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

March 18, 2013

Mr. James Borchardt
Executive Director of Operations
U.S. Nuclear Regulatory Commission
Washington, DC 20555

By Email: MSHD.Resource@nrc.gov

Mr. Borchardt:

Alliance for a Green Economy, Citizens Awareness Network, Pilgrim Watch, and Vermont Citizens Action Network, hereafter referred to as "the petitioners," submit the following emergency enforcement petition as provided by Section 2.206 of Title 10 of the Code of Federal Regulation (10 CFR 2.206).

The petitioners request the following emergency enforcement action with regard to the undue risk to public health and safety caused by the continued power operation of the James A. FitzPatrick, Vermont Yankee, and Pilgrim nuclear power stations.

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PETITION TO THE U.S. NUCLEAR REGULATORY COMMISSION REQUESTING ENFORCEMENT ACTION AGAINST ENTERGY NUCLEAR OPERATIONS, INC.; ENTERGY NUCLEAR FITZPATRICK, LLC; ENTERGY NUCLEAR VERMONT YANKEE, LLC; AND ENTERGY GENERATION CO.

March 18, 2013

Alliance for a Green Economy, Citizens Awareness Network, and Vermont Citizens Action Network (hereafter, "the petitioners") hereby submit this Petition for Emergency Enforcement Action to the US Nuclear Regulatory Commission (NRC). Pursuant to NRC Regulation 10 CFR 2.206, the Petitioners request that the NRC suspend licenses Nos. DPR-59 and DPR-28 (hereafter, "the licenses"), the operating licenses for the James A. FitzPatrick Nuclear Power Plant (hereafter, "FitzPatrick") and the Vermont Yankee Nuclear Power Station (hereafter, "Vermont Yankee" or "VY"). The petitioners also request NRC begin an investigation to determine whether the operating license for the Pilgrim Nuclear Power Station (hereafter, "Pilgrim"), license No. DPR-35, must also be suspended.

Entergy Nuclear Operations, Inc., is the operator of all three reactors and jointly possesses the licenses with other Entergy subsidiaries, each which owns one of the reactors. Respectively, they are: Entergy Nuclear FitzPatrick, LLC, owner of FitzPatrick; Entergy Nuclear Vermont Yankee, LLC, owner of Vermont Yankee; and Entergy Nuclear Generation Co., owner of Pilgrim. Throughout the petition, the licensees are jointly referred to as "Entergy".

Introduction

As detailed in this Petition, Entergy is operating FitzPatrick and Vermont Yankee in violation of the terms and conditions of the licenses. Specifically, Entergy no longer meets the financial qualifications requirements to possess the licenses and operate FitzPatrick and Vermont Yankee, pursuant to 10 CFR 50.80(b)(1)(i) and 10 CFR 50.33(f)(2). Entergy may no longer meet the same licensing requirements for Pilgrim. These regulations require that licensees demonstrate they are financially qualified, in order to ensure they can afford to operate and maintain reactors safely. Recent

information about Entergy's financial performance, and changes in Entergy's business and the New York and New England electricity markets, demonstrate that Entergy is not financially qualified to operate FitzPatrick and Vermont Yankee; the same may also be true of Entergy's qualifications to operate Pilgrim.

In order to protect the public health and safety, NRC must immediately order Entergy to suspend operations at FitzPatrick and Vermont Yankee, and 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."

Requested Actions

The petitioners request that NRC take emergency enforcement action to ensure that Entergy's operation of FitzPatrick, Vermont Yankee, and Pilgrim does not continue to compromise the public health and safety. NRC must suspend Entergy's licenses to operate FitzPatrick and Vermont Yankee in order to protect the public health and safety and prevent further violations of NRC regulations, per 10 CFR 50.110(a)(3) and 10 CFR 50.82(a)(2). NRC must also investigate whether Entergy possesses sufficient funds to cease operations and to decommission the reactors, per 10 CFR 50.75.

