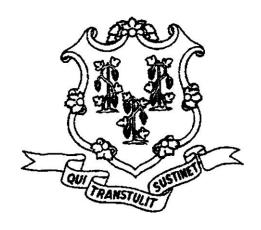
STATE OF CONNECTICUT



THE NUCLEAR ENERGY ADVISORY COUNCIL REPORT

2015

Established Pursuant to Public Act 96-245

John W. Sheehan, Chairperson to Sept 14, 2015 Rep. Kevin Ryan, Chairperson from Sept 14, 2015

December xx, 2015

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Appendix 1 – 2015 Nuclear Energy Advisory Council Membership Appendix 2 - 2015 NEAC Meeting Minutes

CHARGE TO THE COUNCIL

Section 17 of Public Act 96-245(now CGS16-11a as amended) 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, and
- 5. Review the current status of the plants with the Nuclear Regulatory Commission.

COUNCIL MEMBERS

The Council consisted of twelve (12) members appointed by the Governor, legislative leadership, and the executive bodies in the towns in or near which the state's nuclear power plants are located (Appendix 1).

EXECUTIVE SUMMARY

This is the twentieth annual report presented by the Nuclear Energy Advisory Council (NEAC). During calendar year (CY) 2015, the NEAC met five times and received reports from representatives of the Nuclear Regulatory Commission (NRC), the Atlantic Compact, Connecticut Department of Energy and Environmental Protection (DEEP), and Dominion Nuclear Connecticut as well as a written status report from Connecticut Yankee Independent Spent Fuel Storage Installation (ISFSI). Routine and Special NRC Millstone Power Station (MPS) inspection and performance assessment reports were also received and reviewed. During the fourth quarter of 2014, four NRC identified findings and one Licensee identified finding were reported in the routine Integrated Inspection Report. Millstone Unit 2 plant performance (Action Matrix) was classified as "GREEN", meaning that all inspection findings for CY 2014 were classified as having no or low safety significance, This meant that Unit 2 would have baseline inspections in 2015. Millstone Unit 3 plant performance was classified in the Regulatory Response Column due to one WHITE finding in CY 2014. The NRC has conducted its follow-up security inspection and determined that the licensee has taken adequate corrective actions. The NRC has closed the greater than green security finding and Millstone Unit 3 will return to the Licensee Response Column of the plant performance action matrix. The Annual Assessment letter of 03/04/2015 also noted that a final classification of a finding during a Security Inspection had not yet been determined. In the first quarter of 2015 one NRC-identified finding and one self-revealed finding, both of very low safety significance (GREEN) were reported during the integrated inspections of Millstone 2 and Millstone 3. One finding was attributed to Millstone 2 and the other to Millstone 3. Both Millstone 2 and 3 remained in the GREEN and WHITE classification respectively. During the second quarter, there were no findings identified during the integrated inspections of Millstone 2 and 3. In the third quarter there were two NRC identified and one licensee identified GREEN findings identified during the integrated inspections of Millstone 2 and 3. Results for the fourth quarter 2015 were not available at the time of this report. Dominion declared an emergency event on October 4, 2015 at the UNSUAL EVENT level (lowest of the four emergency classification levels) at Millstone Unit 2. The declaration was based on reactor coolant system leakage of greater than 25 gallons per minute. The leakage came from a relief valve on the plant's shutdown cooling system, which is used to provide cooling to the reactor when it is out of service. Millstone Unit 2 was preparing to enter a refueling and maintenance outage at the time of the event. In response to the leakage, the shutdown cooling system was isolated from the reactor coolant system, allowing repairs to be made and the return of the system to operational status. All leakage was contained in tanks onsite and there was no release of radiation to the environment. The NRC had questions regarding operator performance, specifically the delay in identification of leakage and emergency event declaration and determined that a Special Inspection was appropriate to help the better understand Dominion's response to the event. Dominion also made an emergency declaration at the ALERT level (second lowest of four emergency classification levels) on Nov 5, 2015 at 11:33 AM due to a small fire on the A emergency diesel generator lasting more than 15 minutes. The fire was quickly extinguished and the emergency event was terminated at 2:48 PM. The fire was due to oil buildup near the exhaust and was not of a suspicious origin. Inspection of the emergency diesel generator indicated no damage and there was no release of radiation due to the event. Because of the "WHITE" status for Millstone 3, there were additional special inspections

besides the usual base line inspections. The Baseline Security Inspection completed in November 2014 but not reported until January 2015 identified one or more findings that preliminary been determined to have "greater than very low security significance." Another base line Security Inspection completed in June and reported in July had another GREEN finding of very low security significance. There was a special Security Inspection due to a Severity Level IV Security Violation that completed in June 2015 with the results announced on November 24, 2015. The Component Design Basis Inspection conducted in April 2015 and reported in June 2015 reported two GREEN findings and one Severity Level IV finding. A special investigation of Millstone 2 reported in April 2015 revealed three Apparent Violations dating back to 2013. In August 2015 the NRC reported that Dominion had entered into an arbitration procedure to resolve these inspection items. Dominion made significant commitments that will ultimately close these items. There were no findings during the routine inspections of Millstone 1 and the Dry Cask Storage Area.

Scheduled decommissioning activities of the industrial areas at Connecticut Yankee Atomic Power Company (CYAPCO) are complete. The Connecticut Yankee Site with the exception of the Spent Fuel Dry Cask Storage Area was released for unrestricted use on November 26, 2007. Final decommissioning and license termination of the entire site will be completed after removal of spent nuclear fuel (SNF) and greater than Class C (GTCC) radioactive waste that is in dry cask storage. The Connecticut Department of Energy and Environmental Protection (DEEP) terminated radiological environmental monitoring and groundwater monitoring programs and all sampling wells were decommissioned by April 8, 2014. The NRC conducts biennial safety/security inspections of the Independent Spent Fuel Storage Installation (ISFSI).

