

1 **DRAFT Subject to Approval**

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

3 **Thursday, March 24, 2016**

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

5 **Meeting Minutes**

6
7 NDCAP Members Present:

- 8 • Christopher Recchia, Commissioner of Public Service, ex officio
- 9 • Chris Company, Executive Director of the Windham Regional Commission (WRC)
- 10 • Dr. William Irwin, Agency of Human Services- Department of Health
- 11 • Trey Martin, Deputy Secretary Agency of Natural Resources
- 12 • Stephen Skibniowsky, representing the Town of Vernon
- 13 • Kate O'Connor (Brattleboro), Chair, citizen appointee of Governor Shumlin
- 14 • Martin Langeveld (Vernon), Vice-Chair, citizen appointee of Governor Shumlin
- 15 • Derrik Jordan (Putney), citizen appointee of Speaker of the House Shap Smith
- 16 • Christopher J. Wamser, Site Vice-President, Entergy Nuclear Vermont Yankee (VY)
- 17 • David Andrews, International Brotherhood of Electric Workers (IBEW); representing
- 18 present & former employees of Vermont Yankee
- 19 • James Tonkovich (of Wilder), citizen appointee of Senate President Pro Tempore John
- 20 Campbell
- 21 • Paul Paradis, Decommissioning Director, Entergy Nuclear Vermont Yankee (VY)
- 22 • Jim Matteau (Westminster), citizen appointee of Senate President Pro Tempore John
- 23 Campbell

24
25 The following NDCAP members were absent from the meeting:

- 26 • Michael Hebert (Vernon), VT State Representative, member of the House Committee on
- 27 Natural Resources and Energy
- 28 • Paul W. Mark, MA State Representative, (Peru, MA), representing the Towns of
- 29 Bernardston, Colrain, Gill, Greenfield, Leyden, Northfield, and Warwick, Massachusetts
- 30 • VT State Senator Mark MacDonald, member of the Senate Committee on Natural
- 31 Resources and Energy
- 32 • David Deen, (Westminster), VT State Representative, citizen appointee of Speaker of the
- 33 House Shap Smith
- 34 • Diane Becker, Chief of Technological Hazards, New Hampshire Emergency Management
- 35 and Homeland Security
- 36 • Pat Moulton, Secretary of Agency Commerce and Community Development

37
38 The following members of the public were connected to the meeting via teleconference:

- 39 • Ray Powell, NRC
- 40 • Steve Maharis, Department of Energy
- 41 • Nancy McNamara, NRC Region One

1 Meeting called to order at 6:00 pm

2

3 **INTRODUCTIONS**

4 The Panel introduced themselves and the Chair gave an overview of the agenda.

5

6 **APPROVE MINUTES:** No prior minutes to approve.

7

8 **ENTERGY UPDATE ON DECOMMISSIONING ACTIVITIES**

9 *Joe Lynch, Government Affairs Manager, Entergy Vermont Yankee, gave an update on recent*
10 *activities. (Complete presentation is available at www.vydecommissioning.com and*
11 *www.publicservice.vermont.gov.) Joe gave an overview of activities that have been completed*
12 *in the last month at VY. Entergy continues to be in the process of draining fluid from systems*
13 *and backing out of certain building that are no longer required. Entergy is on track to have this*
14 *completed by June of 2016. The Emergency Plan is now transitioning and training for*
15 *Permanently Defueled E-plan and Emergency Action Levels (EALs) stages. This means events at*
16 *the site after 4/19/16 will only require them to be at an unusual or alert level. They will also be*
17 *removing 23 of 37 sirens, which are no longer needed from host towns.*

18

19 **NRC Inspection Activities:** An inspector from the NRC Decommissioning Program comes on site
20 every 4-6 weeks for routine inspections. He will be back on site next week to perform a routine
21 inspection which will include water management and spent fuel pool cleanup as part of the
22 scope of the review. On 3/14/16 Entergy had a security base line inspection, where they
23 simulate intrusion incidents to respond to. The results of that inspection had no findings or
24 violations.

25

26 **State Agency Interactions:** Entergy completed technical hearings in front of the Public Service
27 Board on 2/23/16. A ruling is anticipated in May 2016.