NRC must investigate the current financial qualifications of the Pilgrim licensees, per 10 CFR 50.33(f)(5), to determine whether they remain qualified to continue operating the reactor. This investigation must encompass at a minimum the following:

1. 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.
2. 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.

3. 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.
4. 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 impacts.

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.

Background

On May 11 and 12, 2000, Entergy and the New York Power Authority (hereafter, "NYPA"), the original owner and operator of FitzPatrick and Indian Point Unit 3 (hereafter, "IP3"), jointly submitted applications to transfer the licenses to the reactors.[1] On July 31, 2000, Citizens Awareness Network (hereafter, "CAN") requested a hearing on the application and challenged the license transfers based upon, among other issues, concern about Entergy's financial qualifications.[2] NRC accepted CAN's request and ordered a hearing on Entergy's financial qualifications per 10 CFR 50.33(f)(2), as well as Entergy's ability to satisfy decommissioning funding requirements at FitzPatrick and IP3.[3] CAN provided expert testimony challenging Entergy's ability to reliably meet anticipated operating costs at FitzPatrick and IP3, including finances sufficient to survive a prolonged maintenance outage.

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[1] Power Authority of the State of New York, et al. FitzPatrick License Transfer Application. May 11, 2000. NRC ADAMS document accession number: ML003727417. http://pbadupws.nrc.gov/docs/ML0037/ML003727417.pdf
Power Authority of the State of New York, et al. Indian Point Unit 3 License Transfer Application. May 12, 2000. NRC ADAMS document accession number: ML003743650. http://pbadupws.nrc.gov/docs/ML0037/ML003743650.pdf

[2] Citizens Awareness Network. "Petition to Intervene in the License Transfers for James A. FitzPatrick and Indian Point Unit 3 Nuclear Power Plants and Request for Subpart G Hearing Due to Special Circumstances." July 31, 2000. NRC ADAMS document accession number: ML003737588. http://pbadupws.nrc.gov/docs/ML0037/ML003737588.pdf

[3] USNRC. Memorandum and Order CLI-00-22. November 27, 2000. NRC ADAMS document accession number: ML003771716. http://pbadupws.nrc.gov/docs/ML0037/ML003771716.pdf

With the license transfer application, Entergy submitted projections of operation and maintenance costs and revenues for the first five years of operation, a Power Purchase Agreement with NYPA (hereafter, "PPA"), and supplemental financing arrangements with other Entergy corporate entities.[4] Entergy argued that the supplemental financing arrangements provided assurance of adequate operating funds for a prolonged maintenance outage. However, NRC agreed with CAN that these financial instruments were not materially relevant to Entergy's financial qualifications.[5] Instead, Entergy's financial qualifications had to be determined based on the validity of its cost and revenue projections. CAN also argued that, because the licensees were new entities that were not electric utilities, Entergy should be required to provide cost and revenue projections for the period of the reactors' operating licenses because the Entergy subsidiaries that applied to possess the licenses were newly formed entities. The Commission acknowledged the validity of CAN's legal argument, but rejected it on the merits because NRC judged Entergy's projections adequate to assure that FitzPatrick's and IP3's revenues would be able to cover their operating costs.[6]

Entergy's revenue projections were based on two variables: projected capacity factors for FitzPatrick and IP3 (as a measure of plant performance), and a projected average electricity price. New York State's electricity market had only recently been deregulated at the time Entergy applied for the license transfer, so the PPA was necessary to provide a reliable electricity price projection. The electricity price projections Entergy relied upon for FitzPatrick, included an average rate of $32 per megawatt-hour, based on the PPA.[7]

Similarly, Entergy submitted applications to transfer the operating licenses for Pilgrim and Vermont Yankee on, respectively, December 21, 1998 and October 5, 2001. Those applications were approved, with certain amendments, on April 29, 1999 and May 17, 2002. Both applications included financial qualifications information similar to that

