
STATE OF CONNECTICUT



THE NUCLEAR ENERGY ADVISORY COUNCIL REPORT

2000

Established Pursuant to Public Act 96-245

Terry Concannon, co-chairperson
Evan W. Woollacott, co-chairperson

January 11th, 2001

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Requests for any report or backup documents may be made by contacting the Co-Chairs at Room 4100, Legislative Office Building, Hartford, CT 06106.

CHARGE TO THE COUNCIL

Section 17 of Public Act 96-245 created the Nuclear Energy Advisory Council (NEAC) and requires it to:

1. Hold regular public meetings to discuss issues relating to the safety and operations of nuclear power plants, and to advise the governor, legislature, and municipalities within a five-mile radius of the plants on these issues;
2. Work with federal, state and local agencies and the companies operating such plants to ensure public health and safety;
3. Discuss proposed changes in, or problems arising from, the operation of the plants;
4. Communicate, through reports and presentations, with the plants' operators about safety or operational concerns at the plants;
5. Review the current status of the plants with the Nuclear Regulatory Commission (NRC).

COUNCIL MEMBERS

The council has 14 members appointed by the leadership in the General Assembly and the executive bodies in the towns in which the state's nuclear power plants are located (**Appendix 1**).

NEAC link on the <millstonestation.com> Internet web site.

EXECUTIVE SUMMARY

This is the fifth annual report presented by the Nuclear Energy Advisory Council. This fifth year brought about a change of focus for the council. Millstone 2 and 3 had completed the exhaustive Recovery Process in 1999, as required by the Nuclear Regulatory Commission (NRC), and were generating electricity once again. Millstone 1 and Connecticut Yankee were undergoing the lengthy decommissioning process. NEAC members considered that the council's role now involved ensuring that these operations were executed in a manner that is safe for the workers and for the surrounding communities. With this is mind, the council met seven times on alternate months and several of its sub committees took an active part in overseeing specific areas of concern, notably the decommissioning of Unit 1 and the Auction of Millstone Station. The Legislature responded to NEAC's 1999 recommendation that the council receive guaranteed clerical support by amending 16-11a of the general statutes to state that the Commissioner of Environmental Protection shall provide clerical support to the council. Public Act 00-155 was signed by Governor Rowland on May 26, 2000.

NEAC member, Bill Sheehan, who maintains the qualifications necessary to permit him unescorted access into the power plants, continued the monitoring of the control rooms in Millstone 2 and 3 a total of 24 times on a regular basis. His reports are shared with management as well as with the council, and enable us to keep in touch with what is actually happening in the plants.

We monitored progress made in the Safety Conscious Work Environment (SCWE) program. This is an integral part of safety in the operation of the plants, and has been gaining strength during the recovery and restart phases of Millstone. However, some degree of uncertainty accompanies the current auction and transition stages at the station, and NEAC has expressed its concern before the Public Utilities Commission. It is paramount that ground gained in the SCWE and Employee Concerns Program (ECP) not be lost in the transition to new ownership of the utility.

Where decommissioning of the two nuclear plants, Connecticut Yankee and Millstone Unit 1, is concerned, NEAC has kept in touch with developments during the year. Connecticut Yankee (CY) has its own Community Decommissioning Advisory Committee (CDAC), which is funded by the utility and is monitored by NEAC members from Haddam, Marjorie DeBold and Mary Ann Buckley. The Millstone 1 Decommissioning Advisory Committee (MIDAC) was created as a sub-committee of NEAC, is not fiscally supported by the utility and retains its objective stance and independence in like manner to NEAC. The 12 members of MIDAC come from the surrounding communities around Millstone and have performed their job with diligence during the year. Decommissioning exacerbates the problem of High

Level Radioactive Waste storage, a problem for which the council has been strongly advocating a resolution for the past five years

The auction of Millstone Station has caused a certain degree of concern, and has been closely monitored by NEAC Co-Chair, Evan Woollacott, and Marjorie DeBold. Our request to include the issue of safety as it applies to the operating record of a would-be purchaser of Millstone was accepted and included in the auction requirements. However, we consider that NEAC was accorded *minimal recognition* in the process, and we remain concerned about issues pertaining to the status of current employees during the transition because plant safety could be impacted. Currently, there is no evidence that this is the case.

As part of our agenda for 2001, we shall continue to monitor operations and decommissioning activities, as well as to focus on the Safety Conscious Work Environment program. The proposed new ownership of Millstone Station by Dominion Resources Inc. will be of particular interest to us.

REPORT ON ISSUES

NU RESTART PROGRAM

NEAC monitored post-restart activities at Millstone 2 and 3:

1. Through public meetings with, and briefings by, the Nuclear Regulatory Commission (NRC), Northeast Utilities (NU), Federal Emergency Management Agency (FEMA), Little Harbor Consultants (LHC) and the Department of Energy (DOE);
2. By observing all public meetings including the NRC Atomic Safety and Licensing Board hearing regarding reracking of Millstone 3 Spent Fuel storage;
3. By having a member of NEAC monitor Control Room operations at Millstone 2 and 3; and
4. By observing the NRC and FEMA biennial evaluation of Millstone's performance of the Emergency Response Organization (ERO) during a full participation exercise.

In addition, NEAC monitored the status of **Post-Restart** activities by reviewing NRC staff memos, Inspection Reports and Notices of Violation.

Corrective Action Verification Program

In the case of Millstone 2 and 3, there existed a backlog of discrepancies with the lowest significance (level 4) following restart, which required corrective action. NEAC has monitored the backlog reduction. As of December 31, 2000, Millstone 2 had reduced its backlog from the original 638 level 4 Discrepancy Reports (DRs) to 38, and Millstone 3 had reduced its backlog from 838 to 0. Management is committed to the final disposition of the remaining Millstone 2 level 4 DRs by December 31, 2001.

Millstone Operations

During 2000, Millstone Station became a 'process based organization,' organizing around a group of related tasks that are performed by cross-functional teams. Nine master processes are involved in producing energy safely and efficiently.

No unplanned automatic scrams (emergency plant shutdowns) occurred at Millstone 3 and one operator-initiated scram occurred at Millstone 2 as a result of a Feedwater system oscillation condition that was subsequently corrected. Commencing April 22, 2000, Millstone 2 safely and successfully completed a refueling outage (its thirteenth) in 40 days and 20 hours, a nuclear industry record for safely completing a refueling outage concurrent with a full generator rewind.

The biennial Emergency Preparedness Exercise was held on March 15, 2000, and was evaluated as satisfactory with no violations of NRC requirements identified. In May 2000, the NRC Commissioners announced that Millstone 2 and 3 had been shifted from "agency/regional focus" status to routine oversight status, and in November the NRC approved the expansion of Millstone 3 spent fuel (pool) storage capacity from 750 assemblies to 1,850 assemblies.

A violation of NRC requirements was reported in September 2000. Millstone personnel failed to promptly (from August 23 to September 20) correct a significant condition adverse to quality involving the Millstone 2 turbine-driven auxiliary feedwater pump. Appropriate corrective and regulatory action was taken by NU and the NRC.

Safety Conscious Work Environment

NEAC continued to monitor NU activities to develop and implement the Employee Concerns Program (ECP) and the Safety Conscious Work Environment (SCWE). As it lifted the Confirmatory Order that established the Independent Third Party Oversight Program (ITPOP) on October 24, 1996, the NRC noted NU's commitment to have Little Harbor Consultants (LHC) conduct periodic assessments of the Millstone SCWE. The results of the first assessment were publicly reported at the July 15, 1999, NEAC meeting in Waterford; The "ECP (was) continuing to improve and is one of the best in the country." The second assessment was conducted in January 2000 and reported at the February 17, 2000, NEAC meeting in Waterford. It was noted that, "A generally healthy SCWE has been maintained at Millstone." A third assessment was conducted in September 2000 and, among the conclusions reported by LHC, it was in their considered judgment "that the overall state of the SCWE has improved in some areas since our visit in the early spring of 2000.

Millstone Monitor

A member of NEAC, John (Bill) Sheehan, continued to maintain his 'badged' status throughout 2000 and monitored the control room watch-standers in Millstone 2 and Millstone 3, with emphasis on items relating to Public Health and Safety.

SUMMARY OF MILLSTONE MONITORS IN 2000

a) Twenty-four monitors were conducted. Most were in Millstone 2 due to the refueling outage in April and May, and to more activity occurring in Millstone 2, but ten monitors did take place at Millstone 3. **(Appendix 3)**

b) Each visit took an hour or more. Besides observing the conduct of watch-standers, the monitor reviewed pertinent logs, turnover check offs, outstanding Condition Reports (CRs), status sheets and procedures in use during the observation period.

c) The year's observations may be summarized as follows:

1) The trend in watch-stander performance over the year was up;
2) Watch-standers were not afraid to draft Condition Reports (CRs), if necessary;
3) Millstone 2 seemed to have more material problems than Millstone 3, especially prior to the Refueling Outage 13 in April 2000. Although problems still exist after the outage, they are not as severe;
4) Site performance during the MP2 outage was outstanding. One operator commented to the monitor that ".....we couldn't have done this two years ago."
5) Distractions relating to the site purchase by Dominion Resources and the restructuring of positions at the site caused operators to tailor evolution briefs to insure the undivided attention of all involved;
6) Watch-standers continue to be health and safety conscious and have the open support of upper management;
7) Although there is always room for improvement, the Operators have shown real professional growth during the past year.

YEAR 2000 (Y2K)

November 8, 1999, the NRC reported that all 103 operating nuclear power plants in the country were "Y2K-ready." The effort expended at Millstone and CY to ensure that all software applications and embedded devices were compliant resulted in a smooth transition when the New Year 2000 arrived. In any event, no Y2K issues had been identified with regard to the safe operation of the plants. The NEAC monitor visited the plant on January 1 and vouched for the fact that there were no Y2K induced events.

NUCLEAR EMERGENCY PREPAREDNESS

During 2000, the state of Connecticut started planning the implementation of the NEAC Emergency Preparedness Subcommittee recommendations. These recommendations include the establishment of nuclear emergency public information programs, updating of evacuation routes, increasing the number of emergency reception centers and the stockpiling and distribution of Potassium Iodide (KI).

In December 2000, the NRC announced that it is revising a section of the emergency preparedness regulations to require that consideration be given to include KI as a protective measure for the general public to supplement sheltering and evacuation in the event of a severe nuclear power plant accident. Reversing an earlier decision, the NRC said that it would provide funding for the initial purchases of KI by states that choose to include KI for the general public in their emergency plans. However, the Commission has made no commitment as yet to fund the replenishment of these stockpiles. Replenishment is necessary to replace out-of-date KI pills.

In August 1998, when the NRC suggested that states consider the use of KI to supplement a state's nuclear emergency planning, NEAC acted on the recommendation of its Emergency Preparedness Subcommittee and addressed a letter to Governor Rowland recommending that the State of Connecticut take action to request appropriate quantities of KI pills from the federal government. NEAC also suggested that KI be stockpiled and distributed to residents within the Millstone Emergency Planning Zone. In response, the State of Connecticut formed a state interagency working group in December 1998 to re-assess the state's policy on this issue. NEAC member, Dr. Edward Wilds, represents the DEP on this interagency working group. The group met several times in 1999, but not in 2000. To date, no recommended policy changes have been forthcoming due to lack of guidance from the Federal Drug Administration (FDA).

Concurrently in December 1998, an NRC KI core-working group was formed in order to provide the states with further guidance relating to the possible inclusion of KI in state emergency planning.

To further aid the efforts to include KI in Connecticut's nuclear emergency planning, the Citizens Regulatory Commission (CRC); a local group of volunteers from southeastern Connecticut concerned about nuclear safety, formulated a petition in support of the inclusion of KI in nuclear emergency planning. Over 500 residents of Southeastern Connecticut signed this petition, which was forwarded on July 23,1999, to the Nuclear Regulatory Commission. Copies were also sent to the state's Department of Public Health, State Senator Melodie Peters, and State Representative Andrea Stillman.

In conclusion, it is vital that the state of Connecticut, with the cooperation of the appropriate federal agencies, recognize that all improvements to nuclear emergency planning need to be addressed in a meaningful manner. Our clogged highway structure, the lack of public awareness of evacuation procedures and KI usage, coupled with aging nuclear plants in a newly de-regulated environment, could create a recipe for serious future problems.

DECOMMISSIONING

MILLSTONE 1

In July of 1998, it was announced that Millstone Unit 1 would undergo decommissioning. A modified SAFSTOR decommissioning option was selected. This involves some decontamination and dismantlement early in the process. Most radioactive components and equipment are removed and shipped to a licensed disposal facility. After these initial activities are complete, the unit will then be placed in safe storage. Management personnel from Entergy Nuclear were contracted to complete the first phase of decommissioning, which is to place the unit in a 'Cold and Dark' state. Throughout 2000, decommissioning work continued at Unit 1. The primary focus of the organization is to continue maintaining the spent fuel pool and its supporting systems, to support the systems shared with Units 2 and 3, worker safety and regulatory compliance.

After reviewing Unit 1 requirements, in conjunction with the operational and outage requirements of Millstone Units 2 and 3, it was strategically decided to move the 'Cold and Dark' milestone date to April 2001. This would allow the safe and efficient completion of the separation (from Units 2 and 3) projects as well as the decommissioning projects. Seven separation projects were completed by December 31st, and the remaining twelve scheduled for completion by April 1, 2001. Three significant decommissioning projects had also been completed by December: Spent Fuel Pool Clean-up, Refuel Floor Clean-up and Asbestos Abatement. The remaining projects are on track for completion by April 1, 2001. Preliminary work on the Independent Spent Fuel Storage Installation (ISFSI) Project [dry cask fuel/waste storage] continues. Northeast Utilities and Dominion Corporation, as part of the sale and integration process, are working out an overall decision regarding wet .v. dry fuel storage.

It was discovered during inventory audit of the spent fuel pool that two fuel pins were unaccounted for. These pins could have been moved to another location in the pool or shipped off site to a low-level radioactive waste storage site. Eight corrective actions have been initiated to address this problem, which will be monitored by NEAC.

The April 2001, 'Cold and Dark' milestone is a contingency of the sale of Millstone Station to Dominion Resources, which is scheduled to be completed in April 2001.

MILLSTONE 1 DECOMMISSIONING ADVISORY COMMITTEE (MIDAC)

With the responsibility of monitoring decommissioning activities at Millstone Unit 1, MIDAC members (**Appendix 4**) publicly met throughout the year on the first Thursday of each month at Waterford Town Hall. Personnel from Entergy, Inc., the company selected by Northeast Utilities to conduct the Millstone 1 decommissioning, routinely reported on decommissioning activities and regulatory modifications. Topics for update included; the spent fuel pool clean up, independent spent-fuel installation design, the asbestos removal project and separation projects. Updates were also provided on insurance and security modification requests and the technical license change to reflect Unit 1's decommissioning status. Questions by committee members and the public were addressed during all meetings.

In addition to regular decommissioning updates, specific topics were presented at each meeting, including overall and in-depth discussions on spent fuel storage options and dry cask storage design that spanned four separate meetings.

Committee members were briefed on safety incidents that occurred, which caused a 'stand-down' at Unit 1, and the corrective actions taken to mitigate the potential for subsequent occurrences.

During meetings throughout the year, the committee was privileged to hear from special presenters, including Mike Meisner, President of Maine Yankee nuclear power plant, who outlined Maine Yankee's decommissioning process and invited MIDAC members to tour the plant. NEAC member, John (Bill) Sheehan, reported on NEAC's initiatives and accomplishments, and described his assignment on behalf of NEAC as a 'badged' control-room monitor at Millstone 2 and 3. DEP was represented at every meeting and personnel from NRC Region 1 occasionally attended MIDAC meetings while keeping committee members apprised of the results of the NRC's regular inspections of Unit 1.

Special activities that were undertaken by the committee included; its first tour of Millstone 1 prior to the start of the February meeting, with a follow-up tour in December and a final tour expected in early 2001. Co-chair Rathbun participated in a community television broadcast taping of the Citizens Regulatory Commission's (CRC) "*Nuclear Safety Issues,*" focusing on decommissioning issues. In September, the committee held a joint meeting with NEAC at Connecticut Yankee in Haddam Neck, during which a representative from the U.S. Department of Energy (DOE) presented information on Yucca Mountain in

Nevada, and the DOE's future plans for accepting spent nuclear fuel for storage in the national repository that is being developed there.

MIDAC members also met with their counterparts from Connecticut Yankee's Community Decommissioning Advisory Committee (CDAC) to discuss their respective committee's activities and membership composition. Committee members shared their views on the similarities and differences between the decommissioning that is taking place at the two plants, and they discussed various ways in which to encourage public interest and participation in the decommissioning process.

The upcoming year will find MIDAC at a crossroads of decision due to the expected change of ownership in the Millstone nuclear power plants following the 2000 auction, which came as the result of the 1998 Electric Restructuring Act in Connecticut. If approved by the Department of Public Utility Control process, the new owner, Dominion, could elect to retain wet storage of Unit 1's fuel in the spent fuel pool rather than dry cask storage. MIDAC members will be considering their future as a committee and their role in monitoring Millstone 1 after April 1, 2001, when the plant is scheduled to become "cold and dark." Until that time, MIDAC will continue to be vigilant in monitoring the progress of decommissioning at Millstone Unit 1.

