

June 17, 2008 (8:00am)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION****In the Matter of****Docket No. 50-423-OLA****Dominion Nuclear Connecticut, Inc.
(Millstone Nuclear Power Station,
Unit 3)****ASLBP No. 862-01-OLA-BD01****June 16, 2008****NOTICE OF APPEAL**

The petitioners, Connecticut Coalition Against Millstone and Nancy Burton (collectively, "petitioners" or "CCAM") herewith serve Notice of Appeal¹ upon the United States Nuclear Regulatory Commission ("NRC") from the decision of the Atomic Safety and Licensing Board Panel ("Panel") denying their Petition to Intervene and Request for Hearing dated March 17, 2008 in the matter of the application of Dominion Nuclear Connecticut, Inc. ("Dominion") for a license amendment to allow a 7+ per cent power uprate for Millstone Nuclear Power Station Unit 3 ("Millstone Unit 3"), and to allow collateral radiological and environmental consequences, by Memorandum and Order issued on June 4, 2008 (LBP-08-09)("Panel Order"), in accordance with the provisions of 10 C.F.R. §2.311.

Insofar as the petitioners submitted a factually and legally sufficient petition challenging the license amendment application, as supported by declarations of qualified and eminent experts, the Panel erred in dismissing the petition and denying the petitioners an opportunity for hearing in a decision in which the Panel found the petitioners possess legal standing to request a hearing. As a consequence, the Panel

¹ The petitioners incorporate herein by reference their Petition to Intervene and Request for Hearing with accompanying Declarations; their response to NRC Staff and Dominion Answers and their objection to Dominion's Motion to Strike.

denied the petitioners, a public-interest advocates, the opportunity to present their substantial legal and factual challenges forward to an evidentiary hearing. Moreover, as no other party or governmental agency petitioned to intervene or requested a hearing, the entire affected public has been denied any opportunity for a hearing on the flawed, incomplete and dangerous application which will increase radiological emissions to the air and water by at least 9 per cent and thermal pollution of the Long Island Sound by at least 7 per cent. The Panel committed plain and egregious error. The Commission should reverse the decision and permit the petitioners to proceed to a full Subpart G evidentiary hearing on their nine (9) admissible contentions.

Importantly, the application in question proposes irreversible consequences, including permitting a significant increase in the amount of radiation emitted by a nuclear power plant. Therefore, by its own regulations,² the Commission must be “particularly sensitive” to the license amendment request.

The application fails to meet the NRC’s own legal standards of protecting health and safety of the public and the environment. Its No Significant Hazards Determination is erroneous because the application involves a significant increase in the probability or consequences of an accident previously evaluated and it involves a significant reduction in a margin of safety. The application therefore should be denied.³

Introduction

On July 13, 2007, Dominion submitted an application to the NRC for an amendment

² 10 C.F.R. §50.92(b).

³ 10 C.F.R. §50.92(c).

to its NRC operating license NPF-49 to allow a 7+ increase in electrical power generation at its problem-plagued⁴ Millstone Unit 3 nuclear reactor.⁵

Dominion apparently presumed its application would be rubber-stamped by the NRC. On May 2, 2007- **more than two months before Dominion even submitted the Millstone Unit 3 power uprate application to the NRC** - Thomas Farrell, President and Chief Executive Officer of Dominion Resources, Inc., the applicant's corporate parent, told investors during a "1st quarter" teleconference call:

Upgrades to our merchant plants are a low cost,⁶ high return expansion option. The plant upgrade [sic] at Millstone 3 . . . will allow us to supply additional power in very attractive merchants markets.

On January 15, 2008, the NRC published a "Biweekly Notice: Applications and Amendments to Facility Operating Licenses Involving No Significant Hazards Consideration"⁷ The notice provided for a 60-day period of time within which interested parties might petition the NRC to intervene in the license amendment proceedings and

⁴ Refer, e.g., to Class II emergency declared at Millstone Unit 3 on April 17, 2005 as a result of the growth of a "tin whisker" on a circuit board. The event caused "unusual" releases of radiation to the environment, a fact initially denied by the NRC. Steam cascaded from Millstone Unit 3 for more than 10 hours during the event. Astonishingly, the NRC declined to order Dominion to identify and correct all other tin whiskers from Millstone Unit 3's circuitry in the aftermath of the emergency.

⁵ Dominion "supplemented" its application on September 12, 2007, November 19, 2007, December 13, 2007 and December 17, 2007. 73 Fed. Reg. 2546, 2549 (January 15, 2008). Nevertheless, the application was still incomplete even after the 60-day hearing deadline had expired. See discussion at 15 *infra*.

