Vermont State Nuclear Advisory Panel

Annual Report

2011

Department of Public Service
112 State Street
Montpelier, Vermont 05620-2601

INTRODUCTION

The Vermont State Nuclear Advisory Panel (VSNAP) is established by and functions in accordance with the Vermont Statutes Annotated (VSA), Title 18, Chapter 34, Sections 1700 -1702, provided as Attachment 1. Its primary function is to consider issues related to the use of nuclear power in the State of Vermont. Issues for consideration include, but are not limited to, responsibilities of state agencies for assuring the safety and health of the public, changes in operation and problems associated with nuclear facilities, state-federal regulatory interface, potential liabilities, benefits or repercussions of nuclear power generation in the state.

Membership of VSNAP consists of 1) the secretary of the agency of human services, or designee, 2) the secretary of the agency of natural resources, or designee, 3) the commissioner of the department of public service or designee, 4) a member of the Vermont House of Representatives chosen by the Speaker of the House, 5) a member of the Vermont Senate chosen by the committee on committees, and 6) two members of the public selected by the Governor. In 2011 VSNAP representation consisted of:

- Commissioner Elizabeth Miller, Chair
- Larry Becker, State Geologist, Designee for Secretary Deb Markowitz
- Dr, William E. Irwin, Radiological Health Chief,Designee for Secretary Doug Racine
- Senator Mark MacDonald
- Representative Sarah Edwards
- Jim Matteau
- William Burton

Mr. William Burton submitted notice of his resignation from the VSNAP in December 2011, and the Governor's Office selected Dr. Leslie Kanat to serve on the VSNAP. Staff Services for the VSNAP were provided by the Department of Public Services.

MEETINGS

There were four meetings of the VSNAP held in 2011. All the meetings were held at the Vernon Elementary School and are summarized below:

Meeting of February 22, 2011

Topics presented and discussed at this meeting included:

- An update on the status of two Dockets with the Vermont Public Service Board (7440 and 7600) pertaining to Entergy Nuclear Vermont Yankee seeking a certificate of public good for continued operation of the nuclear station and the environmental tritium contamination event at the nuclear station site.
- The NRC license renewal process for Vermont Yankee.

- State monitoring activities and Vermont Yankee's investigation associated with the tritium contamination event at Vermont Yankee. Also, Arnie Gundersen, consultant to the Vermont Joint Fiscal Office, delivered a presentation on his assessment of the tritium event at Vermont Yankee and provided the findings of the Public Oversight Panel on the 2010 Supplemental Comprehensive Reliability Assessment of the Vermont Yankee nuclear station conducted by the Vermont Department of Public Service.
- A presentation by Paul Blanch on the issue of submerged electrical cables at Vermont Yankee.

Motions passed at this meeting included:

1) The minutes of the March 4, 2009 VSNAP meeting were approved.
2) The 2010 Annual Report was approved with one correction.

Meeting of April 27, 2011

The focus of this meeting was on issues surrounding the ultimate decommissioning of the Vermont Yankee nuclear station. Presentation and discussions were given by the Department of Public Service and Vermont Yankee centered on the funding regulations and status, and decommissioning options and timeline. At this meeting the Panel and public also discussed that the NRC granted Vermont Yankee a renewed license to operate an additional 20 years to 2032, and Entergy Nuclear Vermont Yankee had filed a Federal law suit seeking relief from Vermont legal requirements to operate the power station beyond March 21, 2012. The Department of Health also discussed with the Panel the radiation monitoring activities associated with fallout from the Fukushima nuclear power station accidents in Japan.

Motions passed at this meeting included:

1) The minutes of the February 22, 2011 VSNAP meeting were approved.

Meeting of October 19, 2011

The focus of this meeting was reviewing and discussing off-site emergency response and planning around the Vermont Yankee nuclear station. In an attempt to apply lessons learned from Tropical Storm Irene to an emergency response associated with an accident at Vermont Yankee, Vermont Emergency Management provided an overview of the emergency planning for Vermont Yankee as well as all hazards in Vermont. Several town representatives and members of the public provided comments to the Panel on emergency planning issues. The Department of Health provided information on the matter of river silt that was excavated from the Vermont Yankee intake structure and disposed of off-site. The Panel learned that the Vermont Department of Conservation conducted a formal investigation into this matter. In addition, there was discussion on the matter of the identification of Strontium 90 in fish taken from the Connecticut River and control

samples for comparison to discriminate the radionuclide from nuclear weapon testing fallout and from the Vermont nuclear station.

