

NDCAP March 26, 2015

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35 in the audience, 12 of them allies

Public comment: Unlike past agendas, which had time for public comment after most agenda items, this meeting had no public comment scheduled until 7:25, after a presentation by Jay Tarzia, the owner of a decommissioning company. He did not finish until almost 8pm, and then answered questions from the panel. Although no one asked, he spent 8 minutes (I watched the clock) on whether or not he is pro nuclear or not (clearly pro). The chair then said there was only time for 2 public questions; 7 of us had lined up. Clay caught him in an error about the thickness of canisters (he had said a few inches; at most, its 5/8 of an inch). Then Howard Schaffer told the panel that there would be a final resting place for high level waste soon; folks in Texas, among others, want it. That was it for the public. People were clearly pissed and a few people left soon after. A few of us waited for the next public comment slot – at the end of the meeting – and used our time to go back to asking him questions.

Both Entergy reps were present. Chris Wamser challenged the state once. Micheal Twomey did not say one word. This is very different from past meetings, when they both spoke frequently. Hmm.

Kate O'Connor, chair, opened with a recap of progress made by the panel since the February meeting. Because NDCAP is a state panel, the website needs to be hosted by the state, and that is taking some time. Michelle Hughes in DPS is being helpful.

Minutes of February meeting approved; [NDCAP Annual Report](#) approved with minor changes.

The new Issues committee met. Dave Andrews (IBEW) gave a report.

- The meetigns will be planned in advance; they will have a common structure: update by VY, update by state, opportunities for public comment, segment which is educational, segment on issues.
- They hope to schedule field trips to a Yankee – Connecticut is preferable because it is the one the panel is least familiar with, and near Millstone which is in SAFSTOR.
- May agenda: the educational segment will be “unanticipated issues,” ie, what surprises have been discovered during SAFSTOR or decomm at other sites. Issues segment will be decomm trust fund.
- Proposed speakers will be run by Chair who will run by panel before committing.
- Recchia: DPS will provide resources within reason.

Future meetings: 4<sup>th</sup> Thursdays will continue. No April meeting. May 28, June 28. Then every other month: Sept, Nov, January.

Entergy Update on Decommissioning Activities – Joe Lunch, government affairs. [Download PDF.](#)

- March 6: state requested info on 42 items. Entergy met with state for clarification, got extension on response. They will respond tomorrow (*Ed note: same old pattern, day after NDCAP*)
- 7 upper structures (not underground) were removed. Ossie pad was rubblized, the rubble is still on-site as it had some radiation and waiting for necessary paperwork. All work done by local contractors. All necessary paperwork was filed with appropriate agencies.
- Site security: two separate instances of individuals on site. See Reformer article
- Entergy will do a presentation at GCC in Greenfield, MA in April. Hosted by Rep. Paul Marks.
- Entergy is creating a color coded map of what's happening where and when on site

#### State Update on Decommissioning Activities – Tony Leshinskie, \_\_\_\_\_

- Been on the job 9 or 10 months
- Primary role is to provide information to DPS and PSB, support to NDCAP
- Helps state agencies get information and may interpret the information
- Office at Yankee, not Montpleier.
- Ossie pad: where low level waste storage was previously held on-site. Some radiation evaluation was done; NRC needs to do more but person not immediately available so removal on hold.
- Reviewed items on significant technical changes; his questions were the same as NRC's.
- Tracks issues and filings for DPS
- He and resident inspector inspected spent fuel pool cooling system
- March 11: drill conducted to prepare for FEMA drill on May 13 with VT, MA, NH

#### Jay Tarzia, Radiation Safety & Control Services, presentation on dry cask storage [NEED LINK](#)

- Introduced by Diane Becker, chief of tech hazards, state of NH.
  - Tarzia is chair of NH Radiation Advisory Committee
  - NH has a decommissioning committee with state and local agencies on it
- Gave his radiation safety background. Ken Strable is his mentor. He is a certified health physicist (Like Irwin)
- Questions from panel
  - Recchia: what do we look for in dry casks? How often do we anticipate changing them out, and how?
  - Irwin (DOH): 1,000 gigabecquerels is a lot of radiation. How many US sites have bunkers vs open pads?
    - Tarzia: only 2 or 3 designs for horizontal systems, many for vertical. Need right site for an underground or bunker system.
    - What about high burn up fuel?
      - Tarzia: Magnastor is a system design to hold fresh fuel. Or you can make more space in each canister (ie, fewer fuel rods per canister).
  - Martin Langveld (citizen rep): question about owners going for cheaper vs better
    - Tarzia: they don't do that
- Questions from public: only 2 allowed.
  - Clay Turnbull (NEC): Tarzia's description of thickness of canister is wrong. Not a few inches; 5/8"
  - Howard Shaffer (NEI): There are sites waiting to take the waste, like in Texas

#### Presentations by State of VY on State's Role in Decommissioning

- David Mears, ANR: ANR has authority over hazardous waste. Agencies are coordinating work, tracking filings on SAS, PSDAR, technical compliance. Staffs of Entergy and ANR met recently about ANR implementing authority.
- Dr. Bill Irwin, Dept. of Health: 42 year plus history at DOH on evaluation of effects of measuring radiation at the site, even before they started it up (Ed. Note: so there are pre-nuke baselines). Have published data since 1972. Can see effects in VT from Chernobyl and Fukushima.
  - Oversight of VT emergency response program , with FEMA, Homeland Security, etc. Trainings, publications, procedures, like how local emergency personnel can measure radiation releases.

