

## NRR-PMDAPEm Resource

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**From:** Tim Judson [timj@nirs.org]  
**Sent:** Monday, April 27, 2015 5:00 PM  
**To:** Evans, Michele  
**Cc:** Jessica Azulay Azulay; Deb Katz; Chris (cevan@sover.net) Williams; paul@beyondnuclear.org; Mary Lampert (mary.lampert@comcast.net) (mary.lampert@comcast.net); Morgan, Nadiyah  
**Subject:** Re: Petitioners' Response to Proposed Directors Decision  
**Attachments:** Response\_ProposedDecision\_Fitz-Pilgrim-VY.pdf

Dear Ms. Evans,

Please accept the following corrected version of our response. The original contained an incorrect date.

Tim Judson  
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On Apr 27, 2015, at 4:55 PM, Tim Judson wrote:

Dear Ms. Evans,

Please accept the attached response from the petitioners to the proposed director's decision on the 2.206 petition for enforcement action on financial qualifications for the FitzPatrick, Pilgrim, and Vermont Yankee reactors.

Sincerely,

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<Response\_ProposedDecision\_Fitz-Pilgrim-VY.pdf>

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**From:** Tim Judson

**Created By:** timj@nirs.org

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**Recipients Received:**

**Alliance for a Green Economy, Citizens Awareness Network,  
Pilgrim Watch, Vermont Citizens Action Network**

April 27, 2015

Ms. Michele G. Evans  
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Dear Ms. Evans:

On behalf of the Alliance for a Green Economy (AGREE), Beyond Nuclear, Citizens Awareness Network (CAN), Nuclear Information and Resource Service (NIRS), and Pilgrim Watch (hereafter, "the Petitioners"), we submit the following response to the proposed director's decision transmitted to us on March 27, 2015. We find numerous material flaws in the decision:

1. It misrepresents some of the requested actions in our petition, and ignores some others entirely.
2. It contains no review of the substantial amount of evidence the Petitioners presented, including new and unreviewed information, in the petition, in the May 7, 2013 Petition Review Board meeting, and in six supplements to the petition submitted by the Petitioners.
3. It is based on a review of incomplete and immaterial information submitted by Entergy in response to a June 14, 2014 NRC request for voluntary information.
4. It contains no substantive analysis of the safety concerns and regulatory analysis presented by the Petitioners.
5. It fails to address other material information submitted by the Attorneys General of Massachusetts, New York, and Vermont in support of the review requested by the Petitioners.

For these reasons, we believe the proposed director's decision represents a flawed and incomplete analysis of the petition. In addition, it contradicts NRC's express interpretation of the financial qualifications regulation (50.33(f)), as articulated in a request for additional information (RAI) submitted to Vermont Yankee, on March 20, 2013. When viewed in context of the full documentary record, we believe the proposed director's decision constitutes a regulatory failure by NRC to protect the public health and safety and violates the agency's mandate under the Atomic Energy Act. Finally, it confirms a pattern of regulatory practice through which NRC has systematically failed to provide members of the public substantive relief through the 2.206 process, the only avenue available under the agency's regulations for the public to initiate enforcement action in response to violations. The Petitioners, therefore, object to the proposed director's decision.

## **Background**

Prior to NRC's March 20 RAI to Vermont Yankee, the Petitioners submitted a petition on March 18, 2013 for enforcement action against the licensees (collectively, Entergy) that own and operate the James A. FitzPatrick, Pilgrim, and Vermont Yankee nuclear reactors. The Petitioners met with the Petition Review Board on May 7, 2013, and NRC later informed us that the transcript for the proceeding would be incorporated as a supplement to the petition. The Petitioners submitted six additional supplements with additional requests, evidence, analysis, and emerging safety issues, dated: April 23, 2013 ("Supplement 1"); June 28, 2013 ("Supplement 2"); July 22, 2013 ("Supplement 3"); October 16, 2013 ("Supplement 4"); December 17, 2013 ("Supplement 5"); and October 15, 2014 ("Supplement 6").

NRC notified the Petitioners on August 7, 2013 via an acknowledgment letter that the petition and supplements were accepted for review, which would be completed "within a reasonable amount of time." A September 27, 2013 email message from petition manager Richard Guzman notified me that the agency would issue a decision by December 2013, and that Petitioners would continue to be notified "at least every 60 days of the status of your petition, or more frequently if any significant action occurs." The petitioners received no subsequent notifications of the petition review status or changes to the review schedule, except on January 10 and October 15, 2014, in response to status updates requested by Petitioners. On both occasions, Petitioners were notified that completion of the petition review would be delayed several months (June 2014 and March 2, 2015, respectively). In each case, NRC failed to complete its review by the date indicated, and the more than 18-month review period failed to fulfill the agency's commitment to "take action on your request within a reasonable amount of time."

Prior to the August 2013 acknowledgement letter, petitioners later learned, several related events occurred at NRC, documented in a November 14, 2013 letter to NRC Chairman Allison McFarlane sent by Senator Edward J. Markey and Senator Bernard Sanders. On June 5, 2013 -- one month after the May 7 PRB meeting, at which petitioners raised concerns about the impact of financial qualifications violations at the subject reactors on Entergy's other merchant reactors (Indian Point 2 and 3 and Palisades) -- NRC transmitted to Entergy draft RAIs for financial qualifications-related information on its merchant nuclear reactors. Following receipt of the draft RAIs, Entergy contacted NRC's office of Nuclear Reactor Regulation. The following week, senior representatives of Entergy and NRC met to discuss the matter. Afterward, NRC senior management prevented agency staff from issuing the RAIs, and directed them not to investigate the financial qualifications of licensees that are subject to increased oversight due to safety problems in the future.

On August 27, 2013, Entergy announced it would close the Vermont Yankee in late 2014. On December 2, 2013, New York State Attorney General Eric Schneiderman delivered a letter to NRC submitting new and unreviewed information in support of NRC's review of the Petition, and detailing the need for NRC to include an examination of "the financial and operational interrelationships" between the licensees and other

Entergy corporate entities, and “the assets, revenue streams, and obligations between and among” Entergy subsidiaries. On October 20, 2014, the Massachusetts Attorney General’s office submitted a letter to NRC supporting the Petitioners’ requests, the NY Attorney General’s information requests, introducing new and unreviewed information, and proposing additional information requests following up on Entergy’s response to the June 2014 voluntary request for information. On January 27, 2015, the Vermont Attorney General’s office and the Vermont Department of Public Service detailing ongoing concerns about Entergy’s financial qualifications at the now-closed Vermont Yankee reactor under decommissioning, due to the company’s expressed intent to pay for nearly all expenses going forward from the decommissioning trust fund (DTF), including for activities for which NRC regulations do not permit DTF funds to be used.

### **Proposed Director's Decision Misrepresents and Ignores Requested Actions**

The proposed decision does not accurately represent the actions Petitioners requested, and it fails to address additional requests submitted in supplements to the petition accepted by NRC. Of primary and most pertinent note, the proposed decision misrepresents and improperly circumscribes the first request made in the March 18 petition: the immediate suspension of the licenses for FitzPatrick and Vermont Yankee.

The proposed director’s decision simply cites the PRB’s decision to deny the immediate suspension or revocation of the operating licenses, and ignores the need to investigate Entergy’s compliance with the financial qualifications regulation on which that request, and indeed the entire petition, is based. Petitioners made our intent in this matter explicit on page 3 of the petition, which the proposed director’s decision fails to recognize:

Should Entergy challenge suspension of the FitzPatrick and Vermont Yankee licenses or petition to reinstate them, NRC must conduct an investigation of Entergy’s financial qualifications encompassing the same scope as that described above for Pilgrim.

