Amended Petition of Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc., for amendment of their certificate of public good and other approvals required under 30 V.S.A. §231 (a) for authority to continue after March 21, 2012, operation of the Vermont Yankee Nuclear Power Station, including the storage of spent nuclear [Second Amended petition – August 27, 2013]

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7862

REPLY BRIEF OF NEW ENGLAND COALITION

October 25, 2013

By its Pro Se Representative,

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Amended Petition of Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc., for amendment of their Certificate of Public Good and other approvals required under 30 V.S.A. § 231(a) for authority to continue after March 21, 2012, operation of the Vermont Yankee Nuclear Power Station, including storage of spent nuclear Fuel [Second Amended Petition – August 27, 2013]

STATE OF VERMONT
PUBLIC SERVICE BOARD

Replied Brief of New England Coalition

Intervener, New England Coalition, Inc. ("New England Coalition, NEC, or the Coalition") respectfully submits this Reply Brief  by and through its Pro Se Representative, Raymond Shadis, in answer to the Initial Brief of Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc., ("Entergy" or "petitioner") regarding Entergy's amended petition for amendment of their Certificate of Public Good ("CPG") and other approvals required under 30 V.S.A. § 231(a) for authority to continue after March 21, 2012, operation of the Vermont Yankee Nuclear Power Station ("VY Station"), including the storage of spent nuclear fuel ("SNF"), filed August 16, 2013, AND Entergy's "Second Amended Petition" filed August 27, 2013

DISCUSSION

The Introduction of Entergy's initial Brief opens with the following rather curious statement:

In regulating the VY Station and nuclear power more generally, this Board must choose the public good over anti-nuclear sentiment and decide the issues on the
Of course to "chose public good over anti-nuclear sentiment" is a mismatched dichotomy or in rhetorical terms, a false choice and of all the parties, it is only Entergy that presents that choice. However, and whatever Entergy means by this Board "regulating …nuclear power more generally," NEC concurs. NEC would agree on principal and in deference to Entergy's seeming obsession with federal preemption that nuclear sentiments, (anti or pro), have no place in the deliberations of this tribunal. Fair is fair so the Board should eschew any consideration of anti-nuclear sentiments in the record (of which NEC can find none) and pro-nuclear sentiments as well (of which there are many).

Accordingly the Board, for example, should ignore in their entirety the nuclear advocacy sentiments of Entergy Witness, Dr. Richard Lester; Entergy VY’s expert witness even though they are couched in terms of concern for greenhouse gas emissions,

Dr. Richard K. Lester, is the Japan Steel Industry Professor and Head of the Department of Nuclear Science and Engineering at the Massachusetts Institute of Technology. Lester pf. at 1:4-5; exh. EN-RKL-5. For more than twenty years, his research and teaching has covered both nuclear power and “various aspects of innovation, productivity and competitiveness that are not related to nuclear power.” Tr. 2/15/13, Vol. I, at 8:17-23 (Lester). His testimony in this case concerned the problem of GHG emissions and global warming; and the critical need for nuclear power to serve as part of the solution to this problem. [Emphasis added] Entergy Initial Brief at p.25

NEC will speak more of Dr. Lester in Reply to the section of Entergy's Brief dealing with GHG emissions.

It is unreasonable for Entergy to introduce witnesses bent on discussing and promoting the nuclear aspects of Vermont Yankee operations; then to complain that interveners are preoccupied with the interveners' supposed aversion to nuclear aspects of the plant. NEC can find no intervener witness on the record in this proceeding that is discussing nuclear safety.
NEC agrees that Entergy is correct in its assertion that Board must "decide the issues on the record evidence" with the added advice that the Board may also consult information of which it has taken official notice.

NEC disagrees utterly with Entergy's second sentence assertion, that evidence strongly supports granting a new CPG. *Entergy Initial Brief at 1* NEC has no argument with the notion that Entergy has provided a great deal of evidence, both testimony and evidence. However, the Board must not allow itself to be led, into Entergy's apparent confusion between the sheer volume and the probative quality of evidence. The long standing nature of this apparent confusion on Entergy's part leads NEC to surmise that it may be deliberate. As NEC said regarding a discovery dispute with Entergy in VPSB Docket 6812, 'Entergy heaps up mountains of chaff and proudly points to it as if it were grain.' The Board has both the discernment and the discretion to fairly assign value and weight to the evidence on which it must rely. NEC believes that on balance, when examined by the Board for credibility, probative value, and materiality, the evidence actually strongly supports denying a new CPG and thus prohibiting the VY Station from continuing to operate beyond 2012 and until 2032 or, given Entergy's surprise "Second Amended Petition of August 27th" beyond 2012 and until the end of 2014.

Entergy's Brief next proceeds to advertise that the Nuclear Regulatory Commission ("NRC") has granted Entergy VY an extended federal license. *Entergy Initial Brief at 1* This may be nice for the company but it is irrelevant and immaterial to this proceeding. The NRC regulates nuclear safety which this Board does not. The federal license only grants NRC permission to operate by certifying that the licensee is capable and expected to operate the nuclear power plant in a manner protective of public health and safety.
On the other hand, in discussing its newly adopted regulations governing license renewal, the NRC noted that the final decision regarding continued operation depends on other-than-NRC decision-makers.

