

1 **DRAFT Subject to Approval**

2 **Nuclear Decommissioning Citizen's Advisory Panel (NDCAP)**

3 **Thursday, September 22, 2016**

4 **Brattleboro Union High School, Multipurpose Room, Brattleboro VT**

5 **Meeting Minutes**

6
7 NDCAP Members Present:

- 8 • Chris Campany, Executive Director of the Windham Regional Commission (WRC)
- 9 • Stephen Skibniowsky, representing the Town of Vernon
- 10 • Kate O'Connor (Brattleboro), Chair, citizen appointee of Governor Shumlin
- 11 • Derrick Jordan (Putney), citizen appointee of Speaker of the House Shap Smith
- 12 • David Andrews, International Brotherhood of Electric Workers (IBEW); representing
13 present & former employees of Vermont Yankee
- 14 • James Tonkovich (of Wilder), citizen appointee of Senate President Pro Tempore John
15 Campbell
- 16 • Jim Matteau (Westminster), citizen appointee of Senate President Pro Tempore John
17 Campbell
- 18 • David Deen, (Westminster), VT State Representative, citizen appointee of Speaker of the
19 House Shap Smith
- 20 • Diane Becker, Chief of Technological Hazards, New Hampshire Emergency Management
21 and Homeland Security
- 22 • Mike McKenney, Technical Coordinator, Vermont Entergy
- 23 • Joe Lynch, Government Affairs Manager, Entergy Vermont Yankee (for Jack Boyle)
- 24 • George Desch, Deputy Commissioner, Department of Environmental Conservation

25
26 The following NDCAP members were connected to the meeting via teleconference:

- 27 • Lucy Leriche, Secretary of the Agency of Commerce and Community Development

28
29 The following NDCAP members were absent from the meeting:

- 30 • Christopher Recchia, Commissioner of Public Service, ex officio
- 31 • Dr. William Irwin, Agency of Human Services- Department of Health
- 32 • Martin Langeveld (Vernon), Vice-Chair, citizen appointee of Governor Shumlin
- 33 • Michael Hebert (Vernon), VT State Representative, member of the House Committee on
34 Natural Resources and Energy
- 35 • Paul W. Mark, MA State Representative, (Peru, MA), representing the Towns of
36 Bernardston, Colrain, Gill, Greenfield, Leyden, Northfield, and Warwick, Massachusetts
- 37 • VT State Senator Mark MacDonald, member of the Senate Committee on Natural
38 Resources and Energy

39
40 Meeting called to order at 6:00 pm

1 **INTRODUCTIONS**

2 The Panel introduced themselves and the Chair gave an overview of the agenda. Kate
3 O'Connor announced that Pat Moulton left the panel to become Interim President of Vermont
4 Technical College and Trey Martin, beginning next week, will be the new Secretary of
5 Administration appointed by Governor Shumlin.

6
7 **APPROVAL OF MEETING MINUTES**

8 The meeting minutes for the November 12, 2015; December 10, 2015; and June 23, 2016
9 meetings were sent to the panel for review and approval.

10 Jack Boyle suggested the following corrections to the June 23, 2016 meeting minutes:

11 Page 3, line 26: Delete the sentence that starts "New Station Blackout generator..." and replace
12 it with "New security diesel generator is an emergency backup to provide power to security
13 systems and dry cask monitoring systems."

14 Page 3, line 41: The language in the answer should be replaced with "VY installed and
15 commissioned a new Station Blackout diesel generator in September, 2013. This was not paid
16 for with Decommissioning Trust funds, but paid with funds provided by Entergy. This SBO
17 diesel generator is still available as a backup power source for VY today. Our installed A and B
18 Train emergency diesel generators are no longer needed for emergency power and have been
19 decommissioned and abandoned."

20 Page 8, line 6: Add the name of the water management consultant that VY has contracted with:
21 Environmental Resources Management.

22 After reviewing the video of the June 23, 2016 meeting Kate recommended that Jack's
23 suggested changes on Page 3, line 26 be accepted and that the changes on Page 3, Line 41 and
24 Page 8, line 6 not be changed in the minutes, but instead be added as part of the record to the
25 September 22, 2016 meeting minutes.