CONNECTICUT YANKEE

Dismantlement activities continue at Connecticut Yankee (CY), with the project about 35 percent complete. Over four million pounds of wastes have been taken away, and all major reactor components, except the reactor itself, have been removed from containment. The internals of the reactor vessel have been cut up and transferred to storage canisters, ready for placement in the spent fuel pool. During a 1.5 million-work hour period there has been one lost-time accident (broken leg); safe work habits have resulted in an OSHA recordable injury rate one tenth that of construction site averages.

Bechtel Power, the Decommissioning Operations Contractor, is currently working on the planning and permitting process to allow for removal, by barge, of the steam generators and the reactor pressure vessel. During the fall, CY applied to the Haddam Planning and Zoning Commission for the creation of two industrial zones, elsewhere on the CY property. One site would serve for the construction of storage casks. The other zone would allow the construction of a facility where the spent fuel rods (now on-site in the spent fuel pool) and other 'Greater than Class C' (GTCC) high level nuclear waste would be stored above ground, in forty-three casks (16 feet tall x 10 feet in diameter) on a concrete pad. Three public hearings were held in Haddam and Haddam Neck in November and, on December 4, 2000, the Planning and Zoning Commission denied the requests for zone changes essentially because it could have led to the

creation of a regional nuclear waste site that would be forced to accept nuclear waste from out of state. It also went against the town's plan for conservation and development.

In July 2000, CY submitted its License Termination Plan (LTP) to the Nuclear Regulatory Commission (NRC). The LTP outlines the process and approach CY will use to meet the NRC criteria for terminating the operating license and releasing the site from NRC regulatory control. In October, CY explained to the public what the LTP contains and how CY plans to reduce residual plant radioactivity on the site to acceptable NRC levels so that the site will be ready for reuse. The NRC is currently considering the LTP.

A portion of the plant property is under consideration for the possible construction of a gas-fired power plant. CY has been working with the town to help make this an achievable opportunity.

CY provides information to the public through daily publications of "CY Today", its website www.connyankee.com, monthly meetings of the Community Decommissioning Advisory Committee (CDAC), and quarterly NEAC presentations.

The dismantlement project is scheduled for completion in 2004.

HIGH LEVEL NUCLEAR WASTE

NEAC continued its quest to obtain an early, centralized storage facility for spent nuclear fuel rods. For the first time since NEAC has been monitoring action on the various high level waste proposals, both congressional houses passed a bill authorizing an interim centralized storage site, among other provisions. Unfortunately, the votes were not sufficient to override a subsequent presidential veto.

In view of the fact that there are now two nuclear plants currently being decommissioned in Connecticut, failure to establish a centralized facility could adversely affect the State's economy. There have been discussions about locating a combined-cycle natural gas fired unit at the Connecticut Yankee site. However, with spent nuclear fuel still at CY, the NRC would require substantial review of the potential effects of any postulated natural gas explosion. This could also involve additional expense to provide the protections required by the NRC.

NEAC will continue to follow the progress of bills expected to be introduced in the 2001 Congress. In addition, NEAC will contact its own congressional representatives to emphasize again the importance of this issue to the people of Connecticut and to the employees of our nuclear plants.

THE NUCLEAR AUCTION PROCESS

The 1998 Electricity Restructuring Act in Connecticut required divestiture of nuclear power plants in the state as well as those units in other states that were owned by Connecticut utilities. The Nuclear Energy Advisory Council [NEAC], in fulfillment of its responsibilities established by Connecticut statute, intervened in the Department of Public Utility Control hearings on divestiture. Evan W. Woollacott, former DPUC Commissioner, and Marjorie DeBold, former Haddam First Selectman, represented NEAC at the hearings.

- Of importance to NEAC was the fact that no safety considerations were included, either in the directive issued by the DPUC, or in the submittals and testimony offered by Connecticut Light & Power. After the past four years of emphasizing safety, NEAC was concerned that safety was not a primary issue at the hearing.
- NEAC strongly recommended that the Millstone site be bid on only as a complete package. Having more than one ownership entity present could have an adverse effect on the safety of the entire site.
- NEAC also recommended that the auction process should ensure that the Safety Conscious Work Environment be continued. Failure to continue this could cause the site to face the same problems it faced previously.
- NEAC further recommended that the selected consultant should have, or should obtain the background and knowledge necessary to understand nuclear operations.

The above is a brief summary of the issues identified by NEAC. An in-depth discussion of the issues is included in its brief, included as (**Appendix 5a**)

In its reply brief, NEAC offered to assist in the development of safety criteria. It also noted that work force reductions to meet competitive pressures, could, if not properly monitored, adversely affect the safe operation of nuclear power plants. NEAC again asked that these new concerns be added to the issues it presented in its original brief. NEAC's Reply Brief is included in (**Appendix 5b**)

The draft DPUC decision failed to recognize the NEAC concerns. In its exceptions, NEAC emphasized that while the NRC has the final say in safety matters, "safety is everyone's business." NEAC went on to emphasize its key recommendations in its prior briefs. Please see exceptions included in (**Appendix 5c**)

In its oral arguments, NEAC emphasized the reason why the legislature established the council. In the past, both the NRC and NU had failed to fulfill their safety responsibilities. NEAC did not want that to

happen again. It again asked that the DPUC support the NEAC arguments in the final decision. The DPUC did respond to the NEAC concerns. In its final decision, the DPUC added: "It is critical that any buyer of generation assets have the technical, managerial, and financial capability to carry out the transaction and continue to operate the facilities in a safe and efficient manner. This need is heightened by the complexity and risk associated with nuclear facilities. While the NRC has ultimate jurisdiction over nuclear safety matters, the Department believes it is appropriate to consider the qualifications of the bidders to operate the units safely. The Department therefore directs its consultant to screen bidders to ensure they have the proper qualifications to operate the units safely. The Department will consider these qualifications in its final approval of the sale. The winning bidder(s) should pledge to ensure a safety conscious work environment at the Millstone Station." The Department further added that it will "ensure that the NRC is aware of the auction process, so that the NRC has an opportunity to comment or otherwise take any other action it deems necessary. Therefore, the Department will direct its consultant to keep NRC authorities at Millstone apprised of the auction process and to provide the NRC with any additional information it deems necessary."

Following the selection of a buyer through the auction process, a second docket was established to evaluate both the auction process and the recommended bidder, Dominion Resources, Inc. NEAC is participating in this docket also. It is expected that the decision will not be made until early in 2001. NEAC has been concerned about the process. Most of the documents were filed under protective order, and, per DPUC rules, were available only to the parties concerned. NEAC, being designated an intervenor by the DPUC, did not have access to the important documents. It requested a redacted version, and the response received from JP Morgan was inappropriate. A copy of NEAC's answering letter is included as (**Appendix 5d**).

Subsequently, JP Morgan did reach agreement with the Office of Consumer Council and the review was limited to that of the Consumer Council. The DPUC ruled that no other parties or intervenors could participate in the review. In view of the facts that the Restructuring Act required that a "public" auction be conducted for the divestiture of nuclear assets, and an open review of the documents by all parties was not permitted, NEAC believes that the DPUC action was not responsive to the intent of the Act or the DPUC approved divestiture plan.

While NEAC, having met with the executives of Dominion Resources, Inc., is comfortable with the selected bidder, it believes that the process, thus far, leaves much to be desired. The results of the current docket will be discussed in the report for 2001.

CANCER RISK STUDY

The Connecticut Academy of Science and Engineering (CASE) has completed its "Study of Radiation Exposure from the Connecticut Yankee Nuclear Power Plant," in response to NEAC's 1997 inquiry. This correlates data regarding emissions from Connecticut Yankee and known weather conditions with cancer incidence statistics. The report is being printed and its presentation by CASE is scheduled for a public meeting sponsored by NEAC in Haddam in January 2001.

RECOMMENDATIONS

Federal:

1. There should be a positive recommendation that Congress pass, and the President sign, a High Level Waste siting bill that would ensure timely construction of a national High Level Radioactive Waste Repository (This is a political decision – the technical ability has been available for at least 20 years). The state administration and legislature should also support an effective federal solution.
2. NEAC supports the work of the *KI Core Group*, and urges it to complete its work in an expeditious manner.
3. The Connecticut Congressional delegation should monitor the reorganization of the NRC to ensure that health and safety issues, including the funding of KI, are not compromised by budgetary constraints.

State:

1. NEAC recommends that the Office of Emergency Management receive the fiscal support needed to address any shortfalls in Emergency Preparedness.
2. The legislature, governor and NEAC should continue to insist the NRC maintain vigilant oversight during the entire decommissioning effort at Connecticut Yankee and Millstone 1, and regular inspections should be carried out by the NRC for as long as the high level radioactive waste remains on site.
3. The state administration and legislature should support an effective federal solution to the High Level Waste problem while urging our congressional representatives and the federal administration to resolve this situation.

NEAC

1. NEAC should continue to monitor the stability of the Employee Concerns Program/Safety Conscious Work Environment.
2. NEAC should monitor the progress of the state's working group, which is investigating the distribution of potassium iodide to the public per NEAC's recommendations.

3. NEAC should continue monitoring:
   a) The ongoing power operations at Millstone 2 and 3, including the Corrective Action backlog reduction;
   b) The decommissioning of Millstone 1 and Connecticut Yankee, including the "Spent Fuel Pool Islands," "Dry Cask Storage," and the License Termination Plan (CY);
   c) The refueling outage at Millstone 3;
4. NEAC should continue to advocate that spent fuel from plants undergoing decommissioning receives priority in disposal.
5. Responding to concerns of Haddam residents, NEAC should:
   a) Sponsor an informational program for Haddam and the surrounding communities regarding the pros and cons of dry cask storage of spent fuel .v. the spent fuel pool, including details of dry cask construction; and
   b) Obtain and impart information regarding Greater Than Class C (GTCC) nuclear waste now stored at CY.
6. Communication of NEAC activities should be continued and increased through:
   a) Regular distribution of reports/press releases to daily/weekly newspapers and town newsletters;
   b) Coordination of agendas with the citizens' committees involved with the decommissioning of CY and Millstone 1; and
   c) Development of consistent post-restart public communications in conjunction with local citizen groups and the utility.
7. NEAC should request informal meetings with U.S. senators Dodd and Lieberman, and Congressman Simmons, in order to provide a briefing on NEAC's work and goals so that a better working relationship is established.
8. In order to ensure that public health and safety are not compromised, NEAC should monitor:
   a) Millstone Station's integration with Dominion Resources after sale closure in April 2001;
   b) Millstone Station's continuing personnel reductions as the restructuring program completes;
   c) Unauthorized toxic discharges from Millstone Station;
   d) The Case of the Missing Rods at Millstone 1;
   e) The progress of deregulation in the electric industry in Connecticut.

COUNCIL ACTIVITIES IN 2000

Meetings

NEAC held seven regular public meetings during the year, as required by PA 96-245, to provide a venue for the discussion of issues relating to the safety and operations of the state's nuclear power plants. NU, NRC, Department of Energy (DOE), CY, Little Harbor Consultants and Dominion Resources made presentations on current issues and developments. Each meeting included a period for public participation.

The council met:

January 27 (Waterford), Topic: Y2K Review, approval of 1999 NEAC Annual Report.

February 17 (Waterford), Joint meeting with NRC, Topic: Employee Concerns and Safety Conscious Work Environment. Presenters: Little Harbor Consultants, NRC and NU.

March 16 (Waterford), Topic: Millstone Auction. Presenter: Bruce Kenyon, President and CEO, NU Nuclear Generation Group.

May 18 (Waterford), Council business meeting took the place of cancelled forum, *Auction of Millstone.*

July 20 (Waterford), Topic: *New NRC Reactor Inspection and Oversight Program,* presented by NRC.

September 21 (Connecticut Yankee, Haddam Neck,), Joint meeting with decommissioning committees, MIDAC and CDAC, Topic: Yucca Mountain and the permanent disposition of High Level Radioactive Waste, presented by U.S. Department of Energy.

November 16 (Waterford), Joint meeting with Boards of Selectmen from Waterford and East Lyme, Topic: Presentation by Dominion Resources/Dominion Nuclear of Connecticut, new owners of Millstone.

The minutes of the meetings are in **Appendix 2**

The May 18th meeting was originally planned to be a Public Forum, ***The Auction of Millstone.*** Representatives of J.P. Morgan, the auctioneer, DPUC and NRC were scheduled to attend the forum in Waterford. Ten days before the event, word was received from DPUC that participation in the forum, as planned, was no longer desirable from its perspective. The issue of confidentiality presented a problem. Co-chairs Concannon and Woollacott met with J.P. Morgan and DPUC in New Britain, but to no avail. Where NEAC was concerned the delay in arriving at the decision not to participate was regrettable. Plans had been made well in advance, and the public looked forward to learning information about the auction of Millstone, which was a significant occurrence both for the workers and citizens living in the area.

APPENDIX 1

APPENDICES

Nuclear Energy Advisory Membership

Terry Concannon (Co-Chair), Marlborough: BSc Biochemistry, Dublin, Ireland. Tax Consultant, former state legislator.

Evan Woollacott (Co-Chair), Simsbury: MBA, Wharton School. Consultant, formerly Vice-President Combustion Engineering.

Lawrence (Bill) Brockett, Middle Haddam: BS Mech. Engineering, Yale. Consultant, formerly Director of Nuclear Systems, Honeywell.

Mary Ann Buckley, Haddam Neck: MA Child Development & Family Relations, UConn. Director of Noyes Rhythm Foundation, Inc.

Marjorie W. DeBold, Haddam: BA Psychology and Child Development, UC Berkeley. Retired teacher, former First Selectman of Haddam.

John Helm, Sr.., Groton: MS Mech. Engineering, Columbia. Consultant, former experience includes nuclear submarine development.

Mark Holloway, Waterford: BS Interdisciplinary Sciences, Charter Oak. Task manager and analyst in nuclear submarine development.

Robert J. Klancko, Woodbridge; BSE Chemical Engineering, UConn. Engineering consultant, member State Emergency Response Commission.

John Markowicz, Waterford; BS Engineering, Naval Academy. Economic Development director, former chief engineer nuclear powered submarine.

Pearl Rathbun, Niantic: BA Economics, Three Rivers C-TC. Administrative Assistant, Office of Emergency Management & Fire Marshal's Bureau, East Lyme.

Frank Rothen, Waterford: Vice President, Nuclear Services, Northeast Utilities.

Rep. Kevin Ryan, Oakdale: O.D., Pennsylvania College of Optometry. Legislator, Adjunct Faculty University of New Haven.

John (Bill) Sheehan, Waterford: MBA, Rensselaer Polytechnic. Dir. Management Information Systems, former captain nuclear powered submarine.

Edward L. Wilds, Griswold: Ph.D Physics, UConn. Director, Division of Radiation, Department Environmental Protection.

APPENDIX 2

Nuclear Energy Advisory Council (NEAC) Meeting
Waterford Town Hall
Waterford, Connecticut
January 27, 2000

Ms. Terry Concannon, Co-Chair
Mr. Evan Woollacott, Co-Chair
Ms. Mary Ann Buckley
Mr. John Helm, Sr.
Mr. Mark Holloway
Mr. John Markowicz
Dr. Kevin Ryan
Mr. Bill Sheehan
Dr. Edward L. Wilds, Jr., representing DEP, Commissioner Arthur J. Rocque, Jr.

Co-Chair Concannon called the meeting to order at 7:06 p.m. on January 27, 2000, at the Waterford Town Hall, Waterford, Connecticut.

Co-Chair Concannon asked for a motion on the acceptance of the December 9, 1999 NEAC minutes. The motion was made, seconded and accepted.

Co-Chair Concannon introduced Mr. Themig of Northeast Utilities. Mr. Themig gave a presentation on reported Y2K problems at the Millstone Power Plant.

Mr. Bill Sheehan reported on his visits to the Millstone 2 and 3 control rooms on 12/15/99; 12/28/99; 1/1/00 and 1/19/00 (Enclosures A,B,C,D).

Co-Chair Concannon briefly discussed her letter to the Department of Public Utility Control (DPUC) requesting secretarial support for MIDAC. After further discussion between Commissioner Rocque and Chairman Downes it was decided that $2,000 will be provided for the clerical support of MIDAC.

Co-Chair Woollacott briefly discussed NEAC's brief to DPUC regarding the auction of the nuclear units.

Mr. John Markowicz made the motion to adopt the DPUC brief as corrected (Enclosure E). The motion was seconded by Mr. Bill Sheehan and approved.

NEAC members took a short break.

NEAC members continued working on the annual report. Mr. Markowicz then made a motion to delete state recommendation #5 in the draft report. The motion was seconded by Mr. John Helm, Sr. and accepted.

Mr. Markowicz made a motion to accept the annual report as amended. The motion was seconded by Mr. Mark Holloway and accepted.

The next NEAC meeting will be on February 17, 2000 at the Waterford Town Hall.

Co-Chair Woollacott made the motion to adjourn the meeting. The motion was seconded and accepted and the meeting adjourned at 9:55 p.m.

Nuclear Energy Advisory Council (NEAC) Meeting
Waterford Town Hall
Waterford, Connecticut
February 17, 2000

Ms Terry Concannon, Co-Chair
Mr. Evan Woollacott, Co-Chair
Mr. John Helm, Sr.
Mr. Mark Holloway
Mr. John Markowicz
Ms Pearl Rathbun
Mr. Frank Rothen
Dr. Kevin Ryan
Mr. Bill Sheehan
Mr. Denny Galloway representing DEP Commissioner, Arthur J. Rocque, Jr.