“[a]fter the NRC makes its decision based on the safety and environmental considerations, the final decision on whether or not to continue operating the nuclear plant will be made by the utility, State, and Federal (non-NRC) decision makers.”


Similarly, upon the NRC Commission's completion of its review of Entergy Vermont Yankee's License Renewal Application, NRC issued a press release that began,

The Nuclear Regulatory Commission has voted to conclude the legal proceeding regarding renewal of the operating license for the Vermont Yankee Nuclear Power Station near Brattleboro, Vt., for an additional 20 years. The NRC staff expects to issue the renewed license soon; the renewed license will expire March 21, 2032.

“This is the final step in the NRC’s detailed technical and legal process of examining whether it’s appropriate to issue a renewed license,” said NRC Chairman Gregory B. Jaczko. “Since there are other approval processes outside the NRC, we’ll continue to ensure Vermont Yankee is meeting the appropriate public health and safety standards regardless of the reactor’s ultimate status.” [Emphasis added]

NRC News – No. 11-041, March 10, 2011, ML 110691224

NRC Staff's most recently published Practice and Procedures Digest, NUREG–0386, #16, September 2010, still contains the following 1978 Atomic Licensing Appeals Board ruling and no note that it has been superseded,

A state or political subdivision thereof may not substantially obstruct or delay conditions imposed upon a plant’s operating license by the NRC pursuant to its NEPA responsibilities, as such actions would be preempted by federal law. However, a state may refuse to authorize construction of a nuclear power plant on environmental or other grounds and may prevent or halt operation of an already built plant for some valid reason under state law. [Emphasis added]

Consolidated Edison Co. (Indian Point Nuclear Generating Unit 2), ALAB-453, 7 NRC 31, 34-35 (1978).
Entergy has consistently asserted throughout this proceeding that investigation of any plant component or procedure is preempted because the entirety of plant operations is under the sole jurisdiction of NRC. In fact, it is an open question as to who does regulate the non-safety aspects, never mind, non-nuclear aspects of nuclear power plant operation. In New England Coalition's experience, the NRC will not inspect, monitor, or regulate in any way an increasing number of plant components that the agency is newly designating as, "not-safety related". Here, for example, is an excerpt of an NRC denial of an NEC petition to examine reactor feedwater system,

In your petition, you requested a root-cause analysis/extent-of-condition review of the [reactor] feedwater piping system at Vermont Yankee. This is not required by regulation. The original leak was on non-safety related piping, and therefore, 10 CFR Part 50 Appendix B Criterion XVI, "Corrective Action" does not apply.
Letter-Theodore R. Quay, Deputy Director Division of Policy and Rulemaking Office of Nuclear Reactor Regulation, U.S.NRC to Raymond Shadis, February 2, 2011, ADAMS Accession Number ML110420347

Entergy then states,

For as long as it operates, the VY Station will provide near-zero emissions power to the region, employ workers, and help improve the reliability of the electric system. Entergy Initial Brief at 1

It is reasonable to deduce, upon Entergy's August, 27, 2013 Notice that Vermont Yankee will be closing in the last quarter of 2014 and that it now seeks a CPG to operate for a additional (nominal) year instead of twenty years, that the overall benefits it has claimed in this docket, will be reduced proportionally, in other words, by c. 95 %.

Thus, in the global scheme of GHG reduction, as described by Entergy's witness Dr. Lester, Vermont Yankee's already miniscule contribution to global (or even regional) reduction becomes over the timeframe Dr. Lester contemplated, indiscernible.
Any contribution to grid reliability, small under the 20-year scheme, is likewise trivialized. Vermont Yankee's contribution to well-paid long-term employment is also truncated and its (nominally) 300 Vermont resident short-term employees should be viewed against the background of 298, 273 employed Vermonters (1st ¼ 2013) [Vt. Dept. of Labor Economic & Labor Market Information](http://www.vtlmi.info/indareanaics.cfm?areatype=01)

Entergy also states further,

The aesthetic impact of the VY Station is largely the same whether or not the VY Station continues operating, and speculation regarding an adverse impact of the plant’s thermal discharge on Connecticut River biota can be studied and (necessary) regulated by the Vermont Agency of Natural Resources (“ANR”).

Entergy Initial Brief at 1,2

Entergy ignores that the Quechee Lakes analysis requires the Court to determine whether that adverse effect is "undue." Quechee Lakes, Permit Nos. 3W041 1 -EB and 3W0439-EB, at 19. And whether aesthetic impact is undue may rely on the answer any one of the following three questions in the affirmative:

(1) does the project violate a clear, written community standard intended to preserve the aesthetics or scenic, natural beauty of the area;

(2) does the project offend the sensibilities of the average person;

and

(3) has the applicant failed to take generally available mitigating steps that a reasonable person would take to improve the harmony of the proposed project with its surroundings.”

In re: Appeal of Times and Seasons, LLC and Benoit, 2008 VT 7,1 8 (citing In re McShinsky, 153 Vt. at 592 ).