28

29 **STATE OF VERMONT UPDATE ON DECOMMISSIONING ACTIVITIES**

30 *Anthony Leshinskie, Vermont State Nuclear Engineer gave an update on recent activities.*
31 *(Complete presentation is available at www.publicservice.vermont.gov or*
32 *www.vydecommissioning.com.) Tony noted that the State filed their comments on the NRC's*
33 *proposed rulemaking on March 18, 2016. The comments provided were a multi-agency effort*
34 *of a full set of responses to the 80 plus ANPR questions. The comments were filed jointly with*
35 *Connecticut, Massachusetts, and New York. Supported positions include; Emergency Response*
36 *Data System (ERDS), Trust Fund, Emergency Plan Zone, spent fuel monitoring, zirconium fire*
37 *analysis, expanded state, local and public participation, shorter decommissioning period,*
38 *redefining of Safstor with a 10-year limit, recognition of state authority over non-radiological*
39 *matters.*

40

41 The Department of Energy is coming to the site in May to assess spent nuclear fuel
42 transportation options.

43

44

1 **QUESTIONS AND COMMENTS FROM THE PANEL**

2 *Question from Dr. Irwin to Joe Lynch: You mentioned 23 of 37 sirens are being removed. How*
3 *many are in VT or how many of 23 sirens to be removed are in Vermont. Answer: I have that*
4 *information but I do not have it with me. We have the breakdown by state and I can send it to*
5 *Kate for distribution to the panel.*

6
7 *Question from Kate O'Connor for Joe Lynch: Entergy has reached an agreement with town of*
8 *Vernon about taxes. Is that money coming out of the decommissioning trust fund? Answer:*
9 *We are still working on the arrangement. There are some legal things to work out and we still*
10 *need to review each other's documents but it is our intent to withdrawal that money from the*
11 *trust fund.*

12
13 *Comment from Kate: The rulemaking is moving forward and if anyone has info we should know*
14 *about such as timing deadlines, please let me know and I can distribute the information to the*
15 *panel. It would be helpful, as we are not always informed by the federal register and rely on*
16 *others to provide it. Do not assume we know everything.*

17
18 **GROUNDWATER MONITORING ADVISORY OPINION: CONTINUED DISCUSSION FROM**
19 **FEBRUARY 25, 2016 MEETING**

20 Dr. Irwin gave an update that Entergy and the State are working out details for protocols to use
21 for decommissioning for all parties affected. He also announced they are trying to identify how
22 that will be funded. These efforts are at early stages right now and the hope is that decisions
23 will be made soon, so the advisory opinion is on hold for now. Joe Lynch added he felt the two
24 parties are working collaboratively and think they will have good news to report at the next
25 meeting.

26
27 **PRESENTATION ON WATER MANAGEMENT ISSUES AT VERMONT ENTERGY SITE BY VY,**
28 **ENERGY SOLUTION**

29 Joe Lynch began by stating that water management is very important and that Entergy has
30 developed a comprehensive plan to reduce ground water coming into the turbine building.
31 Entergy is focused on a cost effective solution and maintain they have been prudent regarding
32 elimination of the water and not purposely discharging the water in the Connecticut River since
33 the 1980s. He presented further that the ground water coming into building was expected but
34 is far more fluctuating than anticipated. Entergy formed a comprehensive team including
35 industry experts and other consultants with decommissioning and ground water experience to
36 help solve the problem. They made a detailed site conceptual model on how ground water
37 flows to make best efforts on how to handle it. They have been sealing areas where they know
38 water is coming in, looking at minimizing ground water coming toward building, temporary
39 storage pools are now drained or removed and water is stored in bladders inside the building or
40 frack tanks. Then the water is transported to tankers to disposal facilities such as in Tennessee.
41 They have shipped thirty thousand gallons to date and continue to ship ten to twenty thousand
42 gallons per week. Process water is not intrusion water. It contains higher activity fluid that ran
43 through the plant systems in operations with higher contaminant levels that needs to be