Co-Chair Concannon called the meeting to order at 7:05 p.m. on February 17, 2000, at the Waterford Town Hall, Waterford, Connecticut and introduced Mr. Jim Linville, Director, Millstone Inspections Directorate, Region 1. The NRC was taking the opportunity to publicize its findings regarding employee concerns at Millstone by taking part in this meeting instead of holding a separate public meeting. Thus, the public would not have to attend on two evenings.

Co-Chair Concannon asked for a motion on the acceptance of the January 27, 2000, NEAC minutes. The motion was made, seconded and accepted.

The Nuclear Regulatory Commission (NRC) gave their opening remarks on the Millstone Employee Concerns Program (ECP). Mr. John W. Beck, Little Harbor Consultants, presented the on-site assessment report on Millstone completed in January 2000 (Enclosure A)

Co-Chair Concannon opened the floor to the public for questions and comments.

Co-Chair Concannon presented Mr. Rick Urban, NRC, who was the lead inspector. Mr. Urban gave a presentation on Employee Concerns (ECP) and the Safety Conscious Work Environment (SCWE) at Millstone Station (Enclosure B). *NRC letter of 3-8-2000 attached to minutes.

Co-Chair Concannon introduced Mr. Lee Olivier, Chief Nuclear Officer, Northeast Utilities. Mr. Olivier gave a presentation on Millstone's strategic direction, *Focus 2000*, for the year 2000 (Enclosure C).

Co-Chair Concannon introduced Mr. Russ Mellor of Connecticut Yankee (CY), who, with Ms Sara Sneider from the decommissioning contractor, Bechtel, briefly discussed the status of the decommissioning as well as the employee status. Mr. Paul Frazier of Entergy also discussed the status of decommissioning activities at Millstone 1.

Business Meeting:

Mr. John Markowicz made a motion to circulate either a fax or e-mail to NEAC members for their review and vote, should DPUC not accept NEAC's recommendations to include safety as a component in the Millstone auction process. The motion was seconded by Mr. Bill Sheehan and accepted.

Mr. Bill Sheehan reported on his visit to the Millstone 2 control room on February 6, 2000 (Enclosure D).

Ms Pearl Rathbun discussed the minutes of the MIDAC meeting (Enclosure E).

NEAC members made a motion authorizing Co-Chair Concannon to secure letterhead and envelopes for NEAC at 100 pages and 100 envelopes for the cost of $105.00. The motion was seconded and accepted.

Co-Chair Concannon made a motion to adjourn the meeting. The motion was seconded and accepted and the meeting adjourned at 11:02 p.m.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

March 8, 2000

Ms. Terry Concannon
Co-Chair for NEAC
41 South Buckboard Lane
Marlborough, Connecticut 06447

Dear Ms. Concannon:

I am writing this letter to correct the record and ensure that any misunderstandings left by my staff at the February 17, 2000, joint public meeting are appropriately addressed. The joint public meeting at the Waterford Town Hall sponsored by the Nuclear Energy Advisory Council (NEAC) and the Nuclear Regulatory Commission (NRC) had as a primary purpose the discussion of the Millstone Employee Concerns and Safety Conscious Work Environment Programs. Before I do so, however, I would like to thank you for supporting the joint meeting format in which the NEAC and NRC can participate. This format, used twice, has been helpful in building public confidence and in improving efficiency.

During a discussion of the timeliness of NRC investigations of wrongdoing, Mr. James Linville of my staff said that he was not aware of any instances where the statute of limitations had impacted the ability of the NRC to complete an action during his 20- year NRC career. Mr. Linville was subsequently questioned by Mr. Paul Blanch. Mr. Blanch stated that he was aware of some instances in which the statute of limitations had expired. Mr. Blanch was correct. There have been a couple of instances where the statute of limitations has expired before the NRC completed its action. Mr. Linville has subsequently indicated to me that his intent was not to make an absolute statement since he does not have specific knowledge of all NRC investigations. Rather, his intent was to indicate that the statute of limitations does not often impact completion of NRC actions based on the sample of cases with which he has been involved over the years. On behalf of myself and Mr. Linville, I apologize for any misunderstanding that his comment may have caused. I have personally discussed with Mr. Linville, and other members of my staff, the point that we need to carefully qualify what we say and that accuracy requires we not speak about areas beyond what our experience and knowledge permit us to do. I have reinforced the point that it is both acceptable and appropriate to say "I don't know," and offer to follow-up by checking with staff knowledgeable in the area questioned.

While there may have been only a few cases where the statute of limitations has been a factor, I assure you that the NRC will continue making every effort to disposition allegations and investigations of potential wrongdoing in a timely manner. The staff agrees with the concerns raised by the Committee in this regard.

Once again, I would like to thank you and the NEAC members for your continuing interest and support in assuring the safety of nuclear activities at the Millstone plants. If you have any further questions or concerns on this matter or any other please don't hesitate to contact me or my staff.

Sincerely,

Hubert J. Miller
Regional Administrator

Docket Nos. 05000336; 05000423
License Nos. DPR-65, NPF-49

cc:
S. Scace, Director, Nuclear Oversight and Regulatory Affairs
B. D. Kenyon, President and Chief Executive Officer - NNECO
R. P. Necci, Vice President - Nuclear Technical Services
L. J. Olivier, Senior Vice President and Chief Nuclear Officer - Millstone
M. H. Brothers, Vice President - Nuclear Operations
F. C. Rothen, Vice President - Nuclear Work Services
J. T. Carlin, Vice President - Human Services - Nuclear
G. D. Hicks, Director - Nuclear Training Services
C. J. Schwarz, Station Director
D. A. Smith, Manager - Regulatory Affairs
L. M. Cuoco, Senior Nuclear Counsel
J. R. Egan, Esquire
N. Burton, Esquire
V. Juliano, Waterford Library
J. Buckingham, Department of Public Utility Control
State of Connecticut SLO Designee
First Selectmen, Town of Waterford
D. Katz, Citizens Awareness Network (CAN)
R. Bassilakis, CAN
J. M. Block, Attorney, CAN
G. Winslow, Citizens Regulatory Commission (CRC)
E. Woollacott, Co-Chair, NEAC
P. Blanch

Nuclear Energy Advisory Council (NEAC) Meeting
Waterford Town Hall
Waterford, Connecticut
March 16, 2000

Ms. Terry Concannon, Co-Chair
Mr. Evan Woollacott, Co-Chair
Mr. John Markowicz
Ms. Pearl Rathbun
Mr. Frank Rothen
Dr. Kevin Ryan
Mr. Bill Sheehan
Ms. Mary Ann Buckley
Ms. Margie DeBold
Mr. Denny Galloway, representing DEP, Commissioner Arthur J. Rocque, Jr.

Co-Chair Concannon called the meeting to order at 7:12 PM on March 16, 2000, at the Waterford Town Hall, Waterford, Connecticut

Co-Chair Concannon asked for a motion on the acceptance of the February 17, 2000 NEAC minutes. A motion from Ms. DeBold to add her name and Mary Ann's name to the meeting notes; The motion was made, seconded and accepted for the additions and the acceptance on the meeting notes.

The NU generation group gave their status of the Millstone auction and divestiture plan. Mr. Bruce Kenyon (NU) discussed J.P. Morgan, the auction contractor and how they were experienced in other auctions. He discussed NU's strategy on this auction, that it was being done by DPUC and expressed his views that it should be carried out efficiently and it should be turned over in the best shape in order for the site to be focused and keep a positive attitude. He also said that it is not NU's intent to bid. He was also concerned about the employees and having them feel comfortable during the sale.

Co-Chair Woollacott asked about the safety issues and the governing criteria for the bidding companies.

Co-Chair Concannon asked where the document room was and why isn't NU getting involved with the bidding.

Mr. Sheehan asked if J. P. Morgan and NEAC could meet to explain to the public the auction process and a motion from Mr. Markowicz was made and Mr. Sheehan seconded that NEAC write a letter to DPUC and request that J. P. Morgan attend a future NEAC meeting and make a presentation on their auction procedure and answer questions from NEAC and the public. The motion was accepted.

Mr. Kenyon also presented a 15 minute video on the new Millstone. Subject matter was staffing, environment, safety and costs. He said that this would be a good tool to use for perspective buyers.

Ms. Rathbun asked if the decommissing to Millstone I is a handicap to the bidding process.

Meeting was open to public comment:

One commenter asked that a motion to get the public involved on who will be the buyer; how would this happen. It was suggested that copies of the NEAC briefing report be made available.

One commenter asked about the bidding process; if there are several companies bidding, and all of them have issues on their safety, what would happen then. Mr. Kenyon answered by describing the thresholds and if they are currently complying and have a good track record at present, they should be qualified bidders.

Mr. Rick Kacich discussed the simulated exercise that was held. Panel members said it went very well, except for the fire drill. Discussion was on civil preparedness, the declaration of an emergency, badging and security.

Mr. Steve Hook (NU) discussed emergency preparedness and NU's radio pager system.

Mr. Kacich presented a paper on NRC's exercise critique report (Enclosure A). He discussed the exercise strengths and weaknesses, and objectives for corrective actions.

Meeting opened for public comments:

One commenter discussed the exercise article in the paper on the simulated accident at Millstone and how a recommendation to evacuate was made and she is concerned about the decision-making process for shelter or evacuation.

One commenter discussed the usage of potassium iodine tablets and how is it that the residents do not have them. She presented a newspaper article about a town (Duxbury, Mass.) that had them.

Mr. Markowicz noted that the town of Duxbury appropriated the money for the tablets.

Mr. Galloway discussed that the FDA and WHO are discussing the dosage and have not yet released a report on their findings. He also noted that he would discuss the matter with Dr. Wilds.

Co-Chair Concannon asked Mr. Kacich for handouts and the drill IRF forms. Mr. Kacich will mail them to her. She also suggested that additional copies of the December 31st letter be available to the other members of the panel.

Co-Chair Concannon made the motion to adjourn the meeting; the motion was seconded and accepted and the meeting adjourned at 9:15 P.M.

Regular business meeting was held immediately after the regular meeting.

Co-Chair Concannon discussed the role of Mr. Kevin McCarthy (Enclosure B). Discussion was what is his involvement and has he accomplished anything yet, since he is only hired for one year. She asked if he is needed in the relationship to the auction.

Mr. Markowicz suggested he attend NEAC meetings quarterly and provide minutes of meetings' activities he could be helping out with on other issues.

Mr. Markowicz made a motion to have a letter sent to OPM suggesting Mr. McCarthy's work assignments include (l) decommissioning activities at CT Yankee and Millstone I, (2) nuclear waste storage and disposal, and (3) nuclear safety and safety conscious work environment as it applies to the auction. Motion was seconded and accepted.

Co-Chair Concannon discussed a public act detailing that the DEP shall provide clerical support to the NEAC council.

Mr. Sheehan provided handouts (Enclosures C, D, E) regarding his monitor watch at Millstone 2 Control room.

Co-Chair Concannon discussed the NRC letter of March 8, 2000.

Ms. Rathbun discussed the MIDAC meeting notes. She noted that Bill Sheehan's badging process presentation helped the committee members mesh with NEAC. Bob Fraser discussed recent Millstone I incidents; one was a rigging incident where a rigging strap broke, another involved improper tagging of a breaker that was taken out of service. They put a temporary moratorium on tagging and rigging.

Mr. Rothen said that they were both planned activities and were modified by the crew in the field. The matter was discussed with the president and the contractor is being monitored very closely. This incident could result in disclipinary action.

Ms. Rathbun discussed the May 5th meeting in Maine and that 5 members are interested. She also said that one member, Katherine Burton has resigned and will be looking for someone to replace her. The next MIDAC meeting will be April 6th.

Co-Chair Concannon discussed the NRC letter (Enclosure F)

Next meeting will be May 18, 2000. Agenda was discussed for the May meeting and panel agreed that the auction is a more important topic.

Mr. Sheehan made a motion to adjourn; motion seconded and passed, meeting adjourned at 10:10 PM

Nuclear Energy Advisory Council (NEAC) Meeting
Waterford Town Hall
Waterford, Connecticut
May 18, 2000

Ms Terry Concannon, Co-Chair
Mr. Evan Woollacott, Co-Chair
Mr. John Markowicz
Mr. Frank Rothen
Dr. Kevin Ryan
Mr. Bill Sheehan
Ms Mary Ann Buckley
Ms Marge DeBold
Mr. Bob Klancko
Mr. Mark Holloway
Mr. John Helm, Sr.
Dr. Edward Wilds representing DEP Commissioner, Arthur J. Rocque, Jr.

Co-Chair Concannon called the meeting to order at 7:00 p.m. on May 18, 2000, at the Waterford Town Hall, Waterford, Connecticut. The original plan to hold a public forum in Waterford, on this date, in order to present information about the auction of Millstone Station had fallen through. Panelists were to have included J.P. Morgan (auctioneer), DPUC and NRC. The auctioneer and DPUC developed belated objections, which were not overcome by assurances from the co-chairs.

Co-Chair Concannon asked for a motion on the acceptance of the March 16, 2000, NEAC minutes. The motion was made, seconded and accepted on the meeting notes.

Mr. Sheehan discussed various monitor watches at the Millstone 2 Control room (Attachment A). Co-Chair Concannon asked if the dropped rod incident was the same rod as before; Mr. Sheehan answered that it was not. Regarding the April 21 watch, Mr. Sheehan discussed the changes in the communication process; staff has to repeat messages back to ensure that the receiver is clear with what is being reported. On the May 15 watch, he noted that NU found some cracks in some of the main generator stator cooling water steel header nipples. The necessary repairs did not have a major impact on the refueling outage schedule. He stated that the workers are volunteering to perform different duties. Co-Chair Concannon asked if the refueling was finished and Mr. Sheehan said yes, that they were ahead of schedule. Mr. Bill Temple added that everyone had a positive attitude. Mr. Sheehan also discussed the advantage of the One Stop Shop Center. They used it on Unit 3, but made significant improvements to it during the refueling of Unit 2. If materials were needed, the One Stop Shop Center had them available before projects were started. Other plants utilize this process and it is working out well. Mr. Markowicz asked why the rod was dropped in the spent fuel pool and Mr. Sheehan said it was due to human error.

MIDAC meeting notes of April 6, 2000.

Dr. Ryan reported the MIDAC meeting notes of April 6, 2000. One topic was the insurance issue at Millstone. De. Wilds said each plant is required to have an escrow in the event of an accident and said the Price Anderson Act deals with adequate funding and nuclear accidents. Dr. Wilds also said the Emergency Management Office should know about the requirements of insurance. Most of the members wanted to have insurance on the agenda at a future meeting. Co-Chair Concannon discussed the Maine field trip that was cancelled due to the small number of members that were able to take advantage of the opportunity. She asked if Mr. Temple would add a MIDAC site to the Millstone website.

Auction

Co-Chair Woollacott and Ms DeBold attended a DPUC hearing in New Britain. Co-Chair Woollacott testified this past Friday. Co-Chair Concannon said that she talked to Mr. Downes, Chairman of the DPUC; he said J.P. Morgan, the auctioneer of Millstone Station, had some questions so they wanted to delay the meeting with NEAC. She also said that DPUC was not going to come and that they did not want J.P. Morgan to be at the meeting in case the auction process would be jeopardized. Members still wanted to hold the public forum and discussed what would be the best format to publicize it. NRC and DPUC should explain their roles. Members did not want it to be a private forum as had been suggested by DPUC. Mr. Holloway added that NEAC should set up guidelines. Mr. Markowicz suggested that questions could be submitted in advance and answered in the order that they were submitted. Dr. Ryan said if it were held at a school, it would look like an open discussion rather than a public meeting. Mr. Rothen said NEAC could be a sponsor of the project. Mr. Markowicz made a motion regarding the process in which the public should submit questions in writing, the amount of time to answer the questions and that all the questions could go directly to DPUC, seconded and approved. Mr. Markowicz also suggested we ask them to attend, outline the process and explain that NEAC is the host. Ms DeBold added we should get the word out well ahead, at least three weeks. Dr. Wilds made a motion that it should not be part of the NEAC meeting, but an event, which was seconded and approved. A motion was made regarding having the DPUC and NRC attend, all in favor. Co-Chair Woollacott said if it fell through, Mr. Jim Linville should be invited to come and present the new NRC Reactor Oversight Process at the next meeting.

New Business

Co-Chair Concannon asked Bill Temple if all the NEAC members could be listed on the Millstone website. MIDAC stationery has been made up. Discussion took place about the timing of the Yucca Mountain vote in Congress. South Carolina is joining the New England LLRW compact with NJ and CT. Dr. Wilds said that when the compact is passed, Connecticut would have disposal capacity for the next 50 years. Co-Chair Concannon talked about some personnel changes at CY. Mr. Sheehan asked Mr. Temple to provide an executive summary, with conclusions, to the public regarding the radiation report, making it more of a public relations report.

Dr. Wilds said he would get information about the Price Anderson Act (nuclear plant insurance) and send it to MIDAC and NEAC. Mr. Klancko asked about the CY study that the Connecticut Academy of Science and Engineering has been preparing since 1997. Co-Chair Concannon suggested that an official letter be sent to them requesting it.

Mr. Sheehan made the motion to adjourn the meeting. The motion was seconded and accepted and the meeting adjourned at 9:10 p.m.