Further, Entergy does not consider that the perception of the average person living near Vermont Yankee, traveling or even commuting New Hampshire highways on the opposite shore of the Connecticut river, hiking scenic federal or state managed trails high above the river, or engaged in recreation on the river may have changed their
perceptions regarding rural waterfront industrial sites, even as society's relationship with the environment and the 'great outdoors' has changed. Vermont Yankee was, after all, sited and constructed before much of the federal environmental and conservation legislation now in place was enacted. It preceded the environmental movement and the organic farming and gardening movement and the whole foods movement and the huge recent wave of popularity for environmentally engaged activities such as hiking, camping, kayaking, nature photography, bird-watching, fly-fishing, and more. Entergy will have to agree that all of these betoken an enhanced appreciation the natural landscape and thus an altered aesthetic perception of the industrial occlusion. NEC would suggest that the new perception of the average person is a negative one. Entergy has provided no evidence or argument to the contrary. Entergy's argument that extending the pain is not increasing or changing the pain in total simply does not meet the 'straight-face' test.

Moreover, NEC avers that Entergy, itself, has served to alter the average person's perception of the Vermont Yankee, not just the company in abstract, but the entire industrial complex, by its utter failure to engage, and convince of its sincerity, large swathes of the population affected by its operations. The company's widely-reported disingenuous behavior before the people's Legislature and Vermont regulators, its high-handed manner before this Board ("bullying and corrosive" and "willing to deceive", as a Board Order in Docket 6812 had it) in submitting petitions that are prefaced with denigrations of the Board's responsibility and authority; accompanied by insinuations of the Board's failures of integrity; and topped by barely-veiled threats of federal appeal, have surely served to color the public's perception of
the plant more than the varying green shades of industrial enamel with which Entergy has swathed VY’s structures. What does the average person see when they see Vermont Yankee's green-on-green slab-sided, metal-sheathed buildings? NEC avers that it is more than just design; it is symbol. And the aesthetics of any design are informed by its meaning as symbol. Thus, rude or offensive graffiti symbols take on aesthetic and emotional response that obviates any consideration of the pretty colors. The fact that Vermont Yankee, with all of its symbolic and aesthetic perception baggage, noticeably and notoriously protrudes above the idyllic landscape of the western Connecticut River shore, should be sufficient for this Board to find that the Entergy Vermont Yankee CPG petition (as amended or otherwise) does not meet the aesthetics criteria under 30 V.S.A. § 248(b).

By analogy, in the famous historical Ford Pinto 'exploding gas tank' litigation of the 1960's, Ford Motor Company was shown to be aware that the sharp rear differential configuration would in the event of a rear collision present the risk of puncturing the gas tank, because the company had modified the Pinto's design, subsequent to the first complaints, to include a metal-plate rear differential-shield. The courts took this modification as an admission that the sharp rear-end casting in the Pinto was known by Ford to be a hazard from a time before litigation began. In similar fashion, in VPSB Docket 7082, Entergy agreed, at great expense, to add to its riverside Independent Spent Fuel Storage Installation ("ISFSI") a storage-cask-high visual barrier fence "for aesthetic purposes."

1. Entergy VY has agreed to mitigate the potential aesthetic impact by building a 20-foot high, dark green fence that will completely screen the ISFSI from the Connecticut River and New Hampshire shoreline. Id. at 5, 12, 30; tr. 1/30/06 at 172 (Vissering); exh. Entergy-JEV-2 (simulation of the Project with wall).
The proposed fence will appear similar in scale and color to the existing warehouse behind the planned Overpack Storage Facility. Vissering pf. at 5–6, 12, 17, 18, 30; tr. 1/30/06 at 142–45, 172 (Vissering); exh. Entergy-JEV-2.

...NEC has argued that the placement of containers of "searing hot radioactive waste" will have an adverse impact on aesthetics. This impact will not only be a "mental impact" on residents of the area, the casks of spent fuel will also be visible from the New Hampshire side of the Connecticut River, even with the presence of the proposed fence.\(^1\) Furthermore, according to NEC, not only will it offend the sensibilities of many of the region's citizens, Entergy VY's failure to build a berm is a failure to perform a reasonable mitigation measure to lessen the adverse impact that the project creates.

We are not convinced by NEC's arguments. There is substantial evidence to indicate that the spent fuel storage facility will not create an undue adverse effect on aesthetics. Not only will the proposed Project be compatible with its industrial surroundings, the colors and the materials with which it is comprised will be consistent with and suitable for the surrounding area. The Project does not violate principles articulated in the Windham County Regional Plan, the Vernon Town Plan or the Master Plan for the Town of Hinsdale. Because it is located in an industrial site and will be visible only from the Connecticut River and the New Hampshire shore, the Project should not offend the sensibilities of the average person.

In addition, Entergy VY has agreed to mitigate potential aesthetic impacts by constructing a 20-foot-tall fence. It is proposed to be dark green and should appear similar in scale and color to other existing buildings at Vermont Yankee. The fence should screen nearly the entire view of the spent fuel casks from the Connecticut River and New Hampshire shore.

We are not convinced, however, that the visual barrier is necessary. Vermont Yankee is an industrial site, and from an aesthetic perspective, the addition of a limited number of concrete and metal containers results in little change to the overall aesthetics of the site. We have accepted the proposal to include a fence, not because we consider it a necessary mitigation step here, but because it came as part of the memorandum of understanding accompanying this proposal. For these reasons, we conclude that the Project will cause no undue adverse aesthetic impacts.