⁶ Farrell did not share with investors the true costs of the prospective Millstone Unit 3 uprate: significantly reduced safety margins and heightened risks to the public health and safety.

⁷ 73 Fed. Reg. at 2546.

request a hearing.

Dominion styled its application as a "Stretch Power Uprate" ("SPU") to increase Millstone Unit 3's authorized core power level from 3411 megawatts thermal (MWt) to 3650 MWt.

The Panel Order notes:

Dominion stated that it developed its LAR [license amendment request] utilizing the guidelines in NRC Review Standard, RS-001, "Review Standard for Extended Power Uprates [EPUs]."

However, the Panel Order statement is inaccurate and misleading. Dominion's application submission -Attachment 1 to the July 13, 2007 application - contains the following acknowledgment at page 13:

While it is concluded that the proposed power level change is classified as a Stretch Power Uprate, the guidelines for an Extended Power Uprate have also been used in the LAR **with a small number of exceptions**. [Emphasis added.]

The "small number of exceptions" wherein the Millstone Unit 3 power uprate application does not conform to the NRC's guidelines for Extended Power Uprate are not identified by Dominion nor NRC Staff; nor indeed are specific instances wherein the application assertedly conforms to the NRC's guidelines for Extended Power Uprate identified.

The application proposes significant collateral radiological and environmental consequences, including:

- An estimated 9 per cent increase in the levels of radiological emissions to the air and water above current levels⁸ - which increased levels of radiation are associated with

⁸ Refer to Dominion application at Attachment 2 ("Supplemental Environmental Report" at Section 8.0 ("Radiological Environmental Impacts").

linear increases in health risks⁹ -to a community which already suffers pronounced heightened incidences of breast, thyroid, brain, bone, lung and colon cancers and leukemia, diseases which are associated with radiation exposure and have been on a steady rise since Millstone began releasing radiation routinely to the environment in 1970. Cancer incidences among children and young adults are higher in the region surrounding Millstone than elsewhere in the state¹⁰. When the NRC declined to allow an evidentiary hearing to consider the health effects of continued operation of Millstone Units 2 and 3 during a relicensing period, it did so on the grounds that health effects of Millstone operations would be considered on a going-forward basis - presumably in a proceeding at which Dominion might propose to increase its radiation releases and hence risks of harmful health effects.

- The total BTU's (British Thermal Units) in Millstone Unit 3's thermal plume discharge to the Long Island Sound will increase by an estimated 7 per cent.¹¹
- Heightened safety risks to the public and workers due to overstressing the already-"stretched" Millstone 3's uniquely small containment and infrastructure with increased pressure and coolant flow rates.

The gravamen of the Petition to Intervene and Request for Hearing is the overriding issue that the proposed power increase exceeds NRC's own standards for a "stretch"

⁹ Refer to Declaration of Ernest J. Sternglass, Ph.D., accompanying the CCAM Petition to Intervene and Request for Hearing.

¹⁰ Region closest to the Indian Point Nuclear Power Station also suffers from similar heightened cancer incidences.

¹¹ Attachment 2 to LRA at page 23 (7.2.2 MPS3 Cooling Water Systems).

power uprate and that the unique problematical characteristics of the Millstone Unit 3 containment, identified in detail by the petitioners' expert, a nuclear engineer with substantial experience at Millstone Unit 3, compel NRC review of the application under "Extended Power Uprate" standards.

Contentions

Contention 1: The proposed power level for which Dominion has applied to uprate Millstone Nuclear Power Station Unit 3 exceeds the NRC's SPU regulatory "criteria." The SPU application fails to satisfy the first NRC "criterion"¹² that the NRC has set the power limit for SPUs at ". . . up to 7% . . ." (Emphasis added.)

Initially, it must be observed that the Panel Order appears to disavow information the NRC has posted on its own website. ("CCAM refers us to statements on the NRC website and to regulatory guidance documents (such as Review Standard RS-001), but these references are not the applicable law. They are only guidance prepared by the Staff to indicate to an applicant the matters it should address.")¹³

The Panel Order states that the governing regulations setting forth the standards to be applied in this matter appear at 10 C.F.R. §50.90 to §50.92. ("The relevant NRC regulations for a power uprate, be it a SPU or a EPU, are set forth in 10 C.F.R. §§50.90 to 50.92.")¹⁴

However, 10 C.F.R. §§50.90 to 50.92 are not specifically addressed to power uprates and indeed the cited regulations set forth general terms but not defined standards.