COUNCIL ACTIVITIES IN 2015

MEETINGS:

As required by CGS16-11a (PA 96-245) as amended, the NEAC held five public meetings as follows: (1) April 14, 2015, (3) June 18, 2015, (4) September 14, 2015 and (5) December 17, 2015 at Waterford Town Hall, Waterford, CT and (2) April 23, 2015 at Three Rivers Community College, Norwich, CT;. The purpose of these meetings was to provide a venue for discussion of issues relating to the safe operation of the state's nuclear power plants. Meeting minutes are included in Appendix 2. A summary of the meetings follows:

April 14, 2015: This was a joint meeting with the NRC Region I staff and focused on the Annual Assessment Report of Millstone Power Station Units 2 and 3 for the four quarters of CY2014 It was reported that overall these two units were operated in a manner that preserved public health and safety and Unit 2 fully met NRC cornerstone objectives. Unit 2 would have baseline inspections. Unit 3 was in the "Regulatory Response" Inspection mode due to WHITE Findings related to the Turbine Driven Auxiliary Feed Water (TDAFW) Pump and the complete loss of Site Power one day in 2014.

<u>April 23, 2015:</u> This was a brief meeting following a tour of the new Dominion Emergency Operations Facility (EOF) located in the Norwich Industrial Park near Dodd Stadium. NEAC members were very impressed with the capabilities of the new EOF.

<u>June 18, 2015:</u> NEAC was briefed by officials of the Atlantic Compact regarding the status of the Low Level Radioactive Waste Facility in Barnwell, SC, how waste was transported to the facility and the future plans for the facility.

<u>September 14, 2015:</u> Dominion Nuclear Connecticut representatives provided an update of activities at Millstone Power Station. Since Dominion had just signed the confirmatory order with the NRC, this brief was much better than the previous year's brief. NEAC member Jeff Semancik from DEEP updated NEAC on Spent Nuclear Fuel Storage. Representative Kevin Ryan was elected Chairman of NEAC, replacing J. W. "Bill" Sheehan who stepped down as Chair after over ten years of service.

<u>December 17, 2015</u>: The CY2015 Annual Report was discussed, reviewed, and approved for promulgation. NRC Correspondence and Inspection Results received since the last meeting was discussed. The meeting schedule for CY2016 was approved and possible topics for the meetings were discussed.

<u>Millstone 1 Decommissioning Advisory Committee (M1DAC):</u> Since Millstone 1 remains in Safe Storage (SAFSTORE) and no significant activities were conducted at the Unit during the past calendar year, M1DAC did not meet in CY2015.

REPORT ON ISSUES

MILLSTONE OPERATIONS

On October 20, 2014 the NRC officially notified Dominion Nuclear Connecticut that Millstone Unit 3 was in the Regulatory Response column of the NRC Action Matrix and that a Supplemental Inspection will be conducted when the licensee notifies the NRC it is ready for this inspection. Millstone Unit 2 remained in the Licensee Response mode of baseline inspections. Dominion appointed a new Site Vice President in December 2014 and there appears to be some positive indications in performance. However, in 2015 the number of issues, including two Special Inspection Teams, two declared emergency events, continued operator performance issues, and a number of Greater than GREEN findings and potential Level III or IV Apparent violations, remain higher than normal and indicative of the need for continued focus by station management, the NRC and NEAC.

Routine and special inspections conducted between October 1, 2014 and September 30, 2015 resulted in the identification of nine Unit 2 issues, seven Unit 3 issues, and six multi-plant or Site issues. Fourteen were determined to be of very low safety significance (GREEN), two were Greater than Green, two were Level III or IV and three were classified as Apparent Violations (AV). An NRC Security Baseline Inspection for CY2014 was reported on January 5, 2015 with a Greater than GREEN finding. Actual observations and findings were not released to the public. A Level III violation was reported in a letter dated 02/10/2015 as the result of a Special Inspection conducted in July 2014 related to the change Dominion made that removed the Severe Line Outage Detection System (SLOD) in December 2012 without a complete evaluation or NRC approval. This violation was revealed during the investigation of the complete loss of site power that had occurred May 2014.

The integrated Inspection Report dated 02/10/2015 covering the period October 1, 2014 to December 31, 2014 reported four GREEN findings charged to Millstone 3 and two GREEN findings charged to Millstone 2. The Integrated Inspection Report dated 05/08/2015 covering January 1, 2015 to March 31, 2015 reported one GREEN finding each for Millstone 2 and 3. The Integrated Inspection Report dated 08/10/2015 covering April 1, 2015 to June 30, 2015 identified no findings of significance. The Integrated Inspection Report dated 11/10/2015 covering the period July 1, 2015 to September 30, 2015 reported three GREEN findings for Millstone 3.

An 04/29/2015 NRC letter reported the results of an investigation by the NRC Office of Investigations completed May 23, 2013 that reported three Apparent Violations dating back to actions taken by Dominion Nuclear Connecticut at various occasions dating back to 2002 regarding Millstone 2 Charging Pump Flow in "mitigation of design basis accident involving inadvertent opening of Pressurizer Relief Valves..." and changes to the Millstone 2 UFSAR and Tech Spec Basis that "...decreased the amount of irradiated fuel decay time." The letter stated that Dominion could use Alternate Dispute Resolution (ADR) with the NRC to resolve these issues. An NRC letter dated 08/26/2015 included a Confirmatory Order that resulted from the ADR that committed Dominion Nuclear Connecticut to a number of actions over the next year that will resolve the Apparent Violations. Assuming successful completion of the commitments in the Confirmatory Order, the NRC agreed not to pursue any further enforcement action. To date, Dominion has met all of the commitments made in the confirmatory order.