26 The minutes for November 12, 2015, December 10, 2015 and June 23, 2016 with corrections
27 were approved by the panel.

28 **ENTERGY UPDATE ON DECOMMISSIONING ACTIVITIES**

29 *Joe Lynch, Government Affairs Manager, Entergy Vermont Yankee, gave an update on recent*
30 *activities. (Complete presentation is available at www.vydecommissioning.com and*
31 *www.publicservice.vermont.gov.) Joe gave an overview of activities that occurred since the last*
32 *meeting in June. Decommissioning activities have met the goal to be complete in June and*
33 *within budget. Entergy continues to go through buildings no longer needed long term, and*
34 *have consolidated staffing. In regard to the update on NRC inspection activities, the NRC was on*
35 *site the week of 8/29/16. This inspection looks at radioactive waste management and how*
36 *Entergy manifest them. There were no issues or potential violations.*

1 Joe was pleased to inform the panel that they have worked with the Vermont Division of
2 Emergency Management and Homeland Security to enter into a two year budget agreement
3 providing \$300,000 for two years for EP funding that goes through 2017 and 2018. He told the
4 panel that Entergy has listed some of its real estate property for sale and announced there will
5 be an auction of equipment on 9/28/16 and 9/29/16.

6
7 Joe gave an update on the construction of the dry fuel storage pad. He noted, as the Panel is
8 aware, that Entergy received the Certificate of Public Good allowing for the construction of
9 second ISFSI pad and to install a new security diesel generator. Both are on target and within
10 budget.

11
12 Update on Holtec Cask System Fabrication: Holtec is their vendor. Factory inspections are
13 complete and 12 of 28 cask systems are complete. They will be delivered in the fourth quarter
14 of this year with the continued goal of transferring all spent fuel to dry storage by 2020.

15
16 Joe gave an update on the Nuclear Decommissioning Trust and Site Restoration Trust and
17 announced there continues to be open communication and transparency in information shared.
18 Entergy has been raising money for local charities and donating office supplies to New
19 Hampshire, Massachusetts and Vermont.

20 21 **STATE OF VERMONT UPDATE ON DECOMMISSIONING ACTIVITIES**

22 *Anthony Leshinskie, Vermont State Nuclear Engineer gave an update on recent activities.*
23 *(Complete presentation is available at www.publicservice.vermont.gov or*

24 *www.vydecommissioning.com.) Tony gave update on the EPZ and ERDS and announced they*
25 *are still waiting on concerns for valid uses of trust fund. As Joe Lynch reported, the CPG for the*
26 *second ISFSI was awarded on June 17, 2016. The state is still getting weekly summary updates*
27 *from Entergy on water management issues. They also hold biweekly teleconferences with*
28 *Vermont Entergy senior staff to discuss water issues and other items that come up.*

29
30 Tony gave an update on State-NRC interactions: The NRC has sponsored a number of public
31 meetings relevant to decommissioning. Early in July he attended a follow up meeting regarding
32 decommissioning planning rules in regard to immediate clean up after radioactive
33 contamination. He also attended a meeting regarding Fukushima lessons learned, which was
34 about ground water incursion treatment and how they dealt with much larger ground water
35 incursion than we. He learned we are doing almost all of the same interventions with the
36 exception of soil freezing.

37
38 The NRC continues to reorganize itself through Project AIM 2020. The NRC is now accepting
39 comments for strategic planning 2018-2022. The State requested that decommissioning
40 improvements continue and that the NRC strive for more rapid response to regulatory needs;
41 i.e. earliest we'll see decommissioning rules is 2020 and why not get a faster response? Some
42 other state and local governments do not have same access as licensees and want it. Tony
43 reported on the NRC "back fit rule", which is process to assess whether an issue at a particular
44 site needs to be a national issue, and/or in some instances, international issue.