¹² Id.

¹³ See Panel Order at 16.

¹⁴ Panel Order at 16.

Indeed the only "standard" which can be gleaned from 10 C.F.R. §§50.90 to 50.92 appears as 10 C.F.R. §50.92(b), which states:

The Commission will be particularly sensitive to a license amendment request that involves irreversible consequences (such as one that permits a significant increase in the amount of effluents or radiation emitted by a nuclear power plant). [Emphasis added.]

Indeed, the instant application proposes such "irreversible consequences (such as one that permits a significant increase in the amount of effluents or radiation emitted by a nuclear power plant)" as are referenced in 10 C.F.R. §50.92(b), namely, increases of at least 9 per cent in the levels of radionuclides to be released to the environment. Dominion and the NRC Staff dispute that the proposed 9 per cent increase is "significant." This dispute is particularly the subject of Contention 8. (See further discussion at 8 *infra*.)

Since the Panel Order disavows NRC website information as well as Review Standard RS-001 as providing standards for review of an SPU uprate, and since the applicable regulations, as cited by the Panel Order, contain NO standards for review of SPU applications, the Panel Order appears to advocate a position whereby NRC determination of a SPU application is to be undertaken in a standards vacuum and subject to arbitrary analysis and determination.

It is, needless to say, somewhat disconcerting for a panel of the Atomic Safety and Licensing Board to render a decision through disavowal of standards.

The proper, and legal, approach is to apply the standards which the NRC has established for Extended Power Uprates, that is, for those exceeding 7 per cent, to the matter at hand, which qualifies as an application for Extended Power Uprate because it

proposes to increase power generation by more than 7 per cent.

It is equally disconcerting for the Panel to rule that an applicant's failure to address the NRC's guidance documents - or even an applicant's deviation from such NRC guidance documents - "does not rise to the level of failure to comply with NRC regulations"¹⁵ particularly where the NRC regulations are utterly silent as to applicable standards. Charitably, the Panel's Order employs circuitous logic to reach a result which finds Dominion need not comply with standards which do not exist. As the existence of enforceable standards is the centerpiece of administrative law adjudications, the Panel's espousal of an abdication-of-standards approach is self-defeating.

Similarly, the Panel Order asserts that "CCAM's challenge to whether the Dominion application should be treated as a SPU or EPU has no basis in the law." Again, the Panel Order exemplifies circuitous logic: since the NRC itself came up with the two categories to describe power uprates - SPU and EPU - the Panel's attempt to deny any distinction between the two categories is simply non-sensical and it undermines the NRC's policies and practices.

Further, the Panel Order determines that Contention One is inadmissible because it does not "assert an omission from the application of required information or an asserted error in a specific analysis or other technical matter."

This statement is simply incorrect. The petitioners pointed out that Dominion acknowledged that it did not provide all the information which would be required of a EPU and that such information is required because the application requests a power

¹⁵ Id. at 17.

increase in excess of 7 per cent - above the SPU threshold.

Finally, the Panel Order determines that Contention One is inadmissible because it fails to “present any support to indicate the materiality of this contention to the ultimate findings the Commission must make.”¹⁶ Again, the Panel Order makes the mistake of disavowing NRC’s standards as set forth on its website and in Review Standard RS-001. Resorting to colloquial expression to characterize the Panel’s Order on this point, its attitude toward an applicant’s non-compliance with NRC standards is a “So what???”

The “So what” is that the instant application is unprecedented as a SPU¹⁷: the NRC has never approved a SPU for a power increase of more than 7 per cent¹⁸ for any nuclear reactor and neither Dominion nor NRC Staff - nor the ASLB Panel itself - has provided any good reason why it should do so in this particular case. To the contrary, given Millstone Unit 3’s uniquely problem-plagued operational history, more than a modicum of enhanced consideration is required.

The Panel Order rejection of the admissibility of Contention 1 is clearly erroneous.

Contention 2: Dominion’s application fails to meet the NRC’s second “criterion” for a SPU application because Millstone Unit 3 already has had its design margins dramatically and substantially reduced.

The proposed power uprate will dramatically reduce safety margins, according to the Declaration of Arnold Gundersen. Dominion, in its filings, disagrees. Therefore, the

¹⁶ Id. at 18.

¹⁷ Refer to the entirety of the Declaration of Arnold Gundersen accompanying the Petition to Intervene and Request for Hearing in this matter.