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[4] FitzPatrick License Transfer Application. Enclosure 4, Exhibit K.
[5] U.S. Nuclear Regulatory Commission. "Memorandum and Order." CLI-01-14, Docket Nos. 50-333-LT and 50-286-LT (consolidated). June 21, 2001. NRC ADAMS document accession number: ML012000311. http://pbadupws.nrc.gov/docs/ML0120/ML012000311.pdf
[6] Ibid.
[7] Ibid. Page 33.

submitted with the FitzPatrick petition. The Pilgrim application utilized the same capacity factor as the FitzPatrick application (85%); while the Pilgrim PPA included higher electricity prices than the Fitzpatrick PPA, the amount of electricity output covered by the contract decreased in the third year (to 80% in 2002) and phased out at the end of the fifth year of projections (2004).

The Vermont Yankee application assumed a higher average capacity factor than the FitzPatrick and Pilgrim applications (89.6%), and the electricity prices in the PPA were significantly higher, averaging $40.98 per megawatt-hour (through 2007). Also, in 2006, Entergy implemented a 20% extended power uprate at Vermont Yankee, increasing the plant's electric generation capacity from the 510 megawatts relied upon in the license transfer to approximately 610 megawatts.

UBS Investment Research Reports FitzPatrick and Vermont Yankee Are and Will Remain Operating at a Net Loss through 2016 – States Pilgrim May Be at Risk, Depending on Market Conditions

In January[8] and February 2013,[9] UBS Investment Research (hereafter, "UBS") issued consecutive reports enumerating strong concerns about the performance of Entergy's merchant nuclear business, Entergy Wholesale Commodities (hereafter, "EWC"). In particular, UBS names two Entergy reactors that are unable to generate sufficient revenue to meet their operating costs: FitzPatrick and Vermont Yankee. In the February report, UBS also notes that Pilgrim is at risk of falling into this category. UBS projects that, unless Entergy closes FitzPatrick and/or Vermont Yankee, Entergy will have to operate them at a loss through at least 2016. Ultimately, the reports conclude Entergy will need to fundamentally restructure its merchant nuclear business to remove the liability for operating and, especially, decommissioning its merchant reactors from the corporate balance sheet.[10]

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[8] UBS Investment Research. "Entergy Corp.: Re-Assessing Cash Flows from the Nukes." January 2, 2013. http://www.clf.org/wp-content/uploads/2013/01/ETR_010213-Nuke.pdf

[9] UBS Investment Research. "Entergy Corp.: Challenging Outlook for New Team at Kickoff." February 4, 2013. http://www.clf.org/wp-content/uploads/2013/02/ETR_020313-MgmtMeet.pdf

[10] Ibid. Page 2.

Entergy has not challenged UBS's assessments, but neither has it announced plans to close the plants. If UBS is correct that FitzPatrick and VY have been operating at a net loss, and will continue to do for at least the next four years, then Entergy is no longer financially qualified to operate the reactors under the licenses and the terms of their transfers. Under Memorandum and Order CLI-01-014, NRC approved Entergy's application to possess the FitzPatrick operating license based upon Entergy's assurance that it could generate sufficient revenue to cover the plant's operating costs and withstand an extended maintenance outage. The projections Entergy provided to demonstrate its qualifications were either inaccurate, unpredictive, or are simply no longer valid. As a result, the FitzPatrick and Vermont Yankee licensees are no longer able to satisfy NRC financial qualifications requirements. An investigation of Pilgrim under 10 CFR 50.33(f)(5) is necessary to determine whether the same is true of the Pilgrim licensees.

Entergy Has No Power Purchase Agreements for the Reactors, and No Other Reliable Sources of Sufficient Revenue for FitzPatrick and Vermont Yankee

One basic condition on which the applications were based has changed, namely that Entergy no longer has PPAs for FitzPatrick, Vermont Yankee, and Pilgrim. Entergy's PPA with NYPA for FitzPatrick expired on December 31, 2012, and Entergy has so far failed to obtain long-term bilateral contracts to replace the PPA.[11] Entergy's PPAs for Vermont Yankee expired on March 21, 2012,[12] the date that the state-issued Certificate of Public Good expired. Further, Entergy has pulled VY out of the New England Independent System Operator's (hereafter, "NEISO") installed capacity market, both removing another possible source of revenue and signaling uncertainty as to the plant's future.[13] Entergy has not possessed PPAs for a significant portions of Pilgrim's output for several years.