Motions passed during this meeting were:

1) The minutes of the April 27, 2011 meeting of VSNAP were approved.
2) The Panel requested that results of the testing of the silt by the Department of Health be made available for public disclosure.
3) The Panel requested a letter being sent from Commissioner Miller to the Department of Environmental Conservation requesting a fact time line of the offsite silt removal by Vermont Yankee.
4) The Panel requested for the Department of Public Service to provide to the Panel information on continuity of emergency response, including funding issues post March 2012.

Meeting of December 14, 2011

The focus of this meeting was a presentation and subsequent discussion with the Nuclear Regulatory Commission on lessons learned from the Fukushima event and the impact on nuclear power stations in the United States. Other topics covered during this meeting were a presentation by Vermont Yankee personnel on Entergy's actions and policy concerning the testing of the Construction Office Building deep water well that was discontinued as a potable drinking well when the Tritium contamination was discovered in February 2010. The actions approved by motion at the previous VSNAP meeting were reviewed and all were completed.

Motions passed during this meeting were:

1) The minutes of the October 19, 2011 meeting of VSNAP were approved.
2) The Panel approved a motion for recommendations in the upcoming VSNAP annual report. Four suggestions offered to be included in the annual report are:
   (a) Evaluate emergency communications to the state and towns with consideration of integrating new technologies.
   (b) Invite FEMA to a VSNAP meeting.
   (c) Request an independent review of the offsite emergency plan.
   (d) Attach the comments provided at the last meeting (10/19/12) by the towns and others regarding emergency planning.
3) The Panel approved that a letter from DPS, Department of Health, and Department of Environmental Conservation requesting that the COB well be tested for tritium be sent to Vermont Yankee.
4) A motion was passed by the Panel to make the VSNAP web site accessible to the public

LEGISLATIVE ENACTMENTS

There were no Legislative enactments involving the VSNAP in 2011. However, the VSNAP improved upon a 2010 Legislative enactment in which the Department of Public Service was to provide upon request all relevant information to VSNAP members within the jurisdiction of the Panel. As originally implemented, a website was created accessible only by Panel members that held relevant documents. At the VSNAP meeting of December 14, 2011 on the Department's motion, the Panel voted unanimously to improve transparency and to have the Department of Public Service modify the website such that it is open to the public. The Department has accomplished this and the site is now accessible to members of the public to access documents pertaining to the issues on nuclear power.

LOOKING AHEAD TO 2012

The meetings of the VSNAP in 2011 resulted in considerable discussion of Vermont Yankee off-site emergency planning and response with several issues for further discussion identified. Issues for further discussion include the use of social media such as twitter to improve public notification of emergencies, use of cell phone number for text messages, the potential to have a third party review the State of Vermont emergency response and plan for the Vermont Yankee nuclear station, and to explore potential improvements in emergency planning and response through discussions with FEMA.

With the future of the Vermont Yankee operation uncertain at the close of 2011 due to the law suit against the State of Vermont filed by Entergy Nuclear Vermont Yankee in Federal District Court, questions concerning the adequate funding of state government activities required to protect the public health and environment arose in meetings of the VSNAP in 2011. The Department is pursuing information on this matter for discussion with the VSNAP in 2012 to determine what activities and funds would be required upon the ultimate closure of Vermont Yankee, and if any regulatory changes or statues would need to be enacted to assure state activities will have adequate funding post Vermont Yankee closure.

RECOMMENDATIONS

Emergency management of the area surrounding Vermont Yankee continues to be a crucial issue to the people in the emergency planning zone. The Panel feels strongly that this issue has to stay at the forefront of state considerations. Accordingly, the VSNAP makes the following recommendations:

1. An evaluation of the emergency communications between the state and the communities needs to be undertaken with consideration of integrating new technologies.
2. In 2012, FEMA should be invited to a VSNAP meeting to discuss with the Panel and the public its role and ways it would function in an emergency.
3. An independent review of the offsite emergency plans should be undertaken.