Furthermore, NRC’s determination that Entergy’s financial qualifications did not “pose an immediate danger to the public health and safety and the environment” does not proscribe the need to investigate whether Entergy is in violation of the financial qualifications regulation. NRC acknowledged this in the August 19, 2013 Federal Register notice of the petition’s acceptance:

As the basis for this request, the petitioners state that Entergy no longer meets the financial qualifications requirements to possess the licenses and operate Fitzpatrick and Vermont Yankee, pursuant to 10 CFR SO.80(b)(1)(i) and 10 CFR SO.33(f)(2) and that Entergy may no longer meet the same licensing requirements for Pilgrim.<sup>1</sup>

In addition, the August 2013 acknowledgment letter stated that the request for suspension of the operating licenses would remain open for further review:

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<sup>1</sup> <https://www.federalregister.gov/articles/2013/08/19/2013-20145/entergy-nuclear-operations-inc-james-a-fitzpatrick-nuclear-power-plant-vermont-yankee-nuclear-power>

If further NRC inquiry determines that Entergy's financial qualifications pose an immediate danger to the public health and safety and the environment, the NRC will take appropriate action to address the concern.<sup>2</sup>

Such inquiry could only be possible through investigation of the Petitioners' repeated and well-documented allegation that Entergy is in violation of the financial qualifications regulation. Thus, the proposed decision misrepresents the primary request at issue in the petition, and therefore fails to offer a material response. It is furthermore a mystery as to how NRR could take over eighteen months to review a petition for which it believes the central allegation was resolved when the petition was accepted.

In supplements to the petition, the Petitioners made several additional requests, which the proposed decision either ignores entirely or misrepresents. These include the following:

1. **NRC must undertake an investigation of the safety-conscious work environment and quality assurance and quality control programs at Vermont Yankee, FitzPatrick, and Pilgrim** (Supplement 4, page 2). The proposed decision does not acknowledge this request as such at all, misrepresents it merely as an issue raised by the Petitioners, and incorrectly proscribes its scope as though only applying to Pilgrim.
2. **NRC's investigation of Entergy's financial qualifications must include a detailed audit of planned and anticipated capital expenditures at each of the reactors, as well as a cost and amortization schedule for each capital project** (Supplement 4, page 2). The proposed decision does not address this request in whole or in part.
3. **NRC incorporate performance data in financial qualifications investigation for FitzPatrick and Pilgrim to determine whether there is a causal or compounding relationship between Entergy's economic considerations and operational problems** (Supplement 4, page 9). The proposed decision does not address this request in whole or in part. As detailed further, herein, the proposed decision's discussion of the main condenser leaks which plagued FitzPatrick during most of 2013 and 2014 represents at best an incomplete and inadequate consideration of one issue raised in support of the request.
4. **NRC obtain detailed information from Entergy regarding all of its corporate entities and incorporate it in the investigation of the licensees' financial qualifications, and to make such information available to the public** (Supplement 5, page 1). The proposed decision does not acknowledge this request in whole or in part.
5. **Include analysis of internal financial transactions and cash flows among Entergy subsidiaries in the investigation of the licensees' financial qualifications** (Supplement 5, page 2). The proposed decision does not acknowledge this request in whole or in part.

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<sup>2</sup> NRC Acknowledgment Letter. August 7, 2013. Page 2.

### **Proposed Director's Decision Fails to Address Evidence Submitted by Petitioners**

The proposed decision appears to be based solely on review of Entergy's response to the June 2, 2014 request for voluntary information. As detailed further, herein, the information provided by Entergy is incomplete, unresponsive, and irrelevant to an investigation of the licensees' financial qualifications. In pertinent part, the NY Attorney General's December 2, 2013 letter explained that Entergy's consolidated financial statements filed with the U.S. Securities and Exchange Commission lacks the necessary detailed reporting on Entergy subsidiaries' finances for assessing the licensees' compliance with the financial qualifications regulation. The proposed decision's acceptance of the information on Entergy Wholesale Commodities business unit in the 10K SEC filings is completely immaterial to the licensees' financial qualifications and represents a refusal on the part of NRC to conduct a meaningful investigation of the petition.

Equally concerning, however, is the NRC's apparent failure to analyze the substantial amount of new and unreviewed information Petitioners submitted as evidence. Below is a list of documents and information the proposed decision fails to recognize or respond to:

- UBS Investment Research: "Reevaluating Merchant Nuclear"
- UBS Investment Research: "Entergy Corp.: Re-Assessing Cash Flows from the Nukes"
- UBS Investment Research: "Entergy Corp.: Challenging Outlook for New Team at Kickoff"
- UBS Investment Research: "In Search of Washington's Latest Realities (DC Fieldtrip Takeaways)"
- UBS Investment Research: "Nuclear Decommissioning Discussion with the NRC Staff: Conference Call Transcript"
- Entergy Preliminary 2nd Quarter (2013) Earnings Guidance
- Cooper, Mark: "Renaissance in Reverse: Competition Pushes Aging U.S. Nuclear Reactors to the Brink of Economic Abandonment"
- Supplement 4, Appendix1: "2013 Event Reports and Equipment Problems at Pilgrim Nuclear Power Station"
- Letter from NY Attorney General Eric Schneiderman (December 2, 2013)
- Letter from Senator Edward J. Markey and Senator Bernard Sanders (November 14, 2013)
- Letter from Massachusetts Attorney General's Office (October 20, 2014)
- Letter from Vermont Attorney General's Office and Department of Public Service (January 27, 2014)
- September 2014 Morningstar bond rating report on Entergy<sup>3</sup>
- Entergy presentation at June 5, 2014 Analyst Day: "EWC Value Story"
- Transcript of Entergy Corp. Chief Executive Officer Leo Denault presentation at Barclays CEO Energy Power Conference (September 4, 2014)

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<sup>3</sup> <http://www.vtcitizen.org/cms-assets/documents/185557-259383.1entergybbbratingsept92014.pdf>



- April 30, 2014 Entergy filing with the New York Public Service Commission filing
- Travis v. Entergy Enterprises, Inc. et al, re: Indian Point perimeter security system
- September 16, 2014 2.206 petition on security lapses at Pilgrim, submitted by Pilgrim Watch and Cape Downwinders

The body of evidence submitted by the Petitioners is far more detailed and pertinent to the question of Entergy's financial qualifications than the information on which the proposed decision is based. NRC's failure to recognize, let alone analyze, it represents a disturbing refusal by the agency to even consider the basis for Petitioners' requests and to deny the public an opportunity for substantive relief through the 2.206 process.

### **Proposed Director's Decision Fails to Evaluate Substantive Issues**

The proposed decision selectively addresses a small number of substantive issues the Petitioners raised in support of the requested actions. By limiting the scope of the review to a small handful of narrowly proscribed examples of our concerns, NRC has ignored not just the substantive evidence Petitioners presented, but the substantive analysis that demonstrates the need for NRC to deviate from its standard regulatory practice to address significant safety issues arising from changing real-world conditions affecting the licensees.