1 shipped, too. There are no health or safety concerns to the public. The NRC has been
2 overseeing all VY activities and report on a regular basis.
3 *Mark Walker, VP from Energy Solutions, located in Salt Lake City made a presentation (including*
4 *a video) on what Energy Solutions does and what they are doing at VY specifically. Safety is*
5 *their first issue. They recently went through revamping of safety programs. Staff can shut*
6 *facilities down if they see safety is not being followed. He provided statistics and discussed the*
7 *processes shown in the video. He explained their regulatory monitoring process and what they*
8 *do with the waste materials. They have systems for both radiological and hazardous material.*
9 *Transfer waste to trucks and trains. Transfer is what they do. He explained their absorption*
10 *method to eliminate liquid substance, and if each meets regulations the waste goes to each*
11 *designated disposal facility. The waste contaminants are far below Tennessee State regulations*
12 *for tritium. The DOT never had a death of exposure with transportation. He explained the*
13 *notifications and emergency processes.*

14

15 *Trey Martin spoke on behalf of the State regarding the State's interactions with Entergy on the*
16 *water management issue. The State has had conversations with Entergy after the story of the*
17 *swimming pools being used for water storage broke. Communication continues with the State*
18 *working group via weekly meetings or calls. This reflects commitment on behalf of Entergy to*
19 *continue regular communication with State and commitment of State that the dialogue is*
20 *happening. A clean and timely line of communication is set if something other than planned*
21 *water disposal needs to occur. Their dialogue has been robust with very good outcomes.*

22

23 **QUESTIONS AND COMMENTS FROM THE PANEL**

24 *Question from Pat Moulton for Mark Walker: Will you be contracted to do just water*
25 *management or will you be doing anything else? Answer: Water right now, but willing to do*
26 *more.*

27

28 *Question from Pat Moulton to Mark Walker: Do you notify local authorities when transporting*
29 *hazardous waste or only in event of emergency? Answer: We notify DOT and regulatory*
30 *agencies. If necessary we go through each state for notification.*

31

32 *Question from Pat Moulton to Mark Walker: Are you an R & D company seeking for best*
33 *method of disposal? Answer: Yes, we are always looking for best method for disposal.*

34

35 *Question from Pat Moulton to Mark Walker: Are you actively doing research on that? Answer:*
36 *We feel we have the very best method but do look at projects and see if there is anything we*
37 *can improve.*

38

39 *Question from Chris Recchia to Mark Walker: It is reported that the water that comes in has low*
40 *levels of tritium. Are you doing any filtration and is the water going up in the steam? Answer:*
41 *We have not had to use filtration yet, but there are filters that catch steam but does not capture*
42 *it all.*

43

1 Question from Chris Recchia to Mark Walker: What is rough estimate that is captured?
2 Answer: 50-70 percent. We look for levels of low radiation before disposal.

3
4 Question from Kate O'Connor to Mark Walker: The State did not know until it learned in the
5 press about the incident and the end result opened up important dialoged that should have
6 existed before an incident like this. Why not notify of shipping process water? Discussion
7 ensued around shipping process water and how it came about and what the processes should
8 have been vs what happened with communication and notification.

9
10 Question from Jim Matteau for Mark Walker: Re: Tritium in the water. Water goes through a
11 filter and some tritium is captured and some not. How does that happen? Answer: We try to
12 capture what we can. We plan to use bulk survey for this material rather than incineration.

13
14 Question from David Andrews to Mark Walker: What is the radiological risk of this water?
15 Answer: Very low. When transporting on the highway there is no need plaque the tankers
16 because there is large amount of water not a not a lot of risk.

17
18 Question from Chris Campany for Joe Lynch: What is the cost per shipment you're estimating?
19 Answer: Each shipment of 5,000 gallons is \$22,000 per shipment.

20
21 **QUESTIONS AND COMMENTS FROM THE PUBLIC**

22 Clay Turnbull, New England Coalition, Brattleboro: You reported that groundwater coming in
23 contact with the building is radioactive. At what point does it become radioactive? Answer
24 from Joe Lynch: The water comes in contact with the concrete and in the concrete there are low
25 levels. The water that has low levels once reaching the building needs to be disposed of.

26
27 Clay Turnbull: Was water contaminated before it got to the building? Is there radioactivity
28 underneath the building? Answer from Joe Lynch: We have sumps in concrete vessels below the
29 building that are contaminated and they are doing investigation below the slab to see if that
30 contributing to this.