An 11/24/2015 NRC letter reported the results of an investigation by the NRC Office of Investigations completed June 23, 2015 that reported on Severity Level IV Security Violation pertaining to Fitness for Duty testing when a Contractor Supervisor directed a subordinate to go home and wait for the next day when the subordinate admitted to using a controlled substance that would cause a failure of the Fitness for Duty examination. Ultimately, the worker failed the FFD the next day and was never granted access to the site. The supervisor's access was terminated upon discovery of the violation.

The NRC Component Design Basis Inspection was completed on 05/01/2015 and reported in a letter dated 06/12/2015. The inspection had two GREEN findings and one Severity Level IV finding that "...Dominion failed to perform a written evaluation to provide the bases for determining whether a change to the facility required a license amendment. This finding is similar to the Level III finding noted above and also the Apparent Violations discussed above. Like those violations, the corrective action is included in the Confirmatory Order noted in the NRC letter dated 08/26/2015. Millstone has it work cut out for it to fulfill the requirements of the Confirmatory Order in 2016.

Throughout 2015, as in 2014, the NRC and Dominion made a number of changes as a result of analyses of the Fukushima Dai-Ichai Accident. Studies were conducted related to the flooding potential from various sources and potential for seismic activity and the impact on the Millstone Power Station. Based upon requirement from NRC, Dominion moved its Emergency Operating Facility (EOF) from the plant site in Waterford to a facility Dominion constructed in the Norwich Industrial Park near the Dodd Baseball Stadium. This facility went on line in late November 2014. Dominion also constructed a special storage structure in a parking lot at the

power station that would store large emergency equipment that might be required in the event of a major flooding or seismic event. The nuclear power industry group has established two remote storage sites the will hold emergency equipment that may be airlifted to a damaged nuclear power plant. A landing site for this equipment has been outlined by Dominion near its new EOC.

On October 27 NRC released the Final Determination of Licensee Seismic Probabilistic Risk Assessments Under the Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendation 2.1 "Seismic" of the Near-Term Task Force. It would appear that Millstone only has to check the spent fuel pools and some high frequency electronic relays for possible seismic risk.

DECOMMISSIONING

MILLSTONE 1

In July of 1998, it was announced that Millstone Unit 1 would undergo decommissioning. A modified Safe Storage (SAFSTOR) decommissioning option was selected and remains in effect. This involved some decontamination and dismantlement early in the process. After these initial activities were completed, the unit was then placed in safe storage until the other two units at the Millstone site undergo decommissioning. After reviewing Unit 1 requirements, in conjunction with the operational and outage requirements of Millstone Units 2 and 3, it was strategically decided to place Unit 1 in 'Cold and Dark' storage in April 2001. This allowed the safe and efficient separation (from Units 2 and 3) projects as well as the decommissioning projects. All separation projects were completed by April 1, 2001.

The annual inspection of Millstone 1 operations was conducted between August 11 and August 13, 2015. There were "No findings of safety significance" according to the NRC reporting letter dated September 3, 2015.

CONNECTICUT YANKEE

The Connecticut Yankee Atomic Power Company (CYAPCO) plant began commercial operation in 1968 and produced more than 110 billion kilowatt-hours of electricity during its 28-year operating history. In 1996, the CYAPCO Board of Directors voted to permanently close and decommission the power plant. After two years of planning and preparation, actual decommissioning began in 1998 and was completed in 2007. CYAPCO has operated the NRC licensed Independent Spent Fuel Storage Installation (ISFSI) at the Haddam Neck site since 2004. The spent nuclear fuel and GTCC waste at the ISFSI facility is stored in 43 dry casks containing dual purpose canisters licensed by the NRC for both storage and transportation. The generic storage license for the dry cask storage system expires in 2020. CYAPCO plans to submit a license renewal request by 2018 extending the license for another 40 years. The U.S.

Department of Energy is obligated under the Nuclear Waste Policy Act and by contract with CYAPCO to remove and dispose of this waste.

Current Status

ISFSI Operations:

ISFSI operations were normal - there was one lost time accident on March 4th and no OSHA recordable injuries or first aid cases.

An agreement with the CT DEEP allowed removal of the boom from the discharge canal whereby the state agreed to post and patrol

the canal and CY agreed to install security enhancements along the canal. Upon implementation of the enhancements and completion

of the security force training, the canal boom was removed on October 22nd.

Implementation is also underway for security upgrades to address certain aging and obsolescence issues with both hardware and

software. Other site projects include LED lighting upgrades, CT State Police radio upgrade, installation of a sand/salt shed, and a

Transfer Cask (TFR) removal study.

CY is proceeding with the first phase of a four year plan for a timber harvest. This is to ensure that this significant site resource is

managed properly. Permits have been secured, trees have been marked and a contract has been awarded for the work which is

expected to start in December.

CY's submittal for a "Green Circle Award" to the CT DEEP for the environmental clean-up of the site is under evaluation.

Nuclear Regulatory Commission

The NRC has accepted the CY request for exemption from certain requirements of 10 CFR 72.212 and 10 CFR 72.214 for the CY

ISFSI. This exemption addresses safety concerns with removal of snow and/or ice from the VCC inlet screens, often under

challenging environmental conditions. The exemption request will allow the use of either visual inspection or temperature monitoring

so that snow removal can be performed under the safest conditions, without a rigid 24 hour timeline requirement.