1 The NRC now has public meetings they want to redefine; “observational meeting”,
2 “informational meeting with some public Q & A”, and “comment gathering meeting” mostly
3 with the bulk of the meeting focused on public comments or Q & A. Please note the comment
4 period is open through November 14, 2016.

5
6 NRC and US Department of Transportation have a comment period through October 28, 2016.
7

8 **QUESTIONS AND COMMENTS FROM THE PANEL:**

9 *Question from Steve Skibniowski to Tony: You mentioned a few things I never heard before:*
10 *cladding creep and hydride reorientation. Should we be concerned with this with the VY fuel?*

11 *Answer: These phenomenons are concerns to any fuel in a nuclear core. Pellets swell and touch*
12 *cladding and can stress it. High definition fuel that has been in a reactor core for a long time is*
13 *something that we don’t know as much about but more information should be coming out.*
14

15 *Questions from David Deen to Tony: What does high burn up fuel mean? Is there low burn up*
16 *fuel? Answer: Yes. When you refuel a reactor you don’t put an entire brand new core in, fuel*
17 *management is like a wood fire. As it dies down you put some more wood in and continue*
18 *burning with exiting fire. Fuel that has been through several cycles is high burn fuel.*
19

20 *Question from David Deen to Joe Lynch: Is the listed property for sale Old Ferry Road or the*
21 *plant site? What is listed? Answer: All Brattleboro properties on Old Ferry Road. We have no*
22 *plan to sell property on Governor Hunt Road or the property of the site itself.*
23

24 *Question from David Deen to Tony: Can you explain why frozen soil is not necessary here?*
25 *Answer: Entergy has been able to reduce the incursion rate and Fukushima still looking at 5K-*
26 *10K gallons of water per day. We don’t know if they have been successful.*
27

28 *Question from David Deen to Tony: Are all the publications and opinions on the website?*
29 *Answer: No but I can get them up there.*
30

31 *Question from Derrick Jordan to Tony: Is the Fukushima ice wall working? Answer: Not sure but*
32 *can get answer.*
33

34 *Question from Jim Matteau to Joe Lynch: Why can’t we know what funds are withdrawn and*
35 *market status on the funds? Answer: The funds are audited; i.e., how much gained/lost. He*
36 *doesn’t get monthly details but will look into getting that detail.*
37

38 *Question from Kate O’Connor to Tony: You mentioned the State making comments at public*
39 *meetings, can you provide that in writing and/or on the website as well? Answer: Yes.*
40

41 **WATER MANAGEMENT AT VY UPDATE**

42 *Mike McKenney, Technical Coordinator, Entergy Vermont Yankee provided an update on the*
43 *water management activities at VY. (Complete presentation is available at*
44 *www.vydecommissioning.com and www.publicservice.vermont.gov.)*

1 The water management program anticipated ground water intrusion as part of the
2 decommissioning plan but not at the volumes we are experiencing since shut down. The way
3 we are addressing this is to look at the most efficient and cost effective water management
4 approach we can come up with. We put together a comprehensive plan with two major parts
5 to it: 1) to move storage of water that has come on to the site and 2) significantly reduce
6 leakage. We have been successful to date. The water management team includes consultants
7 and industry experts. Collectively we have worked to come up with an approach to reduce the
8 intrusion water and efficiently store it on site, i.e.; intercept wells allow to redirecting of ground
9 water.

10
11 All contemporary storage pools have been drained and removed, reduced frack tanks to one
12 and been shipping ground water through Energy Solutions to Tennessee. A major effort has
13 been made to reduce leakage in an area found between the reactor building and the turbine
14 building using a consultant. Energy Solutions is providing disposal services for the water and
15 Entergy is looking at another source if needed. Security, health and safety of public are
16 paramount and they want to be strong stewards of the decommissioning funds.