Below is a list of substantive issues raised by the Petitioners, with citations to the filing and page number. Those in italics represent the concerns discussed in the proposed director's decision, albeit inadequately and incompletely. Please refer to the enclosed appendices (1, 2, and 3) for detailed comments from petitioners on the proposed decision's consideration of issues specific to each of the subject reactors.

<b>Issue</b>	<b>Filing</b>	<b>Page</b>
UBS: FitzPatrick and Vermont Yankee negative cash flow	Petition	5
UBS: Structural nature of EWC financial problems, tied to economics of merchant reactors	Petition	5
Cost and revenue projections used to establish financial qualifications in Entergy license transfer applications no longer valid	Petition	6
No long-term power purchase contracts at FitzPatrick, Pilgrim, and Vermont Yankee. Revenues dependent entirely on market sales	Petition	6
Long-term market price downturn presents structural problem for merchant reactor economic performance and financial qualifications	Petition	7
FitzPatrick unplanned power changes undermines economic performance	Petition	10
Human performance problems root cause of unplanned power changes	Petition	11
Major maintenance costs at VY and Fitz	Petition Sup1	11 5



NRC backsliding on post-Fukushima requirements to protect industry financial interests	Sup1	7
UBS cash flow analyses show structural deficits	Sup1	3
Reactors' economics susceptible to modest performance downturns and regulatory developments	Sup1	7
Decommissioning liability provides disincentive to closure decisions	Sup1	10
<i>FitzPatrick performance problems</i>	Sup1	12
Pilgrim performance problems	Sup1	
Intent of Atomic Energy Act and 10 CFR 50.33 is to prevent financial qualifications problems as a root cause of safety problems	Sup1 Sup6	12 2
Historical cases of economic causes of safety problems	Sup2	1-2
Write-down of Vermont Yankee asset value	Sup2	3
Financial qualifications cannot rely upon parent company or cross-subsidization	Sup2	3
EWC performance sensitive to planned outages, even within industry standard outage duration	Sup3	1
<i>Entergy workforce reductions</i>	Sup3	1
Vermont Yankee closure confirms petition basis	Sup4	2
Entergy press statements suggest cash flow worse than UBS estimated	Sup4	3
Entergy testimony before New York Senate confirms FitzPatrick is in same position as Vermont Yankee	Sup4	5
Uncertainty re: continued operation of FitzPatrick	Sup4	5
Safety implications of FitzPatrick financial qualifications	Sup4	6
Pilgrim projections substantiate concern over financial qualifications violation	Sup4	7
Pilgrim performance problems and declining market prices	Sup4	8
Period of continued operation of Vermont Yankee after closure announcement is unprecedented and safety risk	Sup4	9
Loss of Skilled Workforce at Vermont Yankee	Sup4	12
Performance problems affect financial qualifications going forward	Sup4	14
Entergy Corp. structure amplifies financial qualifications concerns	Sup5	1
Interlocking finances of Entergy licensees poses problems of other merchant reactors	Sup5	1
Internal financial transactions may leave licensees with worse cash flow than projected	Sup5	2
SECY memos on financial qualifications affirm that NRC has statutory and regulatory authority to request financial info and review financial qualifications compliance	Sup5	3

Concern over Entergy interference in regulatory process	Sup5	3
Entergy's response to voluntary request for info is inadequate and necessitates enforcement proceeding	Sup6	2
Entergy parent company makes no commitment to funding licensees, making up shortfalls	Sup6	2
Entergy rated moderate default risk due, in part, to merchant reactor performance	Sup6	3
Entergy reliant on risky hedging strategies to mitigate merchant reactor cash flow losses	Sup6	3
Hedging activities produce cash flow upstream of the licensees	Sup6	4
Deferral of FitzPatrick condenser replacement increased worker radiation exposures	Sup6	3
Security system installation at Indian Point rushed and inadequately implemented due to financial constraints	Sup6	4
Safety implications of 40% staff reduction at Vermont Yankee and loss of skilled workforce	Sup6	4
Site perimeter security cutbacks and intrusions at Pilgrim	Sup6	4

### **Proposed Decision Represents Failure to Comply with Atomic Energy Act**

The proposed director's decision denies our request for enforcement action on a regulatory theory that contradicts the agency's application of 10 CFR 50.33 and the Atomic Energy Act. In the March 20, 2013 RAI issued to Vermont Yankee, NRC made it clear to the licensee that, the agency's normal oversight practice with respect to licensee finances notwithstanding, 10 CFR 50.33(f)(5) authorizes the agency to request information and conduct financial qualifications reviews when circumstances deem appropriate:

The NRC has used this provision [10 CFR 50.33(f)(5)] only in limited situations and normally will not require licensees, including those that are not "electric utilities," to report on their financial qualifications at specified intervals.

However, reviewers have and will continue to conduct general follow-up reviews of all licensees by screening trade and financial press reports, and other sources of information. Reviewers will use this information to determine whether to recommend any additional NRC action, including requests for additional information and the assignment of additional inspection resources to monitor the adequacy of plant safety performance.

NRC goes on to explain that the availability of information indicating financial problems affecting Vermont Yankee indicated "a change in the cashflow and/or revenues generated by Vermont Yankee, necessitating "further information to insure that the licensee is meeting NRC requirements for financial qualifications." The petitioners have provided material and substantive information meeting a higher standard of evidence than NRC deemed necessary to warrant the issuance of the March 20 RAI. It is therefore inexplicable that NRC would not conduct an analysis of that evidence in reviewing our

petition, and that it would not warrant the issuance of substantive RAIs to Entergy, rather than the mere request for voluntary information issued in June 2014.

In conjunction with the report of NRC management's acquiescence to Entergy management documented by Senators Markey and Sanders in allegedly quashing the issuance of RAIs to Entergy in June 2013 suggests an effort by NRC to prevent the creation of a documentary record that would necessitate enforcement action. This impression is buttressed by the report offered by UBS Investment Research in its February 2013 report, referenced in our petition, that NRC, in consideration of the financial impact on licensees, intended to reject agency staff's recommendation that Mark I boiling water reactors (including all three subject reactors in this petition) be required to install radiation filters on the hardened containment venting systems.

In failing to review the evidence Petitioners have presented, NRC has also failed to provide an acceptable justification for denying our requests. Per NRC Management Directive 8.11, the Petitioners have satisfied the criteria for acceptance of the petition, having made requests for enforcement-related actions and presented new and previously unreviewed information in support of those requests, in the absence of an appropriate licensing or regulatory proceeding through the issues could be addressed. In pertinent part, the proposed decision's failure to address our requests and to review the evidence presented demonstrates a failure by NRC to offer substantive relief to members of the public through the 2.206 process.

Alarming, this comports with the analysis presented by NRC Administrative Law Judge Alan S Rosenthal in an additional opinion offered in NRC Docket Nos. EA-12-050 and EA-12-051 on July 12, 2012. Judge Rosenthal challenged NRC staff's assertions that the 2.206 process affords members of the public a meaning avenue for obtaining substantive relief for concerns about nuclear safety and licensee compliance with the regulations. Based on a review of information on 2.206 petition cases presented by NRC staff at the judge's request, ALJ Rosenthal concluded that the evidentiary record indicates that NRC has provided little or no reason for the public to have confidence that the 2.206 is likely to provide substantive relief:

I question the justification for the often reference, both in Commission decisions and in Staff briefs filed with licensing boards, to the broad availability of the section 2.206 remedy as a realistic alternative to an adjudicatory hearing. Where it has been determined that the hearing requester ... has not established an entitlement to a licensing board's evidentiary consideration of a claim for what manifestly amounts to substantive relief (here the further modification of reactor operating licenses), the matter should be left at that. An unsuccessful hearing requester is, of course, always free to invoke the section 2.206 remedy. But, at least where truly substantive relief is being sought (i.e., some affirmative administrative action taken with respect to the licensee or license), there should be no room for a belief on the requester's part that the pursuit of such a course is either being encouraged by Commission officialdom or has a fair chance of success.