VPSB 7082, Final Order pp.54-55

NEC takes the Vermont Yankee's voluntary construction (the Board does not think it necessary) of a visual barrier wall as a tacit admission (analogous to Ford's fix of the Pinto differential) that Entergy is quite aware of the visual, aesthetic implications of outdoor, riverbank, open-to-view waste storage, even as they are aware that the

\(^1\) NEC Brief at 22-23.
perception of many people, perhaps even the average person, finds the continued visual image of Vermont Yankee repugnant.

Further NEC contends that Entergy's public statements regarding its intent and interpretation of the NRC-approved option of "Saf-Stor", decommissioning delayed for up to sixty-years, is leaving at least some area residents and affected people with the unnerving image of mothballed, hulking, leaking industrial structures as a kind of bequest, a negative legacy to the next three generations of Vermonters. Unlike the spent fuel dry cask case (Docket 7082), Entergy has offered nothing to mitigate this unsavory prospect and perception.

Entergy proceeds,

...speculation regarding an adverse impact of the plant's thermal discharge on Connecticut River biota can be studied and (if necessary) regulated by the Vermont Agency of Natural Resources ("ANR"). Entergy Initial Brief at 1, 2

This reasoning fails because it presumes that while quantification of harm to the river environment is in doubt the company may proceed to continue thermal pollution of the river until harm is proven and quantified; or not. Thus the benefit of the doubt goes to Entergy's avoided cost of closed cycle cooling and not to the aquatic community of biota. Thus Board should not allow Entergy to slide past just because this is a difficult issue. If it is capable of resolution as Entergy's statement suggests, therefore, failing immediate denial of a CPG, the Board should allow a reasonable period of time for CRWC, ANR and Entergy to resolve their differences before issuing even a conditioned CPG. Failing that, as a matter of simple conservative stewardship of natural resources,

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2. As a measure of this sentiment, NEC notes that according to local news sources the Vermont State Nuclear Advisory Panel on October 23, 2013 voted a resolution favoring the prompt (Decon) decommissioning option.
the benefit of the doubt must go to the aquatic community of biota and not Entergy's bottom line. Then the Board should deny a CPG or require as a condition of a new CPG the cessation of once-through-cooling.

Entergy says,

No party has connected the issue of non-radiological decommissioning to the question of continued operation, and in any event the VY Station’s decommissioning finances are in good order.

Entergy Initial Brief at 2

It is true that there was much discussion of decommissioning in this docket and little of it touched on site restoration or "greenfielding." NEC believes that Entergy's remark bears little relevance to the state's legitimate interest in the timing and quality of decommissioning; which NEC will discuss below.

That fact the Entergy has by its "Second Amended Petition" shifted decommissioning choices from the 2032 Time frame to the 2014 has heightened the need to talk about decommissioning choices now. According to the terms of the Docket 6545 MOU and Order (if un-amended or un-supplemented by an Order in Docket 7862) Entergy may not feel itself obliged to come before, or even consult with, the Vermont Public Service Board on any post-operation activities- including decommissioning.

The fact that the Board has chosen to have interveners incorporate comment on the Second Amended Petition with their Reply Briefs necessitates NEC drawing on material that

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2013/10/29 -This paragraph has been amended for purposes of clarity only. In the original MsWord submission, this paragraph opened reading as follows:

That fact the Entergy has by its "Second Amended Petition" shifted decommissioning choices from the 2032, as according to the terms of the Docket 6545 MOU and Order, if un-amended or un-supplemented by an Order in Docket 7862, Entergy may not feel itself obliged to come before or even consult with the Vermont Public Service Board on any post-operation activities- including decommissioning. Time frame to the 2014 has heightened the need to talk about decommissioning choices now.
is not in the record, though NEC will limit that as much as possible to Entergy statements or official documents of which the Board may take official notice..

Decommissioning concerns have been inextricably interwoven in Entergy CPG dockets beginning with the very first and perhaps most seminal, Docket 6545, which at pages 31 - 35 makes it very clear that all costs and risks associated with decommissioning are transferred to ENVY and Entergy. [Emphasis Added]

“ENVY agrees to assume all liability associated with decommissioning Vermont Yankee.” (Docket 6545, Finding of Fact 24)

“In the case of a premature shutdown at a time when the decommissioning fund is not fully funded, Vermont Yankee could be placed in SAFESTOR to allow the decommissioning trust fund to increase in value until sufficient funds exist.” (Dkt 6545, FF 31.) [Emphasis Added]

“...the financial assurances that Entergy has agreed to provide ENVY will be sufficient to ensure that ENVY has the resources it needs to operate and to eventually close and decommission Vermont Yankee. In addition, commitments and obligations from Entergy’s parent corporation now back ... its proposed Vermont subsidiaries.” (Dkt 6545, p 151.) Even the discussion in the Docket 6545 Findings of Fact focused on Safstor as acceptable only in the case of "premature" shutdown (Dkt 6545, FF 31.)

And then "Vermont Yankee could be placed in SAFESTOR to allow the decommissioning trust fund to increase in value [only] until sufficient funds exist.”

It is unclear at this point if Entergy VY, whether it closes now or in 2032 or 2014, will ever have to appear before the VPSB, or for that matter, any Vermont state regulatory body ever again. Chopping the proposed period of extended operation really appears to narrow that
possibility and proportionally heightens the need for the VPSB and the parties to 'get it right' this time.