17 **PANEL QUESTIONS ON WATER MANAGEMENT**

18 *Question for Mike McKenney from Diane Becker: New Hampshire has been in a terrible drought*
19 *and assuming it is fairly wide spread. Do you have any indication of how much of the reduction*
20 *is related to drought conditions and how much is a result of efforts Entergy has made? Answer:*
21 *We feel it may have had some impact over the summer, but last leakage reduction was prior to*
22 *summer and we are seeing it is within normal range.*

23
24
25 *Question from David Deen to Mike McKenney: Did intrusion of ground water start at shut down*
26 *and why would shut down produce a different situation? Answer: We feel we may have been*
27 *getting some leaking when operating, but it was masked. When we shut down the buildings*
28 *cool down and cracks and fissures may have opened up.*

29
30 *Question from David Deen to Mike McKenney: How do you redirect ground water? Answer:*
31 *We anticipate this would work from drilling wells below the buildings where water is not*
32 *contaminated yet and discharge.*

33
34 *Question from Jim Matteau to Mike McKenney: With the water disposal taking place in*
35 *Tennessee and possibly Idaho, what exactly are they doing with it? Answer: I was not at the*
36 *last meeting nor prepared to answer this but can get an answer.*

37
38 *Question from Jim Tonkovich to Mike McKenney: Are the frack tanks loaded on trucks and*
39 *replaced with empty ones? Are they being drained on site? Answer: Frack tanks stay on site*
40 *and the water is pumped directly from the frack tank to tanker trucks.*

41 **PRESENTATION ON NEW EMERGENCY PLAN**

42 *Scott Carpenter, Planning Section Chief and Glenn Herrin, Planner, from the Vermont*
43 *Department of Emergency Management and Homeland Security (VEMHS)*

1 Scott presented their role as how they respond to floods or other State hazards. The
2 Radiological Emergency Response Plan (RERP) 2016 is an aspect of that. Since the plant
3 shutdown they moved to a staff level of 3-4 to 1 staff located in Brattleboro (this staffer does
4 not deal with VY). Scott reviewed EPA Protective Action Guides, preparedness resources, town
5 funding agreements, and regional planner positions, one including duties specifically for
6 Vermont Entergy.

7
8 Glen reviewed emergency plan changes and what the overall plan will like. They still work with
9 the six towns around the plant but these towns are no longer in the EPZ. There is no longer a
10 designated reception center for people who may get contaminated, but they have a plan to
11 send such folks to other congregated facilities. They have radiology survey rules for teams
12 when needed but the teams themselves no longer exist. They continue to have biannual EPS,
13 training for radiological response is available, potassium iodide pills distribution is also no
14 longer needed since plant is shutdown.

15
16 Current Plan: Planning training exercises are done periodically. In the event of an incident, VY
17 will set up incident command site. If the emergency grows beyond local responders, then
18 Vernon town will have an incident command center to activate, and if needed other towns will
19 follow emergency response plans. The State Emergency Center tracks what is going on and
20 Entergy will coordinate actions with State and Federal support. Levels of Alerts were reviewed.
21 Entergy will work with State for public notification. They suggest signing up for Vermont Alert
22 System.

23
24 **PANEL QUESTIONS ON NEW EMERGENCY PLAN:**

25 *Question from David Andrews to Scott Carpenter? When was last time there was a request for*
26 *radiological response training? Answer: The last one was in March and no one came.*

27
28 *Question from David Andrews to Glen Herrin: The last actual response training was over a year?*
29 *Answer: Yes.*

30
31 *Question to Scott Carpenter: When are the next bi-annual workshops and table top exercises*
32 *scheduled? Answer: They are not at this time. They are talking to Entergy about that.*

33
34 *Question from Chris Campany: Are job descriptions of the new the positions just radiological?*
35 *Answer: No planning positions also.*

36
37 *Chris Campany to Joe Lynch: Once the fuel is in casks, will the fence line move in from where it is*
38 *currently? Answer: Looking at post security but do not have plans on that right now.*

39
40 *Question from Kate O'Connor to Scott: Will the new south regional position be located in*
41 *Brattleboro and where will the north person be? Answer: Yes, north in Waterbury. Question: Is*
42 *\$300,000/year funds for just Windham County or to overall emergency planning operations*
43 *cost? Answer: Funding is for at least the southern person and some partial staffing in other*
44 *areas. Question: When the EPZ went away did anything change with notification times?*