Given the quality and preponderance of evidence we have presented in this case, it pains us to say that the issuance of the proposed director's decision would provide stark confirmation of the trend identified by Judge Rosenthal. Combined with the reports by NRC staff of the prohibition on issuance of RAIs in this case and the directive to cease such investigations in the future, the remainder of the documentary record in this proceeding give us no confidence that NRC has fulfilled its regulatory duties in this matter.

Sincerely,

-----/s/-----

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Department of Public Service



## **Appendix 1**

### **Citizens Awareness Network Response Concerning Proposed Director's Decision on Issues Pertaining to Vermont Yankee**

The NRC's Director's decision elevates form over substance. In terms of the shuttering and decommissioning of Vermont Yankee, the Agency's generic approach to determine Entergy's financial qualifications to operate and decommission Vermont Yankee is incomprehensible. Decommissioning Funds for reactor cleanup are notoriously underfunded; the Agency permits nuclear corporations to seriously under-fund their decommissioning funds with the rationale that over time and with the ability for shuttered reactors to remain in SAFSTOR for up to 60 years, the funds required for cleanup would accumulate eventually. In addition, under utility owned nuclear facilities, utilities could request rate increases from state public service entities to cover any shortfalls in the fund. This was certainly the case at Yankee Rowe and Connecticut Yankee. These captured ratepayers covered the substantial shortfalls for inadequate and incompetent financial planning.

With energy deregulation and the sale of aging fleets of nuclear reactors to other nuclear corporations, a consolidation of the industry occurred and a new entity created- a merchant plant. With no captive ratebase to return to, merchant operators sell their power on the open market. As long as they're making a profit, there is no problem. However, when operational costs escalate, competition increases, and rates fall, profits diminish; financial instability can ensue. This is the case with Entergy as analyzed by UBS in relation to Vermont Yankee, Fitzpatrick and Pilgrim.

The Agency has the power to review Entergy's financial circumstances; in rejecting this petition, it chooses not to. Entergy pressured the Agency to reject any such review. In fact, Entergy stated that the NRC has no ability to regulate the corporation in regards to its finances. Petitioners do not agree. We also disagree and are confounded by the Agency's acceptance of the parent company's generic financial submissions assant justification for rejection of the petition and its supplements .

In terms of ENVY, Entergy's LLC overseeing the operation and cleanup of Vermont Yankee, the Agency's rejection is noteworthy in its irresponsibility. Vermont Yankee's decommissioning fund is underfunded having about half of the necessary monies to accomplish an adequate cleanup of the site. This is using Entergy's own estimation of \$1.2 billion. In reality the eventual costs can rise substantially above these estimates. This has been the case at other decommissioning facilities. Nuclear corporations themselves claim decommissioning is an iterative process.

The Decommissioning fund was established for the cleanup of *radiological* contamination at reactor site. Its express purpose is to permit the site to be released for unrestricted use (if possible) after cleanup is completed. Entergy (ENVY) has advanced a series of propositions for the use of the decommissioning fund that have nothing to do with radiological cleanup. However, these appropriations have everything to do with Entergy's financial vulnerability and its lack of adequate operational funds. For example,

Entergy wants to use decommissioning funds to pay \$600,000 in local taxes. It intends to use decommissioning funds to pay for guarding its dry cask storage installation through the 2050's. In fact, the corporation wants to use the fund to pay for the transfer of fuel to dry storage. It has also been noted that Entergy may want to utilize the fund to cover worker retirement costs. How do any of these activities serve radiological cleanup?

What do these appropriations represent? In addition to Entergy's financial limitations and its inappropriate use of the decommissioning fund, It is an indication of the parent corporation's refusal to cover any shortfalls. This is relevant since Entergy submitted SEC filings to justify its financial stability and its ability to safely operate and cleanup its fleet of nuclear reactors. When Entergy (the parent corporation) bought Vermont Yankee in 2002, it created ENVY LLC; it signed a Memorandum of Understanding with the State of Vermont in which it committed to cover any financial shortfalls. So where is the parent corporation now? Why isn't Entergy covering the \$600,000 in local taxes for its floundering LLC? Why isn't Entergy covering the costs for the establishment of the ISFSI and the guarding of the high level waste, since ENVY maintains that it will recover 90% of the installation costs from the DOE?

If the parent corporation is financially viable, why isn't it accountable for ENVY and its other LLCs? In fact ENVY and its parent corporation maintain that when the Decommissioning fund reaches 0 at Vermont Yankee, their responsibility for any further cleanup of the site ends! It seems that Entergy and its minions want to have it both ways-maintain their financial viability while it attempts to abdicate any responsibility for its agreements. Doesn't this merit an investigation and hearing into Entergy's capacity to operate and decommission these reactors safely and responsibly?



## **Appendix 2**

### **Alliance for a Green Economy Response Concerning Proposed Director's Decision on Issues Pertaining to FitzPatrick**

The NRC Directors decision did not address our concerns that Entergy is not financially qualified to operate FitzPatrick.

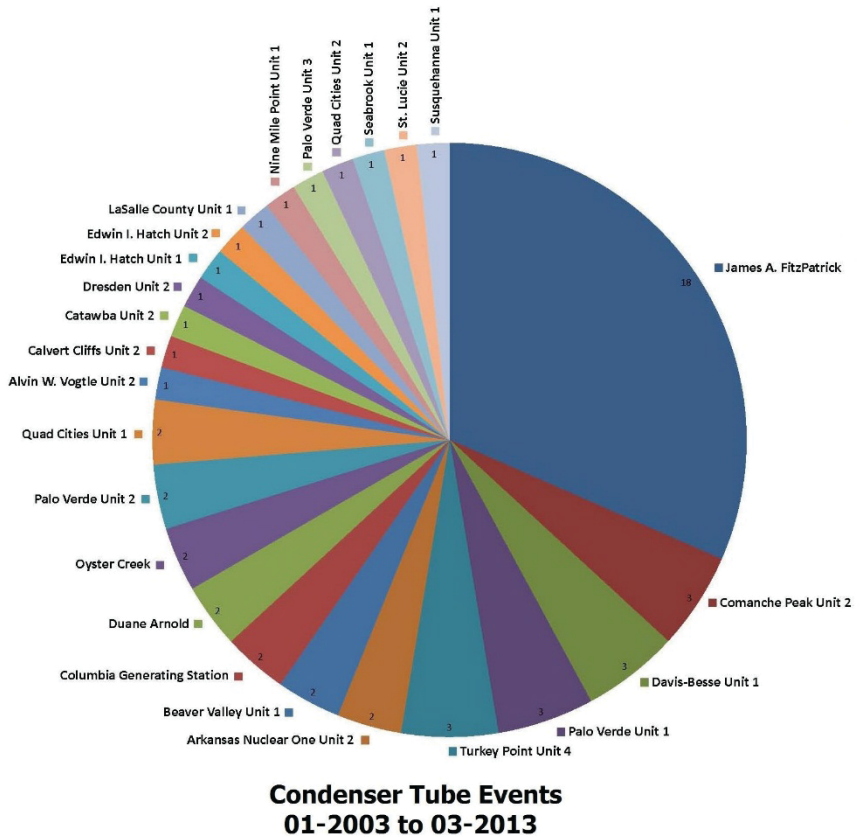
Based on the publicly available financial information about market prices in New York and the costs of operating a nuclear power plant, we continue to believe that Entergy Nuclear FitzPatrick, LLC is losing money. In accepting our petition for review, the NRC committed to investigating whether the Entergy entities that own and/or operate the various reactors named in our petition are financially qualified. In accordance with that commitment, on June 2, 2014, the NRC requested that Energy provide “updated cost and revenue projections and cashflow statements for Fitzpatrick and Pilgrim for the five year period of 2014-2019.”