The next biennial NRC site inspection is scheduled for April 2016.

Canal Boom Removal

All of the security related enhancements are operational, the signage along the sides of the canal has been installed, and the training of the security staff has been completed. Accordingly, the canal boom project is complete and the boom has been removed. Connecticut Yankee thanked everyone for their patience while this project was completed.

The Interim Consolidated Storage Act of 2015

The "Interim Consolidated Storage Act of 2015" (H.R.3643) was introduced in the Congress on September 29th and was cosponsored by Congressman Courtney. This legislation will allow the Department of Energy to begin meeting its obligations under the Nuclear Waste Policy Act by utilizing consolidated interim storage until a permanent repository is operational. The bill specifically provides for the priority removal and storage of spent nuclear fuel and high-level waste from sites like Connecticut Yankee that no longer have an operating nuclear reactor. A copy of the bill is attached, as is a copy of a letter from Wayne Norton thanking Congressman Courtney on behalf of CY for his ongoing leadership role in pressing for a solution to the

HIGH LEVEL NUCLEAR WASTE

• NEAC continued to monitor activity to establish a permanent solution for spent nuclear fuel disposal. In view of the fact that there are now two nuclear plants currently decommissioned in Connecticut, failure to establish a permanent repository or otherwise dispose of the spent nuclear fuel and high level waste could adversely affect the State's economy and homeland security. It is noted that temporary storage of spent fuel in dry cask storage containers has been implemented at both Millstone and Connecticut Yankee.

The President's Blue Ribbon Committee Report was submitted to the Secretary of Energy on January 26, 2012 with eight key recommendations to reform the spent nuclear fuel management program. Some of these recommendations will require legislation by Congress and approval by the President. NEAC will continue to monitor the progress toward a solution to the problem of High Level Nuclear Waste.

According to information from the Yankee Power Companies the three Yankee Companies filed a Phase III round of damages claims in the U. S. Court of Federal Claims for the years 2009-2012 in August 2013. It appears that the company must file suit every five to six years to get the government to pay for past costs of the ISFSI and the fuel modules due to an earlier U. S. Federal Appeals Court decision that the companies may not receive damage awards for costs that have not yet been incurred.

According to information provided by the Yankee Power Companies, the NRC is continuing to undertake the safety evaluation report on the Department of Energy submission regarding the Yucca Mountain nuclear waste depository. This direction is a result of an August 2013 decision by the U. S. Court of Appeals for the District of Columbia ordering the NRC to continue the evaluation until currently appropriated funds are exhausted. One of the five Safety Evaluation Reports is completed and the remaining reports are expected to be complete in January of 2015. There is uncertainty whether the next Congress will appropriate the funding necessary to complete the license application review process.

RECOMMENDATIONS

STATE

1. Department of Emergency Services and Public Protection, Division of Emergency Management and Homeland Security and the Department of Energy and Environmental

- Protection should continue to work together to address any emergency preparedness issues at Connecticut's nuclear sites.
- 2. The Department of Energy and Environmental Protection should, in cooperation with the Connecticut State Police, continue to study and monitor security at Connecticut's nuclear sites to assure the dangers of terrorism and sabotage are minimized.
- **3.** Department of Energy and Environmental Protection should continue radiological and environmental monitoring of Connecticut's nuclear sites.
- **4.** The Governor, General Assembly, Department of Energy and Environmental Protection, and NEAC should continue to insist that the NRC continue vigilant oversight of Connecticut Yankee and Millstone Power Station sites for as long as high-level nuclear waste remains on site.
- 5. The Governor, General Assembly, and DEEP should encourage the federal government to develop a solution to the spent fuel storage problem and urge the federal Executive Branch and Congress to implement the President's Blue Ribbon Commission 2012 Report near term and long term recommendations. Specifically, The Governor, General Assembly and DEEP should endorse a nuclear waste strategy that includes consent based consolidated interim storage that: Gives priority to removal of Spent Nuclear Fuel (SNF) and Greater Than Class C (GTCC) waste from permanently shutdown reactor sites and transfers title of SNF to Department of Energy (DOE) upon receipt.
- **6.** The Governor and the General Assembly should seriously consider and act on the recommendations of the CASE Report on the Future of Nuclear Power in Connecticut published in 2012. (See NEAC 2012 Annual Report for more information).

NEAC

- 1. Continue to monitor the stability of the Employee Concern Program and Safety Conscious Work Environment and Corrective Action Program at Millstone Power Station.
- 2. Continue to monitor operations and activities at Millstone Power Station and Connecticut Yankee Site, including the dry cask storage programs.
- 3. Continue to encourage the development of a solution to the problem of Spent Nuclear Fuel, High Level Waste and Greater Than Class C Low-Level Radioactive Waste and the safe transfer of this nuclear waste from Connecticut. Including the establishment of a consent based consolidated interim storage that gives priority to removal of SNF and GTCC waste from permanently shutdown reactor sites and transfers title of SNF to DOE upon receipt.
- 4. Determine status of the Low Level Waste Compact and its impact on Connecticut.

NUCLEAR ENERGY ADVISORY COUNCIL MEMBERSHIP

John W. (Bill) Sheehan (Chair until 09/14/2015) Waterford: BS, Naval Science, US Naval Academy; MBA, Rensselaer Polytechnic Institute; former Commanding Officer, Nuclear powered submarine.; retired Navy Captain.

Rep. Kevin Ryan (Chair after 09/14/2015) Oakdale: OD, Pennsylvania College of Optometry. Legislator, Adjunct Faculty, University of New Haven.