¹⁸ The “7 per cent” is a delineator of the NRC’s own making; presumably, the NRC adopted the “7 per cent rule” for a valid reason.

issue - which is at the essence of the NRC's review¹⁹ - is in material dispute. The contested facts can only be determined after a full evidentiary hearing. In clear error, the Panel Order rejects Contention 2 on the rather dubious grounds that the issue has been "**discussed**" (emphasis added) by Dominion in its submission. ("However, CCAM errs because the effects of the requested power uprate upon containment pressure, and therefore upon the structural operating margins, are discussed in Attachment 5 to the LAR."²⁰)

The important point here is that CCAM, being aware of Dominion's "discussion," disagrees with it and finds it inadequate to provide an appropriate assurances that implementation of the proposed power uprate will not significantly reduce already-reduced safety margins.

The Panel Decision seems to suggest that simply because an applicant submits a "discussion," that should end any inquiry or challenge to the adequacy or correctness of the "discussion." In a fair-minded and neutral proceeding, the "discussion" provided by one party cannot be accepted as determinative in the face of a substantive, fact-based challenge - and particularly one mounted through an expert with hand-on experience at a high level at the very facility in question.

Furthermore, contrary to the statement of the Panel Order ("CCAM neither

¹⁹ See 10 C.F.R. §50.92(C)(3) ("The Commission may make a final determination, under the procedures in §50.91, that a proposed amendment to an operating license . . . involves no significant hazards consideration, if operation of the facility in accordance with the proposed amendment would not . . . (3) Involve a significant reduction in a margin of safety."

²⁰ Id. at 19.

challenges any specific analysis in the LAR regarding the containment pressurizations . . . nor supports their proposition by suggesting any particular containment design limit that would be challenged by the proposed power uprate.”²¹), the Gundersen Declaration sets out in exquisite detail how the Millstone Unit 3 containment has already been “maxed out.” CCAM’s nuclear engineer expert - aware of Dominion’s representations and calculations - rejects them as inadequate to protect the public health and safety and the environment.

The Panel Order misconstrues the Petition and the Gundersen Declaration as challenging the current operating license of Millstone Unit 3.²² Rather, the Petition and the Gundersen declaration take the reasonable position - given the facts as set forth in the Gundersen Declaration - that Millstone Unit 3 has already been “stretched to the limit.”

Thus there is an obvious dispute as to material facts, requiring adjudication through an evidentiary hearing.

The Panel Order rejection of the admissibility of Contention 2 is clearly erroneous.

Contention 3: When compared to all other Westinghouse Reactors, Millstone Unit 3 is an “outlier” or “anomaly.” Dominion’s proposed uprate is the largest per cent power uprate for a Westinghouse reactor, while Millstone Unit 3 also has the smallest containment for any Westinghouse reactor of roughly comparable output.

The Panel Order misconstrues Contention 3. As CCAM set forth in its Petition:

If approved, Dominion’s power increase to Millstone Unit 3 would be the largest-ever uprate approved to Millstone 3’s unique containment with the “smallest”

²¹ Id.

²² Id. at 20-21.

volume ever licensed, as discussed above. The consequences of increasing the nuclear reactor power in this unique, very small sub-atmospheric-designed containment are grave: The proposed power uprate increase at Millstone Unit 3 means that in the event of a nuclear accident at Unit 3, more than 7 per cent additional energy must be absorbed into this one-of-a-kind containment. Analytical "tweaking" of pressure limits and real concerns about the integrity of the concrete containment form a further basis for concern that the suitability of Millstone Unit 3 for a 7+ per cent power increase has not been adequately analyzed as a SPU application. Further detail is provided in the Gundersen Declaration at paragraphs 34-43.

Contention 3 contends that Dominion's analysis is inadequate to assure protection of the public health and safety. Furthermore, the LAR omits to address the issue of the integrity of the concrete containment integrity.

The Panel Order rejection of the admissibility of Contention 3 is clearly erroneous.

Contention 4: Construction problems due to the unique sub-atmospheric containment design, coupled with the impact upon the containment concrete by the operation of the containment building at very high temperature, very low pressure and very low specific humidity, place the calculations used to predict stress on that concrete containment in uncharted analytical areas.

The principal error of the Panel Order rejecting Contention 4 is its statement of confidence that "matters that occurred in the 1970s [when Millstone Unit 3 was under construction] . . . are now part of the Millstone Unit 3 current licensing basis (CLB)."²³

As Dominion's license amendment application makes no reference to the issue of concrete integrity as raised in the Gundersen Declaration, there is simply no basis for the Panel's expression of confidence - and rejection of Contention 4 on such basis.