Nuclear Energy Advisory Council (NEAC) Meeting
Waterford Town Hall
Waterford, Connecticut
July 20, 2000

Ms. Terry Concannon, Co-Chair
Mr. Evan Woollacott, Co-Chair
Mr. John Markowicz
Mr. Frank Rothen
Mr. Bill Sheehan
Ms. Marge DeBold
Mr. Robert Klancko
Mr. Mark Holloway
Mr. John Helm, Sr.
Ms. Pearl Rathbun
Dr. Edward Wilds, representing DEP, Commissioner Arthur J. Rocque, Jr.

Vice-Chair John Markowicz, who organized the program for the evening, presided at the meeting and called it to order at 7:00 PM on July 20, 2000, at the Waterford Town Hall, Waterford, Connecticut.

John Markowicz asked for a motion on the acceptance of the May 18, 2000 NEAC minutes. Corrections were made regarding Marge DeBold's name, Paul Corey's name, Mr. Downes from DPUC and one sentence regarding the steel head nipples. The motion was made, seconded and accepted on the meeting notes and changes were made.

Presenters were Mr. Jim Linville from NRC Region I, Mr. Steve Barr from NRC Region I and Mr. Rick Kacich from NU.

Mr. Steve Barr presented a slide show describing the *New NRC Reactor Inspection and Oversight Program*. He discussed the use of performance indicators, strategic performance areas and safety performance measures. The revised program is now used in plant inspections and in assessing their performance. The program uses objective indicators for performance. These measures are being implemented in every nuclear power plant.

Comments from the Committee: Co-Chair Woollacott asked about how the severity of exposure is measured. Mr. Barr said that the occupational exposure is based on the dose.

Regarding page 12 of the slide regarding the performance indicator for occupational exposure, Co-Chair Concannon asked for more information on the Green Band. Mr. Barr said the green band is where most facilities would fall. If you go from green to white, you cross the threshold from the top 90%. If you go from white to yellow and yellow to red, that is based on risk calculations. You start out with that observation and perform the inspection to see how bad the exposure was. Based on the severity of the event, the inspection finding could be in the red band. The blip on the chart represents a number of events that occurred in that quarter. Mr. Rothen noted that you carry the number of those events on the record for three years. Mr. Barr said there is a performance indicator book that is looked at. It tells what needs to be counted, how to count it and how to report it. Mr. Helm asked how the modeling is done. Mr. Barr answered that if all of the bands in the thresholds are going from green to white, it is based on experience. Mr. Helm asked

what determines the accuracy of the yardstick that they are measuring and determines where they are. Mr. Barr explained it is locked in to a mathematical model. The amount that that percentage changes is what they are responsible for. Mr. Barr talked about slide 14, which gives a tool to assess the plant safety performance. The inspectors have to send a report to Mr. Barr on all of their findings. Mr. Markowicz asked if violations are still part of the criteria. Mr. Barr said the enforcement and severity levels are based on the same kind of thresholds or findings, except for human performance and intentional issues. Mr. Markowicz also asked about tech spec violations in terms of risk. Mr. Barr said they now ask what does this tech spec mean in the realm of risk. It does not change the tech spec, it only changes the way they assess them. Mr. Barr also indicated that the inspection reports of every plant in the country can now be accessed on the NRC web page.

Mr. Holloway asked about the transition and how deregulation plays into it. Mr. Barr and Mr. Linville said Congress had a lot to do with it and it was based on the plants' performance back in the early years. Mr. Linville said the program focuses on the responsibility of the licensee and their corrective action program for low-level issues, and relies on the inspection program to verify that they will correct the problems. Mr. Holloway said a lot of time, energy and money was spent on items and they should focus on what really matters. Mr. Linville said there haven't been any major cuts in the budget. Mr. Barr noted that the commission said that they should do the inspections and then come back next July to tell them how much it cost. Workshops were also held for inspectors. Co-Chair Concannon asked about comparisons. Mr. Barr said you can't compare one event at one plant with another event at another. Mr. Rothen commented that now the criteria are well defined and clearly indicate how well the plants are performing. It is a great management program 'to tell us where we are.' It is very objective. Mr. Sheehan questioned the indicators. The slide did not show how you tailor the inspection to take that incident that still leaves them in the green, but gives them a red finding, and keep it from being a subjective opinion of the inspector who is writing the report. He requested an explanation as to how the inspection measurements go from green to yellow to white to red. Mr. Barr said it depends on the severity and the number of exposures. They have guidelines that are looked at; this is the process for reactor safety - here is the procedure for evaluating it. The inspection program is indicative not diagnostic. Mr. Markowicz asked how do you relay information on inspections to the public. Mr. Barr said the web page would carry this information. Mr. Markowicz asked if you have a display going from green to white to yellow, if the inspector finds a red, how do you track it. Mr. Barr said if it is red, they are going to inspect it as red.

Public Comments: First Selectman, Waterford, Paul Eccard asked about the new process, how many plants are they now applying this process to and when will they be fully implementing it. Mr. Barr said they are in the initial part of the program; it started April lst for the whole country for one year. Everyone is locked into the same one-year cycle.

Bill Watson: Mr. Watson wanted to add some observations. He noted that it used to take two years before any information was filtered to the public; now one gets information quickly and he sees benefits in the program. Everything is consistent. and he can get a more accurate feel of how the plant is doing.

Joe Besade: Mr. Besade asked about the barrels in the ballfield; that they only went l8" deep with the meters, that Congress is cutting 25% from the NRC's allotment in the year 200l, and if they find anything who has to clean it up and is something buried in the Waterford landfill. Mr. Linville said there were no barrels in the ballfield and they did not cut any part of the budget. Mr. Rothen added that they have completed Phase I of the site review for the auctioneer. Four barrels were found, but not on the ballfield. They are in the process of doing Phase II; the results of Phase II will go to DPUC and the auctioneer. They have drilled 60-65 test boreholes and will drill until they reach water or bedrock. The results go from Metcalf and Eddy (engineering firm) to Morgan Stanley. It is a requirement for any sale of industrial property in the state. The (old) owners have to clean the property and this information has to be given to the auctioneer. Regarding the landfill, Mr. Rothen said he did not agree that there anything in the landfill.

Mr. Peter Reynolds: What determines the baseline for the NRC's criteria. Mr. Barr answered that they have procedures that are based on the inspection program, and every plant gets a baseline inspection. Mr. Linville added the baseline inspection is based on the type of activity. For a plant-specific inspection, they base it on the facility design. Mr. Reynolds asked about the older plants vs. the recent plants. Mr. Linville said their criteria would be different because of the design; they would use site-specific inspection procedures and go with licensing conditions. Mr. Reynolds, regarding risk assessment and predictability, noted that with all the new computer technology it does not always change the risk assessment. Mr. Reynolds asked that if there was a safety related, or non-safety related problem, would it be reported, and how are they going to handle problems if the inspectors aren't there all of the time. Mr. Barr said they would be starting residential inspectors.

Mr. Paul Choiniere: As an example, if a worker were to receive a high radiation exposure; and in the PI, it was still be in the green; and this incident involved a very high exposure, and some serious violations of the procedure that led to this, would that be reflected. Mr. Barr said they would inspect it and it would be in the inspection findings. In that one incident, it might not make the PI change its color. If it is significant enough, it will show up as a color and that color carries as much weight as the PI color does. Mr. Choiniere questioned the level of subjectivity at that point in the inspector's evaluation. Mr. Barr said you can't get rid of all of it, but it is a lot less.

Mr. Rick Kacich from NU presented slides regarding the performance management process and tools. He noted that NU's intent is different than the NRC's intent, but they have similarities. The similarities are the data and what the data convey. He discussed slide 8 which is the color rating system. A question was asked as to how it is determined, what performance gets what color; Mr. Kacich replied it is unique to each indicator; they have their own standards that they developed. White is most acceptable to NU. There are four colors. At slide l0, Mr. Kacich said improvement was indicated in all areas since the system was introduced. Mr. Klancko asked about the COST boxes; the previous 4 quarters were white and now they were green and what was making the workforce part red. Mr. Kacich said that they had a few more contractors on board than they had anticipated and had to determine when it would be appropriate to reduce the contractors.

Mr. Holloway asked if this applied to the 3 (Millstone) units; Mr. Kacich said it was not for Unit 1.

Questions from the Public:

Mr. Reynolds asked if this information is available across the stations. Mr. Kacich said yes. Mr. Sheehan addressed Mr. Reynolds and told him that at Millstone, they make sure everything is documented so nothing happens again, there has been a tremendous change within the last two years.

NEAC Business Meeting:

Mr. Sheehan read his monitor notes; Mr. Rothen said the isolation of the spent fuel pool at Millstone I has been completed and Ms. Rathbun read her MIDAC notes.

Co-Chair Concannon asked Dr. Wilds how best to obtain an agent from DOE to attend a (NEAC) meeting. He indicated that he would put in a request while attending an upcoming meeting out of state.

Dr. Wilds discussed KI and said that the state is not going to change its plans until the final guidelines come out. The pill cost could be $1,000,000 to $3,000,000. If the state was to go out and buy the wrong pills and the FDA came out with differing guidelines, then Connecticut would have to buy them again. He said we would continue to operate under existing FDA guidelines. Mr. Holloway said this data has been available for a long time. Co-Chair Concannon asked about the NRC's current position on KI. Dr. Wilds answered that the states are to evaluate whether they should or should not participate in supplying it; it did say 'you have to look at your plan' to determine if it is appropriate to do it or not. Mr. Holloway said that predistribution is needed. Dr. Wilds said it is shown not to be effective. Mr. Holloway said they should tell people here is where it is available. Dr. Wilds said if the town wants to go out and buy it, it could; the state is not going to buy it. There are a lot of liability issues regarding the issuing the KI.

Ms DeBold reported that she attended two Connecticut Yankee Community Decommissioning Advisory Committee (CDAC) meetings. She discussed the irradiated internals are being cut up under water and the pieces will be stored in the fuel pool. They are considering dry cask storage. The town of Haddam is going for a variance in a zone change in the area where they want to store the dry casks. Members of CDAC are going to Palisades, Michigan, to see the dry cask storage in place there. She wanted to know if NEAC or MIDAC would like to go to Michigan. Mr. Rothen said it depends on the type of cask that CY and Millstone will have and it might be different. Ms DeBold said CY wants to use the same thing for storage and transport. Ms Rathbun suggested that the Maine trip is more feasible (to visit with their Citizens Advisory Panel <CAP>), and if MIDAC could get the video on Michigan that would be better right now. Ms DeBold said CY has just done their license termination plan and she has a copy of it. Marie Miller, an NRC health physicist, told Ms DeBold the May inspection findings were positive.

Co-Chair Woollacott reported on his discussions with DPUC and Morgan Stanley regarding an (NEAC) public meeting on the subject of the auction of the Millstone plants; it seems that they were not interested in having any public meeting especially with the sale pending. They want to make sure everything goes all right with the auction. Mr. Sheehan suggested waiting until the new owners get in and then have them come to our meeting.

Mr. Markowicz and Mr. Helm attended the NRC Board hearings on the reracking of the Millstone III spent fuel pool. Mr. Helm said that the intervenors didn't know how to answer some of the hearing officers' questions. The Board also discussed boron loading in the spent fuel, how it is controlled and managed. Mr. Helm commented about the press conference held during the hearings by the intervenors.

Mr. Holloway asked about the components being dismantled and put into the spent fuel pool at Millstone I. Dr. Wilds said that that waste is the responsibility of DOE. Mr. Holloway asked if they have to have an amendment to do that. Dr. Wilds said it has to do with Class A, B or C waste. Mr. Rothen said it is on a license basis. If you want to deviate and expand, and if you ask them for a change from the design, you have to change your license. Mr. Kacich said you have to have authority to do anything

One public comment was made: people from Long Island are fearful; they are asking about evacuation and how are they going to leave their homes in case of emergency.

Motion was made to adjourn; motion seconded and passed, meeting adjourned at 11:10 PM. Next meeting will be on September 21, 2000 at CY, Haddam

NUCLEAR ENERGY ADVISORY COUNCIL (NEAC) MEETING
MILLSTONE I DECOMMISSIONING ADVISORY COMMITTEE
(M1DAC)
Connecticut Yankee
Haddam, Connecticut
September 21, 2000

NEAC Members Present:
Ms Terry Concannon, Co-Chair
Mr. John Markowicz
Mr. Bill Sheehan
Ms Marge DeBold
Mr. Robert Klancko
Ms Mary Ann Buckley
Ms. Pearl Rathbun
Denny Galloway, representing DEP, Commissioner Arthur J. Rocque, Jr.

M1DAC Members Present: Pearl Rathbun, Doran Shumway, Gregg Dixon, Joseph Coleman, Paul Blanch, Geri Winslow, Jerry Bobruff, James Sherrard

M1DAC Members Absent: Wayne Fraser, Kathryn Burton, Robert Moore, Kevin Ryan, Paul Suprin

CDAC Members Present: Ed Kalinowski, Ed Schwing, Tony Nericcio, Bob Meyers and Rosemary Bassilakis

Co-Chair Concannon called the meeting to order at 7:00 PM on September 21, 2000, at the Connecticut Yankee Power Plant, Haddam Neck, Connecticut.

Handouts: None; Mr. Jay Jones gave a copy of the Office of Civilian Radioactive Waste Management Program Update of Yucca Mountain (the evening's program) to Ms Concannon.

Mr. Jay Jones from the Department of Energy in Washington, D.C. discussed Yucca Mountain and presented his program regarding the program history, schedules, legislation, storage and transportation.

Discussion included: The types of radioactive waste stored at Yucca Mountain, the geological areas, the ability to retrieve the waste and the alternatives they considered before the decision was made to use geological disposal. Congress established the Nuclear Waste Policy Act Amendments, DOE identified sites and performed studies on the sites and in 1987, Congress decided that Yucca Mountain should be the disposal site. A nuclear waste fund, funded by the nuclear utilities, was established and will be used to fund the entire disposal.

Timeline: By next year the DOE will inform the Secretary of Energy that this site is ready, and both the President and Congress have to approve it. The Governor of Nevada has the opportunity to either veto or accept the recommendation. If it is vetoed, Congress has the right to override the governor's veto. In 2002, they will apply for the license, which takes several years for review, and the goal is that by 2010, the depository will be in operation.

Packages: There will be approximately 100 emplacement tunnels holding 100 waste packages in each tunnel. The packages will be hot and radioactive. The water table is 1,000 feet below the repository and the unsaturated zone is where the waste packages will be. There have been studies to see how fast some water moves through the rocks. They decided to put a drip shield over the waste packages and the packages will rest on a pallet. The packages are comprised of the uncanistered fuel going into an overpack and into several cylinders. Right now the repository legislation says it should hold up to 70,000 metric tons, comprised of 63,000 metric tons of commercial fuel and 7,000 tons of DOE waste.

Testing: Extensive testing is being performed which is taking the most time. EPA has identified certain distances from the repository at which they will measure a radiation ring and a certain number will have to be met at that distance. They are also measuring rock seepage and how long it takes the water to travel. Heating tests include drift and many heaters are heating the rock to measure geochemical properties. They are trying to simulate how hot it will be.

Storage: 40,000 metric tons of spent fuel, generated by the nuclear power plants, are now being stored at these utilities. Most of it is in spent fuel pools with 2,000 metric tons in dry cask storage. In 16 facilities, they have dry storage and NRC will be overseeing these storage facilities. A consortium of 8 electric companies plan to finance, build and operate a temporary storage facility in Utah at the Skull Valley Goshute Indian reservation. Licensing by NRC is expected in 2002.

Transportation: Transporting the waste will be done either by rail or by truck. No routes have been finalized yet and they are analyzing sample routes. DOT has the responsibility of regulating the safe transport. Cask design goes through extensive testing that is regulated by the NRC.

In response to questions from NEAC, MIDAC and CDAC members, Mr. Jones said:

- There are several options to assist in cooling the waste packages including, spreading out the packages, the use of natural ventilation, etc. Thermal studies commenced in December 1997.
- The repository at Yucca Mountain could be kept open and monitored for up to 300 years during which time the waste would be retrievable for 100+ years.
- The fuel assemblies would be covered by an erosion-resistant stainless steel, which would prevent any water that might enter the space from coming into contact with the fuel.
- Regarding the types of casks that would be accepted (dual purpose .v. multi-purpose storage casks) DOE has made no decisions as yet.
- The repository will hold 70 metric tons. It would take an Act of Congress to increase its size.
- They have studied underground effects of nuclear tests in the area to determine possible reactions due to an earthquake.
- When questioned further about the high temperature levels of the rock and cask demonstrated during testing, Mr. Jones acknowledged that he did not know how hot the actual cask would be.

- The fact that Yucca Mountain is situated in a previous nuclear test site, results in higher background radiation levels, which could mask any levels that Yucca might contribute.
- He deferred to experts when questioned about whether the older fuel would be accepted first – and then in order of age.
- He was confident that the proposed schedule (2010 opening) would be met even though it has taken 23 years to reach this point. Many issues are out of the control of DOE.
- No one agency – DOE, NRC, EPA – oversees the entire operation, except Congress.
- Yucca Mountain will be monitored until officially closed in 100-300 years. Regarding geological changes in 10,000 years, total system performance assessment computer models will serve as the guide.
- Where possible reprocessing of the waste could be performed in order to reduce the volume, the NRC has decided not to reprocess. Yucca is considered to be a disposal not a storage facility, but it is possible that a means to reduce the volume could be developed and implemented during the retrievability period (100 years).
- Could not answer question about cask design requirements and the emergency specification that requires cask to withstand immersion in 3 feet of water for 8 hours .v. 1 hour at 200 meters.
- When asked to give an example of a 'show stopper' that would bring the engineering of Yucca to a halt, Mr. Jones postulated that ground water travel time would be one.
- Whether DOE will accept the 3 canisters of Greater-Than-Class-C (GTCC) radioactive waste that will be generated by CY has yet to be discussed.
- DOE intends to minimize the unloading/reloading of the canisters at Yucca. The canisters are designed to last 10,000 years.
- When asked if it were true that if one of the dry casks at CY were to develop a defect it would be transported to a DOE facility for repair, Mr. Jones said he would have to talk to his supervisor.