Entergy refused to provide this information, and instead informed NRC that collectively, its merchant reactors are turning a profit. The fact that Entergy Wholesale Commodities is profitable as a whole is not new information. It is also largely irrelevant to the question of whether a particular Entergy reactor is earning enough revenue to financially qualify its operator or whether the managers at a particular plant are under pressure to cut costs in ways that could compromise safety.

The draft director's decision does not address this concern or provide any information showing that revenues earned by Entergy Nuclear FitzPatrick, LLC are sufficient to carry out the activities for which the company is licensed. In response to the very detailed economic analysis provided by UBS and additional information we submitted about wholesale electricity prices in Central New York, the NRC and Entergy have provided no rebuttal – no financial information that refutes those analyses.

Instead, NRC points to Entergy's claims that revenues a parent company is available, if needed, to supplement shortfalls at FitzPatrick. First, it is important to note that while Entergy did claim this in its response to NRC's request, Entergy also said it was making “no commitment” of those funds. Second, the potential availability of funds from other Entergy entities does not necessarily remove pressure upon the managers at FitzPatrick to turn a profit or to reduce losses as much as possible. Third, if revenues other nuclear plants, like Indian Point, are being called upon to subsidize FitzPatrick, then those profitable reactors may also come under financial pressure to cut costs and boost profits in ways that make even profitable reactor less safe.

In the case of FitzPatrick, the most visible symptom of financial distress was Entergy's failure to replace its condenser, despite repeated and increasing leaks that led to escalating plant instability. The number of unplanned power changes due to condenser leaks culminated in 2014.<sup>4</sup> FitzPatrick's unplanned power changes and condenser issues made it a far outlier in the nuclear fleet. For more information, see the 2.206 petition submitted by Union of Concerned Scientists and co-signed by Alliance for a Green Economy and Nuclear Information and Resource Service.<sup>5</sup>



Source: Union of Concerned Scientists

The fact that Entergy finally replaced the tubes in the condenser in late 2014 does not erase the years that Entergy allowed the condenser issues to fester, compromising the plant's operations.

Entergy and the NRC are now pointing to the 2014 condenser replacement project as evidence that the company is willing to invest in the plant and can access capital to do so. Yet, we point to the years that the old condenser was kept in service without timely replacement as evidence of the deferred maintenance that can stem from economic pressure. We believe this decision was financially motivated – that Entergy put off the investment as long as possible to save money and/or that it put off the investment while it took time to decide whether FitzPatrick was worth refueling in 2014. Other than a

<sup>4</sup> *Syracuse Post-Standard*. May 15, 2014. "FitzPatrick nuclear plant put off repairs, now plagued by water leaks" [http://www.syracuse.com/news/index.ssf/2014/05/fitzpatrick\\_nuclear\\_plant\\_put\\_off\\_repairs\\_now\\_plagued\\_by\\_water\\_leaks.html](http://www.syracuse.com/news/index.ssf/2014/05/fitzpatrick_nuclear_plant_put_off_repairs_now_plagued_by_water_leaks.html)

<sup>5</sup> Union of Concerned Scientists. July 25, 2013. "Recurring Condenser Tube Leaks and Petition Pursuant to 10 CFR §2.206 for the James A. FitzPatrick Nuclear Power Plant" [http://allianceforagreenecconomy.org/sites/default/files/20130725-jaf-ucs-nrc-condenser-tube-events\\_0.pdf](http://allianceforagreenecconomy.org/sites/default/files/20130725-jaf-ucs-nrc-condenser-tube-events_0.pdf)

financial motivation, we can find no other rationale for why Entergy would keep a compromised piece of essential equipment in service for so long, and Entergy has not provided one.

A dramatic increase in unplanned power changes that resulted from the condenser leaks did put FitzPatrick under increased scrutiny by the NRC. On March 4, 2013, NRC issued a letter to Entergy notifying the company of an additional inspection it would perform because of the number of unplanned power changes at the plant.<sup>6</sup> The letter stated: "This inspection procedure is conducted to provide assurance that the root causes and contributing causes of risk significant performance issues are understood, the extent of condition and cause were identified, and the corrective actions are sufficient to prevent recurrence." It was obvious from previous inspection reports that the root cause of the unplanned power changes was the leaking condenser, but NRC allowed Entergy to continue operating with its worn out condenser for another 1.5 years. NRC also never investigated why FitzPatrick allowed the condenser leaks to continue.

The deferred maintenance on the condenser did compromise safety and health. While the NRC has repeatedly claimed that the condenser is not a critical safety component, the condenser leaks led to plant instability. Entergy was forced to repeatedly and increasingly reduce power at the plant in order to plug leaks. Additionally, the condenser is the normal "heat sink" for the reactor. If the condenser is deteriorated, it creates a pre-existing impairment that puts the public at increased risk if other backup systems fail.

We also found evidence that the condenser leaks led to higher than necessary exposure of workers at FitzPatrick to radiation. We submitted that evidence as a supplement to our petition in October 2014.<sup>7</sup> This critical safety issue was never answered.

Therefore, we continue to argue, as we have in multiple other filings in this process, that Entergy's financial situation led to compromised public health and safety. And we remain concerned that if Entergy was willing to defer maintenance on a piece of equipment that is as integral to plant operations as the condenser, even to the point where it compromised the plant's ability to run at full output, what other projects is Entergy deferring?

In the proposed Directors Decision, NRC claims it "employs multiple engineered barriers and multiple levels of reactor oversight that are in NRC regulations to provide reasonable assurance of adequate protection of public and health and safety and the environment. Emergent safety concerns are promptly identified and assessed through the NRC's

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<sup>6</sup> NRC. March 4, 2013. "ANNUAL ASSESSMENT LETTER FOR JAMES A. FITZPATRICK NUCLEAR POWER PLANT (REPORT 05000333/2012001)" <http://allianceforagreenconomy.org/sites/default/files/Fitz%202012%20AAL-2.pdf#overlay-context=content/fitzpatrick-documents>

<sup>7</sup> October 15, 2014 Supplement.

[http://allianceforagreenconomy.org/sites/default/files/2206\\_Financial\\_Qualifications\\_Entergy\\_Supplement\\_October\\_15\\_2014\\_0.pdf](http://allianceforagreenconomy.org/sites/default/files/2206_Financial_Qualifications_Entergy_Supplement_October_15_2014_0.pdf)

Reactor Oversight Process (ROP). The ROP requires that licensees take prompt corrective action to resolve identified safety concerns.”