Rather than fault Dominion for its failure to offer evidence in its answer of any analysis it conducted regarding the integrity of the containment concrete and in light of the construction practices of the 1970s, the Panel Order turns a blind eye to the

²³ Id. at 23.

petitioners' allegations and unfairly castigates the petitioners for supposedly presenting "unsupported challenges to the Millstone 3 CLB."²⁴

Contention 4 presents issues of bedrock significance which prudence dictates must be aired and analyzed before Millstone Unit 3 is permitted to begin an incremental power ascension in its latest experiment to test the validity of its calculations.

Contention 4 presents a dispute of material facts which require resolution by means of an evidentiary hearing.

The Panel Order rejection of the admissibility of Contention 4 is clearly erroneous.

Contention 5: The impact of flow-accelerated corrosion at Dominion's proposed higher power level for Millstone Unit 3 has not been adequately analyzed nor addressed.

The Petition and the accompanying Gundersen Declaration present the undisputed fact that implementing a 7+ power uprate at Millstone Unit 3 will cause flow-accelerated corrosion to occur and heighten the risk of equipment failure and accident.²⁵

Contention 5 asserts that the non-linear effects of flow-accelerated corrosion are significant and have not been adequately analyzed. For example, the Gundersen Declaration points out that the application does not contain an assessment of possible damage which may have occurred when Dominion recently illegally operated at greater-than-authorized power.²⁶

The Panel Order recites that portion of Dominion's Answer which states that

²⁴ Id. at 24.

²⁵ See Gundersen Declaration at paragraph 49F.

²⁶ See Gundersen Declaration at paragraph 49G.

Millstone Unit 3's flow-accelerated corrosion program conforms with the guidance in the GALL Report - or so it was "established" in the license renewal proceedings for the Millstone Nuclear Power Station, according to Dominion.²⁷ However, upon information and belief, Dominion did not represent to the NRC during public proceedings on its license extension application that it intended to achieve a 7+ per cent power uprate at Millstone Unit 3 in the near future. Nor had the recent event occurred during which Dominion exceeded permissible power levels at Millstone Unit 3. Nor does Dominion provide reference to establish that its future plans for a 7+ power uprate were disclosed to the NRC during the relicensing proceedings. Without reference to and adequate consideration of these factors, the application for a 7+ power uprate is substantially incomplete.

Moreover, it is important to note that Dominion is apparently prepared in advance to NOT adhere to the guidance of NUREG-1800 to adequately manage effects of flow-accelerated corrosion - by contracting out a contract on a fixed price basis.²⁸

The Panel Order rejection of the admissibility of Contention 5 is clearly erroneous.

Contention 6: Dominion's application for a Millstone Unit 3 7+ per cent uprate cannot be and should not be analyzed as a SPU application insofar as the NRC has not adopted standards nor regulatory requirements for reviewing SPU applications.

As mentioned above,²⁹ the Panel Order disavows the regulatory standards the NRC has posted on its website relating to nuclear power plant power uprates.

²⁷ See Panel Order at footnote 127.

²⁸ See petitioners' April 22, 2008 Reply at pages 19-20.

²⁹ See discussion at 6-10 *supra*.

The Panel Order points to no other specific authority setting forth standards for SPU applications. Without standards by which to assess an application, an administrative agency is left to its unbridled discretion, a legal oxymoron.

Contention 6 presents an issue of law which requires adjudication.

The Panel Order rejection of the admissibility of Contention 6 is clearly erroneous.

Contention 7: Dominion has neglected to provide all information to the NRC staff as it has requested and therefore its application for Millstone Unit 3 uprate should be considered to be incomplete and inadequate.

Well after CCAM petitioned to intervene in these proceedings on March 17, 2008, the NRC staff continued to request information from Dominion which had not been submitted with the application and was required to complete the application.³⁰

Contention 8: The uprate will result in heightened releases of radionuclides and consequent exposures to plant workers and to the public estimated by Dominion to be 9 per cent but likely in excess of 9 per cent above current levels and such increases will result in corresponding 9 per cent (or more) increases of the risk of harmful health effects. Dominion's application for Millstone 3 uprate makes no provision for new shielding or other techniques to mitigate increased radionuclide release levels. Since Millstone first went online in 1970, cancer incidences in the communities surrounding Millstone have become the highest in the state for many types of cancer; the Millstone host communities suffer high incidences of fetal distress, stillbirth, premature birth, genetic defects and childhood cancer. Cancer is widespread among current and former Millstone workers. Under these circumstances, Dominion's application is entirely inadequate to assure that the uprate will not endanger plant workers or the public to an unsafe and unacceptable degree. Dominion's application must be rejected.

