Gray, Mel

From: Lew, David
Sent: Monday, March 12, 2012 2:59 PM
To: Clifford, James; Tappert, John; Miller, Chris; Wilson, Peter; Gray, Mel
Cc: Dean, Bill
Subject: FW: Re-issued to include page 2 of Tab "D" ----COMMISSION E-READER....MONDAY, MARCH 12, 2012
Attachments: Tab A 03-12-12 Gunter 12-0098.pdf; Tab B 03-09-12 Congress 12-0097.pdf; Tab C 02-29-12 P. Feiner 12-0094.pdf; Tab E 03-09-12 Ltr to P. Kong.pdf; Tab F 03-08-12 Ltr to Markey.pdf; Tab D 02-28-12 Coleman 12-0096.pdf

Ahead of next week's visit to NMP, looks like I need to get a little more up to speed on the Fitz vent history than I thought. Several other items of interest in tabs B, C and F.

From: Champ, Billie
Sent: Monday, March 12, 2012 2:34 PM
To: Commission E-Reader Distribution
Subject: Re-issued to include page 2 of Tab "D" ----COMMISSION E-READER....MONDAY, MARCH 12, 2012

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Some of the information contained in the Reader is not publicly available.
If there are any questions, please contact SECY.

READING FILE

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March 9, 2012

INCOMING CORRESPONDENCE

Tab "A" 03/12/12 -- Email from Paul Gunter, concerns FitzPatrick Emergency Enforcement Petition.

Tab "B" 03/09/12 -- Letter from Congress, concerns Questions for the Record (QFR) associated with the March 7, 2012 hearing with the House Appropriations Subcommittee on Energy and Water Development.

Tab "C" 02/29/12 – Letter from Paul Feiner, concerns resolution calling for closure of Indian Point.

Tab "D" 02/28/12 -- Letter from Samuel Coleman, EPA, concerns community concerns regarding the length of exposure to radon and contaminated water and failed remediation at the Homestake Mining Company Superfund Site.

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OUTGOING CORRESPONDENCE

Tab "E" 03/08/12 -- Letter to Po Kee Wong, responds to request to speak at the NRC's Regulatory Information Conference (RIC).

Tab "F" 03/08/12 -- Letter to Rep. Edward Markey, responds to concerns related to the staff's review of the licensing renewal application for the Pilgrim Nuclear Power Station.

Billie A. C-Lopes

Champ, Billie

From: Paul Gunter [paul@beyondnuclear.org]
Sent: Saturday, March 10, 2012 11:57 AM
To: Borchardt, Bill
Cc: Vietti-Cook, Annette
Subject: Fwd: FitzPatrick Emergency Enforcement Petition (10 CFR 2.206)
Attachments: fitz_2206_03092012_no_vent_signed_final.pdf

Hello Mr Borchardt and Ms Vietti-Cook,

Please find attached joint petitioners emergency enforcement petition as provided by 10 CFR 2.206.

On March 9, 2011, I placed a call to the NRC Office of the Executive Director of Operations to verify how the emergency enforcement petitions as provided under 10 CFR 2.206 are to be submitted to the NRC for review.

The person that I spoke to put me on hold for a considerable length of time while she consulted.

Even though the regulation says that the petition may be submitted by email directly to the EDO (but does not provide an email address), she was reluctant to provide me with Mr. Borchardt's email address. Instead she was instructed to give me the email address > MSHD.Resource@nrc.gov < to which I submitted our petition.

This is apparently the Help Desk for the NRC Electronic Information Exchange Help Desk. Donna from the Help Desk left a message on my business number inquiring of the receipt of the emergency enforcement petition, leaving the message "Is there anything I am supposed to do with this?", even though the email is addressed to the attention of the EDO. I picked up this phone message this morning.

I managed to figure out the email address for the EDO so I am sending this to your attention and the Office of the Secretary in hopes that this petition will be properly filed.

I will be checking back in to affirm that the petition has landed on the EDO's desk as 10 CFR 2.206 process stipulates. I would very much appreciation some clarification on what the NRC policy is for submitting 2206 petitions in the future.

Thanks,

Paul

---------- Forwarded message ----------
From: **Paul Gunter** <paul@beyondnuclear.org>
Date: Fri, Mar 9, 2012 at 4:57 PM
Subject: FitzPatrick Emergency Enforcement Petition (10 CFR 2.206)
To: MSHD.Resource@nrc.gov
Cc: Jessica Azulay <jessica@allianceforagreeneconomy.org>

To the Attention of the Executive Director of Operations for the United States Nuclear Regulatory Commission.