ATTACHMENT 1

Title 18: Health

Chapter 34: NUCLEAR ADVISORY PANEL

§ 1700. Creation; membership; officers; quorum

(a) There is created a nuclear advisory panel which shall consist of the following:

(1) the secretary of the agency of human services or designee;

(2) the secretary of the agency of natural resources or designee;

(3) the commissioner of the department of public service, or his or her designee;

(4) one member of an energy committee of the Vermont house of representatives, chosen by the speaker of the house;

(5) one member of an energy committee of the Vermont senate, chosen by the committee on committees; and

(6) two members of the public, selected by the governor for terms of four years.

(b) Ex officio members shall serve for the duration of their time in office or until a successor has been appointed. Members of the general assembly shall be appointed for two years or until their successors are appointed, beginning on or before January 15 in the first year of the biennium. Representatives designated by ex officio members shall serve at the direction of the designating authority.

(c) The commissioner of the department of public service shall serve as chairperson.

(d) A majority of the members of the panel shall constitute a quorum. The panel shall act only by vote of a majority of its entire membership and only at meetings called by the chairperson or by any three of the members. The person or persons calling the meeting shall provide adequate notice to all its members.

(e) Members of the panel, except for ex officio members and except for legislative members while the general assembly is in session, shall be entitled to $30.00 per diem and their necessary and actual expenses. Funds for this purpose shall come from the monies collected under section 22 of Title 30 for the purpose of maintaining the public service board.

(f) The department of public service shall:

(1) keep the panel informed of the status of matters within the jurisdiction of the panel;

(2) notify members of the panel in a timely manner upon receipt of information relating to matters within the jurisdiction of the panel; and

(3) upon request, provide to all members of the panel all relevant information within the department's control relating to subjects within the scope of the duties of the panel. (Added 1997, No. 147 (Adj. Sess.), § 271, eff. April 29, 1998; amended 2009, No. 135 (Adj. Sess.), § 7.)

§ 1701. Duties

The duties of the panel shall be:

(1) To hold a minimum of three public meetings each year for the purpose of discussing issues relating to the present and future use of nuclear power and to advise the governor, the general assembly and the agencies of the state thereon with a written report being provided annually to the governor and to the energy committees of the general assembly;

(2) To define the responsibilities of state agencies for assuring the safety and health of the public as the result of the operation of a fixed nuclear facility and to assess the ability of state and local governments to meet this responsibility in terms of both technical expertise and financial support;

(3) To discuss proposed changes in operations or specific problems that arise in the operation of a fixed nuclear facility, and to prepare and present technical data to serve as a basis for establishing the state's position on such changes or problems;

(4) To maintain communications with the operators of any fixed nuclear facility, including the receipt of written reports and presentations to the panel at its regular meetings;

(5) To develop awareness in the state and in the state government of the potential liabilities, benefits or repercussions of nuclear power generation in the state in comparison to other electrical energy sources; and

(6) To review the current status of state relations with the Nuclear Regulatory Commission and to seek some agreement on federal and state regulatory efforts. (Added 1997, No. 147 (Adj. Sess.), § 271, eff. April 29, 1998; amended 2009, No. 135 (Adj. Sess.), § 8.)

§ 1702. Assistance

Staff services for the committee shall be furnished by the department of public service, the agency of human services, the agency of environmental conservation and the office of the attorney general. (Added 1997, No. 147 (Adj. Sess.), § 271, eff. April 29, 1998.)

ATTACHMENT 2 – COMMENTS PROVIDED IN WRITING ON EMERGENCY MANAGEMENT

Town of Dummerston

1523 Middle Road East Dummerston, Vermont 05346

October 20, 2011

Sarah Hofmann
Deputy Commissioner
Vermont Dept. of Public service
112 State Street
Montpelier, VT 05620-2601

Dear Commissioner Hofmann,

I regret that the Dummerston Selectboard was not represented at the VSNAP meeting last night In Vernon regarding emergency planning for a radiological event at Vermont Yankee and we are grateful for this opportunity to provide you with our written comments here.