Contention 9: Dominion's application for a 7+ per cent power generation uprate at Millstone Unit 3 will result in significant new releases of radioactive material to the environment and it will result in discharges of significant volumes of water to the Long Island Sound at heightened temperatures, both of which consequences are inadequately addressed in the application.

³⁰ See Petition to Intervene and Reply discussions of Contention 7.

With regard to Contentions 8 and 9 (addressed collectively here), the Panel Order fails to pay heed to the singular requirement of 10 C.F.R. §50.92(b), which provides in its entirety as follows:

[Before issuing a license amendment for a nuclear power reactor] the Commission [NRC] will be particularly sensitive to a license amendment request that involves irreversible consequences (such as one that permits a significant increase in the amount of effluents or radiation emitted by a nuclear power plant.

It is undisputed that the present license amendment request proposes to increase the amount of effluents or radiation emitted by Millstone Unit 3.

In its initial Petition to Intervene and Request for Hearing and in its April 22, 2008 Reply, CCAM cited the applicable passages from Dominion's application stating that levels of radionuclides released to the air and water will increase by nine-fold above current levels of routine Millstone Unit 3 radiological effluent releases.

In dispute is whether a 9 per cent increase in radiological emissions to the air and water above current levels is "significant" within the meaning of 10 C.F.R. §50.92 - as the petitioners insist - or not "significant," as Dominion and the NRC staff assert.

Dominion's Attachment 1 states as follows in pertinent part at Page 52:

7.0 Environmental Evaluation

... The proposed license amendment request does not involve a **significant** adverse change in the types or amount of any effluent that may be released offsite nor does it involve a significant increase in individual or cumulative occupational radiation exposure. [Emphasis added.]

Webster's New International Dictionary (2d Ed.) defines "significant" as

“deserving to be considered; important.”

The antonym of “significant” is “insignificant,” defined by Webster’s New International Dictionary (2d Ed.) as “empty, meaningless.”

Given Dominion’s projections of estimates of increases in radiological effluent releases to the air, it is clear that the application proposes a significant new threat to human health, both among the public living and working offsite as well as to plant workers themselves.

As the petitioners’ eminent expert in the health effects of nuclear power plant radiation, Dr. Ernest J. Sternglass, opined in his Declaration supporting CCAM’s Petition to Intervene:

8. If Millstone Unit 3 nuclear reactor is permitted to release radionuclides to the environment at levels 9 per cent greater than current levels, it is likely that there will be a closely corresponding increase in adverse effects on human health.

Such a heightened risk to be assumed by the Millstone Nuclear Power Station host community is indeed “deserving to be considered” and “important”; hence, it is significant.

To accept Dominion’s argument that the increases in radiological emissions to the air is “insignificant,” i.e., “meaningless” or “empty,” is to disregard the conclusion of the 2005 National Academy of Sciences report, “Health Risks from Exposure to Low Levels of Ionizing Radiation” (BEIR VII - Phase 2) in which it is stated that there is no safe level or threshold of ionizing radiation exposure and that the smallest dose of low-level ionizing radiation has the potential to cause an increase in health risks to

humans.³¹

The Panel Order appears to adopt Dominion's blithe dismissal of the facts asserted in the Declaration of Cynthia M. Besade as "anecdotal accounts . . . [with] no probative value and [which] are flatly contradicted by studies, such as that conducted by the National Cancer Institute in 1991, which have found that there is no general increased risk of death from cancer for people living in 107 counties containing or closely adjacent to 62 nuclear facilities."³²

Whether Ms. Besade's statements on personal knowledge of high cancer incidences in the Millstone vicinity - most disturbingly, among children - lack or possess probative value is within the exclusive realm of the fact-finder: the ASLB Panel. Dominion's protestations simply demonstrate that these very material facts are indeed in contention.

With regard to the 1991 National Cancer Institute study, it is out of date. In the intervening seventeen (17) years, there has been no epidemiological study of cancer incidences in the Millstone community which has not found markedly heightened incidences.³³

In remarking that a "similar" contention was rejected by an ASLB Panel in the Millstone relicensing proceedings,³⁴ Dominion failed to note that NRC's peculiar

³¹ Sternglass Declaration, ¶7.