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[11] Bandyk, Matthew. "Smaller nuclear plants could be forced to depend on outside support to remain open." SNL Financial. February 11, 2013. http://www.snl.com/Interactivex/article.aspx?TabStates=0&CdId=A-16916352-10804

[12] Ibid.

[13] DiSavino, Scott. "New England grid can function without Vermont Yankee reactor." Reuters. December 12, 2012. http://www.reuters.com/article/2012/12/10/utilities-entergy-vermontyankee-idUSL1E8NA50O20121210

NRC does not require a PPA to maintain financial qualifications, and UBS's reports suggest that FitzPatrick may not have been generating sufficient revenue under the PPA, anyway. Entergy's failure to obtain a PPA for FitzPatrick is relevant to its financial qualifications because it confirms that market conditions in Central and Western New York have changed substantially, so that power purchasers do not anticipate electricity prices increasing substantially in the near future. This means Entergy must rely on selling most or all of FitzPatrick's electricity on the New York Independent System Operator's (hereafter, "NYISO") Day-Ahead Market. Likewise, Entergy must generate nearly all of the revenue from Vermont Yankee's and Pilgrim's operations from sales on the NEISO Day-Ahead Market.

Market Electricity Prices Have Declined Below the Levels Entergy Relied Upon to Demonstrate Financial Qualifications

Since 2008, market prices for electricity in New York have declined precipitously, and have been lowest in Central and Western New York ("C&WNY," or NYISO Zones A, B, and C). There is significantly more electricity generation capacity than necessary to meet demand in C&WNY, and transmission constraints limit generators' ability to sell into higher-cost markets in the state and region. Below are average prices on NYISO's Day-Ahead Market for Zones A, B, and C:[14]

	Zone A - WNY	**Zone B - Genesee**	**Zone C - CNY**
2011 Average	$37.78/MWh	$39.98/MWh	$40.98/MWh
2012 Average	$31.17/MWh	$31.97/MWh	$32.59/MWh
24-mo. Average	$34.47/MWh	$35.97/MWh	$36.78/MWh

Of the three market zones that FitzPatrick's electricity has access to, prices tend to be highest in Zone C (Central New York). Even in that market, average electricity prices over the last two years fall significantly below the prices Entergy relied upon to establish its financial qualifications. [15] When adjusted for inflation[16] from 2001-2012, the

[14] These prices are obtained from NYISO's Market Data Center. We used Day-Ahead Market LBMP (Load Based Market Price) – Zonal data for Zones A, B, and C, from January 1, 2011 to December 31, 2012.

[15] The cost and revenue projections Entergy provided in the license transfer application, along with other financial details, were redacted from publicly available versions of the application and

FitzPatrick PPA price would be worth $41.60 per megawatt-hour in 2012 – 13.1% higher than the average price over the last two years. In 2012, prices fell dramatically below those in the original PPA (-26.7%) – so much so that, despite the fact that FitzPatrick performed at a higher capacity factor than Entergy assumed in the license transfer application, the plant would still have produced less revenue than projected. The fact that FitzPatrick may have already been running at an operating deficit suggests the operating costs for the plant may also be higher than Entergy projected.

Market price trends in New England have been similar. NEISO's average Real-Time LBMP in 2012 was $36.09 per megawatt-hour, and the two-year average was $41.39.[17] Prices in the NEISO zones Vermont Yankee and Pilgrim have access to tend to range just slightly higher. Vermont Yankee sells most of its capacity in the tri-state area, including the zones for Vermont (VT), New Hampshire (NH), and Western and Central Massachusetts (WCMASS).