- Environmental surveillance needs to continue through license termination. Although not operating, Yankee is still a collection of components with radioactivity and leaks. After 2020 (spent fuel into casks) there will be less of a need but still risk of underground water contamination, air, fire, etc, which local police and fire depts. Could not handle without emergency management training
- Funding for 42 years has come through VT Yankee emergency management funds. This will stop April 2016. There will be no money at DOH for VT Yankee.
- Chris Recchia, Dept. of Public Service.
  - Legal team. Actively involved in negotiations with Entergy and NRC. Has been in role at PSB and will be at PSB for approval of 2<sup>nd</sup> pad for dry casks.
  - State Liaison with NRC. NRC only has rules specific to operating reactors, no set standards for closed ones. So the process is that Entergy applies for exemptions to operating license; some are automatically granted, some has public comment process. DPS is paying attention to all exemption requests.
  - Funded by electricity generation tax. Yankee no longer generating power so now zero tax paid. So current DPS efforts on Yankee are funded by taxes paid by other generators.
- Pat Moulton, Commerce & Community Development. Working on issues and committees involved in post-closure economic recovery.
- Questions by Panel:
  - O'Connor (chair): what is state allowed to do?
    - Irwin: NRC has no role for state in decommissioning. State role is preempted for radiological health and safety. Over the years there have been negotiated agreements.
  - Campney (WRC): Windham Regional Commission also struggling with shortage of resources, especially in this tough budget period. This is a flaw in the federal regulatory process.
  - Andrews (IBEW): If funds dry up with Entergy then agencies can't continue their missions. How does this differ from other regulated industries, like Fairpoint?
    - Recchia (DPS): State bills back to company the costs to regulate. Entergy would take that money from the decommissioning fund. 1 - We need to grow the fund, and 2 – the fund is for radiological decommissioning, and the work the state is doing is not radiological decommissioning.
    - Mears (ANR): in general ANR gets funded through regulatory fees, the general fund, and federal grants. ANR is looking at bill back authority. This is new and complex – we are being careful.
    - Recchia (DPS): With this, there are times we need to be fully staffed and times when there is not much going on. That will be a challenge for us.
    - Wamser (Entergy): What does ANR see coming that it needs to continue staffing?

Mears (ANR): there is uncertainty. There have been activities at VY that no one on ANR staff was there to see. We are pouring through historical documents to find environmental impacts. I have moved staff over from other work.

- Questions by Public
  - Leslie Sullivan Sachs (Safe & Green): Will ask Jay Tarzia questions while as he's still here.
    - Is Magnastor the only canisters used for High burn up fuel? Tarzia acknowledged that he didn't know.
    - Has the industry made necessary changes to the procedure of moving spent fuel from the pool into dry cask storage, given over packs & high burn up? Tarzia:

pools have been redesigned since the early days (Sachs pointed out that our's was operating since 1972 so that did not apply) and that they have figured out ways to re-pack everything with room for the crane.

○ Sally Shaw (Gill, MA):

- Question 1: In reference to Tarzia's graph of spent fuel decay rate, explain what a "giga" is. He "didn't know off the top of his head, but could check his calculator" and looked to Dave Andrews of Entergy/ IBEW for the answer. Andrews said it was  $10^{12}$ . (Wrong again. Google says it's  $10^9$ .) How many curies in a Gigabequerel? because we're used to talking about radiation in Curies, but not in GigaBeq. He didn't know. Sally's conclusion: Quite a Lot of radiation still remaining after 100 years. The two nuke experts didn't have a clue how much radiation they were talking about
- Question 2: Was sure no dry cask had ever leaked, and he said he "hadn't heard of any that had." Sally asked, "So you're presenting as fact something that was merely opinion to Vermont's public officials?" Sally heard about casks that leaked during the dry cask docket before the Public Service Board,\*\* and suggested the Committee question and independently verify his claims on that.
- Question 3: Clearly state again how thick the stainless steel canister inside the cement overpack of a Holtec Hi Storm dry cask is. He admitted it was 5/8", not the 2-4" he had stated previously.
- Question 4: What kind of dry casks were used at Fukushima, the ones that withstood an earthquake, tsunami, and explosions, the ones that were storing fuel from reactors identical to VT Yankee with the same type of fuel, except for unit 3 which used MOX fuel? He said he didn't know. Sally asked the NDCAP to look into it.
- Question 5: Sally asked him, "if I can put my hand on my oil burner in my home, and not get burned, can I go up and hug a dry cask?" He said no. I asked, "Should we be most concerned about the heat emitted from the loaded dry casks, which he emphasized in his presentation\* or some other type of radiation?" He said the other types, the radioactive sort. I asked, then is the analogy with our home heating systems a fair analogy?
- IBEW's Dave Andrews jumped in at that point and said he hugged his dry casks all the time. I asked for how long could he hug them, and he said "forever", the radiation they give off is so low they have to use a special measuring device just to detect it.
- Sally urged the committee to question the statements of "fact" that were presented by Mr. Tarzia and others and make sure to independently verify them.