Dummerston has faithfully participated in the Emergency Response Plan (ERP) and the attendant VEM and FEMA graded drills since the inception of this planning. Our town recognizes the importance of this planning and also the inherent flaws with any plan attempting to predict an unpredictable event. With that in mind, we will limit our comments to those planning issues we feel are predictable, regardless of the way a radiological emergency might unfold. We have expressed these concerns to officials of VT Emergency Management and the American Red Cross over the course of many rounds of ERP drills and written drafts, but have yet to be satisfied. As you may know, Dummerston has never signed off on the ERP as the language requires us to take responsibility for a plan we still find to be unnervingly flawed.

At every drill I have participated in there comes a point in our Emergency Operations Center as the event escalates when local Dummerston officials look at each other and say, "This is where it all comes apart." Then we begin spit-balling what actions we might actually take in the event of a real emergency. Dummerston has gained the reputation in emergency management circles of being difficult. This is not our intent. As the body charged with the safety of Dummerston residents the selectboard has not been able to provide a signed endorsement of a plan it feels in all likelihood it will not adhere to. What follows is a brief outline of our most stubborn concerns.

Evacuation Routes

Dummerston is divided by the West River, which is crossed by two one-lane bridges. The current ERP evacuation plan has our West Dummerston residents evacuating across Route 30 and the river and making their way to Route 5 north to the receiving center in Bellows Falls. It seems obvious that our west side residents should evacuate directly up Route 30 to leave the area. Bellows Falls can be reached indirectly once they've cleared

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the immediate area. Many of our residents along the east side of the West River would undoubtedly wish to cross to Route 30 and get the heck out of Dodge. This creates a very predictable head to head jam-up at the narrow bridges.

Traffic Control

It has never been definitively explained who will be charged with traffic control in the event of an evacuation. In a scenario where the winds are blowing north and west there will be lines of traffic from Brattleboro and points south filling all three area exits; I91, and Rts 5 and 30. Dummerston residents attempting to enter these lines without traffic controls will be in a precarious position. It was suggested at one point that local officials serve this function, but without real authority or a means of enforcement, this could prove to be dangerous and ineffective. It was also suggested that the Windham County Sherriff would serve this function, but questions about how and where the personnel would be dispatched and if there are enough deputies to man the posts have not been answered.

School Evacuations

As our most vulnerable residents, the ERP understandably calls for school children to be evacuated early in any radiological event scenario. It calls for buses to be brought in from outside of the area so that the children can be loaded and moved. Children are not to be released to parents or other parties, but are to remain with their group. This scenario - while well intentioned -- is highly unrealistic. This plan assumes that in a real radiological emergency lay bus drivers with children and families of their own will drive into a toxic event as ordered. Many will, certainly. But our questions about what happens if many or all won't have not been answered. It was once offered by a VEM official that National Guard trucks and helicopters could be deployed in the event that buses could not reach the area. When we asked where these resources would be coming from and in what numbers we were told that information was classified. It has also not been answered to our satisfaction who is going to explain to the Mama Grizzlies as they come for their school children that they can't have them.

Transfer and Receiving Centers

The current planning calls for Dummerston students to be first removed to the Putney Central School, which is only about 5 miles north of the Dummerston School. In a real emergency, even though Putney is not technically within the 10 mile EPZ radius, released radiation is not expected to stop at the circles on our maps and Putney is far too close to be a safe refuge. The original plan of removing them to the Bellows Falls Receiving Center is preferred.

After the Evacuation

The responsibilities of the Selectboard after an evacuation are unclear. If our EOC has been relocated to Bellows Falls, as our most recent drill in May of this year proscribed, one would expect we would have communications equipment and other facilities

available to us. One of our members proceeded to the Bellows Falls EOC as ordered by the plan and was met with wide eyes and wonder. There was nothing in their plan to accommodate our plan. This is one example of several where the step *after* an evacuation is left unclear. Granted, the goal is to remove people to safety and worry about the rest later, but in the event we still have people in transition and in harm's way, the Selectboard needs to be in communication with its people in the field.