31
32 Clay: Is there a reason VY did not bore the holes and do the tests or leaks before now? Why
33 wait until now if there is contamination underneath the building? Answer from Joe Lynch: We
34 mentioned in the presentation that the ground water intrusion is higher than anticipated and
35 we now realizing we have to do additional work. The reason for the sump installation was due
36 to sealants that were not successful and we are now taking steps to the next level of additional
37 expertise.

38
39 Question from Chris Recchia to Joe Lynch: We are presuming the water gradient is clean but we
40 really don't know, right? Answer: We have 31 wells to monitor west to east as the water moves
41 towards river, and all around all the wells testing is non-detectable for tritium.

42 Question from Kate O'Connor to Joe Lynch: Is this happening at any other building or is this the
43 only one? Answer: We believe that majority is in the turbine building. We have seen, in the
44 past, small leaks that are easily cleaned up and part of normal maintenance.

1 Question from Chris Campany to Trey Martin: Do you have insight as to what the State's
2 oversight role is going to be going forward to help plan ahead? Answer: The plant is closed and
3 a new Public Service Board docket is to be created and most likely go to the next administration
4 piecing this out over many years. There have been and will be other opportunities to establish a
5 framework to work with them as issues arise rather than being surprised.

6
7 Question from Page Barry to the Panel: There is a lot of monitoring going on. Does the State
8 have an onsite engineer? Are you monitoring and watching? Are you informing the State and
9 everyone on what you are finding? Answer from Tony Leshinskie: We receive weekly reports
10 filed through the engineering division, which goes to the governor's office. Also several agencies
11 that are represented here do meet once a month, where I make a report.

12
13 Question from Peter Van der Dose from Brattleboro, New England Coalition to Trey Martin:
14 Why any sign off on CPG on second ISFSI placement? Answer: We want to work with the
15 applicant or Entergy to establish agreement. This allows us to meet with the applicant during
16 the process to give conditions we require to resolve issues vs. going back and forth with a
17 docket.

18 19 **FEDERAL TAXATION OF DECOMMISSIONING TRUST FUNDS**

20 Joe Lynch, Government Affairs Manager, Entergy Vermont Yankee, provided an overview of the
21 federal taxation of decommissioning trust funds.

22 Martin Langeveld stated it's a mystery that the IRS collection 20% taxes of decommissioning
23 funds and he found even congressional staffers were surprised. Questions that come up are
24 how much taxes are being paid by local funds and can we get a look back at the last five or ten
25 years of the impacts of the taxes? Is there a Vermont State equivalent tax and has Entergy
26 projected how the fund would grow if not taxed?

27
28 Answer: Joe Lynch did not know, but would take questions to Entergy officials who have tax
29 expertise. Nuclear Energy Institute (NEI) has a number of reference materials and one is on
30 taxation of nuclear trust which gives a basic outline of the type of taxes applicable. He would
31 be happy see if it's possible to have someone attend a future meeting to answer questions.

32
33 Question from Chris Recchia to Joe Lynch: Are taxes paid as money is withdrawn or as earned?
34 Are they paid on an annual basis based or on projections? Have taxes already been paid based
35 on growth in last 10 years? Answer: They are paid on an annual basis.

36
37 Question from Bill Irwin to Joe Lynch: I just did a quick search on decommissioning taxes and
38 do not see them in the projections. Were they incorporated? Answer: Joe nodded yes.

39
40 The panel will continue the discussion at future meetings.

41 42 **PANEL DISCUSSION ON MEETING PROCEDURES**

43 An issue came up at the February meeting about whether the public should be able to use the
44 call-in system available to panel members. (The conversation began after a Rutland Herald

1 reporter called into the meeting). The panel formed a public access committee to come up
2 with a solution and report back at the May meeting. Committee members: Kate O'Connor,
3 David Andrews, Jim Tonkovich, Chris Company.

4
5 **PUBLIC COMMENTS:** None

6
7 **Updates: ANNUAL REPORT AND ANPR**

8
9 ***WRAP UP AND ADJOURN***

10 Next meeting: Thursday, May 26, 2016.

11

12 ***MEETING ADJOURNED AT 8:30 pm***

13

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