The questions that remained unanswered by Mr. Jones were to be compiled and e-mailed to him by Co-Chair Concannon so that he could obtain the answers. *

* COPY ATTACHED TO MINUTES

In response to questions from the public, Mr. Jones said:

- The dual-purpose cask will be used for transportation so that the fuel will not have to be moved from one type of cask to another while stored on-site at the power plants.
- Reprocessing fuel is done safely in other countries; it reduces the waste stream and should be reconsidered.
- As to what would happen if a cask that has passed a ½ hour test were subjected to burning for 2 hours, Mr. Jones responded that the NRC, in certifying the casks, has developed the tests and regulations.
- The surface-to-trench issue with radioactive chlorine that was discovered at Yucca is still being studied. Likewise, the formation of crystals is being studied. It is doubtful that they will become 'show stoppers.'
- The EPA is still working on allowable levels of radiation at a given point from the repository.

- The definition of volcanic tuft, as Yucca is, was given.
- The issue of placing the pad for the dry casks over an active fault line at CY could not be addressed.
- A spent fuel pool will be considered for emergency situations at Yucca.
- Dual-purpose (storage and transportation) casks have been certified by the NRC, but not those for disposal. DOE does not plan to open every transportation cask, which will be filled with the acceptable numbers of fuel assemblies (24-26 at CY).
- Mr. Jones was unable to answer a significant number of questions. He said it would take a team to do so because of the complexity of the program. He could recommend the team should NEAC be interested.

NEAC business meeting, Connecticut Yankee, September 21, 2000

Meeting called to order at 9:30 p.m.

Members present: Co-Chair Terry Concannon, Mary Ann Buckley, Marge DeBold, Denny Galloway, Bob Klancko, John Markowicz, Bill Sheehan, (Pearl Rathbun was chairing MIDAC meeting in another room at the same time)

Approval of the July 20 minutes was suspended in order to make some revisions.

Millstone Monitoring: Bill Sheehan reported on his 8/3, 8/19, 9/7 and 9/20, control room monitoring at Millstone 2 and 3, twice at each plant since the last meeting (reports attached). Workers at both units are pleased at the prospect of the pending Dominion Resources acquisition of Millstone Station.

Community Decommissioning Advisory Committee (CDAC) and Connecticut Yankee:
Marge DeBold reported about the dry cask storage issue that is of concern to Haddam citizens. The Planning & Zoning Commission has to rule on the zoning change request, from residential to industrial, in order to accommodate the proposed concrete pad, which would provide the base for 43 dry casks. The impact on wetlands would be minor. The concern centers on safety.

On 9/19, there was a meeting at Haddam-Killingworth High School with some 300 residents in attendance. Presenters were: NRC, Bechtel (the decommissioning contractor), the Second Selectman and a representative of CAN (Citizens Awareness Network). Tempers ran high, and people expressed great concern. Many tended to support the continuation of the spent fuel pool rather than the change to dry cask storage. An apparent lack of trust prevails.

Denny Galloway said that where security is concerned, there would be a security guard in place 24 hours/day to protect the dry cask storage area. Installing automatic radiation monitoring of the casks is under consideration.

On 9/25 the Zoning Board of Appeals is meeting in Haddam to address the zoning implications.

MIDAC: The current plan is for Millstone I to become 'Cold and Dark ' by April 1st, 2001. Discussion took place regarding the role of MIDAC in that event. MIDAC membership will be consulted. Consideration will be given to sunsetting the committee later in 2001.

Report from CASE (Connecticut Academy of Science and Engineering). The long-awaited report that ties in cancer incidence of residents living in the proximity of CY with known radioactive emissions and the then prevailing weather conditions has reached first draft stage -- some 3.5 years after the academy agreed to undertake the study. After some discussion, it was decided that a meeting would take place in Haddam at which CASE representatives would present the report. This warrants as much publicity as possible. In addition, the meeting should be a joint affair with CDAC.

Next meeting, November 16th will be a joint meeting with the Boards of Selectmen of Waterford and East Lyme. Dominion Resources will be the agenda.

Meeting adjourned at 10.40 PM.

MIDAC meeting with CDAC, Connecticut Yankee, September 21, 2000

M1DAC and CDAC members met at 9:30 to discuss the groups' formations, accomplishments, members, agendas, and general background data.

Ms Bassilakis said that CDAC was formed by CT Yankee. Ms Rathbun said M1DAC was formed as a subcommittee of NEAC. Bob Meyers discussed long-term storage; how the town of Haddam is trying to obtain a variance for the area where they (CY) want to store dry casks. They are having town meetings regarding the zone change. Mr. Shumway asked about the cooperation with CT Yankee. Ms Bassilakis replied that they have been very cooperative. One of the struggles they have had was in getting information on the (NRC) inspection reports. Their committee relies more on what they learn from the utility rather than from doing research. They have also brought in people from outside CT Yankee and had NRC presentations. Mr. Schwing said that CT Yankee's management has been very responsive. His concern was where the workers will go after the facility gets closed. Mr. Meyers mentioned that they discussed the wet storage situation versus dry cask storage with CT Yankee many times.

Ms Rathbun mentioned that MIDAC is open to members of the public with varying backgrounds and they give different viewpoints on issues. Ms Rathbun asked about the length of terms of a committee member. CDAC's Chair is a 2-year term and members don't have a designated length. Some members are more qualified in the subject. Mr. Meyers said at CY they have a dry cask situation plus a decommissioning project; so there are 2 projects going on at the same time.

Ms Bassilakis asked how does M1DAC decide on its agenda; Ms Rathbun said they work very closely with NU and target a specific topic. Mr. Coleman added that maybe the utility sets the agenda and it has worked out pretty good, but what are they not telling, and when they (MIDAC) get into they would get better at setting agendas. Ms Bassilakis asked if M1DAC has any workers on the committee; i.e., someone working on decommissioning. Ms Rathbun and Mr. Coleman said Mr. Bill Sheehan does inspections

but he is on the NEAC committee and is not an employee. Also, Frank Rothen and Bill Temple, who are not MIDAC members, work with the committee in their capacity as NU personnel. Mr. Meyers said they advertise CDAC meetings on the CT Yankee web site and encourage workers to attend.

First Selectman Kalinowski (of Portland) said there are representatives from the League of Women Voters, the State of Connecticut, Congressman Gejdenson's office, the 5 townships (in the EPZ), and the Connecticut River Watershed Council on their committee. First Selectman Kalinowski said finding volunteers is difficult. CDAC doesn't have a formal way to get back to the public. The public is being ill_informed. The NRC is holding a public hearing on October 17, 2000 in Haddam that would benefit the residents. Ms Rathbun said she sends MIDAC's agenda to the New London Day to have it published prior to the meeting. First Selectman Kalinowski asked if anybody has ideas as to how to let the public know that these events are taking place. Ms Winslow said Waterford has a channel on the high school television station that is used and it can be done through town websites. On July 8-ll, 2001, CT Yankee will hold a forum at Foxwoods Conference Center on decommissioning.

Paul Blanch made a comment that there are significant differences between the decommissioning at CT Yankee and Millstone I. He sees Millstone with little activity as the new company takes over. Mr. Temple said wet storage is what they will be considering, but no decision has been made.

Ms Bassilakis asked if Millstone went through chemical decontamination of the piping system. If you need to know information, this is one question to ask. Ms Winslow said that Millstone is separating systems it shared with the other units and that is a big deal. Dr. Bobruff asked about calcium iodide. Ms Bassilakis said since there aren't any operating reactors at CT Yankee, there isn't any iodine release. Dr. Bobruff asked about the emergency evacuation plan. Ms Bassilakis said once the reactor is defueled, and a certain period of time elapses, they are allowed to remove the emergency plan, and that needs to be looked out for. Mr. Nericcio said that the plant site that is similar to Millstone is Three Mile Island.

Meeting adjourned at 10:00 PM

QUESTIONS ON THE YUCCA MOUNTAIN PROGRAM
NUCLEAR ENERGY ADVISORY COUNCIL MEETING
SEPTEMBER 21, 2000

1) Bill Sheehan:
   a. Will expansion of the repository be possible should the need arise?
   b. Will the ambient temperature be as high as 300°F? Seems too high.

a. Currently the Nuclear Waste Policy Act (NWPA) limits the amount of spent nuclear fuel (SNF) and high level waste (HLW) allowed to be licensed for repository disposal to 70,000 metric tons of heavy metal until such time as a second repository is in operation. However, DOE has not identified any technical reasons that would prevent disposal of additional SNF and HLW and still meet applicable safety and environmental limits. The Draft Environmental Impact Statement for Yucca Mountain considers disposal of an expanded inventory as a reasonably foreseeable future action.

b. Before closure of the repository, which entails sealing all openings to the emplacement area, ambient temperatures would be much less than 300 degrees F. After closure, there would be no circulating air and no place for the heat generated by the waste to go except into the surrounding rock of the repository. Maximum rock wall temperatures could be as high as 300 degrees F during the first two hundred years after emplacement of the radioactive waste. Temperatures would go down as the radioactive decay heat generation subsides. DOE is considering operational variables, such as spacing distance between waste packages and/or excavated drifts and adjustments to ventilation periods that could help reduce the repository temperatures.

2) Paul Blanch: What are the radiation levels at the weapons testing site .v. present levels at Yucca Mountain .v. what will be expected at Yucca Mountain when it is a repository?

For purposes of responding to this question, we have assumed that the question centers on the ambient gamma radiation levels as measured by devices distributed at various locations both at Yucca Mountain and throughout the Nevada Test Site. In addition, to define the terminology "when it is a repository", one would need to consider whether this refers to the operational phase of waste emplacement and monitoring, or the period after which all of the waste is emplaced, and the repository is closed. For purposes of this question, we assume that the question refers to the post-closure period of the repository.

The background radiation level at the surface of Yucca Mountain and most areas of the Nevada Test Site is approximately 120 - 140 millirem per year. Radiation levels at the weapons testing site have dissipated over the years, so that background radiation levels are comparable with the Yucca Mountain site. Other than minor increases from naturally occurring radon released from excavation activities at the underground repository, background radiation levels would not be expected to change as a result of repository development and waste emplacement at Yucca Mountain. [The Yucca Mountain program

employs health physicists that have worked on previous nuclear weapons testing activities which ensures consistency in the monitoring of radiation levels at the Nevada Test Site]

Radiation levels in the immediate vicinity of the waste facilities may be slightly elevated during the pre-closure period because of the existence of spent fuel and high level waste at the waste handling buildings on the surface, prior to underground emplacement.

3) Pearl Rathbun: What will be the order of acceptance of the HLRW once Yucca is operating?

The Department of Energy has entered into contracts with utilities for the acceptance of waste. Details of the allocation of annual acceptance capacity are available in the Annual Capacity Report/Acceptance Priority Ranking, available on the OCRWM home page at www.rw.doe.gov.

4) Rosemary Bassilakis:

a. Will Yucca accept canisters with >Class C waste? (CY will generate 3)
b. What is the life of a storage canister?

a. Under the terms of the spent nuclear fuel disposal contract with Connecticut Yankee, DOE will accept for disposal only spent nuclear fuel and high-level radioactive waste generated through the operation of the reactor. The contract does not provide for the acceptance and disposal of GTCC waste generated by the operation of the reactor. (See the attached letter from Dave Zabransky to the Director of Nuclear Safety and Regulatory Affairs concerning GTCC with respect to Maine Yankee).

b. The "life" of a storage canister is determined by the Nuclear Regulatory Commission. NRC certifies the storage canister for 20 years, which can be extended upon request.

5) John Markowicz: Design requirement of 'Immersion = 200 meters underwater for @ least 1 hour seems exaggerated/irrelevant – please comment?

The 200-meter immersion test comes to U.S. regulations (i.e., 10 CFR 71) from an international regulation (Safety Series 6, now ST-1). It was introduced to address concerns about possible submersion of a cask in deep coastal waters. Unlike the other accident test conditions, it is not part of the sequential test (i.e., impact, puncture, and thermal "fire"). Spent fuel casks are quite robust, and compliance with the condition is easily shown by analysis. Although U.S. shipments are not as likely as those of other nations (e.g., Japan, Sweden) to encounter such conditions, immersion is not precluded in US shipments, and casks are certified for a wide range of shipping conditions.

6) Nick Thomassone: Would it be possible to have a meeting with the full DOE team present so that all the questions can be answered? (Jay Jones will bring it up with 'bosses' in DC).

If there are future meetings at Haddam Neck, the Department will consider sending additional representatives to answer questions. However, because of resource constraints, it is difficult to send enough people to cover all technical aspects of such a highly complex program. However, representatives from DOE will not be able to address certain questions due to ongoing litigation with Connecticut Yankee.

Nuclear Energy Advisory Council (NEAC) Meeting
Waterford Town Hall
Waterford, Connecticut
November 16, 2000

Ms Terry Concannon, Co-Chair
Mr. Evan Woollacott, Co-Chair
Mr. John Markowicz
Mr. Frank Rothen
Mr. Bill Sheehan
Ms Marge DeBold
Mr. Mark Holloway
Ms Pearl Rathbun
Ms Mary Ann Buckley
Mr. Bill Brockett
Dr. Edward Wilds, representing DEP, Commissioner Arthur J. Rocque, Jr.

1. Call to Order

Meeting began at 7:10 PM. Co-Chair Concannon thanked the Boards of Selectmen from Waterford and East Lyme for joining with NEAC for this meeting with Dominion and she discussed the format of the meeting. First Selectman Paul Eccard, Waterford, started the evening with the Pledge of Allegiance.

2. Welcome/Introductory Remarks:

First Selectman Eccard, Waterford, introduced Selectmen Victor H. Ferry and Paul A. Suprin; First Selectman Wayne Fraser, East Lyme, introduced members of his board. Co-Chair Concannon introduced the NEAC members and then introduced Mr. Lee Olivier, NU Senior Vice President and Millstone Chief Nuclear Officer. Mr. Olivier introduced Mr. James O'Hanlon, Dominion President and Chief Operating Officer, and Mr. David Christian, Dominion Senior Vice President, Nuclear Operations, and Chief Nuclear Officer.

3. Northeast Utilities/Dominion Presentation:

Mr. Lee Olivier discussed the progress of Millstone and decommissioning projects. Mr. O'Hanlon discussed Dominion's reputation and Mr. Christian presented slides of Dominion's history, generation growth, community involvement, responsibilities, safety policy, their vision and mission (enclosure A). Mr. O'Hanlon stressed that safety is the first and constant priority for Dominion.

Questions from NEAC members:

Mr. Markowicz asked about nuclear capacity, staffing levels and safety issues. Mr. Christian explained that there are 125-130 operators and 100 engineers at each site, Surry and North Ana, and that there is a Safety Conscious Work Environment and an Employee Concerns Program in place. Staffing at Millstone would be higher because its two plants are different.

Mr. Holloway asked if the work force size will be reduced to 1300 and asked if the only criteria was safety, whether Dominion would choose dry cask storage or the spent fuel pool. Mr. O'Hanlon assured him the number in the plan wouldn't go below 1200. Regarding the storage safety criteria, the choice would be either one, as they consider them to be equally safe.

Co-Chair Woollacott asked about the 18 month refueling. Mr. O'Hanlon said they would stay on the 18-month cycles. Mr. Christian added they are limited by the amount of uranium fuel to put in the core. They will look at all the factors every 3 to 4 years to see if it makes sense for them to continue the 18-month cycles.

Mr. Sheehan asked about the status and the progress of the outstanding design deficiencies that were permitted to be waived and worked on after the recovery and what the status will be at the time of transfer of ownership. Mr. Olivier said Millstone 3 has been completed and they are committed to complete the backlog at Millstone 2 by the end of 2001. Mr. Sheehan asked about restructuring as it applies to the work force. Mr. O'Hanlon said they have options; either to enter into a 135 day period where they will work with an outplacement agency, be placed in other positions in the NU system, accept the severance program or be placed in the professional resources group. Regarding any future plans for increasing generating capacity for Millstone, Mr. Christian said Unit #1 would stay shut down. They have looked at other options but natural gas did not look economical. It will be looked at again in the future.

Ms Rathbun asked if there were any decisions on fuel storage for Unit #1. Mr. O'Hanlon said the rods will be stored in the fuel pool which is fully acceptable and fully safe.

Mr. Markowicz asked about the Safety Conscious Work Environment and if the management scheme with the KPI's is going to be continued. Regarding the work environment, Mr. Oliver said Little Harbor had come in to do site assessments and found positive results. In the near future, there will be less reliance on Little Harbor. Regarding the performance indicators, there is a large amount of overlap which closely replicates the Dominion system.

First Selectman Eccard noted that the tour of the facility was impressive and the interviews went favorably with the employees.

Selectman Paul Suprin suggested to Dominion that they make a presentation to the group on spent fuel storage. Mr. O'Hanlon will consider that for a future meeting.