Re-entry

Provisions for entry into the evacuated area by residents either to gather belongings or care for sheltered animals are not clear. One assumes that in a real emergency there would be state or federal security posted around the evacuation zone within hours or days of an event. It is all the more important that definitive and verifiable lists of farmers and other residents with legitimate business inside the evacuation zone be established in advance of an event. The current list of farmers with livestock in the ERP is quite outdated. These are things we can do for ourselves within our community, but without an area-wide effort of the same kind it would be for naught. It is doubtful our municipal boundaries and local passes are going to mean much to the National Guard soldier manning the roadblock on Route 5. Again, this is a predictable problem that can be mitigated by an area-wide effort from state officials.

Notifications

Another big area of ongoing concern is the emergency notification systems in place. There are Sirens in addition to the EBS radios many residents have in their homes. There was a route-alerting plan in place at one point, which required our firefighters to canvas the town with bullhorns and instructions. That provision was dropped from the plan when the RENTS, or 'reverse 911' system was announced. We are very much in favor of this change; however, we have yet to witness a successful test of the system. It is also clear that a large percentage of residents now use cell phones exclusively and these new numbers need to be registered with the emergency network in advance of an emergency. Again, this is something that can be done locally, but would be much more effective with an area-wide effort with support from state officials.

The plan also calls for local emergency officials, including the Selectboard Chair, to be notified of any Unusual Event at Vermont Yankee. There have been several of these events over the past many years -- harmless as they turned out to be, which we only learned about in the next day's newspaper. This is a real world, real time example of how the ERP breaks down from the very advent of an emergency. This does not inspire confidence in what would follow.

Those are the chief concerns we have with the current planning. There are many other niggling points we've been trying to clean up over the years, but they do not present the threats to life and property we see in the issues listed above.

We do not mean these disagreements to diminish the hard work that state, local, and VY officials have put into the current planning. We accept that the ERP cannot be perfect. It can only be the best we can manage with what we know to be true. Our comments here are based on that understanding. Thank you for this opportunity to comment. We hope it will prove useful to you in your evaluation of the current ERP.

Sincerely,

Tom Bodett, Chair
Dummerston Selectboard

cc DSB
Rick Davis, EMD

To the VSNAP Committee

What ever happens, we might as well accept the fact that any given emergency will not play out as predicted. In preparation for this past event, the warnings were out there for days in advance. Anyone with a chain saw had it sharpened and ready. We were prepared for wind, fallen trees blocking the roadways and streams, and downed power lines, but what we got instead was massive flooding destroying our roads, our bridges our ditches and our driveways. It damaged virtually all of our municipal infrastructure.

If heavy weather were to threaten VY, then it is also going to affect all the surrounding towns – including the roads – the big roads and the small ones. Route 9 runs through the Town of Marlboro. The washouts on Route 9 meant that all traffic – cars, trucks, semi's, emergency vehicles – everything heading east or west, was detoured onto one or two small, steep dirt roads ill equipped in every way to handle the increased traffic. For a while there were no passable roads in or out of the Town of Marlboro – for anyone. Each time a large trailer truck went off the road, traffic in both directions was halted, sometimes for hours.

The coordination of information between the adjacent towns, the state police, VEM, the sheriff and the road crew was undependable and often incorrect. For a while the National Guard stationed west of us was directing people to town roads that were closed causing confusion and lack of confidence in the systems in place. Jurisdiction and authority for posting warnings or alerts at washed out sections of Route 9 within the town were unclear, creating extremely dangerous conditions for local and through traffic.

We tend to think in terms of being prepared to care for our own residents. However, there were many out of state travelers using Route 9 as a through road who suddenly became stranded, unable to proceed in either direction. The town's only small convenience store had no power, gas or phone, the one inn that was open was already full. Local families came forward to house and feed the stranded travelers.

Sociologist Charles Perrow decsribes his Normal Accident Theory as follows:

"As technological systems become ever more complex. disasters that appear to result from a confluence of bad coincidences become. in fact, unavoidable. as a failure in one part causes a failure in another and another in ways that no designer could predict."

Marlboro was lucky – no lives were lost, only one house washed away, bridges and roads can and are being fixed by our excellent hard working road crew. However given our geography, infrastructure and the unpredictability of an unforeseen event, one has to wonder what would happen if a mass evacuation was necessary. I am not optimistic about the outcome.