In the matter of Entergy Nuclear Operations FitzPatrick Nuclear Power Plant in Scriba, New York.

Thank you,

3/12..To EDO for to handle as 2.206 petition...Cpy to: RF...12-0098

Paul Gunter

--
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Beyond Nuclear---The Alliance for a Green Economy--Center for Health, Environment & Justice--Citizens' Environmental Coalition---Peace Action New York State---CNY Citizens' Awareness Network---Syracuse Peace Council---Peace Action Central New York

March 9, 2012

Mr. Bill Borchardt
Executive Director for Operations
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
By Email: MSHD.Resource@nrc.gov

Mr. Borchardt:

Beyond Nuclear, The Alliance for a Green Economy, Center for Health, Environment & Justice, Citizens' Environmental Coalition, Peace Action New York State, CNY Citizens' Awareness Network, Syracuse Peace Council and Peace Action Central New York, hereafter referred to as "the joint 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 joint petitioners are requesting the following emergency enforcement action with regard to the undue risk to the public health and safety caused by the continued power operation of Entergy Nuclear Operation's James A. FitzPatrick nuclear power plant in Scriba, New York.

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

Paul Gunter, Director
Reactor Oversight Project
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----------/s/----------

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Syracuse, NY 13210

----------/s/----------
Diane Swords, Co-Chair
Peace Action Central New York
2013 E. Genesee St.
Syracuse, NY 13210

[ATTACHMENT]

BEYOND NUCLEAR AND THE ALLIANCE FOR A GREEN ECONOMY PETTITION TO THE UNITED STATES NUCLEAR REGULATORY COMMISSION REQUESTING EMERGENCY ENFORCEMENT ACTION PER 10 CFR 2.206 FOR THE FITZPATRICK NUCLEAR POWER PLANT, OSWEGO, NEW YORK

MARCH 9, 2012

INTRODUCTION

Beyond Nuclear[1] and The Alliance for a Green Economy,[2] which includes the Center for Health, Environment & Justice, Citizens' Environmental Coalition, Peace Action New York State, CNY Citizens' Awareness Network, Syracuse Peace Council and Peace Action Central New York, hereafter referred to as "the joint petitioners", request that the United States Nuclear Regulatory Commission (NRC) immediately suspend all power operations at the James A. FitzPatrick nuclear power plant in Oswego, New York pending emergency enforcement actions as provided in this petition by federal law (10 CFR 2.206).[3]

The joint petitioners' request is based on the significant fact that the operator of the FitzPatrick nuclear power plant, a General Electric Mark I Boiling Water Reactor (Mark I), refused to voluntarily install the Direct Torus Vent System (DTVS) on reactor's containment system also known as the "hardened vent" as requested by the NRC in

[1] Beyond Nuclear is a 501(c)3 organization based in Takoma Park, MD http://www.beyondnuclear.org

[2] Alliance for a Green Economy is a New York State-based organization, whose members include Center for Health, Environment & Justice, the Citizens' Environmental Coalition, Peace Action New York State, Peace Action CNY, the CNY chapter of Citizens Awareness Network, and the Syracuse Peace Council.

[3] Chapter 10 Code of Federal Regulation Part 2.206 http://www.nrc.gov/reading-rm/doc-collections/cfr/part002/part002-0206.html

Generic Letter 89-16, "Installation of the Hardened Wetwell Vent," issued on September 1, 1989.[4]

The "hardened vent" was recommended by the NRC in order to close out outstanding and unresolved severe accident issues in the GE Mark I boiling water reactor as the result of the inherently unreliable pressure suppression containment system. Generic Letter 89-16 (GL 89-16) requested that all GE Mark I operators voluntarily make *"modifications that substantially enhance the plants' capability to both prevent and mitigate the consequences of serious accidents."*[5] These enhanced capabilities covered by GL 89-16 included the installation of a *"reliable hardened vent system."*[6] The operators of FitzPatrick Mark I Boiling Water Reactor refused to make modifications to its Mark I containment. Instead, the FitzPatrick operators rely upon the analyzed capability of a ductwork venting system for low pressure venting of containment that pre-existed to the GL 89-16 request. The pre-existing containment vent is intended for such purposes as purging the Mark I pressure suppression containment for worker access during routine maintenance, repair and refueling. It was not designed with the intention to be used as a severe accident mitigation system.