	VT	NH	W&C Mass.	Zonal Average
2011 Average	46.56	46.06	47.23	46.62
2012 Average	36.17	35.95	36.95	36.36
24-mo. Average	41.37	41.01	42.09	41.49

Adjusted for inflation to 2012 dollars, the average price included in the Vermont Yankee license transfer application was $48.98, 18% higher than the two-year average price.[18] The final year of projections Entergy included in the application was based on a rate of $40.00 in 2007, for an inflation-adjusted value of $44.29. The average market price for Vermont Yankee's power in 2012 was 21.8% less. Despite the 20% power uprate and

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the hearing on CAN's contentions. However, the Commission's Memorandum & Order in the proceeding (CLI-01-014) cites an average price of $32 per megawatt-hour in the FitzPatrick PPA (see page 33).

[16] According to the Bureau of Labor Statistics, the Consumer Price Index inflation rate is approximately 30% for 2001 to 2012, and 33% from 2000 to 2012. http://data.bls.gov/cgi-bin/cpicalc.pl

[17] These prices are obtained from NEISO Hourly Zonal Information. For Vermont Yankee and Pilgrim, we used Real-Time Market LMP (Load-based Market Price) zonal data from January 1, 2011 to December 31, 2012. http://www.iso-ne.com/markets/hstdata/znl_info/hourly/index.html

[18] Vermont Yankee Nuclear Power Corporation, et al. "Transfer of Facility Operating License and Proposed License Amendments." October 5, 2001. Page 8. NRC ADAMS document accession number: ML012840021. http://pbadupws.nrc.gov/docs/ML0128/ML012840021.pdf

meeting similar or slightly higher performance levels than originally projected, UBS indicates Vermont Yankee is not able to operate profitably. As with FitzPatrick, this suggests that the operating costs for the plant are higher than Entergy originally projected.

Based on its location, we assume Pilgrim sells most of its power in the NEISO zones for Massachusetts, where prices also tend to be higher than the NEISO average.

	SE Mass.	NE Mass.-Boston	W&C Mass.	Zonal Average
2011 Average	46.58	46.56	47.23	46.79
2012 Average	36.14	36.16	36.95	36.42
24-mo. Average	41.36	41.36	42.09	41.60

Adjusted for inflation to 2012 dollars, the average price included in the Pilgrim license transfer application was $50.81, 22% higher than the two-year average price.[19] The final year of projections Entergy included in the license transfer application was based on a rate of $47.20 in 2004, for an inflation-adjusted value of $57.37. The average market price for Pilgrim's power in 2012 was 37.9% less. Rates in the Pilgrim PPA increased substantially in the final three years, as the amount of capacity under contract decreased – likely as a hedge against potentially lower market prices. We assume that the contract was structured to ensure similar revenues to that provided under the first three years of the PPA, for which the average rate was $47.86 in 2012 dollars – still 15% higher than the two-year average and 31% higher than the 2012 average.

Plant Reliability Problems at FitzPatrick Warrant Immediate Action by NRC to Suspend the License

FitzPatrick is experiencing performance problems that affect the plant's ability to generate revenue reliably. In February 2013, NRC placed FitzPatrick under Increased

[19] USNRC. "Order Approving Transfer of Licenses and Conforming Amendments." April 29, 1999. NRC ADAMS document number: ML011910099. Page 6 of Enclosure 3, "Safety Evaluation by the Office of Nuclear Reactor Regulation: Proposed Transfer of Operation License and Materials License for Pilgrim Nuclear Power Station to Entergy Nuclear Generation Company." http://pbadupws.nrc.gov/docs/ML0119/ML011910099.pdf