Pearl Rathbun (Vice Chair until 09/14/2015) Niantic: BA Economics. Eastern Connecticut State University. Former Director of Emergency Management, East Lyme.

Gerald D. Hicks Waterford: BS Mechanical Engineering University of Colorado. MS Operations Research/Systems Analysis US Naval Postgraduate School. Retired Navy Captain, former Commanding Officer, Nuclear Powered Submarine, represents Dominion Nuclear Connecticut.

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

Gregg W. Dixon Niantic: PhD Mechanical Engineering (Nuclear) Stanford University. Retired Professor, Mechanical Engineering, US Coast Guard Academy.

Thomas A. Nebel Niantic: BS Industrial Engineering New York Polytechnic University; Retired Monsanto/Solutia - former First Responder & NE HAZMAT Coordinator for company; C.E.R.T. Member Missouri & Connecticut.

Robert J. Klancko Woodbridge: BSE Chemical Engineering, UCONN. PE, CSP, Engineering Consultant, member State Emergency Response Commission.

Raymond D. Woolrich Waterford: BS, Nuclear Science, US Naval Academy; MS Computer Systems and Financial Management, US Naval Postgraduate School; former Commanding Officer, Nuclear Powered Submarine; retired Navy Captain; Naval Analyst, Sonalysts, Inc.

James Sherrard Mystic: PhD Nuc. & Mech Eng. MIT/UCONN. Chairman, Nuclear Engineering Technology Department, TRCTC.

Mr. Jeffrey Semancik Groton: BS Physics, US Naval Academy. MS, Electrical Engineering. Former qualified engineer, nuclear powered aircraft carrier. Former Senior Reactor Operator at Millstone Unit 3. Director, Radiation Division, Department of Energy and Environmental Protection.

Royce W. James, New London, PhD, Physics, Stevens Institute of Technology; MS, Applied Physics, Columbia University; BS, Physics, New Mexico State University. Physics Professor, U. S. Coast Guard Academy

NUCLEAR ENERGY ADVISORY COUNCIL

7:00 PM April 14, 2015 RTM MEETING ROOM WATERFORD TOWN HALL 15 ROPE FERRY ROAD WATEFORD, CT SPECIAL MEETING

MINUTES

Members Present

Mr. Bill Sheehan, Chair

Ms. Marge DeBold

Mr. Tom Nebel

Mr. Ray Woolrich

Mr. Mike Firsick Representing DEEP Commissioner Klee,

1. Call to Order of Meeting

NEAC Chair Sheehan called the meeting to order at 7:03 PM at Waterford Town Hall, Waterford, CT.

NEAC members and Nuclear Regulatory Commission (NRC) introduced themselves

2. PROGRAM:

a) Briefing on Millstone Power Station Annual Assessment by Mr. Ho Nieh, Director, Division or Reactor Projects; Mr. Raymond McKinley, Branch Chief, NRC and Ms. Jo. Ambrosini, Senior Resident Inspector, MPS.

NRC reported that they conducted approximately 9,000 hours of inspections at Millstone Power Station in 2014. This compares to an average of 7,000 hours in a normal year. All findings for Millstone 2 (MPS2) during these inspections were in the GREEN category so MPS2 is in the "Licensee Response" column for inspections in 2015. There were two Special Inspections on Turbine Driven Auxiliary Feedwater Pump problems for Millstone 3 (MPS3) and another Special Inspection due to the total loss of off site power resulting in reactor SCRAMS during the Memorial Day weekend in 2014. Three Special Inspections is an unusually high number The TDAFW Pump inspections resulted in a WHITE finding for MPS3 so it is in the "Regulatory Response". Column for inspections in 2015. There was a detailed account of the findings regarding the TDAFW Pump inspections and an explanation of the findings during the inspection dealing with the loss of offsite power. The NRC Representatives emphasized that the plants and operators had responded correctly during the loss of site power but it was discovered that Dominion had not submitted a License Amendment Request (LAR) when it removed the Single Line Operating Detector (SLOD) at an earlier date. And the SLOD was a requirement in the Dominion License. Representatives briefly discussed Security Inspections that had resulted in a "Greater than GREEN" finding without revealing the actual finding.

3. Public Comment

Mr. Stephen Lavoie discussed his Whistle Blower Status and asked the NRC representatives for assistance in resolving his case. He submitted a number of documents regarding a labor hearing that was held in his case resulting in a settlement from the Dominion subcontractor that was his employer. Mr. Lavoie's father also addressed the NRC and NEAC in his son's behalf.

4. NRC Correspondence of note received since last meeting.

- NRC Response to Licensees Regarding Notification of Regulatory Commitments Change
 Associated With Request For Information Pursuant to Title 10CFR50.04(f) Regarding
 Recommendation 2.1 of the Near-Term Task Force Reviews of Insights From the Fukushima DaiIchi Accident dtd 12/15/2014.
- 2. MPS 2& 3 Response Regarding Phase 2 Staffing Submittals Associated With Near-Term Task Force Recommendation 9.3 Related to the Fukushima Dai-Ichi Nuclear Power Plant Accident dtd 12/15/2014.
- 3. MPS2 Staff Evaluation of the 2014 Refueling Outage Steam Generator Tube Inspection dtd 12/22/2014
- 4. MPS 2 & 3 NRC Security Inspection Report Preliminary Greater-Than –Green Finding dtd 01/05/2015
- 5. MPS 3 NRC Special Inspection Report on TDAFW dtd 01/15/2015
- MPS 2 & 3 Notice of Violation and Exercise of Enforcement Discretion NRC Inspection Report dtd 02/10/2015
- 7. MPS- NRC Integrated Inspection Report dtd 02/10/2015
- 8. Annual Assessment Letter for MPS 2 & 3 dtd 03/04/2015
- 9. "Nuclear Waste in Haddam" from March 2015 HADDAM BULLETIN
- 10. MPS 2 & Audit of the Licensee's Management of Regulatory Commitments, Regulatory Commitments Changes, and Appropriateness of Application of the Regulatory Commitments dtd 03/16/2015
- 11. Final Significance Determination for a Security Related Greater Than Green Finding and Notice of Violation (NRC Inspection Report dtd 01/05/2015) MPS 3 dtd 04/02/2015
- 12. Letter to Licensees regarding petition submitted in March 2011 to shut down all reactors due to Fukushima Dia Ichi accident dtd 04/08/2015
- 13. Letter to petitioner regarding petition submitted in March 2011 to shut down all reactors due to Fukushima Dia Ichi accident dtd 04/08/2015.