³² Dominion Response at 42.

³³ See, e.g., Comments of Michael Steinberg regarding Connecticut Tumor Registry Statistics, presented to the NRC on May 28, 2008. ADAMS ML041770179.

³⁴ Dominion Response at 42.

requirements in relicensing of nuclear power plants deems the health effects of human exposure to plant releases of radiation to be a "generic issue" which may not be considered on a site-specific basis, in accordance with the Generic Environmental Impact Statement ("GEIS") for relicensing of nuclear power plants.³⁵ No such prohibition applies to these proceedings.

Dominion's unreasonable aversion to consideration of the health effects of Millstone radiological releases poisoning the community leads it to make extreme and unsupported statements, such as that

[T]he unsupported allegations in Ms. Besade's declaration[s] all pertain to past operations, not to the effects of the uprate. Consequently, these allegations are beyond the scope of the proceeding.³⁶

In fact, Ms. Besade objects to the Millstone Unit 3 uprate proposal precisely because it will, if granted, result in an estimated 9 per cent **increase** in Millstone Unit 3's radioactive effluent releases to the air she breathes, in addition to subjecting her to unacceptably heightened risks of accident and accident consequences.

Dominion also noted that the NRC disagreed with the evidence presented by Ms. Besade and others during the Millstone relicensing proceedings on the health effects of public and worker exposure to Millstone's ionizing radiation.³⁷ In fact, the NRC

³⁵ Dominion ascribes to the GEIS a finding that was never made: that health effects on the community due to exposure to Millstone's radioactive effluents were "small." Dominion Response at 43. The GEIS was promulgated in 1986, the year Millstone Unit 3 first went online, and hence is itself an out-of-date and archaic, if not meaningless, standard.

³⁶ Dominion Response at 43.

³⁷ Dominion Response at 43.

disallowed a hearing on the health contention; the decision was not appealed to the courts.

In the intervening time, the National Academy of Sciences has released its BEIR VII report and cancer incidences, early childhood mortality and other adverse consequences which may be statistically and medically linked to exposure to Millstone radiological effluents have escalated.³⁸

The Panel Order mistakenly asserts as follows:

“Petitioners fail to identify any deficiencies or omissions in the LAR” pertinent to Contention 8.

This statement is incorrect.

For example, the Petition asserts *inter alia*:

Dominion’s application is absent any analysis of the health effects of the proposed Millstone Unit 3 uprate on its workforce, which exhibits a high cancer rate, and the community, which exhibits a high cancer rate. The petitioners contend that the heightened health risks associated with the proposed power generation uprate present a significant safety issue which requires analysis in these proceedings.

The Petition further states:

Dominion proposes to increase power generation at Millstone Unit 3 by 7+ per cent.

Dominion’s application states that the proposed uprate will be accompanied by increases of at least 9 per cent in levels of radionuclide production and dispersion

³⁸ Recent tragedies have included numerous cases of infant deaths in families living within two to five miles of Millstone, including a seven-month old child who died of advanced liver disease within the past year.

through increased concentrations of radionuclides in effluent releases. Such increases may be even greater than predicted by Dominion because of the new dynamics of plant operations under the uprate which will accelerate the rate of coolant flow and increase heat levels leading and slow response time by plant personnel. Such increased releases will correspond with similar increases in health risks to plant workers and the public. Dominion's application entirely fails to make any attempt to evaluate the high cancer incidences among its workforce at Millstone and within the surrounding community. Therefore, its application is inadequate and incomplete and must be rejected.

Moreover the text of Contention 8 states:

Dominion's application for Millstone 3 uprate makes no provision for new shielding or other techniques to mitigate increased radionuclide release levels.

The Panel Order also states as follows:

To the extent Petitioners challenge the compliance of the maximum projected doses for the LAR with the NRC's safety standards, CCAM fails to point to any failure of the Applicant to comply with the NRC's safety standards. . . . It offers nothing to indicate that the radiological consequences of these releases exceed any NRC regulatory limits.

The Panel Order overlooks the important fact that as a practical matter there are no limits set on releases of noble gases, nor is Dominion even required by the NRC to monitor its strontium-90 releases to the atmosphere from Millstone. Thus, the Panel Order raises a red herring. It has hardly ventured to fulfill the mandatory requirement of 10 C.F.R. §50.92.

With regard to the thermal plume, it is undisputed that if the proposed Millstone Unit

3 uprate application is allowed, the thermal plume released into the Long Island Sound will be increased in temperature measurably, an unacceptable and unnecessary environmental consequence.