Discussions prior to Entergy's surprise shutdown announcement largely focused, when discussing SafStor, on waiting twenty years before beginning final decommissioning. Entergy's public statements, at the time the closing was announced, focused on the maximum time allowable under the federal Safstor scheme – 60 years. This was alarming because NRC offers no formal hearing process on decommissioning until the licensee submits a License Termination Plan, not due until up to two years before radiological decommissioning is completed. And Site Restoration or greenfielding cannot take place, nor under NRC regulation can funds for Site Restoration be released, until radiological decommissioning is completed.

The following NRC Atomic Safety and Licensing Board decisions and one NRC Policy Statement delineate NRC policy and regulation on some pertinent expectations and choices in decommissioning:

The statutory frustration principle permits the NRC to disregard the corporate form and impose liability on the parent corporation shareholder for the obligations of its subsidiary. And, this is true whether or not its intent was to avoid the statutory prohibition of Section 184 for "intention is not controlling when the fiction of corporate entity defeats a legislative purpose."

The Commission’s regulations regarding decommissioning funding are intended to minimize administrative effort and provide reasonable assurance that funds will be available to carry out decommissioning in a manner that protects public health and safety. Consolidated Edison Co., Entergy Nuclear Indian Point 2, LLC, and Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Units 1 & 2), CLI-01-19, 54 NRC 109, 143 (2001); citing Final Rule: General Design Requirements for Decommissioning Nuclear Facilities, 53 Fed. Reg. 24,018, 24,030 (June 27, 1988).
The generic formulas set out in 10 C.F.R. § 50.75(c) fulfill the dual purpose of the rule.
NRC regulations regarding decommissioning funding do not require the inclusion of costs related to nonradioactive structures or materials beyond those necessary to terminate an NRC license.

The Commission does not have statutory authority to determine the recipient of excess decommissioning funds.

In addition, once the funds are in the decommissioning trust, withdrawals are limited by 10 C.F.R. § 50.82, so that “non-decommissioning” funds (as defined by the NRC) could be spent after the NRC-defined “decommissioning” work had been finished or committed.

In decommissioning cases there is a presumption that the licensee’s choice of decommissioning alternatives is reasonable. It is, therefore, petitioners’ burden to show “extraordinary circumstances” rebutting this presumption.

Prior to 1996, hearings in decommissioning proceedings were held relatively early in the process and the issues litigated related to whether the agency should approve the licensee’s decommissioning plan. The hearings were held pursuant to the formal hearing requirements in 10 C.F.R. Part 2, Subpart G. This is no longer the case. The only predictable Staff action during decommissioning that will trigger the opportunity for a hearing will be on whether to approve the licensee’s termination plan, which will be submitted at the end of the project, not at the beginning. It is contemplated that a termination plan will be much simpler than the decommissioning plan because it will not include a dismantlement plan and may be as simple as a final site survey plan.


A move toward a more prompt form of decommissioning would enable communities, affected private enterprise, and the state to engage in more effective regional planning and development sooner. It would return unhampered use and enjoyment of the Connecticut
River to Vermont residents sooner, and without the lurking presence of abandoned industrial structures.

With respect to fuel management, it is NEC's position that the imminence of shutdown should prompt the Board together with the parties to explore the possibility and practicality of an alternative spent fuel storage installation site, for example, a local gravel pit well above the Connecticut River flood plain. NEC avers that there is precedent for such an exploration at the Prairie Island NPP, as ordered by the Goodhue County (Minnesota) Board of Environmental Protection.

Entergy includes a good deal of decommissioning testimony, in particular of Mr. Cloutier, in its Initial Brief. NEC agrees with a many of Me. Cloutier's assessments; in particular regarding funds available to begin radiological decommissioning promptly

D. Federal Preemption in Decommissioning

1. Timing of Decommissioning

The U.S. Nuclear regulatory Commission ("NRC") allows licensees a choice of equally acceptable decommissioning regimens and sets a timetable for approved activities within those options. NRC is neutral about whether the licensee chooses to do a prompt decommissioning (DECON) or a delayed decommissioning (Safstor), thus if a state regular attempts to influence the choice of options it cannot be said to be interfering in the federal regulatory scheme. NEC could find no precedent for a state mandating the timing of decommissioning.

The Board has already ordered that Safstor is acceptable only in certain circumstances, namely premature shutdown and lack of funds to do decommissioning. (see, Docket 6545 – Findings and Order, above ). Entergy already has funds, apart from fuel
storage and site restoration, which are in any case separated from decommissioning in the MOU and are sufficient to complete radiological decommissioning.

There are sufficient reasons to back off from 60 years of maintaining, monitoring, and regulating an abandon site that are not concerned with radiological safety, but include areas traditionally regulated by the states.

2. Quality of Decommissioning

New England Coalition believes it would be advantageous to enter into the record great swathes of relevant and potentially material testimony regarding decommissioning from other Dockets including but not limited to the following example of testimony regarding non-radiological environmental quality from Docket 7440.

Here Mr. Jay Thayer, Entergy executive, is cross-examined on the decommissioning practice of rubblization, burying concrete rubble (potentially hundreds of tons) onsite. Mr. Thayer commits to no rubble burial at Vermont Yankee.