NEAC members had no comments on the correspondence.

5. Next Meeting Date and Time

The next NEAC meeting will be on April 23, 2015 at Three Rivers Community College following a tour of the Dominion Emergency Operations Facility (EOF) in the Norwich Industrial Park and prior to a tour of the Three Rivers Community College Nuclear Training facility. Some members of NEAC will attend the CY FSAC Annual Meeting on May 19, 2015.

6. Adjournment – Meeting adjourned at 7:55 PM. (Woolrich/Hicks)

NUCLEAR ENERGY ADVISORY COUNCIL SPECIAL MEETING

6:00 PM or after Tour of Three Rivers nuclear Training facility
April 23, 2015
Room C207 – President's Conference Room
Three Rivers Community College
574 New London Turnpike
Norwich, CT 06360

Prior to the Meeting, there was a tour of the Dominion EOF in the Norwich Industrial Park. After tour NEAC reassembled at Three Rivers Community College for tour of Three Rivers nuclear training facility and meeting

Minutes

Members Present

Mr. Bill Sheehan, Chair

Ms. Marge DeBold

Mr. Tom Nebel

Mr. Robert Klancko

Mr. James Sherrard

Mr. Jeffery Semancik representing Commissioner Klee

1. Call to order of Meeting.

NEAC Chair Sheehan called the meeting to order at 6:11 PM at Three Rivers Community College

2. Approval of the December 11, 2014 NEAC Meeting Minutes.

Motion was made and seconded (Nebel/Sherrard) to approve minutes. No objections. Minutes approved with one abstention

3. Approval of the April 14, 2015 NEAC Meeting Minutes

Motion was made and seconded (Nebel/DeBold) to approve minutes. One Correction – Mr. Sherrard was not at the meeting. Minutes approved with correction with two abstentions.

4. Public Comment

No Public Comment

5. NRC Correspondence Received since Past Meeting

Millstone Power Station – Reply to Notice of Violation of Integrated Inspection Report of Special Inspection dated February 10, 2015 by Dominion dated 04/21/2015

6. Next Meeting Date/Location

June 18, 2015/Waterford Town Hall (Some NEAC members will attend the CY FSAC Meeting on May 19, 2015)

7. Adjournment

Meeting adjourned at 6:18 PM (Klancko/Nebel_

7:00 PM June 18, 2015 RTM MEETING ROOM WATERFORD TOWN HALL 15 ROPE FERRY ROAD WATEFORD, CT SPECIAL MEETING

MINUTES

Members Present

Mr. Bill Sheehan, Chair

Ms. Marge DeBold

Mr. Denny HIcks

Mr. Gregg Dixon

Mr. Robert Klancko

Ms. Pearl Rathbun, Vice Chair

Mr. Jeff Semencik Representing DEEP Commissioner Klee,

7. Call to Order of Meeting

NEAC Chair Sheehan called the meeting to order at 7:05 PM at Waterford Town Hall, Waterford, CT.

NEAC members and Mr. Kevin McCarthy and Mr. Max Batavia from the Atlantic Compact introduced themselves

8. Approval of Minutes of April 23, 2015 NEAC Meeting. Motion made to approve minutes with no corrections (Klancko/Hicks). Approved with one abstention (Rathbun)

9. PROGRAM:

a) Briefing on Low Level Radioactive Waste Presented by Kevin McCarthy and Max Batavia of Atlantic Compact.

Details of presentation are attached to the minutes. Bottom line is that the partnership of Connecticut, New Jersey, and South Carolina is working well.

There is enough capacity at the Barnwell Site to hold any Low Level Radioactive Waste (LLRW) for next twenty years. The annual operating costs of the site are about \$7 million with a \$2 million decommission Trust Fund. The thirteen participating utilities pay \$88,000 each quarter for remaining costs.