Furthermore, FitzPatrick is publicly identified as the "one exception" among the 23 Mark I reactors in the United States to not voluntarily install the Direct Torus Vent System (DTVS) also known as the "hardened wetwell vent" and the "hardened vent."

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[4] "Installation of the Hardened Wetwell Vent," Generic Letter 89-16, US NRC, September 1, 1989 http://www.beyondnuclear.org/storage/japan/pet_2206_09011989-nrc-generic-letter-89-16-hardened-wetwell-vent.pdf

[5] Ibid, GL 89-16, p. 1

[6] Ibid, GL 89-16, p. 1

The modifications requested by NRC for installation of the Direct Torus Vent System were intended to protect and preserve containment integrity of the Mark I pressure suppression containment system in the event of a severe nuclear accident.[7]

Petitioner, Beyond Nuclear, has previously filed an emergency enforcement petition with the NRC on April 13, 2011 that separately challenges the adequacy and reliability of the installation of the experimental Direct Torus Vent System or "hardened vent" as installed on these other Mark I containments.[8] The DTVS includes an 8" hardened steel line that by-passes the Standby Gas Treatment System (the radiation filtration component in the nuclear power plants off-gas release system to the environment). The "hardened vent" by-pass line was installed for the purpose of avoiding back pressure that could lead to the rupture and failure of the vent path anywhere along the path to the 300-foot tall off gas vent stack release point. The Direct Torus Vent System as also installed on the GE Mark I units at Fukushima Daiichi dramatically failed to mitigate the nuclear accidents following the prolonged Station Black Out event that began on March 11, 2011. On December 13, 2011, the Office of Nuclear Reactor Regulation of the NRC formally decided to "ACCEPT" portions of the Beyond Nuclear April 13, 2011 emergency enforcement petition for further review by the

[7] "Safety Evaluation Report (SER) by the Office of Nuclear Reactor Regulation, Power Authority of the State of New York, Hardened Wetwell Vent Capability, James A. Fitzpatrick Nuclear Power Plant," US NRC, September 28, 1992, Purpose, p.2 http://www.beyondnuclear.org/storage/mark-1-campaign/fof/vent/fof_fitz_09281992-nrc-ser-approves-no-dtvs-highlight.pdf

[8] Suspension of operations at GE Mark I Boiling Water Reactors, Beyond Nuclear Emergency Enforcement Petition (10 CFR 2.206), April 13, 2011, http://www.beyondnuclear.org/storage/mark-1-campaign/mk-1-2206/bn_2206_ge_bwr_04132011.pdf June 8, 2011 supplement, www.beyondnuclear.org/storage/mark-1-campaign/mk-1-2206/bn_2206_ge_bwr_comb_06082011_sup_file.pdf

agency including the petitioner's requested action for the revocation of NRC prior approval of installation of the DTVS or hardened vent for these Mark I units.[9]

However, in the matter of this emergency enforcement petition, the joint petitioners assert that the FitzPatrick operator uniquely did not install the DTVS. The joint petitioners do not seek or request that FitzPatrick operators now install the DTVS as it is demonstrated to have experienced multiple failures to mitigate the severe nuclear accidents at Fukushima Daiichi. The joint petitioners instead request that the Fitzpatrick operating license be immediately suspended as the result of the undue risk to the public health and safety presented by the operator's reliance on non-conservative and wrong assumptions that went into the analysis of the capability of FitzPatrick's pre-existing ductwork containment vent system. The risks and uncertainty presented by FitzPatrick assumptions and decisions as regard NRC Generic Letter 89-16 as associated with the day-to-day operations of this nuclear power plant now constitute an undue risk to public health and safety. The joint petitioners request that the suspension of the operating license be in effect pending final resolution of a public challenge to the adequacy of the pre-existing vent line in light of the Fukushima Daiichi nuclear accident.

JOINT PETITIONERS REQUEST THE IMMEDIATE SUSPENSION OF THE FITZPATRICK OPERATING LICENSE

In full light of the demonstrated multiple failures of the GE Mark I containment and hardened venting systems at the Fukushima Daiichi nuclear power station in the

[9] Letter from Eric Leeds, NRR, NRC to Paul Gunter, Beyond Nuclear, December 13, 2011, http://www.beyondnuclear.org/storage/mark-1-campaign/mk-1-2206/fof_nrc_fdd_1213201113_ML11339A078.pdf

days following the March 11, 2011 Station Black Out (SBO) event, the joint petitioners seek the prompt and immediate suspension of Fitzpatrick operations because;