Regulatory Response for the Unplanned Power Changes (UPC) performance indicator.[20] NRC tracks UPC under the Initiating Events Cornerstone under its Reactor Oversight Process, because they "upset plant stability and challenge critical safety functions," making it more likely that an accident could occur. With an average of 6.4 UPC per 7,000 hours of operation, FitzPatrick has had eight times the industry average number of these initiating events.[21] There have been a variety of causes for UPC, as well as Unplanned Scrams (another Initiating Events performance indicator), including condenser fouling and tube leaks, a transformer fire, and a problem with the turbine control system. As part of its investigation of FitzPatrick's financial qualifications, NRC should determine whether these plant reliability problems are connected to economic pressures on Entergy to reduce operating and maintenance costs and outage time. For instance, the frequency of Unplanned Power Changes caused by problems with the main condenser makes it appear that Entergy is tolerating a high rate of initiating events in order to defer maintenance on, or replacement of, a major piece of equipment.

In the course of this period, NRC identified several violations of its regulations involving plant reliability and safety systems; most of these violations noted in inspection reports were identified through "self-revealing" events. Of six violations identified in 2012 inspections, four resulted from self-revealing problems affecting NRC's Initiating Events and Mitigating Systems safety cornerstones. An October 5 transformer failure resulted in a loss of offsite power (LOOP),[22] and the subsequent failure of an emergency diesel generator (EDG) revealed the generator had actually been degraded for a year due to a maintenance mistake.[23] A separate maintenance error on the same EDG on May 5, 2012 compromised the availability of offsite power, and control room operators responded

[20] USNRC. "Nine Mile Point 1, FitzPatrick Nuclear Power Plants to Receive Additional NRC Oversight." February 19, 2013. http://www.nrc.gov/reading-rm/doc-collections/news/2013/13-004.i.pdf

[21] USNRC. "Fiscal Year 2001 Results of the Industry Trends Program for Operating Power Reactors." April 9, 2012. Page 5 of Enclosure 1, "Fiscal Year 2011 Long-Term Industry Trend Results." NRC ADAMS document accession number: ML12065A340. http://pbadupws.nrc.gov/docs/ML1206/ML12065A340.pdf

[22] NRC Inspection Report 05000333/2012005. February 7, 2013. Violation Number: NCV 05000333/2012005-01 "Failure to Install Reserve Station Service Transformers in Accordance with Procedure." http://adamswebsearch.nrc.gov/webSearch2/doccontent.jsp?doc=%7B089F4153-6EFB-4D68-AAD1-6CA391AFCB53%7D

[23] Ibid. Violation Number: NCV 05000333/2012005-02 "Failure of 'A' EDG Output Breaker to Close Following Loss of Offsite Power."

inappropriately.[24] Finally, a mistake in maintenance on a Reactor Water Recirculation pump caused damage to the pump and an unplanned power change.[25] NRC identified all of these problems as resulting from human performance problems. The prevalence of human performance problems resulting in safety system failures and initiating events ought to be investigated for a connection to cost-cutting pressures at FitzPatrick.

There has also been a surprisingly large number of emergencies, plant shutdowns, and equipment failures at Pilgrim in recent months, as documented in daily event reports since January 1, 2013.[26] This recent performance trend should also be reviewed with respect to Entergy's financial qualifications, as part of the 10 CFR 50.33(f)(5) investigation.

FitzPatrick and Vermont Yankee Will Require Major Maintenance and/or Upgrades that Would Further Undercut Entergy's Financial Qualifications

In addition to the main condenser at FitzPatrick, Entergy may be forced to incur other large costs for plant maintenance and upgrades. As AGREE and CAN have alleged in a separate petition under 10 CFR 2.206, FitzPatrick is unique among reactors of its type in never having installed a so-called "hardened vent" (containment bypass system) to address known deficiencies in the design of its containment system.[27] NRC has preliminarily accepted AGREE, et al's, petition.[28] Regardless of the outcome of that proceeding, FitzPatrick will need to complete upgrades to the containment bypass system

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[24] NRC Inspection Report 05000333/2012003. August 7, 2012. Violation Number: NCV 05000333/2012003-01 "Failure to Follow Procedure During Removal from Service of Emergency Diesel Generator Ventilation."
http://adamswebsearch.nrc.gov/webSearch2/doccontent.jsp?doc=%7B9BA95935-DF83-4ECC-819F-9E086B315DB7%7D

[25] Ibid. Violation Number: NCV 05000333/2012003-02 "Inadequate Procedure for Installation of Reactor Water Recirculation Motor-Generator Scoop Tube Positioners."