Examination by John Cotter, VDPS

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17 Q. I want to just touch base, and then I'll turn
18 it over to Mr. Burke, about the concept of rubblization.
19 In your rebuttal you agreed with Mr. Vanags that
20 rubblization would not be used as part of the
21 decommissioning process at the site; is that correct?
22 A. I did. Yes.
23 Q. And yesterday, and I think you were here, Mr.
24 Cloutier was on the stand, and he actually discussed the
25 fact that there are two types of rubblization. One was

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1 where clean concrete was used as fill, and the other was
2 where you could take some contaminated concrete and blend
3 it with some other clean material presumably to get the
4 level of contamination down, and use that combination as a
5 fill. Were you here for that item?
6 A. I was.
7 Q. When you agreed with Mr. Vanags that
rubblization would not be used, which of those two or both, were you agreeing to not use?

A. I was agreeing to not use the -- or I was in my mind, it was the rubblization of clean concrete. I've done decommissioning work. I spent about 10 years in the decommissioning business. And I've never believed that it was a practical alternative to blend contaminated material with clean material to produce an acceptable result. That is, from a practitioner standpoint, that's not an acceptable practice.

So I was focused on the use of clean concrete as rubblized into small pieces, using that as back fill, and that has become a practice which is not used in nuclear decommissioning.

Q. Okay. So just to be clear, you were agreeing to no rubblization of any kind?

A. I guess you could say that, yes.

Should the Board grant Entergy's Second Amended Petition, NEC believes that the CPG Order would be greatly improved in terms of weighing and addressing the interests of Vermonters if a condition memorializing Entergy's 'commitment' of no rubblization through Mr. Thayer's testimony, and followed by an absolute prohibition of the practice, were attached.

That particular path to addressing this particular environmental concern cannot be taken short of introducing Mr. Thayer's testimony into the record. And so it is with a wealth of other information that was not introduced to the 'first' amended petition but is applicable to review of the Second Amended Petition.

Entergy's public statements, at the time the closing was announced, focused on the maximum time allowable under the federal Safstor scheme -- 60 years. This was alarming because most previous discussions had largely focused on waiting twenty years before beginning final decommissioning. Even the discussion in the Docket 6545 Findings of Fact focused on Safstor as acceptable only in the case of "premature" shutdown (Dkt 6545, FF 31.) And then
"Vermont Yankee could be placed in SAFESTOR to allow the decommissioning trust fund to increase in value [only] until **sufficient** funds exist."

Both TLG and the NRC estimate that, together with NRC imposed parent guarantees, minimum sufficient funds exist now to do the radiological decommissioning of Vermont Yankee, which includes demolition and removal of plant buildings and structures, but not fuel storage and site restoration.

Again, Mr. Jay Thayer, Entergy executive:

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20 BY MR. COTTER:
21 Q. Could you please turn to -- it's really the very bottom of page two and the top of page three of the Memorandum of Understanding. And I should note Mr. Miller's caution earlier that there were some changes made by the Board to part of the Memorandum of Understanding, and it is this particular section. But the part I'm interested in, I believe, was unaffected by the Board's order. And would you agree with me that beginning on the bottom of page two, the phrase "completion of decommissioning" is defined.
23 A. I see that. Yes.
24 Q. Would you also agree with me that that definition of completion of decommissioning **excludes** spent fuel management and site restoration? [Emphasis Added]
26 A. Yes.
27 Q. Thank you. Would you agree with me that --
29 A. Yes, I did.
31 Q. Do you agree with those two witnesses that the plant can be decommissioned, the physical structure, can be decommissioned without the Department of Energy beginning acceptance of spent fuel as long as all the spent fuel is in the dry storage facility away from the building?
35 A. I would agree with that, yes.

Transcript - Docket 744o- May 20, 2009 – Vol.1

Entergy however has assured the Board that spent fuel cask and ISFSI construction
funds would be drawn on, or recovered from, the Department of Energy and not withdrawn from the decommissioning fund.

Again, Mr. Jay Thayer, Entergy executive:

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Q. And subsequently on April 1, 2009, an additional filing was made with the NRC that no longer contains that 60 million dollar [parental] pledge; correct?
A. You're correct.
Q. And was something used as a substitute for that 60 million dollars?
A. Yes, it was.
Q. And what was that?
A. We look at all of our mechanisms to provide funding or to provide funds to offset decommissioning and spent fuel management costs. And as it turns out, the status of the lawsuit with the Department of Energy for damages for breach of the standard contract or spent fuel, have matured to the point where we have established that they are liable in our case, in Entergy Vermont Yankee's case, there is liability. Damages are being recovered by other companies, and in the spring of this year, and I don't have the exact date, Entergy filed its damage claim with the Department of Energy to recover costs associated with storing and managing spent fuel. When we look forward into the decommissioning period, we said that would be -- it would be prudent for us now that the status of that lawsuit has matured, to be able to account for those funds in the future during the remaining operating period, and during the decommissioning period, because of that assignment of liability, and the practice of recovering funds -- damages, financial damages from the DOE has now matured.

Non-radiological issues are typified in the foregoing discussion on "rubbllization" of concrete. However, even regulation of radiological components of decommissioning fall to the state's authority when NRC declares that the licensee has successfully fulfilled the conditions of its License Termination Plan; which marks the end of NRC oversight. Thus
Massachusetts and Maine have radiological site release standards 2 ½ times more stringent than those of NRC.