Thank You
Lucy Gratwick
Select Board Chair
Marlboro, Vt.

10-19-11

Nuclear Free Vermont by 2012

Ed Anthes
802 257-0012
ema@svcable.net

What still needs to be done for an effective Emergency Response Plan in case of a radiation release at the reactor, spent fuel pool, or waste storage area at Entergy Nuclear Vermont Yankee?

Adequate funding for state and local evacuation planning must continue. The legislature must ensure the Entergy Nuclear continues to pay for the emergency planning which will be necessary in perpetuity, after the reactor closes, as long as the nuclear fuel waste remains in Vernon. A stable funding source is necessary.

Notification of the public of an emergency in the EPZ has not been demonstrated adequately. Tests of phone systems are unreliable. The tests count answering machine responses as confirmation of notification. Cell phones need to part of any calling database. More sirens are needed, to give full coverage throughout the towns of Vernon, Brattleboro, Dummerston, Marlboro and Guilford. Radios should be mailed to every household in the EPZ. Bus drivers must have pagers.

"**Sheltering in place**" is the default action in case of impassable roads, but very little information has been given the public to prepare for "sheltering in place". As in Japan, most of our houses are wooden, without habitable basements. In Winter, heating systems would have to be turned off to reduce infiltration of outside air. These conditions limit the effectiveness of "sheltering in place". What can be done to minimize effects on people who cannot evacuate?

Planning for everyone. FEMA still allows planning for only 20% of the population in the affected area. The RERP should be required to provide radiation monitoring for everyone potentially affected, not just 20%. Additional Reception Centers need to be funded and set up.

Evacuation Time Estimate studies need to be updated, taking into consideration the "shadow evacuation", sure to increase, following the Fukushima reactor and fuel pool disasters. Does anyone really think people in Putney will stay quietly at home during an evacuation? Of course, people outside the official evacuation area will stream out of the region, as fast as traffic choked roads will allow. **Shut down Vermont Yankee when conditions preclude safe evacuation.**

Expand the Emergency Planning Zone. The EPZ should be expanded beyond ten miles, and should incorporate lessons learned from Fukushima.

Distribute Potassium Iodide again. Have workable plans to distribute PI in a radiation emergency to those who don't have it in advance.

Reactor	# sirens	Location
Indian Point	172	NY
Limerick	165	PA
Duane Arnold	144	IA
Beaver Valley...	119	PA
Prarie Island	117	MN
Susquehanna	112	PA
Sequoyah	108	TN
Monticello	106	MN
Sumner	106	SC
FT Calhoun	101	NE
Brown's Ferry	100	AL
Peach Bottom	097	PA
Ginna	096	NY
Byron	094	IL
Harris	081	NC
Calvert Cliffs	072	MD
North Anna	068	VA
McGuire	067	NC
San Onofre	052	CA
La Salle	050	IL
Dresden	046	IL
Palo Verde	044	AZ
Clinton	044	IL
Fitzpatrick	037	NY
Nine Mile Point	037	NY
Vermont Yankee	037	VT
Cooper	024	NE

ATTACHMENT 3 –ACTION ITEM RESPONSES THAT WERE PROVIDED IN WRITING

Agency of Natural Resources
Department of Environmental Conservation
Compliance & Enforcement Division
VSAC Winooski

MEMORANDUM

To:	Elizabeth Miller, Commissioner, Department of Public Service
Through:	David Mears, Commissioner, Department of Environmental Conservation
From:	Gary Kessler, Director, Environmental Compliance & Enforcement Division
Date:	December 5, 2011
Re:	Vermont Yankee Silt Removal Investigation

On November 15, 2011 Commissioner Mears received a memorandum from you requesting information for the Vermont State Nuclear Safety Advisory Panel regarding a CED investigation into silt removal from Vermont Yankee (VY) property. The following is a timeline of the investigation into this matter.

On September 15, 2011 CED staff received e-mails from Lt. Kraig LaPorte, Commander of the Vermont State Police Barracks in Brattleboro. The e-mails forwarded from Lt. LaPorte concerned material being removed from VY in Vernon, VT. The Brattleboro Reformer had also passed on information to Lt. LaPorte from an anonymous source reporting that VY was hauling unknown material from their property to a location on West Road in Vernon. The contractor named in the report was Larock, an excavating contractor based in Guilford, VT.