10. Public Comment

There was no public comment

11. NRC Correspondence of note received since last meeting.

- 1. Millstone Power Station Unit 2 Inspection Report 05000336/2015201, Investigation Report NO. 1-2012-008 and Apparent Violations dated 04/29/2015
- 2. Millstone Power Station NRC Integrated Inspection Report 05000336/2015001 and 05000423/2015001 dated 05/08/2015
- 3. Millstone Power Station, Unit 2 Exemption from 10 CFR 50.46 and Appendix K to allow use of MSTM Alloy For Fuel Cladding (TAC No. MF3917) dated 05/12/2015
- 4. Millstone Power Station, Unit 2 Issuance of Amendment Re: AREVA MSTM Alloy Clad Fuel Assemblies (TAC NO. MF3917) dated 05/18/2015.
- 5. Response Requirements for Request for Information Pursuant to Title 10 Of the Code of Federal Regulations 50.54(f) Regarding Flooding Hazard Integrated Assessments for Recommendation 2.1 of the Near-Term Task Force Review of Insights from Fukushima Dai-Ichi Accident dated 05/26/2015.
- 6. Millstone Power Station Unit 2 Reactor Vessel Internals Aging Management Program and Inspection Plan for License Renewal Commitment No. 13 (TZC No. MF3402) dated 05/29/2015
- 7. Assessment Follow-Up Letter for Millstone Power Station Unit 3 dated 06/03/2015
- 8. Millstone Power Station Units 2 and 3 NRC Component Design Bases Inspection Report dated 06/12/2015
- 9. NRC Plan for Audit of DNC, Inc.'s Flood Hazard Reevaluation Report Submittal Relating to the Near-Term Task Force Recommendation on Flooding for Millstone Power Station Units 1 and 2 dated 06/15/2015
- 10. Summary of May 21, 2015 Public Meeting with DNC Regarding a Proposed License Amendment for Removal of the Severe Line Outage Detection System at MPS2 and MPS3 dated 06/16/2015

NEAC members had no comments on the correspondence.

12. Next Meeting Date and Time

The next NEAC meeting will be on Thursday, September 17, 2015 at 7:00 PM. Mr. Jeff Semencik will arrange for some presentations on some current projects his division is monitoring. Chairman Sheehan announced that he plans to step down as Chairman at that meeting after ten years. Anyone interested in serving as the next chairman should contact him.

13. Adjournment – Meeting adjourned at 8:18 PM. (Klancko/DeBold)

NUCLEAR ENERGY ADVISORY COUNCIL 7:00 PM

SEPTEMBER 14, 2015

BOARD OF EDUCATION CONFERENCE ROOM

WATERFORD TOWN HALL 15 ROPE FERRY ROAD

WATERFORD, CT SPECIAL MEETING

MINUTES

Members Present

Mr. Bill Sheehan, Outgoing Chair

Rep Kevin Ryan, Incoming Chair

Ms. Pearl Rathbun, Outgoing Vice Chair

Ms. Marge DeBold

Mr. Denny Hicks

Mr. Royce James

Mr. Tom Nebel

Mr. Raymond Woolrich

Mr. James Sherrard

Mr. Jeffrey Semancik representing Commissioner Klee

1. Call to Order of Meeting

NEAC Chair Sheehan called the meeting to order at 6:36 PM at Waterford Town Hall, Waterford, CT. Meeting followed a tour of the Millstone Indoor Firing Range and the Beyond Design Basis Equipment Dome.

Mr. Royce James was introduced as a new member of NEAC replacing Ms. Rathbun.

2. **Minutes Approval – Minutes** of the June 18, 2015 NEAC meeting were reviewed and approved (Tom Nebel/Jeff Semancik) with two abstentions (James and Ryan).

3. PROGRAM:

a. Update on Millstone Station Operations by Dominion Nuclear Connecticut representatives

Mr. Matt Adams (Plant Manager), Mr. Kenneth Holt (Manager of Communications), and Mr. Kevin Hennessey (Director of Government Affairs) briefed NEAC and answered questions from the council concerning:

- i. Millstone II Pending outage work.
- ii. Update on corrective action for various NRC inspection findings
- iii. Training Program Accreditation
- iv. NPDES Discharge Permit Status
- v. See Attachment

b. Spent Nuclear Fuel Storage Update by Jeff Semancik, CT DEET Radiation Division and Commissioner Klee Representative on NEAC.

Jeff provided a review of the current status of Nuclear Spent Fuel Storage within the Nation and in Connecticut. A status on finding a permanent storage location was discussed. Presentation concluded with a recommendation that NEAC endorse a nuclear waste strategy that includes

consent based consolidated interim storage that gives priority to removal of SNF and GTCC Waste from permanently shutdown reactors and transfers title of SNF to DPE upon receipt. See Attachment

4. Public Comment

There was no public comment.

5. NRC Correspondence Received since past meeting.

The list of NRC Correspondence was reviewed.

- a. NRC letter to Mr. Thomas Saporito of Tequesta, FL regarding his petition to shutdown all nuclear power reactors in the U.S. which are known to be located on or near an earthquake fault line dated 06/17/2015
- b. Millstone Power Station Unit 2-NRC Inspection Report 05000336/2015009 dated 06/25/2015
- c. Bisconti Research, Inc. 6th Biennial Survey of U. S. Nuclear Power Plant Neighbors dated Summer 2015
- d. Millstone Power Station Units 2 and 3 NRC Baseline Security Inspection Report 05000336/2015403 and 05000423/2015403 dated 07/08/2015
- e. Millstone Power Station Unit 2 NRC Supplemental Inspection Report 05000423/2015010 and Assessment Follow-up letter dated 07/22/2015
- f. Millstone Power Station Integrated Inspection Report 05000336/2015002 and 05000423/2015002 and Independent Spent Fuel Storage Installation Report 07200047/2015001 dated 08/10/2015
- g. Confirmatory Order Related to NRC Report No 05000336/2015201 and OI Report 1-2012-008 Millstone Power Station Unit 2 dated 08/26/2015
- h. Coordination of Requests for Information Regarding Flooding Hazard Reevaluations and Mitigating Strategies for Beyond-Design-Basis External Events dated 09/01/2015
- i. Mid-Cycle Assessment Letter for Millstone Power Station Units 2 and 3 (Report 05000336/2015005 and 05000423/2015005) dated 09/01/2015
- j. Dominion Nuclear Connecticut, Inc., Millstone Power Station Unit 1 NRC Inspection Report No. 05000245/2015011 dated 09/03/2015

There were no questions from NEAC members.