1) the GE Mark I Boiling Water Reactor pressure suppression containment system is identified as inherently unreliable and likely to fail during a severe accident due to the containment's small volumetric capacity;
2) the capability of FitzPatrick's pre-existing containment vent as approved for severe accident mitigation is not a fully 'hardened vent' system as recommended by NRC Generic Letter 89-16 and therefore presents greater and undue risk to public health and safety in the event of a severe accident from the current day-to-day operations than previously analyzed and assumed;
3) the capability of FitzPatrick's pre-existing containment vent as approved relies upon non-conservative and faulty assumptions including the assumption that there are "no likely ignition sources" along the pre-existing containment vent line during a Station Black Out event that would increase the risk of the detonation of hydrogen gas generated during a severe accident that might require opening the pre-existing vent line and would instead threaten containment integrity. Such faulty assumptions place a non-conservative and undue risk on the public's health and safety in the event of a severe accident during the current day-to-day operation;
4) the capability of Fitzpatrick's pre-existing containment vent system uniquely allows for a severe nuclear accident to be released at ground level with

unanalyzed and unacceptable radiation dose consequences which presents an undue risk to public health and safety in the adjacent communities and beyond;

5) the Fukushima Daiichi nuclear catastrophe dramatically and exponentially changes the FitzPatrick cost-benefit analyses as used to justify reliance on a pre-existing containment vent system that now represents a greater and undue risk to public health and safety;
6) the continued day-to-day reliance upon the significantly flawed pre-existing containment vent system as would be relied upon to mitigate a severe accident at the FitzPatrick Mark I reactor presents an undue risk to the public health and safety while industry and NRC deliberate over unresolved issues associated with the unreliable Mark I containment and experimental criteria for a renewed attempt to establish a "reliable hardened vent." Industry and the NRC could be engaged for many more years than is currently intended per Order still pending from NRC Near-Term Task Force Recommendation 5.1.[10]
7) the identified containment vulnerability, the non-conservative if not false assumption of "no likely ignition sources" in the pre-existing vent line and the unacceptable consequences of failure of the FitzPatrick pre-existing containment vent place both greater uncertainty and undue risk on public health and safety and not reasonably justified by arbitrarily assigning a low probability of the occurrence of a severe accident.

[10] "Recommendations for Enhancing Reactor Safety in the 21st Century: The Near-Term Task Force Review of the Fukushima Daiichi Accident," US NRC, July 12, 2011, p. 41, http://pbadupws.nrc.gov/docs/ML1118/ML111861807.pdf

REQUESTED EMERGENCY ENFORCEMENT ACTIONS

As a result of the Fukushima Daiichi nuclear accident involving the five (5) General Electric Mark I Boiling Water Reactors (Mark I) and multiple failures of both the Mark I pressure suppression containments and the Direct Torus Vent System or "hardened vent " at four (4) units beginning on March 11, 2011, the Petitioners request that the NRC immediately suspend the FitzPatrick operating license and that the reactor unit be placed into cold shutdown until the following emergency enforcement actions are enacted, completed, reviewed and approved by the NRC and informed by independent scientific analysis;

1) Entergy Nuclear Operations' Fitzpatrick nuclear power plant shall be subject to public hearings with full hearing rights on the continued operation of the Mark I BWR and the adequacy and capability of a pre-existing containment vent which is not a fully hardened vent line as recommended by NRC Generic Letter 89-16. As such, the FitzPatrick operator uniquely did not make containment modifications and did not install the Direct Torus Vent System or DTVS, otherwise known as "the hardened vent," as requested by NRC Generic Letter 89-16 and as installed on every other GE Mark I in the US;

2) Entergy Nuclear Operations shall publicly document for independent review its post-Fukushima re-analyses for the reliability and capability of the FitzPatrick pre-existing containment vent system as previously identified as "an acceptable deviation" from NRC Generic Letter 89-16 which recommended the installation of

the Direct Torus Vent System and as outlined in the NRC Safety Evaluation Report dated September 28, 1992.[11] The publicly documented post-Fukushima analysis shall include the reassessment of all assumptions regarding the capability and reliability of the pre-existing containment venting and specifically address non-conservative assumptions regarding;

a) the FitzPatrick cost-benefit analysis used to justify not installing a fully hardened vent system and;

b) "unlikely ignition points" as claimed in the FitzPatrick pre-existing vent line system that would otherwise present increased risks and consequences associated with the detonation of hydrogen gas generated during a severe accident.