**The decommissioning fund is presently adequate to support decommissioning through the radiological decommissioning.**

Radiological decommissioning, as defined by Entergy and Mr. Thayer:

7  Q. Would you also agree with me that that
definition of completion of decommissioning excludes spent
fuel management and site restoration? [Emphasis Added]

8  A. Yes.

9  Q. Thank you. Would you agree with me that --
never mind, I'll withdraw that. You heard the testimony
of Mr. Cloutier and Mr. Hoffman; correct, you were here?

10 A. Yes, I did.

11 Q. Do you agree with those two witnesses that the
plant can be decommissioned, the physical structure, can
be decommissioned without the Department of Energy
beginning acceptance of spent fuel as long as all the
spent fuel is in the dry storage facility away from the
building?

12 A. I would agree with that, yes.

Transcript - Docket 7440- May 20, 2009 – Vol.1

Both NRC and TLG report adequate funding is on hand for prompt radiological decommissioning if the fund continues to grow at historic rates (in excess of 5% -

**Cost Summary**

**SAFSTOR Decommissioning Scenarios**

(Thousands of $2011)

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>1</th>
<th>2</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cessation of Operations (year)</td>
<td>2012</td>
<td>2012</td>
<td>2032</td>
<td>2032</td>
</tr>
<tr>
<td>Spent Fuel Off Site (year)</td>
<td>2045</td>
<td>2082</td>
<td>2060</td>
<td>2082</td>
</tr>
<tr>
<td>Cost Element</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decontamination</td>
<td>16,969</td>
<td>16,969</td>
<td>16,969</td>
<td>16,969</td>
</tr>
<tr>
<td>Removal</td>
<td>100,554</td>
<td>100,949</td>
<td>100,528</td>
<td>100,639</td>
</tr>
<tr>
<td>Packaging</td>
<td>14,959</td>
<td>17,570</td>
<td>14,958</td>
<td>14,962</td>
</tr>
<tr>
<td>Transportation</td>
<td>18,950</td>
<td>18,954</td>
<td>18,949</td>
<td>18,953</td>
</tr>
</tbody>
</table>
Waste Disposal 42,952 42,968 43,703 43,721  
Off-site Waste Processing 33,441 33,441 33,441 33,441  
Program Management [1] 460,638 560,731 442,942 502,281  
Corporate A&G 46,183 50,606 45,714 47,775  
ISFSI-Related [2] 162,561 185,578 129,352 164,803  
Insurance and Regulatory Fees 41,088 47,186 40,929 41,632  
Energy 16,219 16,219 16,219 16,219  
Characterization and Licensing Surveys 19,536 19,536 19,536 19,536  
Property Taxes 460 533 460 460  
Miscellaneous Equipment 19,769 19,769 19,769 19,769  
Site O&M 14,591 16,929 14,591 14,591  
Spent Fuel Pool Isolation 11,822 11,822 11,822 11,822  

Total [3] 1,020,692 1,159,759 969,883 1,067,573

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Scenarios 1</th>
<th>Scenarios 2</th>
<th>Scenarios 5</th>
<th>Scenarios 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>License Termination</td>
<td>645,773</td>
<td>610,278</td>
<td>653,115</td>
<td>622,571</td>
</tr>
<tr>
<td>Site Restoration</td>
<td>47,792</td>
<td>46,502</td>
<td>47,792</td>
<td>47,792</td>
</tr>
<tr>
<td>Total</td>
<td>1,020,692</td>
<td>1,159,759</td>
<td>969,883</td>
<td>1,067,573</td>
</tr>
</tbody>
</table>

Exhibit EN-TLG-2

Entergy Nuclear Operations, Inc.
Status of Decommissioning Funding Vermont Yankee
For Year Ending December 31, 2012 - 10 CFR 50.75(f)(1)

Plant Name: Vermont Yankee Nuclear Power Station

1. Minimum Financial Assurance (MFA) estimated per 10 CFR 50.75(b) and (c) (2012$)
   $620.84 million [Note]

2. Decommissioning Trust Fund Total as of 12/31/12
   $543.26 million

3. A schedule of the annual amounts remaining to be collected
   None.

4. Assumptions used in determining rates of escalation in
decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections
   2% annual real rate of return per 10 CFR 50.75(e)(1)(i)
5. Any contracts upon which the licensee is relying pursuant to 10 CFR 50.75(e)(1)(v) None

6. Modifications occurring to a licensee's current method of providing financial assurance since the last submitted report None

7. Any material changes to trust agreements None

Note: Calculation of the NRC Minimum Amount is provided in Attachment 6.

Entergy ENOC – 00007 March 27, 2013

March 18, 2013

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission Washington DC
20555-0001

Subject: Entergy Corporation Parent — Guarantee of Funds for Decommissioning: Letter from Chief Financial Officer to Demonstrate Financial Assurance

I am the chief financial officer of Entergy Corporation, 639 Loyola Avenue, New Orleans, LA 70113, a corporation. This letter is in support of this firm's use of the financial test to demonstrate financial assurance, as specified in Title 10, Part 50, of the Code of Federal Regulations (10 CFR Part 50).