6. Election of New Chairperson to replace Chairperson Sheehan who is stepping down after ten plus years as Chairperson. Representative Kevin Ryan was nominated (Tom Nebel/James Sherrard) and with no other nominations, nominations were closed (James Sherrard/Marge DeBold). Vote was unanimous. Incoming Chairman Ryan thanked outgoing Chairman Sheehan for his work over the past ten years. Outgoing Chairman Sheehan thanked the Council for their assistance, especially Ms. Rathbun, in the past ten years.

7. Next Meeting Date and Time

The next NEAC meeting will be the annual report meeting on date to be determined by new Chairperson.

8. Adjournment

Motion was made by Mr. Nebel and seconded by Mr. Woolrich to adjourn; no objections; unanimous vote in favor; meeting adjourned at 8:33 PM.

NUCLEAR ENERGY ADVISORY COUNCIL January 27, 2016 7:00 PM Appleby Room Waterford Town Hall

Waterford Town Hal 15 Rope Ferry Road Waterford, CT

MINUTES

Members Present

Rep Kevin Ryan, Chair Ms. Marge DeBold Mr. Raymond Woolrich Mr. Tom Nebel LCDR Royce James

Mr. Jeffrey Semancik representing Commissioner Klee

1. Call to Order of Meeting

NEAC Chair Ryan called the meeting to order at 7:02 PM at Waterford Town Hall, Waterford, CT.

2. Public Comment

No members of the public were in attendance.

3. Approval of Minutes of the September 14, 2015 NEAC meeting

A motion was made to approve the minutes by Mr. Woolrich and seconded by Mr. Nebel. Minutes were approved without any corrections or objections.

4. NRC Correspondence Received since past meeting.

The list of NRC Correspondence was reviewed.

- a. Millstone Power Station, Units 2 And 3-Staff Assessment Of Information Provided Pursuant To Title 10 Of The Code Of Federal Regulations Part 50, Section 50.54(F), Seismic Hazard Reevaluations For Recommendation 2.1 Of The Near-Term Task Force Review Of Insights From The Fukushima Dal-Ichi Accident (TAC NOS. MF3968 AND MF3969) dated December 15, 2015
- b. NRC Investigation Report No. 1-2014-024 dated November 24, 2015
- c. Summary Of October 20, 2015, Public Meeting With Dominion Resources, Inc., et al. Regarding A Proposed License Amendment For Changes To Emergency Action Level Schemes For Millstone, North Anna, And Surry Power Stations (CAC NOS. MF6791, MF6792, MF6793, MF6794, MF6795, AND MF6796) dated November 19, 2015
- d. Millstone Power Station, Unit 3 Summary Of The Staff's Review Of The Fall 2014 Steam Generator Tube Inservice Inspections (TAC NO. MF6084) dated October 19, 2015

- e. Kewaunee Power Station, Millstone Power Station, Unit Nos. 2 And 3, Surry Power Station; Unit Nos. 1 and 2, And North Anna Power Station, Unit Nos. 1 and 2- Issuance Of Amendments To Revise The Cyber Security Milestone 8 Completion Date In The Renewed Facility Operating Licenses (TAC NOS. MF5708,-MF5709, MF5710, MF5711, MF5712, MF5713, AND MF5714) dated October 7, 2015
- f. Millstone Power Station, Unit Nos. 2 And 3 Relief From The Requirements Of The American Society Of Mechanical Engineers Boiler And Pressure Vessel Code Section Xi, Regarding Radiographic Examinations (TAC NOS. MF5014 AND MF5015) dated September 21, 2015.

There were no questions from NEAC members.

5. Annual Report

- a. Ms. DeBold presented updates to the CY portion of the report
- b. Mr. Semancik briefed the committee on the two emergency events referenced in the annual report.
 - Mr. Semancik noted that an NRC Special Inspection Team was sent to Millstone based upon delays by operators in identifying the leak. A formal report will be issued by the team.
- c. Discussed recommendations.
- d. The annual report was approved as amended. (Motion by Mr. Nebel/second by Ms. DeBold)

6. Other Business

- a. Chair Ryan requested members considered Vice Chairman candidates for next meeting.
- b. Mr. Semancik recommend that Chair Ryan discuss vacancies with appointing authorities. Mr. James recommended that the council provide a list of preferred demographics for the appointing authorities. Chair Ryan agreed to discuss council membership with appointing authorities.
- c. Mr. Semancik recommended that the council determine what information within its statutory charter it wanted to discuss and provide to presenters in advance
 - i. Mr. Woolrich requested more information on safety concern status at Millstone for next Dominion presentation.

7. Future Meeting Dates

The next NEAC meeting will be the annual meeting NRC Assessment meeting. Mr. Semancik and Chair Ryan will coordinate the date and time with the NRC.

Chair Ryan proposed the following dates and topics for the 2016 NEAC Meetings. The meeting schedule was approved.

Date	Location	Topics
Wednesday	Waterford Town	NRC Performance Assessment of
March 16, 2016	Hall	Millstone Power Station
(tentative)		
Thursday	Waterford Town	Dominion Presentation of Safety
June 16, 2016	Hall	Performance
Thursday	Connecticut	CY Presentation on Fuel Storage and
September 15, 2016	Yankee	transportation
Thursday	Waterford Town	Annual Report review.
December 15, 2016	Hall	

Ms. DeBold noted that the annual CY Fuel Storage Advisory Board Meeting is scheduled for May 10, 2016.

8. Adjournment

Motion was made by Mr. Woolrich and seconded by Mr. Semancik to adjourn; no objections; unanimous vote in favor; meeting adjourned at 8:05 PM.