Yet, in the case of FitzPatrick’s condenser, the emergent safety concern was not corrected promptly. The NRC also failed to investigate the root cause of this issue to identify whether it resulted from Entergy’s suspected violation of the financial qualifications regulation.

Entergy’s willingness to invest in the condenser after years of deferred maintenance is now being claimed by the company of evidence that the company is financially qualified to operate FitzPatrick. One large capital investment after years of neglect does not make the case that the plant is profitable or that parent entities are willing to put in money to address all operational needs of the plant in a timely manner. In fact, we think the years of deferred maintenance on the condenser point to the opposite.

Meanwhile, we see no evidence of an electricity price rebound that would change FitzPatrick’s financial situation for the better. While market prices increased temporarily in the winter of 2013/2014 due to natural gas volatility, prices in the region were depressed again by winter 2014/2015. Meanwhile, New York energy policy is designed to move the state increasingly toward energy efficiency, cutting of peak demand, and support for renewable energy. All of these moves will further cut into FitzPatrick’s revenues.

### Appendix 3

## Pilgrim Watch Response Concerning Proposed Director's Decision on Issues Pertaining to Pilgrim

### Overview

Petitioners requested in its March 18, 2013 Petition that NRC respond to specific questions regarding Entergy Nuclear Operations, Inc. ("Entergy") financial qualification required for the safe operation, maintenance and decommissioning of Pilgrim Station. The **Massachusetts Attorney Generals' Office** October 20, 2014 letter in support of the petition<sup>8</sup> also asked specific questions to clarify Entergy's financial qualifications.

NRC did not respond to the AGO directly nor respond to the AGO's questions in the Preliminary Decision. Neither did the NRC's Preliminary Decision respond to petitioners requests regarding Pilgrim. Instead, the NRC relied on limited voluntary information from the Entergy that did not provide any assurance of Entergy's financial qualifications to safely operate and decommission Pilgrim. As a result, NRC failed to perform its statutory duty to protect public health and safety by assuring Entergy is financially qualified.

We request NRC to go back to the drawing board and gather the facts necessary to provide assurance of Entergy's financial qualifications to operate and decommission Pilgrim Station safely and provide those facts in its decision.

### Specific Questions Asked to Clarify Entergy's Financial Qualifications

In the March 18, 2013 Petition, Petitioners asked the following specific questions regarding Pilgrim. NRC's decision largely ignored them.

- Determine Entergy's "ability to continue the conduct of the activities authorized by the license and to decommission the facility."
- Open an investigation into Entergy's financial qualifications and determine whether Entergy continues to meet the financial qualification requirements necessary to possess the operating license for Pilgrim.
- Investigate the financial arrangements, policies, and practices among the licensees and other Entergy corporate entities as they pertain to cash flows and retained earnings; generation, possession, and transfers of sales revenue; and allocation of funds to finance operations and maintenance at Pilgrim.
- Determine whether and for what period of time Entergy has operated Pilgrim at a net operating loss, and/or for what period it is projected to do so.

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<sup>8</sup> **Massachusetts Attorney Generals' Office** October 20, 2014 letter Re: Dockets 50-333, 50-272, and 50-293; NRC Enforcement Proceeding, No. 2013-0192

- Determine what major maintenance projects are required or anticipated to be necessary at Pilgrim prior to 2017, and Entergy's plans for scheduling and financing them, taking into account costs, outage time, and other revenue imp

### **Decommissioning**

The March 18<sup>th</sup> Petition, at 4, asked to “commence a proceeding per 10 CFR 50.33(f)(5) with respect to Pilgrim to determine Entergy's “ability to continue the conduct of the activities authorized by the license and to decommission the facility.”

The Preliminary Decision reply to the question is insufficient. First, the decision said that they examined the DTF Report for 2013 and found no decommissioning shortfalls reported. (Decision, 6) We show below that an approximate ½ billion shortfall exists in the 2014 DTF and the same for 2013. Second, the decision (at 7) said that Pilgrim's License Condition J.4 is in effect and is guaranteed by Entergy International Ltd., LLC to guarantee sufficient funds. J.4 provides:

Entergy Nuclear shall have access to a contingency fund of not less than fifty million dollars (\$50m) for payment, if needed, of Pilgrim operating and maintenance expenses, the cost to transition to decommissioning status in the event of a decision to permanently shut down the unit, and decommissioning costs. Entergy Nuclear will take all necessary steps to ensure that access to these funds will remain available until the full amount has been exhausted for the purposes described above. Entergy Nuclear shall inform the Director, Office of Nuclear Regulation, in writing, at such time that it utilizes any of these contingency funds.

NRC never bothers to ask what might be left over from the \$50 million after operating and maintenance expenses and the cost to transition to decommissioning status. NRC assumes it is a guarantee; there is no evidence to support. In any event, even if all of the \$50 million is available for decommissioning, it hardly would make a dent into the ½ billion dollar decommissioning deficit. For example, AP (April 20, 2015) reported that the 2015 outage would cost \$70 million.

### A closer look at the Decommissioning Trust Fund

Date	NRC Estimate	DTF
12/31/11	\$569,110,000	\$676,660,000
12/31/12	\$626,190,153	\$725,410,000
12/31/14	\$628,139,915	\$896.420,000

Petitioner's analysis that shows the decommissioning fund is not adequate relies on decommissioning estimates in three documents: Entergy's Preliminary Decommissioning Cost Analysis For The Pilgrim Nuclear Power Station, 2008<sup>9</sup>; Entergy's December 19, 2014 Vermont Yankee Post Shutdown Decommissioning Activities Report<sup>10</sup>; NRC's March 30, 2015 Decommissioning Funding Status Report for Pilgrim and Vermont Yankee - <sup>11</sup> documents that the NRC should be familiar and taken into consideration in its decision.

An analysis of the reports shows that Pilgrim is about one-half (½) billion dollars short today; and there is no basis to assume that Entergy will make up the shortfall in the future through investment growth of its decommissioning trust fund.

Understanding how much money is in the fund and how much is required for decommissioning requires a look at what expenses whatever analysis defines "Decommissioning" as covering.

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<sup>9</sup> PRELIMINARY DECOMMISSIONING COST ANALYSIS for the PILGRIM NUCLEAR POWER STATION, Prepared for Entergy Nuclear by TLG Services Inc., Bridgewater, Connecticut, July 2008

<sup>10</sup> Entergy's Post Shutdown Decommissioning Activities Report Vermont Yankee Nuclear Power Station Docket No. 50-271 License No. DPR-28, December 19, 2014;

<sup>11</sup>Decommissioning Funding Status Report -- Entergy Nuclear Operations, Inc, ENOC-15-00005, March 30, 2015; Attachment 5. Entergy Nuclear Operations, Inc. Status of Decommissioning Funding - Vermont Yankee Attachment 6. Entergy Nuclear Operations, Inc. Calculation of Minimum Amount - Vermont Yankee; Attachment 7. Entergy Nuclear Operations, Inc. Status of Decommissioning Funding – Pilgrim; Attachment 8. Entergy Nuclear Operations, Inc. Calculation of Minimum Amount – Pilgrim; Attachment 16. Entergy Nuclear Operations, Inc. Minimum Financial Assurance Calculation Worksheets, Vermont (pg., 4), Pilgrim (pg.,5)



- **NRC’s definition:** “*Decommission* means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits—(1) Release of the property for unrestricted use and termination of the license; or (2) Release of the property under restricted conditions and termination of the license.”<sup>12</sup>  
It does not include spent fuel costs and site restoration costs. The most recent NRC 2014 Decommissioning Trust Fund minimal Financial Assurance Estimate for Pilgrim (\$628,139,915.00) includes about on-half the costs of what the public considers is decommissioning a nuclear site.
- **Entergy’s 2008 Preliminary Decommissioning Cost Analysis For The Pilgrim Nuclear Power Station report’s** definition of decommissioning includes: removal of site from service and reducing residual radioactivity to a level that permits release of the property and termination of the operating license (NRC’s definition); and spent fuel management for 3,594 assemblies generated until the termination of its original license in 2012 and site restoration costs.
- **Entergy’s Vermont Yankee 2014 Decommissioning Cost Estimate:** Definition includes: removal of site from service and reducing residual radioactivity to a level that permits release of the property and termination of the operating license (NRC’s definition); and it includes spent fuel management for 3,880 assemblies generated until the termination of its license and site restoration costs. Pilgrim, at the termination of its license in 2032 will have an approximate 5000 assemblies- about 1,000 more than Vermont Yankee.