Co-Chair Concannon asked if Dominion will continue to work with NEAC as NU has done, including the control room monitoring by NEAC. Mr. O'Hanlon assured the committee that the relationship would continue.

4. Public Comment and Question Period:

Nancy Burton, Susan Perry Luxton, Geri Winslow, Pete Reynolds, Rosemary Bassilakis and Joe Besade asked various questions to the new owners.

5. The Joint meeting with the East Lyme and Waterford Boards of Selectman adjourned.

6. NEAC Business Meeting:

NEAC business meeting began at 9:30 PM. Motion was made by Mr. Sheehan to accept the meeting notes of September 21, 2000, after the corrections were made, seconded by Mr. Markowicz and accepted; with two abstentions from members who were absent at the September 21, 2000, meeting. The minutes of the July 20th meeting were approved, following postponement at the September 21st meeting.

Mr. Sheehan read the Millstone monitoring reports of October 4, 19, and November 6 and discussed his findings. The Operational Focus Meeting Reports of November 15 and 16 were then discussed (enclosure B). Mr. Gene Gracheck, who is on loan to NU by Dominion, was also present to answer questions from the committee. He discussed the turbine driven auxiliary feed water pump failure of September 20th, following its malfunction in August, and the root cause. The NRC is treating the failure as an apparent violation. A regulatory conference will he held 11/28/00 in King of Prussia, PA. Mr. Markowicz noted that, as with past occurrences, it always seems to be an engineering problem.

Mr. Rothen reported that the reconciliation of benefits for employees is becoming a big issue. They are working with the attorneys from the two companies to check to see if both plans are identical. He also discussed the workers, their jobs and transition; if they need to address matters, they are going right to their managers, which is a positive. Every single position was affected.

Ms. Rathbun discussed the M1DAC report. One concern was the future of the M1DAC committee and this will be discussed at their next business meeting in December to see what options might be available once Millstone I becomes 'cold and dark' on April 2, 2001. Mr. Rothen suggested to Ms Rathbun that M1DAC tour the facility before the end of this year to observe the configuration of the spent fuel pool.

Mr. Woollacott discussed the DPUC meeting and J.P. Morgan auction. He passed around testimony documents on the bidding process and expressed concern about the manner in which the DPUC redacted the document. Except for parts of page l, all had been blacked out. NEAC is writing to express its dissatisfaction. .

Co-Chair Concannon discussed the Annual Report and would like everyone to send Mr. Woollacott and her their drafts as soon as possible so they could be incorporated before the January 10th deadline.

Ms Buckley discussed CT Yankee's recent meeting. She pointed out that the problems getting solutions to certain issues are not technical but they are political such as the zoning change request for a dry cask storage area at CY. She suggested that NEAC help by getting the legislators to discuss interim solutions and focus more on the pursuit of solutions.

Co-Chair Concannon read a letter regarding Greater Than Class C (GTCC)* radioactive waste from DOE to Maine Yankee. Since DOE is contracted to only accept spent nuclear fuel and high-level radioactive waste (HLRW) it is not interested in how Maine Yankee loads GTCC waste. CY will produce 3 canisters of this waste.

Mr. Bill Brockett announced that he attended this meeting to formally resign from the committee due to the ill health of his wife. The members applauded his contribution since NEAC began, August l, l996.

Motion was made to adjourn the meeting by Mr. Rothen, it was seconded by Mr. Sheehan; meeting adjourned at 11:00

Next meeting: Thursday, January llth, 2001 at Haddam-Killingworth High School media center in Higganum, 7:00 PM.

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Department of Energy
Washington, DC 20585

SEP 2 9 2000

Mr. George Zinke, Director
Nuclear Safety and Regulatory Affairs
Maine Yankee
321 Old Ferry Road
Wiscasset, Maine 04578-4922

Dear Mr. Zinke:

Thank you for your letter of September 7, 2000 in which you informed us that Maine Yankee intends to load Greater-Than-Class-C (GTCC) radioactive waste into Nuclear Assurance Corporation UMS canisters on or about December 1, 2000, and inquired as to our interest in observing the loading activities.

The subject line of your letter states that this loading is in preparation of shipping these canisters to the Department of Energy, presumably for disposal under the referenced spent nuclear fuel disposal contract, Contract Number DE-CR01-83NE44394. Under the terms of that contract, DOE will accept for disposal only spent nuclear fuel and high-level radioactive waste generated through the operation of the Maine Yankee reactor. The contract does not provide for the acceptance and disposal of GTCC waste generated by the operation of the reactor. The Department is not interested in observing the loading of your GTCC waste.

In accordance with the terms of your contract, we request that you keep us informed with respect to the schedule for loading of Maine Yankee's spent nuclear fuel. We will be in a better position to assess our interest in observing those loading activities at that time.

Please contact me if you have any questions.

Sincerely,

David K. Zabransky
Team Leader, Waste Acceptance

APPENDIX 3

Memorandum - 2000-01

DATE: JANUARY 1, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: *Bill Sheehan*

RE: MONITOR WATCH IN MILLSTONE 2 CONTROL ROOM

1. On January 1, 2000, I spent from 1240 to 1340 in the control room of MILLSTONE 2 observing the control room watchstanders. The Reactor Plant was at 100% power. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations during most situations.

   b. The RPS Channel D has a temporary fix. Rather than a continuous alarm condition the alarm is now a frequent intermittent alarm. It occurred over five times during my hour monitor. The unit supervisor told me that there were plans to get permission to widen the alarm band, which would have the effect of reducing the alarm frequency until permanent repairs could be made during the next shutdown.

   c. Only three minor surveillances remained to be accomplished. New Year's day was planned to be a light day.

   d. The unit supervisor conducted an excellent midshift brief. All pending items on the shift were discussed and plans adjusted as necessary and the Technical Advisor and the Shift Manager briefed on lessons learned from other plants and INPO respectively. During the brief a mechanical operator reported that an air compressor had no lube oil in the indicating sight glass. The shift manager stated he would see if he could get repair to take some action on the item.

2. The watch section was professional in their conduct of the watch. However, the continuing recurrence a reactor safety alarm was annoying to say the least and dangerous at worst since the operator continually expected (for good reason) the same cause to the alarm. There might be some unplanned delay in diagnosing a problem that was different from the original Temperature monitor problem. Such time may be crucial in the event of a real casualty.

3. After departing Millstone 2, I stopped briefly at Millstone 3. It was also at 100% power. The Year 2000 bug was not apparent at either plant.

4. A copy of these comments was provided to Dan Hagen, Millstone 2 Operations.

Bill Sheehan

DANIEL A. HAGAN <HAGANDA@GWSMTP.NU.COM> on 01/04/2000 12:44:17 PM

To: bsheehan@ortronics.com
cc:
Subject: Millstone 2 Monitor -Reply

Bill,

Thanks for the observation information.

The current problem with the intermittent alarm has been minimized (1-2 alarms/day) by performing a calibration of the channel. The set point for the alarm will be raise to further reduce the frequency of the alarm. The set point change is scheduled to be completed on January 14, 2000.

DH

Memorandum - 2000-02

DATE: JANUARY 19, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 3 CONTROL ROOM

1. On January 19, 2000, I spent from 1750 to 1850 in the control room of MILLSTONE 3 observing the control room watchstanders. The Reactor Plant was at 100% power. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations during most situations.

   b. The Shift Manager spent a few minutes briefing the watch section on evolutions planned for the next few days.

   c. The Emergency Management Team conducted an unannounced monthly communications drill. Using the new Emergency Notification program, the computer obtained responses from 71 of 74 operators without human intervention. The drill conductors were required to call only two individuals to insure a complete recall within forty minutes. They discovered one feature was not functioning, the auto home telephone feature. The "box" will be checked off prior to the next drill

2. A copy of these comments was provided to Mike Wilson, Millstone 3 Operations.

Bill Sheehan

Memorandum - 2000-03

DATE: FEBRUARY 06, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 2 CONTROL ROOM

1. On February 6, 2000, I spent from 1222 to 1325 in the control room of MILLSTONE 2 observing the control room watchstanders. The Reactor Plant was at 100% power. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations during most situations.

   b. During the entire monitor there was only one annunciator alarm, Radwaste air supply air trouble light. It cleared prior to the end of my visit.

   c. The shift manager spent part of the monitor period working on procedure time to accomplish estimates and resource assignments for the pending outage in April.

2. A copy of these comments was provided to Dan Hagen, Millstone 2 Operations.

Bill Sheehan

Memorandum - 2000-04

DATE: FEBRUARY 23, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 2 CONTROL ROOM

1. On February 23, 2000, I spent from 1725 to 1825 in the control room of MILLSTONE 2 observing the control room watchstanders. The Reactor Plant was in Mode 5 cooled down to 140 degrees. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations during most situations.

   b. The operators were waiting for repairs to be completed on Control Element Drive Mechanism (CEDM) 31. During the repairs to the CEDMs in the past week a leak had developed on the seal of CEDM 31 and an authorized seal weld was required to repair the leak. The welder was expected to commence the repairs during the third shift.

   c. Since it was hoped that start up would be this weekend, the watch section was checking the line up of the condensate system so it would be ready to commence plant heat up.

   d. The control room watch standers also made shift turnover preparations.

2. I was surprised to learn that Unit 2 has not returned to power since the dropped rod incident two weeks ago. There were a number of leaks in the secondary system as they commenced the initial heat up and then the CEDM leak occurred. The emerging repair efforts have also impacted the preparations for the April refueling shutdown.

2. A copy of these comments was provided to Dan Hagen, Millstone 2 Operations.

Bill Sheehan

"J. W. Sheehan" <sheehanjw@email.msn.com> on 03/03/2000 08:48:16 PM

To: "Bill Sheehan" <bsheehan@ortronics.com>
cc:

Subject: Fw: Millstone 2 Monitor Report -Reply

For Files
----- Original Message -----
From: Daniel A. Hagan <haganda@GWSMTP.NU.COM>
To: <ewoollacot@aol.com>; <sheehanjw@email.msn.com>; <tconcannon@snet.net>
Cc: <DANIEL_A._HAGAN/GWISE/NUS@NU.COM>
Sent: Tuesday, February 29, 2000 6:49 AM
Subject: Millstone 2 Monitor Report -Reply

> Bill,
> Thanks for including me on distribution of your U2 Control Room
> observations. These are valuable input for me.
> Some additional information regarding the current shutdown: The
outage
> for the dropped control rods was extended due to a 1.4 g.p.m. leak on a #2
> Safety Injection Tank outlet valve - 2-SI-624. This repair required the
RCS be
> depressurized and level lowered to one foot above the Reactor flange. The
leak
> on CEDM #31 developed following the repair to 2-SI-624. This repair
required
> us to again depressurize the RCS.
>
> DH
>
> >>> <sheehanjw@email.msn.com> 02/23/00 08:54pm >>>
>
> Attached is the latest Millstone 2 monitor. I am sure you will be
> surprised at the information I am reporting. In case you have a problem
> with the attachment-- Unit 2 is still shut down. Bill Sheehan

Memorandum - 2000-05

DATE: MARCH 13, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 3 CONTROL ROOM

1. On March 13, 2000, I spent from 1755 to 1855 in the control room of MILLSTONE 3 observing the control room watchstanders. The Reactor Plant was at 100% power. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations during most situations.

   b. The Unit Supervisor and the Shift Manager spent a few minutes briefing each other on recent training walk throughs they had completed. The concluded that it was a learning experience both for the operators of their section and for themselves. They planned to set up a periodic walk through the plant with all of the operators in their watch section to improve overall plant knowledge.

   c. There was discussion of a needed change to a procedure the watch section was scheduled to conduct on Wednesday or Thursday of this week. The Shift Technical Advisor volunteered to draft up the necessary changes. One of the Control Room operators would provide an independent check of the procedure change and it would be processed so that it could be used when they conducted the evolution. The change was "simple" to draft because there was a similar procedure that provided the alternate steps the watch section desired to accomplish.

   d. The Shift Manager made sure that one of the trainees in the watch section was available and in fact obtained a necessary practical factor in Radiological Waste operations.

   e. In short, this was a basic no significant comment monitor.

2. A copy of these comments was provided to Mike Wilson, Millstone 3 Operations.

Bill Sheehan

Memorandum - 2000-06

DATE: APRIL 05, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 2 CONTROL ROOM

1. On April 05, 2000, I spent from 1920 to 2022 in the control room of MILLSTONE 2 observing the control room watchstanders. The Reactor Plant was at 100 power and normal operating temperature and pressure. The following comments are germane:

a. Watchstanders were formal in their communications with each other concerning plant operations.

b. This was this crew's first time on watch for a week. The shift brief covered the changes in plant conditions since their last in plant watches.

1) The crew was reminded of areas of increase radiation and to think ALARA during their watches.

2) It was reported that during the day shift a rag was found in the diesel fuel line during refueling. The fuel truck operator informed the NU refueling crew that it was his rag. He had forgotten to remove it from his lines before hooking up to the fuel line.

c. Instrumentation and Control Technicians conducted testing on Reactor Protection System circuitry. Although not required to announce the alarms that occurred the control room operator made sure that the alarm was from the circuit under test each time it sounded. The Unit Supervisor also reminded the operator to do this midway in the testing (The Unit Supervisor had been working with another operator preparing for another surveillance).

2. When debriefing with the Shift Manager, I asked about the dropped rod incident that I read about in the newspaper two weeks ago. He informed me that during preparations for Control Element Drive Mechanism (CEDM) movement surveillances an I &C Technician placed a instrument test probe in the incorrect test connections, shorting the circuitry, blowing the fuse, and dropping the rod. The blown fuse was replaced the rod recovered to normal operation according to procedures.

2. A copy of these comments was provided to Dan Hagen, Millstone 2 Operations.

Bill Sheehan

Memorandum - 2000-07

DATE: APRIL 21, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 2 CONTROL ROOM

1. On April 21, 2000, I spent from 1012 to 1115 in the control room of MILLSTONE 2 observing the control room watchstanders. The Reactor Plant was at 100 power and normal operating temperature and pressure and 13 hours from the shutdown for refueling outage 13. The following comments are germane:

a. Watchstanders were formal in their communications with each other concerning plant operations. It is obvious that this watch section has been working on formal face-to-face communications. It was the best I have seen in a long time.

b. Two briefs were conducted during my observation.

1) The crew was briefed on a pending evolution in the HPSI system testing Motor Operated Valve SI27. The brief was conducted by the Technicians performing the evolution and supervised by one of the control room operators who insured that all items for an evolution brief were covered. The shift manager observed this brief.

2) The shift manager conducted the second brief. He covered the shutdown and cool down procedures that the watch section would be using tomorrow. He finished by stating that there would be a detailed shift brief tomorrow when they came on shift concentrating on the specific evolutions that would be conducted during their watch.

c. Early in the observation period the control room operators started a second charging pump and properly balanced flows. They responded to expected alarms as the plant system were balanced for the second charging pump. The initial steps in the HPSI testing commenced just as I was completing my observation period.

2. On completion of my monitor I stopped in the One Stop Shop for the refueling outage to see the layout. The one stop shop was already buzzing with activity as the final hours to commencing the refueling outage ticked away.

2. A copy of these comments was provided to Dan Hagen, Millstone 2 Operations.

Bill Sheehan

Memorandum - 2000-08

DATE: MAY 10, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 3 CONTROL ROOM

1. On May 10, 2000, I spent from 1533 to 1635 in the control room of MILLSTONE 3 observing the control room watchstanders. The Reactor Plant was at 100% power. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations during most situations.

   b. There was a control room operator trainee and during one of the routine boron dilution operations the qualified watch stander did not require the trainee to perform the evolution, he performed it himself. The Shift Manager reminded him that he was to supervise the trainee, not do the evolutions himself.

   c. The B Screen wash pump (This is the pump that gets debris off of the cooling water intake screens) did not start automatically. The operator was required to turn off the pump and then return to auto before it started as required. A Trouble Report (TR) was drafted on the problem.

   d. There was an unexpected Power Range Deviation alarm that cleared shortly after being received. No cause for the alarm was determined by the end of my monitor.

   e. In short, this was a busy watch with few significant evolutions in progress. During the monitor some contract engineers came into the control room to check out what was required to shift a function currently accomplished from Millstone 1 to Millstone 3

2. A copy of these comments was provided to Mike Wilson, Millstone 3 Operations.

Bill Sheehan

Memorandum - 2000-09

DATE: MAY 15, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 2 CONTROL ROOM

1. On May 15, 2000, I spent from 1652 to 1800 in the One Stop Shop Center or the control room of MILLSTONE 2 observing the watchstanders. The Reactor Plant was shutdown for refueling outage 13. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations.

   b. The one stop shop was very busy insuring that the Automated Work Orders and other evolutions scheduled for the refueling outage completed as required. By the latest report the Turbine Generator rewind job was 48 hours ahead of schedule despite some problems with the stator cooling water supply stainless steel header nipples and the facilities were only eight hours behind schedule. This is at the halfway point of the outage. One of the workers in the one stop shop commented that this was the first time he had seen such adherence to a schedule planned before the evolution. He felt that it could not have been done two years ago.

   c. One of the major evolutions completed yesterday was the "setting" of the reactor vessel head. Unfortunately, the head will have to be lifted again because one of the bolted flanges was leaking. It is suspected that some entrapped water in a guide tube caused some foreign material to get on the flange O-ring. If all goes well, the head will be lifted on third shift, the o ring cleaned and head reset by start of first shift tomorrow.

   d. Although the planning and expediting occurs at the one stop shop, the controlling still occurs in the control room and all operators were busy monitoring the progress of the work.