The matter was assigned to Environmental Enforcement Officer (EEO) Tim McNamara. EEO McNamara made contact with Richard Spiese of DEC WMD Radiological Response Team and also with DOH Chief Radiologist Bill Irwin who agreed to meet with EEO McNamara in Vernon that afternoon.

EEO McNamara traveled to VY within a few hours of receiving the initial complaint. Once onsite EEO McNamara conducted surveillance and observed trucks leaving the YV main gate. During the surveillance operation he further observed over a dozen dump truck loads of what appeared to be dirt or mud leave VY. All except two trucks drove south on Governor Hunt Rd. Two trucks dumped loads across from the Vernon Elementary School on what was later learned to be VY property. The trucks observed being used were a Larock dump truck VT reg 31C49, another Larock truck with unknown registration, and a BELLCO truck VT reg BKW108.

EEO McNamara followed Larock truck VT reg 31C49 to a sand pit, located on West Road across from Sak Road. EEO McNamara observed the driver dump a load of the material in the sand pit on top of other dark material that was similar in appearance. EEO McNamara estimated that there were 4000+ cubic yards of this material dumped at this site. EEO McNamara spoke with the driver of the Larock truck which had transported and dumped the most recent load of material from VY. The driver identified himself as John Nebelski. He confirmed the material

came from VY and told EEO McNamara that VY have been cleaning out the intakes in the river. He said the material is all river silt they are hauling and dumping at the pit. He said they were doing this yesterday too and that today they are using three trucks. Two are Larock trucks and one is owned by BELLCO, who has leased the truck to Larock.

Nebelski provided company and pit property owner Rocky Larock's cell phone number. EEO McNamara contacted Mr. Larock and spoke to him about the operation. Mr. Larock stated that material was coming from the river intakes at VY. Mr. Larock agreed to leave the gate to the pit open to allow DEC staff access for the purpose of obtaining soil samples for testing.

EEO McNamara observed Larock truck 31C49 arrive at the pit. Driver Justin Larock confirmed that the material was coming out of the river by the VY intakes. He described the process: they use a large pump in the river to move slurry from the river and pump it into large filtration socks which are left to dry for a time, then emptied into trucks and hauled off the site. Justin Larock estimated that they have hauled about 5000 cubic yards to this site so far, and a few loads to other sites including employees who want it for top-soil.

EEO McNamara observed the two Larock trucks and the BELLCO truck dump several loads at the site over the next hour.

EEO McNamara examined the material that had been dropped off. It appeared to be silt, consistent with river bed material. There was a small amount of solid waste debris mixed in with the silt, including a paper cup and a can and what was later determined to be the remnants of the fabric dewatering socks.

At approximately 1630 EEO McNamara met Dr. Irwin at the sand pit. Dr. Irwin collected several samples of the soil for laboratory analysis. Using a portable Geiger counter Dr. Irwin found no radiation reading above background.

EEO McNamara informed Rocky Larock that the dewatering sock material was solid waste and was not allowed to be dumped at the site and should be separated out from the soil. Mr. Larock agreed to separate out the dewatering sock material in all future loads.

EEO McNamara left the sand pit after the sampling was completed. Later that day CED received electronic copies of US Army Corp. of Engineer's permit and a VT DEC Stream alteration permit SA-1-0803 for the activities related to the cleaning out of the intakes. CED staff contacted DEC Stream Alteration Engineer Todd Menees who confirmed that VY had complied with the pre-construction conference condition of the permit.

Approximately two weeks later CED received an email from Dr. Irwin stating that the lab analysis of the soil samples collected from the sand pit had detected no unusual radioactivity

CED has closed the investigation into this matter without further action or referral having found no evidence of a violation of Vermont law other than a very minor solid waste violation, which had no known environmental impact and was promptly and voluntarily corrected.

Memorandum

Vermont Department of Public Service

To: VSNAP Members
From: Sarah Hofmann, Deputy Commissioner
Subject: Emergency Response Funding After March 21, 2012
Date: December 13, 2011

At the October 19, 2011 meeting of the Vermont State Nuclear Advisory Panel, the Panel approved a motion to have the Department of Public Service review the continuity of emergency response funding issues post March 2012. This memorandum responds to that request.