[26] See NRC Daily Event Report Nos.: 48664, 48665, 48669, 48685, 48712, 48736, 48739, 48743, 48766, and 48801.

[27] Beyond Nuclear, Alliance for a Green Economy, et al. Petition for Emergency Enforcement Action, pursuant to 10 CFR 2.206. March 9, 2012.
Beyond Nuclear, Alliance for a Green Economy, et al. "Joint Petitioners' Supplement 1." March 20, 2012.
Both documents, supporting materials, and subsequent correspondence are available at:
http://allianceforagreeneconomy.org/node/27

[28] Email from Bhalchandra K. Vaidya, USNRC. Subject: "PRB Decision on Initial Recommendation Re: Your Petition under 10CFR2.206 Pertaining to the James A. FitzPatrick Nuclear Plant in Scriba, New York (TAC No. ME8189). October 4, 2012.

and other post-Fukushima requirements before the end of 2016 – during the same period in which UBS anticipates Entergy will not be able to operate FitzPatrick profitably. NRC's post-Fukushima safety review may yet require other investments in maintenance and upgrades.

Vermont Yankee is also known to require replacement of the main condenser sometime before 2016, at an estimated cost of $150 million and requiring substantial outage time.[29] In addition, the policy environment affecting VY's operating costs involve substantial uncertainty, with policymakers considering several measures that could create significant new expenses: fees or penalties for thermal discharges into the Connecticut River,[30] levies on spent fuel storage,[31] and/or prepayment for post-closure spent fuel storage and site remediation.[32] Both VY and Pilgrim, like FitzPatrick, are Mark I boiling water reactors and will have to complete a number post-Fukushima upgrades within the 2013-2016 period and beyond.

Conclusion

Entergy's financial qualifications and the impact of maintenance costs and outage time are not of concern because of their impact on Entergy's profitability, stock price, or bond rating. Rather, they are relevant because of their impact on nuclear plant safety and the decisions Entergy makes about how it operates and maintains FitzPatrick, Vermont Yankee, and Pilgrim while minimizing its financial losses. Entergy may, as UBS anticipates, decide to retire one or more of the plants in 2013 and defer making major investments such as replacing the condensers – in essence, deciding to tolerate problems that contribute to more Unplanned Power Changes and Initiating Events, and compromising mitigating systems and other safety cornerstones.

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[29] Dillon, John. "Problems With Yankee's Condenser Resurface." March 15, 2012. Vermont Public Radio. http://www.vpr.net/news_detail/93789/problems-yankees-condenser-resurface/

[30] Stein, Andrew. "Study: Vermont Yankee thermal discharge into Connecticut River exceeds limits." VTDigger.org. October 10, 2012. http://vtdigger.org/2012/10/10/study-vermont-yankee-thermal-discharge-into-connecticut-river-exceeds-limits/

[31] Vermont Senate. Bill S. 149. http://www.leg.state.vt.us/database/status/summary.cfm?Bill=S%2E0149&Session=2014

[32] Vermont House of Representatives. Bill H. 139.. http://www.leg.state.vt.us/database/status/summary.cfm?Bill=H%2E0139&Session=2014

The licensees must not be allowed to endanger the public health and safety as a result of the fact that Entergy is not financially qualified to operate Vermont Yankee and FitzPatrick, and possibly Pilgrim, per 10 CFR 50.33(f)(2). NRC must therefore suspend the FitzParick and VY licenses to prevent further violations, per 10 CFR 110(a)(3), and investigate Entergy's financial qualifications to continue operating Pilgrim, per 10 CFR 50.33(f)(5).

Jointly signed on behalf of the petitioners:

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