2. I was impressed with the organization and effort of workers and operators. They were handling the day-to-day problems with efficiency and flexibility. It bodes well for the second half of the outage.

3. A copy of these comments was provided to Dan Hagen, Millstone 2 Operations.

Bill Sheehan

Memorandum - 2000-10

DATE: MAY 29, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: *Bill Sheehan*

RE: MONITOR WATCH IN MILLSTONE 2 CONTROL ROOM

1. On May 29, 2000, I spent from 1104 to 1205 in the control room of MILLSTONE 2 observing the watchstanders. The Reactor Plant was in Mode 3, shutdown for refueling outage 13. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations

   b. The following evolutions were in progress:

      1) Nuclear Instrumentation Testing

      2) Testing of certain breaker trips

      3) Testing of main turbine trip valves using a plant condition-testing simulator.

      4) Clearing of tags on the Terry Turbine preparing for its test.

      5) Dilution of the Reactor Coolant System (RCS) to bring the boron concentration to within the limits for a critical reactor.

      6) Main Feed pumps trip testing.

   c. Nuclear oversight was also conducting an observation of control room operators

   d. There were four Control Room Operators to handle the increased activity.

   e. During a lull in the activity, the shift manager relieved the unit supervisor so he could go get lunch. Both turnovers were appropriate for the activity in progress.

2. A review of the refueling outage schedule and discussion with watchstanders revealed that there was still a 48-hour lag in the critical path schedule. It will take a great deal of teamwork and no problems to stay this close to the promulgated schedule

3. A copy of these comments was provided to Dan Hagen, Millstone 2 Operations.

Bill Sheehan

Memorandum - 2000-11

DATE: JUNE 14, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 3 CONTROL ROOM

1. On June 14, 2000, I spent from 1647 to 1750 in the control room of MILLSTONE 3 observing the control room watchstanders. The Reactor Plant was at 100% power. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations.

   b. Surveillances were in progress in the Instrumentation and Control area (RCS flow and Pressurizer level testing) and in fire protection area (CO2 "puff" test). The unit supervisor kept very busy keeping track of both of these evolutions.

   c. It was a quiet and efficient monitor period. There are no other comments.

2. A copy of these comments was provided to Mike Wilson, Millstone 3 Operations.

Bill Sheehan

Memorandum - 2000-12

DATE: JUNE 28, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 2 CONTROL ROOM

1. On June 28, 2000, I spent from 1725 to 1827 in the control room of MILLSTONE 2 observing the watchstanders. The Reactor Plant was at 100% power. The following comments are germane:

   a. Watchstanders were generally formal in their communications with each other concerning plant operations

   b. Preparations were being made for an evolution to remove some foreign material (believed to be a rag) from the Hydrogen system float tank. Since there was the potential of mixing Hydrogen, Air (Oxygen) and oil during the procedure many precautions were being taken to insure personnel and equipment safety.

   c. There were intermittent alarms as the fire pump was tested in anticipation of the evolution mentioned in b. above.

2. A review of the plant plan of the day and discussion with watchstanders revealed that control element assembly tests were planned for Friday, June 30, 2000. This is the first time this routine at power surveillance would be conducted since the refueling outage. I am sure it will have high visibility.

3. A copy of these comments was provided to Dan Hagen, Millstone 2 Operations.

Bill Sheehan

Memorandum - 2000-13

DATE: JULY 08, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 3 CONTROL ROOM

1. On July 07, 2000, I spent from 1955 to 2100 in the control room of MILLSTONE 3 observing the control room watchstanders. The Reactor Plant was at 100% power. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations.

   b. It was a quiet and efficient monitor period. There are no other comments.

2. A copy of these comments was provided to Mike Wilson, Millstone 3 Operations.

Bill Sheehan

Memorandum - 2000-14

DATE: JULY 18, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: *Bill Sheehan*

RE: MONITOR WATCH IN MILLSTONE 2 CONTROL ROOM

1. On July 18, 2000, I spent from 1708 to 1810 in the control room of MILLSTONE 2 observing the watchstanders. The Reactor Plant was at 100% power. The following comments are germane:

   a. Watchstanders were generally formal in their communications with each other concerning plant operations

   b. During the watch, a plant work scheduler came to the control room to confer with the shift manager and the unit supervisor concerning a planned evolution to flush some radioactive hot spots. After a brief discussion, the proposal was left with the shift manager to deliver to the oncoming watch section for their comments as well.

   c. Again, there are no significant comments. The watchstanders have settled into an effective, alert routine.

2. A copy of these comments was provided to Dan Hagen, Millstone 2 Operations.

Bill Sheehan

Memorandum - 2000-15

DATE: AUGUST 03, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 3 CONTROL ROOM

1. On August 03, 2000, I spent from 1725 to 1830 in the control room of MILLSTONE 3 observing the control room watchstanders. The Reactor Plant was at 100% power. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations.

   b. The unit supervisor and the senior control room operator conducted briefings on the restoration of cooling to the spent fuel pool and initiation of purification of the spent fuel pool cooling water. The briefs were thorough and both briefers checked their briefing badges to insure that all precautions were covered. The cutting in of purification procedure was going to be peer checked and the person designated as the peer checker attended the brief.

2. A copy of these comments was provided to Mike Wilson, Millstone 3 Operations.

Bill Sheehan

Memorandum - 2000-16

DATE: AUGUST 19, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 2 CONTROL ROOM

1. On August 19, 2000, I spent from 1155 to 1300 in the control room of MILLSTONE 2 observing the watchstanders. The Reactor Plant was at 100% power. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations

   b. The active problem list on the white board in the shift manager's office is the shortest I have seen it since Unit 2 went to power after the recovery.

   c. The highlight of the monitor period was a call from security reporting that two geese had flown into the Unit 2 power lines and one of the geese had not survived the encounter.

   d. Unit 2 watchstanders are pleased that Dominion Resources will be the new owner of Millstone Station. They developed a relationship with personnel from Dominion during the recovery period when Virginia Power came to Millstone to assist in rebuilding Unit 2 work practices.

2. A copy of these comments was provided to Dan Hagen, Millstone 2 Operations.

Bill Sheehan

Memorandum - 2000-17

DATE: SEPTEMBER 07, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 3 CONTROL ROOM

1. On September 07, 2000, I spent from 1645 to 1745 in the control room of MILLSTONE 3 observing the control room watchstanders. The Reactor Plant was at 100% power. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations. Condition turnovers between the Unit Supervisor and the Shift Manager were especially noteworthy.

   b. Some of the evolutions in progress were the "demucking" of the B Circ Water Basin and some I & C routine testing.

   c. One of the plant problems that has been nagging operators for the past week was the failure of the B Hydrogen recombination system to test satisfactorily. During the monitor one of the Equipment Operators reported finding a flange leak on the Hydrogen recombining system. Although the engineer responsible for the system did not think that this leak was the cause of the flow test failures, it may be proven to be the case. The watch section drafted both a Condition Report and a Trouble Report on the flange leak. Although I didn't think about it at the time, I wonder why both reports needed to be written.

   d. During conversation with one of the watchstanders, the shift manager commented that he had been in training on the new tag out system that will be implemented soon. He stated that although the system will help watchstanders control condition during normal operations, he expected that it will slow down work during a refueling outage or an intense maintenance period. That may be something management should investigate to see if the shift manager's concerns are valid. It is possible that improved planning in the maintenance periods would counteract the slow down caused by the changes in the tagout procedure.

2. A copy of these comments was provided to Mike Wilson, Millstone 3 Operations.

Bill Sheehan

Memorandum - 2000-18

DATE: SEPTEMBER 20, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 2 CONTROL ROOM

1. On September 20, 2000, I spent from 1715 to 1815 in the control room of MILLSTONE 2 observing the watchstanders. The Reactor Plant was at 98.5% power. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations.

   b. The final steps were in progress for a SPROC (Special Procedure) to remove from service, repair, and return to service 2-HD-103B Normal Level Control Valve for Feed Water System. Phones were manned between the control room and all B Steam Generator Level indications and the Control Valve site as it was returned to service. The procedure went as planned with no problems.

   c. Power had been reduced from 100% to allow more recovery time if any problems had occurred. After the Feed Water System was restored to normal, the operators returned the controlling group of rods to the top position from about three steps down. A small Xenon transient was observed and the Shift Technical Advisor (STA) commented that he expected that the next shift would have to dilute the boron in the Reactor Coolant by 40 to 60 gallons. For the past week the normal dilution had been about 30 gallons per shift.

   d. The repair evolution showed great teamwork between maintenance and operations and improved planning by the Millstone 2 staff. The steps had been rehearsed and briefed and responsibilities carefully outlined in case of problems. It was a very professional job by all that I observed and many I did not see to complete the task with no problems.

2. A copy of these comments was provided to Dan Hagen, Millstone 2 Operations.

Bill Sheehan

Memorandum - 2000-19

DATE: OCTOBER 04, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: *Bill Sheehan*

RE: MONITOR WATCH IN MILLSTONE 3 CONTROL ROOM

1. On October 04, 2000, I spent from 1730 to 1830 in the control room of MILLSTONE 3 observing the control room watchstanders. The Reactor Plant was at 100% power. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations.

   b. Valve lineups were in progress for the operational testing of the B charging pump. The control room operators were also preparing for a briefing of the actual test that would be conducted later in their watch.

   c. A trainee was standing his first Unit Supervisor Watch under instruction. He was being quizzed and briefed by the Unit Supervisor and the Shift Manager throughout the monitor period. He was a Unit Supervisor at Connecticut Yankee who then came to Millstone 3 and started as a PEO about two years ago and has finally worked and requalified his way back to Unit Supervisor.

2. A copy of these comments was provided to Mike Wilson, Millstone 3 Operations. According to the shift manager, this is the last monitor I will be sending to Mike because he has been shifted to Director of Operations Training and will be relieved by Bill Hoffner on Friday, October 6, 2000.

Bill Sheehan

Memorandum - 2000-20

DATE: OCTOBER 19, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: *Bill Sheehan*

RE: MONITOR WATCH IN MILLSTONE 2 CONTROL ROOM

1. On October 19, 2000, I spent from 1640 to 1740 in the control room of MILLSTONE 2 observing the watchstanders. The Reactor Plant was at 99.5% power. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations.

   b. Power Range Nuclear Instrumentation checks were in progress causing almost continuous alarms that the operators silenced. Since they related to testing, they were not announced in the control room according to established procedures.

   c. The Unit Supervisor reported to me that earlier in the watch the operators had found a small "wisp of steam" coming from a Feed water Regulating valve control line. He also informed me that progress was being made in the "Unit 1 system separation tasks". Steps were being taken to determine what repairs were necessary. The Shift Technical advisor and an off watch shift manger pointed out an erratic Radiological control monitor (It showed static at a very low reading (.002 mr)). The problem appeared to start on September 25, 2000. While not a major problem it is worth pursuing because the low-level radiation monitoring capabilities are useful to the watchstanders in an emergency situation.

   d. This was a routine monitor of plant operations with no serious problems.

2. a. After my monitor I stopped in to discuss the monitor with Dan Hagen, PO MP2 Operations (his title in the reorganization). I asked him if their had been any effects of the reorg on plant operations. He said there was no direct effect because the operators (except for his position) were not subject to the new process. However, there has been a great effect on the Maintenance and Engineering Groups. During pre-evolution briefs, the operators are cautioned to take this distraction into account and be especially vigilant. The mechanics and engineers participating are reminded to concentrate on the task at hand and save the worries and concerns about the reorganization and the sale of the plant for breaks and lunch time. He emphasized that his was being done in a sympathetic manner since everyone from the top down realizes the emotional stress some workers are under because of the job uncertainty.

   b. A SPECIAL EDITION MISSION POSSIBLE newsletter that I picked up when leaving Millstone reinforced these comments. It contained some specific questions and answers on the realignment and selection processes and the Lump Sum Option available through March 31, 2000 for persons that "fail selection" or chose to leave Millstone for other reasons. There was also a SPECIAL EDITION of TO THE POINT with a message from Lee Olivier to all employees dated October 13, 2000 announcing another effort by the International Brotherhood of Electrical Workers (IBEW) to hold another union organizing election at Millstone.

c. Through a source independent of Millstone, I have also learned that there has been a great increase in Millstone middle managers and workers seeking counseling regarding the stress and personal anxiety related to the changes going on at the site. I am sure that management is aware of the situation because they have been very open regarding the realignment process. The Safety Conscious Work Environment (SCWE) is not in danger but it certainly is under stress as Millstone works through realignment and plant sale.

3. A copy of these comments was provided to Dan Hagen, Millstone 2 Operations.

Bill Sheehan

Memorandum - 2000-21

DATE: NOVEMBER 06, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: *Bill Sheehan*

RE: MONITOR WATCH IN MILLSTONE 3 CONTROL ROOM

1. On November 06, 2000, I spent from 1800 to 1905 in the control room of MILLSTONE 3 observing the control room watchstanders. The Reactor Plant was at 100% power. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations.

   b. There is a problem with the 'A' Steam Generator Feed Water Regulation Valve and it is currently operating in manual bypass to control level in the steam generator. A team is scheduled to brief the watch section on repair procedures and precautions some time this night, November 6, 2000. According to the shift manager, it will be necessary to provide a "dummy air signal" to the control valves while the electronics are deenergized for repairs.

   c. The watch section conducted a brief and then shifted plant chillers from 'A' and 'B' operating to 'B' and 'C' operating. The evolution was conducted safely and professionally.

   d. The watch section conducted a 100-gallon boron dilution of the primary coolant. The unit supervisor commented that as MP3 core ends its life the boron dilutions are coming more often, currently about once every two hours. This compares to once a shift for MP2.

2. As I was leaving the station I stopped to pick up the latest edition of the MISSION POSSIBLE, the Transition Management Team's newsletter. It consisted of questions and answers on compensation packages and the Lump Sum Option Program. One of the questions concerned the different severance package provided to the Millstone directors and managers. The copy that I picked up had the following comment hand written under the explanation of the director and manager package – "But screw the people who really keep this place up and running!!" There is very definitely some resentment in the ranks.

3. A copy of these comments was provided to Bill Hoffner, Process Owner Operations Millstone 3.

Bill Sheehan

Memorandum - 2000-22

DATE: NOVEMBER 21, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 2 CONTROL ROOM

1. On November 21, 2000, I spent from 1710 to 1810 in the control room of MILLSTONE 2 observing the watchstanders. The Reactor Plant was at 99.5% power. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations.

   b. Power Range Nuclear Instrumentation checks were in progress causing almost continuous alarms that the operators silenced. Since they related to testing, they were not announced in the control room according to established procedures.

   c. Preparations were underway for a test of the 'B' Diesel Generator scheduled to start at midnight.

   d. This was a routine monitor of plant operations with no comments.

3. A copy of these comments was provided to Dan Hagen, Process Owner Operations Millstone 2 and to Bill Temple, Manager Executive Support.

Bill Sheehan

Memorandum - 2000-23

DATE: DECEMBER 09, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 3 CONTROL ROOM

1. On December 09, 2000, I spent from 1318 to 1420 in the control room of MILLSTONE 3 observing the control room watchstanders. The Reactor Plant was at 100% power. The following comments are germane:

   a. Watchstanders were formal in their communications with each other concerning plant operations.

   b. One unexpected alarm was received during my monitor, a Low Level/High Level RAD WASTE WATER Tank Alarm. The investigation revealed that the assigned technician was in the process of shifting from a nearly full tank to another tank at the time of the alarm..

   c. The watch section conducted a boron dilution of the primary coolant. The unit supervisor provided me with new guidelines regarding dilution which is now occurring hourly in small amounts as reactivity is controlled prior to the power coast down expected to start soon. Operators guessed that coast down might start as early as December 17, 2000.

2. A copy of these comments was provided to Bill Hoffner, Process Owner Operations Millstone 3.

Bill Sheehan

Memorandum - 2000-24

DATE: DECEMBER 27, 2000

TO: Evan Woollacott and Terry Concannon, CoChair, NEAC

FROM: Bill Sheehan

RE: MONITOR WATCH IN MILLSTONE 2 CONTROL ROOM

1. On December 26, 2000, I spent from 1315 to 1415 in the control room of MILLSTONE 2 observing the watchstanders. The Reactor Plant was at 100% power. The following comments are germane:

a. Watchstanders were formal in their communications with each other concerning plant operations.

b. One of the remote fire alarm modules alarmed and the fire service notified to check a cable run but no actual fire or indications of fire were found. More investigation will be required to determine the exact cause for the alarming module.

c. The control room received notification from engineering to instruct the PEOs not to replace indicating light bulbs on CEA15 (a rod control element assembly). The on watch PEO immediately asked if it applied to all CEA since the watchstanders often replaced the indicating light bulbs. The unit supervisor called the responsible engineer who stated that it was only CEA15 because of a possible malfunction that could lead to dropping that CEA. This problem obviously requires more investigation if there is a potential problem with the CEAs again.

d. There were a number of trainees on watch, including unit supervisor. Near the end of my watch, the shift conducted a brief for shifting condensate demineralizers. Using the briefing check off, the leader of the brief insured that all necessary points were discussed and all questions answered before concluding the brief.