1 *Answer: Entergy has a little longer to notify. Question: Will you bill back beyond the \$300,000?*
2 *Answer: No, this department will not.*

3

4 **PUBLIC QUESTIONS/COMMENTS ONEW EMERGENCY PLAN**

5 Deborah Katz of Citizens' Awareness Network to Vermont Emergency Management and
6 Homeland Security (VEMHS): You talked about terrorist attack, what about fuel fires, off
7 gassing and loss of water from the pool? Do you get any training for that and who is going to
8 be in charge? People besides Entergy should know what to do if something like this escalates
9 through table top training. Answer from VEMHS: Majority of our plan is to focus on how to
10 keep that from happening. We will work with the towns and State for levels and actions of
11 responding.

12

13 Question from Leslie Sullivan-Saks, Brattleboro, Save and Green Campaign: The \$300,000 does
14 not get you very much. You state that for the next two years all fuel will be out by 2020.
15 Would this plan change at all while actually moving the spent fuel into casks? Answer from
16 VEMHS: We have the ability to renegotiate if transfer of fuel goes beyond that.

17

18 Question: What if the fuel is moved before end of the time period? Answer from Joe Lynch:
19 Funding is for the next two years and recognizes the schedule, and we can renegotiate.

20

21 Question: What if there is a leak and there is no designated reception site? Answer from
22 VEMHS: We will find a place set up a reception site or have designated places to go.

23

24 Comment from Chris Campany: We are moving into actions and risks for all hazards.

25

26 Question from Leslie Sullivan Sachs: Are radiation survey teams to check radiation in the air?
27 Answer from VEMHS: There are two teams, one for plume tracking and a dose assessment
28 team that goes out after the plume out and it is safe to check for contaminates in the ground.

29

30 Question from Guy Page: With evacuation, you mentioned it will be a relatively slow
31 development. Will there be training? In Fukushima a lot of harm was during evacuation.
32 Answer from VEMHS: No, nothing other than talking to the towns but we should.

33

34 Question from Citizen: When Vermont Yankee started, you had a lot of sirens. What
35 happening to them? Answer from VEMHS: Vernon is the only town that still has one all other
36 five towns gave them up.

37

38 Question from Citizen: Do you know actual numbers of radiation and isotopes levels in the
39 water? Answer from Joe Lynch: If you mean the water shipped, I do not have that information
40 available. I can say that the level is so low that trucks are not marked that they contain
41 radioactive materials.

42 Comment from Kate O'Connor: Since there are no sirens or radios anymore, should people sign
43 up for VT Alert, which is not just for emergencies at VY? Answer from VEMHS: Yes, that is
44 correct sign up by going to vtalert.gov

1 Comment from David Andrews: All weather radios are still working and there is not plan to
2 stop that communication, in fact there are plans to improve it.

3

4 **MOVING FORWARD AGENDAS ITEMS, MEETING DATES, ANNUAL REPORT**

5 Kate announced that for the October 27th meeting guests from the Massachusetts Department
6 of Environmental Protection are coming to talk about their experience with the Rowe cleanup.
7 The panel agreed to have the November meeting on the third Thursday of the month
8 (11/17/16) due to Thanksgiving being on the fourth Thursday. Our plan is to continue the site
9 restoration discussion. A tentative meeting is scheduled for December 15th should it be needed
10 and a decision will be made on its need in the October meeting. The Annual report will be due
11 and the Chair would like to get started on that.

12

13 Comment from David Deen: Would like to thank Congress Welch, Senator's Lahey and Sanders
14 for having spearheaded this letter (congressional delegation wrote letter to NRC urging not
15 limit what they talk about during the rule making process) to the NRC and have it show up in
16 the minutes that the Panel thanks them.

17

18 **PUBLIC COMMENTS:** None.

19

20 **WRAP UP AND ADJOURN**

21 Next meeting: Thursday, October 27, 2016.

22

23 **MEETING ADJOURNED AT 8:20 pm**

24

25 NOTE: Brattleboro TV created a video recording of this meeting and can be found on website.

26

27