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<sup>12</sup> 10 CFR 50.2 Definition, <http://www.nrc.gov/reading-rm/doc-collections/cfr/part050/part050-0002.html>

<b>COSTS</b>	<b>NRC DTF YEAR ENDING G 12.31.12)</b>	<b>NRC DTF (YEAR ENDING G 12.31.14)  See Note 1</b>	<b>ENTERGY PILGRIM 2008 REPORT (2007 Dollars)</b>	<b>ENTERGY PILGRIM 2008 ADJUSTING 2007-2015 INFLATION (13.2%)</b>	<b>ENTERGY VT YANKEE DECOM REPORT  See Note 2</b>
<b>NRC Minimum Financial Assurance Estimate</b>	<b>\$626.19</b>	<b>\$628.14</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
<b>REMOVE SITE FROM SERVICE</b>	\$725.41	\$896.42	\$549,800,000	\$622,373,600	\$817,219,000
<b>SPENT FUEL MANAGEMENT</b>	NA	NA	\$327,701,000	\$370,957,530	\$368,347,000
<b>SITE RESTORATION</b>	NA	NA	\$35,918,000	\$40,659,176	\$57,145,000
<b>EMERGENCY PLANNING, JOB TRAINING, SITE CLEANUP TO STATE STANDARDS</b>	NA	NA	NA	NA	NA
<b>TOTAL</b>	<b>\$725.41</b>	<b>\$896.42</b>	<b>\$914,419,000</b>	<b>\$1,035,122,300</b>	<b>\$1,243,000</b>

**Notes:**

1: **Pilgrim's 2014 Decommissioning Trust Fund (DTF) Report** said that the 2014 Trust Fund balance was \$896.42 million and projected a fund of \$1,266 billion by 2032 and \$1.360 billion within the next 7 years of the decommissioning period. NRC's 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 are a 2% annual real rate of return.

Today's \$896.42 million DTF (covering ½ of the real costs of decommissioning) is approximately \$200 million short of Vermont's estimates costs; Pilgrim is larger than Vermont. Going forward, costs to decommission will inflate approximately \$2 billion by the end of Pilgrim's license in 2032

2: **Vermont Yankee's 2014 decommissioning fund report** to the NRC said that the 2014 trust fund balance was \$664.56 million. Attachment 15 is Entergy's attempt to show that, with SAFSTOR until 2068, this will be enough.

3. **Pilgrim 2008 Report** assumed that DOE would start accepting spent fuel in 2017 and that all fuel (a total of 3594 assemblies) would be removed from the site by the end of 2042. Adding spent fuel assemblies generated during the extended 20 year license, Pilgrim will have generated slightly more than 4,900. DOE will not begin accepting fuel in 2017 or anytime in the foreseeable future so that spent fuel management costs will continue and escalate.

Vermont Yankee 2014 Report assumed that DOE would start accepting spent fuel in 2025 and that all fuel (a total of 3880 assemblies) would be removed from the site by the end of 2052. Again where DOE's rescue in 2025 comes from is a mystery.

Adjusted for inflation, the assumed spent fuel management costs for 3600 spent fuel assemblies at Pilgrim and 3880 spent fuel assemblies at Vermont Yankee are generally consistent. If the eventual number of spent fuel assemblies generated at Pilgrim is about 4900 spent fuel assemblies, it may be fair to assume that the spent fuel management costs will increase proportionately, to about \$468M.

### **Pilgrim's Decommissioning Fund Inadequate- Contrary to the Preliminary Decision**

Pilgrim's decommissioning fund today is approximately ½ billion short. Entergy projected that by 2040 the fund would reach \$1.3 billion dollars that is close to Vermont Yankee's estimated cost in today's dollars. But this ignores inflation; it assumes that the fund's investments in the stock market will grow and not tank, as it did in the recession. Pilgrim will have far more spent fuel to manage; and additional costs such as job training,

site cleanup to “Greenfield” and offsite emergency planning until the fuel leaves the site are ignored.

Lessons learned from Vermont Yankee, a smaller reactor than Pilgrim owned by Entergy, show Entergy recently estimated VY’s decommissioning costs at \$1.23 billion whereas NRC estimated in 2014 only \$628, 139, 915.00. EVY’s NRC approved decommissioning fund, 2014 was a mere \$817.22 million. In theory the fund was expected to grow via investment in stocks and bonds; but EVY closed early for economic reasons; it could not compete with natural gas and wind in today’s market electricity economy. The same factors impact Pilgrim.

GAO report, “Nuclear Regulation: NRC’s Oversight of Nuclear Power Reactors

**The Vermont case is not atypical. The Government Accounting Office’s (GAO) 2012 GAO report, “Nuclear Regulation: NRC’s Oversight of Nuclear Power Reactors”<sup>13</sup>, examined NRC’s estimates of decommissioning. It showed NRC is inaccurately estimating the costs of decommissioning and inadequately ensuring that owners are financially planning for the eventual shutdown of these plants.**

The key findings of the GAO report included:

- The NRC decommissioning funding formula may be outdated since it was last updated in 1988 and is based on two studies published in 1978 and 1980 that used technology cost and other information available at that time.
- NRC’s evaluation of licensees’ funding arrangements was not rigorous enough to ensure that decommissioning funds would be adequate.
- The NRC had not established criteria for taking action if it determines that a licensee is not accumulating adequate decommissioning funds.

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<sup>13</sup> A copy of the GAO report can be found [HERE](#).

- The NRC relies on licensees' reports of decommissioning fund balances without verifying these balances. Every two years, licensees are required to report the status of their decommissioning accounts.

#### Unexpected Decommissioning Costs

Previous experience with decommissioning indicates that unexpected decommissioning costs should be factored into the estimates. The decision does not consider this. Connecticut Yankee, for example, was significantly more contaminated than expected – increasing costs. The Utilities that owned Connecticut Yankee had originally set aside a Decommissioning Fund of \$410 Million for decommissioning Connecticut Yankee, a process that began in 1998.<sup>14</sup> The cost of decommissioning CY climbed to \$938 Million by November 2006's estimate due to Strontium 90 (Sr- 90) that had contaminated the water table surrounding the plant and was discovered well after the decommissioning process began.<sup>15</sup> The contamination problems at Connecticut Yankee were not reflected in the "generic" estimate, as they were unknown to the owners prior to shutdown. These costs have been passed on to Connecticut's ratepayers.