Contrary to the Panel's Order, the petitioners did contest Dominion's assertion that the higher temperature of the thermal plume would be inconsequential to the marine habitat.

Further, the petitioners did contest Dominion's flat-out-wrong assertion that the increased heat released to the Long Island Sound in the thermal plume will be within the limits of Millstone's NPDES permit.

Dominion did not point out that the permit expired on December 14, 1997 and is of no legal effect.

The Panel's Order states that the petitioners' concerns about overheating of the Long Island Sound and contamination of food produced for human consumption are "generalized" and do not "address any part of Dominion's Supplemental Environmental Report."³⁹

The fact is that Dominion's application fails to provide credible documentation that the thermal plume will not cause harm to the already-stressed marine environment surrounding Millstone.

Moreover, Dominion's application does not address in any way the prospect that its increased radiological emissions will contaminate the human food supply. This is a serious omission. The NRC requires analysis of this issue before it can act in the

³⁹ Panel Order at page 32.

“particularly sensitive” manner it must in weighing this application because of its significant increased radiological emissions, in accordance with the dictate of 10 C.F.R. §50.92.

It is therefore necessary for the ASLB Panel to convene a hearing on Contentions 8 and 9 to determine the facts which are in dispute.

The Panel Order rejection of the admissibility of Contentions 8 and 9 is clearly erroneous.

Conclusion

The petitioners have submitted nine admissible contentions. A Subpart G hearing is warranted on all contentions.

Respectfully Submitted,

**CONNECTICUT COALITION AGAINST
MILLSTONE
NANCY BURTON**



Nancy Burton
147 Cross Highway
Redding Ridge CT 06876
Tel. 203-938-3952

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

In the Matter of

Docket No. 50-423-OLA

**Dominion Nuclear Connecticut, Inc.
(Millstone Nuclear Power Station,
Unit 3)**

ASLBP No. 862-01-OLA-BD01

June 16, 2008

CERTIFICATE OF SERVICE

I certify that copies of the **"CONNECTICUT COALITION AGAINST MILLSTONE AND NANCY BURTON NOTICE OF APPEAL"** was transmitted on June 16, 2008 by email and by U.S. Mail, First Class, postage pre-paid to the individuals and offices as indicated below:

Office of the Secretary
Attn: Rulemaking and Adjudications Staff
U.S. Nuclear Regulatory Commission
Mail Stop: O-16G4
Washington DC 20555-0001
HearingDocket@nrc.gov
Secy@nrc.gov
(Original + 2 copies)

Office of Commission Appellate
Adjudication
U.S. Nuclear Regulatory Commission
Mail Stop: O-16G4
Washington DC 20555-0001
OCAAMAIL@nrc.gov

Administrative Judge
William J. Froelich, Chair
Atomic Safety and Licensing Board Panel
Mail Stop - T-3 F23
U.S. Nuclear regulatory Commission
Washington DC 20555-0001
wjf1@nrc.gov

Administrative Judge
Dr. Paul B. Abramson
Atomic Safety and Licensing Board Panel
Mail Stop - T-3 F23
U.S. Nuclear Regulatory Commission
Washington DC 20555-0001
pba@nrc.gov

Administrative Judge
Dr. Michael F. Kennedy
Atomic Safety and Licensing Board
Panel
Mail Stop T-3 F23
U.S. Nuclear Regulatory Commission
Washington DC 20555-0001
mfk2@nrc.gov

Lloyd Subin, Esq.
David Roth, Esq.
Office of the General Counsel
U.S. Nuclear Regulatory Commission
Washington DC 20555
OGCMailCenter@nrc.gov
lbs@nrc.gov
david.roth@nrc.gov

David Lewis, Esq.
Stefanie Nelson, Esq.
Matias Travieso-Diaz, Esq.
Pillsbury Winthrop Shaw Pittman LLP
Maria Webb, Paralegal
2300 N Street NW
Washington DC 20037-1122
david.lewis@pillsburylaw.com
stefanie.nelson@pillsburylaw.com
matias.travieso-diaz@pillsburylaw.com
maria.webb@pillsburylaw.com

Lillian Cuoco, Esq.
Dominion Resources Services, Inc.
120 Tredegar Street, RS-2
Richmond VA 23219
Lillian.Cuoco@dom.com

[Signed in Original] 
Nancy Burton
147 Cross Highway
Redding Ridge CT 06876
NancyBurtonCT@aol.com