BACKGROUND AND ARGUMENT

The General Electric Mark I Boiling Water Reactor's pressure suppression containment system is documented to be vulnerable to failure during a severe accident due to containment melt through, over-pressurization and hydrogen gas generation and explosion as the result of a severe accident.[12] This is in large part due to the Mark I pressure suppression containment system's relatively small size, volumetrically, which is one-sixth (1/6th) that of the large dry containment systems for the Pressurized Water Reactors. As a result of design vulnerability to severe accidents, the NRC and the

[11] NRC SER for Fitzpatrick, p 2 of 8 http://www.beyondnuclear.org/storage/mark-1-campaign/fof/vent/fof_fitz_09281992-nrc-ser-approves-no-dtvs.pdf

[12] Beyond Nuclear emergency enforcement petition, April 13, 2011, http://www.beyondnuclear.org/storage/mark-1-campaign/mk-1-2206/bn_2206_ge_bwr_041320111.pdf

industry collaborated to design and voluntarily install the Direct Torus Vent System (DTVS) or "hardened wetwell vent" to provide control room operators with a "*last resort*" option during a severe accident challenge to deliberately and temporarily defeat containment through a hardened venting system retrofitted to the wetwell component of the GE Mark I pressure suppression system to save it from permanent rupture and the catastrophic release of radiation.[13]

On September 1, 1989, the NRC sent to all Mark I operators including the New York Power Authority (NYPA) Generic Letter 89-16, "Subject: Installation of a Hardened Wetwell Vent (GL 89-16)."[14] GL 89-16 requests that all Mark I operators voluntarily to modify the pressure suppression containment systems by installing the Direct Torus Vent System *"to reduce the vulnerability of the BWR Mark I containments to severe accidents."*[15] The generic letter further states, "*Specifically, the Commission has directed the staff to approve installation of a hardened vent under the provisions of 10 CFR 50.59 for licensees, who on their own initiative, elect to incorporate this plant improvement."*[16] The NRC communication then explicitly identifies, "*Continued reliance on pre-existing capability (non-pressure-bearing vent path) which may jeopardize*

[13] "Filtered Venting Considerations in the United States," Dahlman, Hulman, Kudrick, US NRC, May 17-18, 1988, CSNI Specialists Meeting on Filtered Vented Containment Systems, Paris, France, OSTI released 07/27/2006 http://www.beyondnuclear.org/storage/mark-1-campaign/fof/vent/fof_vent_filter_1988_nrc_pros-cons.pdf

[14] Generic Letter 89-16, "Subject: Installation of Hardened Wetwell Vent, (GL 89-16)," NRC, September 1, 1989, http://www.beyondnuclear.org/storage/japan/pet_2206_09011989-nrc-generic-letter-89-16-hardened-wetwell-vent.pdf

[15] Ibid, p.1

[16] Ibid, p. 1

access to vital plant areas or other equipment is an unnecessary complication that threatens accident management strategies."[17]

The NRC Generic Letter 89-16 concludes, "*For the aforementioned reasons, the staff concludes that a plant modification is highly desirable and a prudent engineering solution of issues surrounding complex and uncertain phenomenon. Therefore, the staff strongly encourages licensees to implement requisite design changes, utilizing portions of existing systems to the greatest extent practical, under the provisions of 10 CFR 50.59."*[18]

Yet, on September 28, 1992, a little more than two years later, the NRC in fact provided the FitzPatrick operator with its approval to continue to operate with an accepted deviation from the guidance of GL 89-16 for just such a "pre-existing capability."[19] The NRC approved a pre-existing vent path from the FitzPatrick Mark I containment system. Rather than install the requested modifications to by-pass the Standby Gas Treatment System (SGTS), FitzPatrick made no modifications to its pre-existing duct work as-built by crediting and acknowledging that the pre-existing vent line would rupture at low-pressure and grossly fail at that portion of the "non-pressure-

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[17] Ibid, p. 2

[18] Ibid, p. 2

[19] "Hardened Wetwell Vent Capability at the James A. Fitzpatrick Nuclear Power Plant,", Attachment "Safety Evaluation Report by the Office of Nuclear Reactor Regulation, Power Authority of the State of New York, Hardened Wetwell Vent Capability, James A. FitzPatrick Nuclear Power Plant," US NRC, September 28, 1992, http://www.beyondnuclear.org/storage/mark-1-campaign/fof/vent/fof_fitz_09281992-nrc-ser-approves-no-dtvs-highlight.pdf