The over \$500 million decommissioning cost increase that subsurface contamination caused at Connecticut Yankee demonstrates that unexpected decommissioning costs must be factored. This is especially important at Pilgrim in consideration of its history of releases that culminated in blowing its filters in 1982 that contaminated on and offsite; and by the fact that Pilgrim has not had monitoring wells until November 2007. At that time only (4) were installed, generally located between the reactor and the shoreline. Today there are 22 wells. Neither the licensee nor the state knows the source of the tritium found in well samples. The onsite monitoring wells do not provide a reliable indicator to base an assumption that site contamination is not significant.

#### Limited Liability Company

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<sup>14</sup> Hartford Current, November 12, 2005.

<http://www.courant.com/news/local/hccynukemess.artnov12,0,6222764.story?col l=hc-headlines-home>

<sup>15</sup> The PSDAR is available at <http://www.connyankee.com/assets/pdfs/Document1.PDF>; the Haddam Neck Plant License Termination Plan, Rev. 4, is available at NRC ADAMS Accession No. ML063390404.

Accurate provision for Pilgrim's Post-Closure Trust Fund is especially important because Pilgrim is a limited liability corporation (LLC). The decision does not consider this. Pilgrim is a **LLC** with no significant assets beyond its single power plant and access to a 50 million contingency fund for operating and maintenance expenses, the cost to transition to decommissioning status in the event of a decision to permanently shut down the unit, and decommissioning costs<sup>16</sup> How much would be left after O&M costs is unknown. NRC does not but should assure that Entergy will pay while it is still operating and has resources. It avoids the situation where a LLC faces a decommissioning shortfall and there are insufficient assets to pay for the true decommissioning cost of the facility. Therefore with no way for these costs to be recovered from the LLC, these shortfalls will ultimately be borne by the citizens of the state in which the LLC is located many years after the reactor stopped generating electricity. The State of Massachusetts, New York and Vermont 's letters in support of this petition noted that multiple layers of limited-liability corporations stand between Pilgrim, Fitzpatrick, and Vermont Yankee and its corporate parent<sup>17</sup>.

#### Timetable for Decommissioning

A sufficient Post-Closure Trust Fund is critical to the timetable for decommissioning the plant. If the fund is inadequate it will slow plans for an accelerated timeline – perhaps mothball the plant for 60 years, a process referred to as SAFESTOR. It is in the interest of the community that decommissioning begins when operations cease so that the property can be used for other taxable purposes, workers with institutional knowledge of the history of spills and releases are there to properly direct cleanup. And the influx of decommissioning workers over ten or so years provides money to the host community to

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<sup>16</sup> Pilgrim's License Condition J4, guaranteed by Entergy International Ltd., LLC provides "Entergy Nuclear shall have access to a contingency fund of not less than fifty million dollars (\$50m) for payment, if needed, of Pilgrim operating and maintenance expenses, the cost to transition to decommissioning status in the event of a decision to permanently shut down the unit, and decommissioning costs. Entergy Nuclear will take all necessary steps to ensure that access to these funds will remain available until the full amount has been exhausted for the purposes described above. Entergy Nuclear shall inform the Director, Office of Nuclear Regulation, in writing, at such time that it utilizes any of these contingency funds."

<sup>17</sup> Commonwealth of Massachusetts Office of the Attorney General Letter to William Dean Director NRR, NRC, October 20, 2014

act as a cushion for its transition to the loss of income from an operating reactor. The NRC does not consider this fact.

### **Financial Qualifications to Safety Operate Pilgrim**

The decision's conclusion that Entergy Nuclear Operations is financially qualified to operate Pilgrim is not based on hard facts. ENO asserted that the 2.206 process did not provide a basis to inquire about cost and revenue projections and cash flow and instead ENO simply pointed to revenues reported in the SEC filing. (Decision, 6) The NRC has the authority to demand the information but failed to do so. The SEC filing does not provide information required for NRC to make judgment. Instead, the Massachusetts Attorney General's Office asked the questions that are necessary to make a determination of sufficiency. Why did the NRC ignore those questions? The proper template for inquiry was provided by the AGOs.

The AGO's questions that pertain to Pilgrim included:

1. For every plant, detail every occasion, including the date, reason and amount of intercorporate transfer, on which any Licensee has accessed any funds necessary for the continued safe operation of the plants from Entergy Corporation or any of its subsidiaries, including, but not limited to the:

- Date each specific licensee accessed the funds;
- Source(s) of the funding;
- Use(s) of the funding, with sufficient detail to determine how the described use(s) relate to plant safety;
- Amount of each intercorporate transfer;
- Reason why the additional funding was necessary, including any and all instances in which budget shortfalls for safe operations occurred.

2. For any plant not previously identified, list plant by plant any and all sources of funds used to continue the safe operation of those plants. Missing from the NRC's Requests, and, for that matter, from the ADAMS database, is any reference to the letter dated November 27, 2013 (corrected on December 2, 2013) from the Attorney General for the State of New York, Eric Schneiderman, which is attached hereto as Exhibit 1 and incorporated by reference ("NYAGO Letter"). That letter provides extensive detail regarding the relationship of numerous entities with an interest in operating the nuclear plants at issue in this matter, and seeks far more detail regarding these relationships than was requested by the NRC in its Requests for Information.



Because much of the information requested by New York is pertinent to the financial qualification of Entergy and its affiliated entities to operate Pilgrim, we ask that the NRC ask Entergy to produce the information requested in the NYAGO Letter.

Finally, recent changes in the Forward Capacity Market implemented by the Independent System Operator New England ("ISONE") will have an impact on the revenues of power plants such as Pilgrim. Accordingly, we request that the NRC require Entergy to disclose the impact of the changes to the ISONE Forward Capacity Market on Pilgrim's revenue stream.

**Pilgrim is a troubled reactor. It is on the watch list. NRC should be asking why.** One line of inquiry would be ENO's financial qualifications to run the plant safely- perform maintenance, replace parts, hire and train enough qualified employees to run the reactor and provide security.

Providing the information to specific questions requested by the MAAGO and NYAGO is likely to shed light on why in 2013 Pilgrim's performance rating by NRC dropped due to multiple shutdowns and complciations placing it among 22 reactors in the country requiring more oversight. And again in 2014 NRC lowered Pilgrim's performance to degraded and increased oversight. Pilgrim joins 7 other U.S. plants marked "degraded." And once again in 2015, Pilgrim experienced another "near-miss" during winter-storm Juno. NRC kept Pilgrim's performance as degraded and increases oversight in April. Pilgrim now joins 5 other U.S. plants marked "degraded."

### **Safety- Conscious Work Environment (SCWE)**

Petitioners expressed concern that Pilgrim's SCWE could be affected by a potential workforce reduction and financial woes. The decision found no evidence of an unacceptable SCWE at Pilgrim (Decision, 9). A safety conscious work environment is not helped by the VP ordering forgery. November 2014, Pilgrim's VP Mike Perrito had another worker John Babyak forge paperwork for work in an outage. It is under investigation. What was VP's Perrito's motivation? Could it have been to avoid maintenance to save the company money; and how pervasive was or is the falsification of work documents?

Morale is not boosted knowing that the site VP at Vermont explained Vermont's closure was due to the fact that it could not make money in New England's competitive market. It does not take imagination for a worker to figure out that Pilgrim is in the same competitive market and that it is on thin ice, along with their jobs. If you were in their situation, would you bring up safety concerns?