The bottom-line answer is that funding for radiological emergency response will continue after March 21, 2012 if the plant is running or not. Vermont law requires "any entity operating a nuclear reactor or storing nuclear fuel and radioactive waste in the state" to deposit into a radiological emergency response plan fund the amount appropriated to support the Vermont radiological response plan for a given fiscal year. 20 V.S.A. § 38(a)(1).

The amount appropriated refers to the annual legislative appropriation. That appropriation is developed by the Division of Emergency Management and is to represent what is anticipated to be expenditures made from the fund in the ensuing fiscal year. The statute is specific as to how the budget of the expenditures is to be developed:

> Each fiscal year, the division of emergency management in collaboration with the state and local agencies, the management of the nuclear power plant, the selectboards of the municipalities in the emergency planning zone, the Windham regional planning commission, and any other municipality or emergency planning zone entity defined by the state as required to support the radiological emergency response plan shall develop the budget for expenditures from the radiological emergency response plan fund.

20 V.S.A. §38(a)(2). The budget is only to include expenditures to support the emergency response plan.

Entergy Nuclear Vermont Yankee as an operator of a nuclear reactor or storing nuclear fuel in the state will have to continue funding the radiological emergency response plan until permanent cessation of operations and final removal of all nuclear fuel and radioactive waste and no other federal requirements or regulations for emergency planning remain.

shared 12-28-11

VERMONT

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December 27, 2011

Christopher Wamser
Site Vice President
Entergy Nuclear Vermont Yankee, LLC
P.O. Box 250
320 Governor Hunt Road
Vernon, VT 05354-9766

Re: Construction Office Building Well Testing

Dear Mr. Wamser:

As you know, as Commissioner of the Public Service Department I serve as chairman of the Vermont State Nuclear Advisory Panel (VSNAP). At the VSNAP meeting on December 14, 2011, panel members unanimously passed a motion asking the state to review the status of Construction Office Building ("COB") well testing and to renew the request for testing made several times previously, despite Entergy's repeated rejections of these requests.

In October 2010, a sample from the COB well tested positive for tritium. This positive test appeared and still appears at odds with the expectations of subsurface water flow posited by Entergy and set forth in the conceptual site model undertaken as a result of the tritium investigation at the plant. Then Governor-Elect Shumlin noted this apparent discrepancy in his letter to site vice president Mike Colomb on December 7, 2010, and called for further testing of the COB well. The state reiterated this request on several subsequent occasions.

We understand that you have not tested the COB well as requested, finding that such a test is not necessary because the well has been taken out of service. Furthermore, you have expressed that the testing protocol your experts developed, requiring purging the low volume flow of the well, risked contamination.

Lawrence Becker, State Geologist at the Department of Environmental Conservation, has researched the issue and has conferred with the Environmental Protection Agency; based upon this research and discussion, we strongly believe that the plant can and should test the COB well with a grab sample that would avoid the concerns raised by the purging protocol. Such testing would provide further information regarding the site hydrogeology and may also help to understand the seemingly anomalous positive tritium test from the COB well in October 2010.

Particularly in light of the recent positive tests in the Connecticut River samples, including the test confirmed by your own laboratory last week, it would seem both responsible and transparent for Entergy to test a COB well sample and report the results to the public. We note that the Nuclear Regulatory Commission's spokesperson Neil Sheehan said much the same thing when NRC released report on the tritium investigation this fall, stating that "... the NRC believes that

sampling of the COB well, which is a former deep drinking-water well, would provide useful information for determining the depth of tritium migration and its potential transport to the bedrock aquifer."

Therefore, I reiterate the state's request that you test the COB well for the presence of tritium and other radionuclides; as with other water testing, we would request a split sample for testing verification. I look forward to your response.

Very truly yours,

Elizabeth H. Miller
Commissioner, Department of Public Service
Chairman, Vermont State Nuclear Advisory Panel

cc: VSNAP Panel Members
Commissioner Harry Chen
Deputy Commissioner Justin Johnson