This firm guarantees, through the parent company guarantee submitted to demonstrate compliance under 10 CFR Part 50, the decommissioning of the following facilities owned or operated by subsidiaries of this firm. The current cost estimate or certified amount for decommissioning, and the amount being guaranteed, are shown for each facility:

<table>
<thead>
<tr>
<th>Name of Facility</th>
<th>Location of Facility</th>
<th>Current Cost Estimate</th>
<th>Amount Being Guaranteed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vermont Yankee Nuclear Power Station</td>
<td>Vernon, VT</td>
<td>$620,842,653'</td>
<td>$40,000,000</td>
</tr>
</tbody>
</table>

Through April 30, 2012, the VY Stations decommissioning-trust funds grew at an after-tax, annual rate of 5.42% from the plant's acquisition by Entergy VY on July 31, 2002. Cloutier pf. at 12:3-5
As of March 31, 2013, the trusts' value was approximately $570 million. Tr. 6/20/13, Vol. II, at 29:3-8, 42:9-10 (Pecquet).

Thus, between December 31, 2012 and March 31, 2013, the decommissioning trust fund grew from $543.26 Million to approximately $570 million according to the preceding figures.

If the fund continues to grow at historic rates between now and the end of 2014, the requisite $620 million should be attainable before any significant decommissioning activities can begin in 2015. As decommissioning trust fund money is metered out by NRC, the balance will remain invested. NEC estimates that over a nominal 7 year decommissioning period sufficient funds will accrue to begin site restoration.

The Board should require Entergy to provide a certified professional analysis of how long it would take, with and without parental guarantees, to accrue minimum decommissioning funds for DECON radiological decommissioning starting in the first quarter of 2015.

Entergy VY intends to continue pursuing its damages claims against the DOE as they arise, at appropriate intervals of time, to obtain reimbursement for all costs related to the failure of the DOE to remove spent fuel from the VY Station. Id. at 20:11-13. The Board should accordingly conclude that costs incurred for SNF management will be recovered from the Federal Government. Entergy Initial Brief at 27

NEC Concurs.

**GOVERNING STANDARDS**

Entergy has correctly listed the governing standards as follows:

30 V.S.A. § 231(a) provides in relevant part:

A person, partnership, unincorporated association, or previously
incorporated association, which desires to own or operate a business over which the public service board has jurisdiction under the provisions of this chapter shall first petition the board to determine whether the operation of such business will promote the general good of the state. ... If the board finds that the operation of such business will promote the general good of the state, it shall give such person, partnership, unincorporated association, or previously incorporated association a certificate of public good specifying the business and territory to be served by such petitioners. For good cause, the board may amend or revoke any certificate awarded under the provisions of this section.

This provision applies here because the ownership and operation of an electricity generating facility within Vermont is within the Board’s jurisdiction under 30 V.S.A. § 203(1), and because Entergy VY’s original CPG, granted by the Board in 2002, was to expire on March 21, 2012 (subject to the timely-renewal rule of 3 V.S.A. § 814(b)). See Docket 6545, Investigation into General Order No. 45 Notice filed by Vt. Yankee Nuclear Power Corp re: proposed sale of VY Station to Entergy VY, and related transactions, CPG issued 6/13/02.

Accordingly, in order to continue operating beyond March 21, 2012, Entergy VY must apply for a CPG under 30 V.S.A. § 231(a). Entergy VY did so in Docket 7440, and amended its application at the Board’s direction, initiating this docket, Docket 7862.

The Board has prescribed several factors to inform the “general good of the state” standard set forth in 30 V.S.A. § 231(a):

1. Technical expertise;
2. Adequate service;
3. Facility maintenance;
4. Balance between customers and shareholders;
5. Financial stability;
6. Company’s ability to obtain finance;
7. Regulatory environment; and
8. Relationship with customers.
E.g., Docket 6039, *Pet. of New England Power Co.*, Order of 6/29/98 at 17. The Board has further described these factors as including “assessments of technical and managerial competence, of financial strength and soundness, and of matters related to reputation and conduct (often stated as whether the owner, manager or operator will be a fair partner for Vermont).”


**Reliability, Availability, Viability.**

NEC has provided testimony as to why it believes the Vermont Yankee enterprise is not viable, will not likely be available as an electric source of choice with reliability in the long term.

Contrary to the factors above and contrary to the Board's expectations expressed the 6545 Order Entergy has not proven to be a better operator than the previous owners and has run the business and the facility into the ground in less than 10 years (Entergy VY not showing a profit since 2011).

Based on a consideration of Entergy's utter failure to match any of the 30 V.S.A. § 231(a) factors: it should not be accorded another CPG.

If the Board does choose to issue a CPG for the remainder of 2013 and 2014, it should condition that CPG on Entergy's willingness to decommission promptly and to clean-up standards matching those of the other New England "Yankee" plants. Vermont people and the Vermont environment deserve no less.

New England Coalition herein respectfully subscribes to, endorses, and adopts the Reply Briefs of Conservation Law Foundation, Vermont Public Interest Research Group,
CONCLUSION

The Board should not grant Entergy VY's petition.

Edgecomb, Maine October 25, 2013

Respectfully submitted,
New England Coalition, Inc.
By its pro se representative,

_________________________

Raymond Shadis