3. A copy of these comments was provided to Dan Hagen, Process Owner Operations Millstone 2 and to Bill Temple, Manager Executive Support.

Bill Sheehan

APPENDIX 4

Nuclear Energy Advisory Council

Millstone 1 Decommissioning Advisory Committee

Pearl I. Rathbun, (Co-Chair), Niantic: BA Economics, Eastern Connecticut State University. Administrative Assistant, East Lyme Emergency Management and Fire Marshal's Bureau; Deputy Emergency Management Director, East Lyme.

Rep. Kevin Ryan (Co-Chair), Montville: O.D., Pennsylvania College of Optometry. State legislator; Adjunct Faculty University of New Haven.

Paul Blanch, (Ad Hoc Member), West Hartford: BSEE, University of Hartford. Professional Engineer, Management Consultant, Northeast Utilities.

Jerome Bobruff, M.D., New London: M.D. Degree, Yale University. Private Practice.

Joseph M. Coleman, Niantic: BSME, University of Notre Dame. Retired. Former experience includes Civil Engineer, Bethlehem Steel Company; Supervisor of Shipbuilding, USN and Electric Boat Division of General Dynamics Corp.

Terry Concannon, (Ex Officio, NEAC Co-Chair), Marlborough: BSc Biochemistry, Dublin, Ireland. Downtown Manager, Middletown; Tax Consultant; former state legislator.

Gregg W. Dixon, Ph.D., Niantic: Ph.D., Mechanical Engineering (Nuclear), Stanford University. Mechanical Engineering, U.S. Coast Guard Academy.

Wayne L. Fraser, East Lyme: First Selectman, Town of East Lyme.

Robert A. Moore, Niantic: Master of Theology, Boston University. Pastor of Niantic Community Church.

James R. Sherrard, Mystic: MS Nuclear Science and Ph.D. Program in Nuclear Engineering, Catholic University of America. Chairman of Nuclear Engineering Technology Department, Three Rivers Community-Technical College.

Doran Shumway, Oakdale: School of Radiologic Technology, Windham Community Memorial Hospital, Willimantic. Former radiation control specialist, Connecticut Department of Environmental Protection.

Paul A. Suprin, Waterford: BA Psychology, Central Connecticut State University. Senior Commercial Lending Officer.

Geralyn Winslow, Waterford: Southern Connecticut State University and University of Arizona. Paraprofessional, lifelong resident of Waterford, member of Citizens Regulatory Commission (CRC).

APPENDIX 5a

BRIEF BY THE NUCLEAR ENERGY ADVISORY COUNCIL

DOCKET NO. 99-09-12

APPLICATION OF THE CONNECTICUT LIGHT AND POWER COMPANY FOR APPROVAL OF ITS MILLSTONE NUCLEAR GENERATING ASSETS DIVESTITURE PLAN

I. INTRODUCTION

The Nuclear Energy Advisory Council [NEAC] was established by Section 17 of Public Act 96-245. Its responsibility relates to the safe operations of nuclear power plants. It has the specific responsibility to "work with federal, state, and local agencies and the companies operating such plants to ensure public health and safety". It is within the framework of this specific public requirement that the NEAC asked to participate in Docket 99-09-12. Decisions made for the auction process could affect the safety and well being of the general public, particularly those within a five-mile radius of the Millstone Facility.

II. ISSUES

A. No safety considerations were included in the directives issued by the DPUC or in the submittal made by CL&P.

Safety and nuclear operations can not be separated. This is known to all that have worked and are working in the nuclear field. During the hearing, the CL&P lawyers consistently raised the objection that only the NRC could rule on safety issues. This is technically correct. However, economic decisions must insure that the end results will not compromise nuclear safety. These include decisions made by CL&P and the DPUC. The substantial monies and time spent the past three plus years to insure safe plant operations must not be wasted. We have a major auction of nuclear facilities. The evaluation of capabilities of prospective bidders must include criteria that will insure that the selected bidder can safely operate the nuclear facilities without endangering the safety of the general public. Mr. Kenyon, in his testimony, indicated that the bid process would identify key areas that must be evaluated. The important thing to the State of Connecticut is to insure that safety is not compromised. Please insure that any bid request include criteria for measuring the

expected safety performance of any selected bidder. As a minimum, the historic safety record of the bidder should be included.

B. The Millstone site should be bid on only as a complete package.

CL&P, in its presentation, recommended that that the Millstone site only be offered as a complete package. It did say that, if the DPUC desired, it would be willing to receive quotes on individual units. The Office of Consumer Council also expressed an interest in having separate bids for the various components.

From an economic standpoint the "whole" is worth greater than its "parts" because of the synergies created when there is one operator. Should we have one maintenance contractor or three? Should there be one cafeteria or three? Should there be one engineering building or three? Should there be one set of safety rules, or three? The concern the NEAC has is that the old phrase: "Too many cooks spoil the broth" may well be operative when we

are looking to the safety and well being of the peoples of Connecticut. The NEAC recommends that the Millstone site be sold as a complete facility.

C. THE AUCTON PROCESS SHOULD ENSURE THAT THE SAFETY CONSCIOUS WORK ENVIRONMENT PROGRAM IS CONTINUED

One of the major problems associated with the failure of plant operations at Millstone was the fear of management reprisal if the employees raised safety concerns. This led to the Safety Conscious Work Environment program now in force at the Millstone site. Millions of dollars were spent to develop and maintain this program. It is a very important key to insure continued safe operations of the Millstone units.

The auction process should include criteria to measure the capability and willingness of the bidders to maintain a work environment that is conducive to safe operation of the nuclear plants.

D. THE SELECTED DPUC CONSULTANT SHOULD OBTAIN BACKGROUND AND KNOWLEDGE OF NUCLEAR OPERATIONS.

During the testimony, many references were made to the role of the selected consultant in developing and administering the auction process. For all practical purposes, the consultant is a decision-maker. In its decision making, the consultant must insure that a bidder has the expertise to operate the nuclear plants in a safe and reliable manner. The NEAC urges that consultant obtain independent nuclear support during the decision-making process.

III. CONCLUDING NOTES

The NEAC recognizes that the economic and safety responsibilities have been compartmentalized between the DPUC and the NRC, respectively, for many years. However, both the DPUC and the plant operator have a higher responsibility. That is to ensure that the

safety and well being of the people of the State of Connecticut are not compromised.

The NEAC urges that proactive safety criteria be included in the auction. Should the auction plan that is developed result in a simple economic review with the highest bidder reaping the reward, the NEAC, under its charter, will have no other choice but to ask the legislature to remove the nuclear plants from the auction process and work out an arrangement which will insure the continued safe operation of the nuclear plants in Connecticut.

For the Nuclear Energy Advisory Council

Evan W. Woollacott

Marjorie DeBold

APPENDIX 5b

REPLY BRIEF

DOCKET 99-09-12

THE NUCLEAR ENERGY ADVISORY COUNCIL

APPLICATION OF THE CONNECTICUT LIGHT AND POWER COMPANY FOR APPROVAL OF ITS MILLSTONE NUCLEAR GENERATING ASSETS DIVESTITURE PLAN

I. INTRODUCTION

The Nuclear Energy Advisory Council has reviewed the briefs issued by the parties and offers no direct comment on the issues discussed. It will, however, offer some additional information in support of its recommendation that the nuclear auction process include a strong safety component.

Should the DPUC desire, the NEAC would be willing to assist in the development of Safety criteria.

II. WORK FORCE REDUCTIONS TO MEET COMPETITIVE PRESSURES, COULD, IF NOT PROPERLY MONITORED, ADVERSELY AFFECT THE SAFE OPERATION OF NUCLEAR POWER PLANTS.

With the advent of the very efficient combined cycle gas turbine production facilities, greater competitive pressure is placed on the operators of nuclear power plants. The gas units can produce power at 2.8 cents/kwh. The Millstone units are at about 4.5 cents/kwh. Northeast Utilities has already announced that substantial manning reductions will be required in its nuclear facilities to meet the competitive pressures resulting from deregulation of the electric power production facilities.

Manpower reductions can be made without compromising safety. However, the reductions must be carefully monitored from a safety standpoint. In a recent report, the British nuclear regulators, the Nuclear Installation Inspectorate [NII], expressed concern about the manpower reduction practices of British Energy. British Energy controls 11 nuclear plants in Great Britain, about 20% the nation's supply. British Energy also is in partnership with Philadelphia Electric, operating AMERGEN in the

United States. In its report on British Energy, NII stated that *"the technical basis for continuing staff reductions was not clear to us, but it could be related to the requirement to compete in the commercial market place."* The NEAC is attempting to obtain a full copy of the NII report and further evaluate any safety aspects.

The NEAC asks that criteria be established to evaluate a bidder's posture on manpower reductions and safety.

III. CONCLUSION

The NEAC requests that this new concern be added to the issues it presented in its original brief, and asks that the resulting auction process include measurable criteria to insure, to the extent possible, that safety will not be compromised by the selected bidder.

Should the DPUC desire, the NEAC would be willing to assist in the development of safety criteria.

Evan W. Woollacott Marjorie DeBold

APPENDIX 5c

STATE OF CONNECTICUT

BEFORE THE

DEPARTMENT OF PUBLIC UTILITY CONTROL

WRITTEN EXCEPTIONS BY THE NUCLEAR ENERGY ADVISORY COUNCIL TO THE "DRAFT DECISION" UNDER DOCKET 99-09-12

APPLICATION OF THE CONNECTICUT LIGHT AND POWER COMPANY AND THE UNITED ILLUMINATING COMPANY FOR APPROVAL OF THEIR MILLSTONE NUCLEAR GENERATION ASSETS DIVESTITURE PLAN

Evan W. Woollacott **Marjorie DeBold**

Nuclear Energy Advisory Council
State of Connecticut

I. GENERAL

The Nuclear Energy Advisory Council [NEAC] appreciates the careful study reflected in the Draft Decision regarding the NEAC position as presented in its brief and reply brief. It understands the legal responsibilities assigned to the NRC by Congress. However, NEAC firmly adheres to the truism generally accepted in the Nuclear Power field, that "safety is everybody's business." Whether it be Northeast Utilities, the OCC, the Attorney General, or the DPUC itself, comments and decisions must recognize the effect a decision can have on the safety and well being of the people of the State of Connecticut. In fact, in its draft decision at page 22, the Department admits that it "has traditionally been mindful of nuclear safety considerations in its decision making,"and it "has avoided any economic actions that could credibly result in a direct adverse effect on nuclear safety." It is with this background that the NEAC offers its exceptions to the draft decision.

II. THE MILLSTONE UNITS SHOULD BE SOLD AS A COMPLETE PACKAGE.

NEAC understands the economic alternatives relative to the individual sale of specific units. However, the draft decision, in its discussion of the inclusion of Seabrook in the auction, noted quite effectively on page 8 "that significant synergies existed between two unit, so-called 'twin' nuclear units located on the same site." The draft decision further added that "this is due to the commonalties in operating, maintenance, engineering, and support staff and the opportunities for sharing material resources between units located on the same site." NEAC suggests that this specific argument could well be used in support of asking for single bids for the entire site entity. NEAC supports this argument included in the draft decision, but it suggests that it be included in the section on bidding alternatives.

The draft decision states on page 6 that "NEAC's concerns that confusion resulting from multiple owners could affect safety" is "entirely hypothetical". The decision further states that "the Department is unaware of any studies or analyses that have concluded that such sites are any less safe than multi-unit sites operated by a single entity." Indeed, the example given on page 7 of the draft decision is a poor one due to the inferior safety record at Indian Point. What is more, the Department seems to infer that in order to prove its concern, NEAC would have to identify that a safety infraction had occurred as a result of the "hypothetical" presentation made by the NEAC. Many laws have been enacted as the result of lessons learned. However, NEAC suggests that lessons learned may be from a severe injury or death resulting from a poor safety performance. What would a prudent businessman do? Should the businessman react when it happens, or take precautions to insure that an injury doesn't occur? An insurance company will set its premiums based on whether it sees a proactive or reactive response from the businessman. Whatever the cost, it could well rest on the customers, the ratepayers, to pay the cost of being

reactive versus being proactive. This could be true in both a regulated and a deregulated world.

III. ANY REQUEST FOR BIDS SHOULD INCLUDE CRITERIA FOR MEASURING THE EXPECTED SAFETY PERFORMANCE OF THE SELECTED BIDDER.

With detailed references, the draft decision identified safety as being within the purview of the NRC. The fact that the statutory authority rests with the NRC was highlighted. NEAC was established by the legislature to assess not only the performance of NU, but also the performance of the NRC. It found that during the period studied that neither NU nor the NRC fulfilled safety requirements. Since NEAC became involved in 1996, there has been a substantial improvement by both NU and the NRC. The NEAC annual reports to the legislature document these statements. NEAC again requests that that the measures of safety performance be identified and that all bidders be asked to respond. We are not simply looking at an auction, we are looking at the public safety of the peoples of the State of Connecticut.

Prior lapses in nuclear safety compliance by NU and in nuclear safety oversight by the NRC can not be repeated. The State of Connecticut, on behalf of its residents, has earned the right to review, and if necessary, challenge the nuclear safety credentials of potential new owners of Millstone.

IV. THE AUCTION PROCESS SHOULD INSURE THAT A SAFETY CONSCIOUS WORK ENVIRONMENT IS CONTINUED.

The NU failure to provide a safety conscious work environment was the proximate cause for the shut down of the Millstone plants. Millions of dollars were subsequently spent to provide the proper work milieu. If the employees do not feel free to talk with the new management regarding the safety of the Millstone site, this investment will be lost. They and NEAC need to be assured that the selected

contractor will guarantee that there is an open channel to address concerns that relate directly to nuclear safety. This is not simply a NRC safety concern, it is a concern that reflects the safety and well being of the citizens of the State of Connecticut. It is a responsibility that NEAC has been assigned by the State of Connecticut. NEAC is perturbed that this is not reflected in the draft decision.

V. THE AUCTION CONSULTANT SHOULD HAVE EXPERTISE IN NUCLEAR OPERATIONS.

After the years that NEAC has been through in insuring that a safe operating program exists at Millstone, NEAC wants to make sure that the consultant understands its concerns. If you have to talk nuclear, you must have a nuclear operations understanding. We are ready to discuss this with the consultant and its nuclear advisors.

VI. CONCLUSION

Despite the statements in the Draft Decision, NEAC strongly endorses the important nuclear fact that "safety is everybody's business." NEAC asks that the draft decision include safety criteria measurements as part of the auction process. As stated in its brief, NEAC will discuss its concerns with the legislative chairs of the Energy and Technology Committee. The NEAC stands ready to participate in the auction process with a singular goal of protecting the health and safety of the peoples of the State of Connecticut.

Evan W. Woollacott

Marjorie DeBold

Nuclear Energy Advisory Council

APPENDIX 5d

State of Connecticut

NUCLEAR ENERGY ADVISORY COUNCIL

Room 4100
Legislative Office Building
Capitol Avenue
Hartford, CT 06106

November 18, 2000

The Honorable Donald W. Downes
Chairman, CT DPUC
10 Franklin Square
New Britain, CT 06051

Re: Docket 99-09-12RE01 – Application of the Connecticut Light and Power Company and the United Illuminating Company for the approval of Their Nuclear Generation Asset Divestiture Plan – Sale of Millstone Station to Dominion Resources, Inc.

Dear Chairman Downes:

The Nuclear Energy Advisory Council [NEAC] was established by Legislative Act to monitor the health and safety of the Connecticut citizenry relative to the operation of Nuclear Power Plants in Connecticut. In fulfillment of its responsibilities NEAC was granted intervenor status in Dockets 99-09-12 and 99-09-12RE01.

When the NEAC received the initial documents, it recognized that there were many documents filed under protective cover and therefore not available to the NEAC. It raised this issue at the initial hearing, and indicated it would be willing to sign the protective order and asked that, as an exception, copies be made available to the NEAC so it could perform its function as required by the laws of the State of Connecticut. This was denied by the Hearing Officer. The NEAC then asked that redacted copies be made available. This request was accepted by the parties.

The redacted copies were received this week. They failed by a substantial margin to meet the standard of normal discovery. Specifically, one of the redacted items was the March 2000 Divestiture Video. I had previously seen the unredacted version at a NU meeting held in Norwich with over 300 people present. It was an excellent video and well done by the Millstone employees. In my opinion and from direct review of the entire video, there was no need to place this tape under protective cover.

Further, almost all the J.P. Morgan redactions were full page redactions, leaving only a page number remaining. The CL&P submittals simply included document cover pages, with no apparent attempt to consider each page.

It gives the appearance that the work by J.P. Morgan and CL&P was performed in an arbitrary and capricious manner, unbecoming a party to this important docket.

Further, the record is replete with concerns expressed by the Office of Consumer Council relative to the failure of J.P. Morgan to provide the necessary information. The documents are required by the Office of the Consumer Council to fulfill its duties established by the laws of the State of Connecticut. Further, the Office of Consumer Council asserts that documents promised it during preauction discussions have never been released by J.P. Morgan.

In view of the concerns expressed by NEAC and the Office of Consumer Council, the prospect of having a flawed decision weighs heavily on the parties.

For the above reasons and in the interests of insuring a rigorous but proper review and an acceptable decision, the NEAC asks that the Chairman take that action necessary to resolve the issues raised at the hearing and in this letter.

For the Nuclear Energy Advisory Council

Evan W. Woollacott
Co-Chair

Cc: Louise E. Rickard (10}
Service List
NEAC members