

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

DOCKETED  
USNRC

ATOMIC SAFETY AND LICENSING BOARD

January 18, 2006 (8:00am)

Before Administrative Judges:  
E. Roy Hawkens, Chair  
Dr. Paul B. Abramson  
Dr. Anthony J. Baratta

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

In the Matter of:	)	January 17, 2006
AmerGen Energy Company, LLC	)	
(License Renewal for Oyster Creek Nuclear Generating Station)	)	Docket No. 50-219-LR
	)	
	)	
	)	

**AMERGEN'S BRIEF IN RESPONSE TO ORDER  
DIRECTING SUPPLEMENTAL BRIEFING ON HEARING REQUESTS**

AmerGen Energy Company, LLC ("AmerGen") hereby submits its supplemental brief in response to the Atomic Safety and Licensing Board's ("Board") January 10, 2006 "Order (Directing Supplemental Briefing on Hearing Requests)" ("Order") in the above-captioned proceeding. AmerGen's responses are provided below.

**I. NIRS ET AL. DRYWELL SHELL CORROSION CONTENTION**

In its January 10, 2006 Order, the Board first asks the parties to discuss the legal basis for concluding that the contention submitted by six organizations ("Petitioners"), regarding potential corrosion of the Oyster Creek Nuclear Generating Station ("OCNGS") drywell shell "falls within or without the scope of this license renewal proceeding." Order at 1-2. To the extent that Petitioners' contention addresses

AmerGen's aging management program related to potential corrosion of the drywell shell

TEMPLATE = SECY - 021

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*during the period of extended operation under the renewed license*, the contention may raise some matters that are within the scope of the instant proceeding. AmerGen continues to believe, however, that the contention should be dismissed for failure to raise a genuine dispute of material law or fact, to provide an adequate basis, and to provide a supporting expert opinion. These arguments are discussed in detail in “AmerGen’s Answer Opposing NIRS Et Al. Request for Hearing and Petition to Intervene” at 23-31.

At the same time, to the extent that the contention could be construed as a challenge to the adequacy of AmerGen’s corrosion inspection program during the *current* term of the OCNCS license it is clearly outside the scope of this license renewal proceeding. As the Commission made clear in *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 290 (2002) and in *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI 01-17, 54 NRC 3, 10 (2001), it is the “period of extended operation,” not operation during the initial license term, that is at issue in a license renewal proceeding.

The Board has asked the parties to elaborate on the legal bases for “defining the scope of the proceeding as it relates to the drywell liner corrosion management program.” Order at 2. 10 CFR Part 54 defines the requirements applicable to the renewal of reactor operating licenses. In adopting Part 54, the Commission established two fundamental regulatory principles to guide the license renewal process:

- First, “with the possible exception of the detrimental effects of aging on the functionality of certain plant systems, structures, and components [“SSCs”] in the period of extended operation and possibly a few other

issues related to safety only during extended operation, the regulatory process is adequate to ensure that the licensing bases of all currently operating plants provides [*sic*] and maintains an acceptable level of safety so that operation will not be inimical to public health and safety or common defense and security.” 60 Fed. Reg. 22,461, 22,464 (1995).

- “The second and equally important principle of license renewal holds that the plant-specific licensing basis [*i.e.*, the Current Licensing Basis or “CLB”] must be maintained during the renewal term in the same manner and to the same extent as during the original licensing term.” *Id.*

In summary, the objective of the license renewal regulatory process is to determine whether the effects of aging, that could adversely affect the functionality of SSCs that the Commission determines require review for the period of extended operation, will be adequately managed to ensure maintenance of the CLB during the period of extended operation.

Part 54 is not a platform upon which to raise issues associated with current, ongoing operations conducted under the existing license. The Commission concluded in the Part 54 rulemaking that only the aging management of certain important SSCs during the period of extended operation should be the focus of a renewal proceeding, and that issues concerning operation during the currently authorized term of operation should be addressed as part of the current license. *Id.* at 22,481. This is the backbone of license renewal, and is reflected in the regulations which establish the finding that the NRC must make prior to issuing a renewed operating license: “there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance

with the CLB, and that any changes made to the plant's CLB in order to comply with this paragraph are in accord with the [Atomic Energy] Act and the Commission's regulations." 10 CFR § 54.29(a).

A number of Licensing Board and Commission decisions have interpreted and applied these principles consistent with the regulatory framework described above. Examples of those safety-related contentions (as opposed to environmental contentions) that were dismissed, at least in part, for being outside the scope of a license renewal proceeding are summarized below.

**A. Turkey Point License Renewal Proceeding**

In the Turkey Point license renewal proceeding, the Board rejected a contention that the spent fuel pool facility at the site could not withstand a category 5 hurricane as a result of alleged inadequate construction practices and defense-in-depth. *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 165 (2001), *aff'd*, CLI-01-17, 54 NRC 3 (2001). The Board concluded that, because the contention focused on the facility's CLB rather than on aging management issues, it was "beyond the allowable scope of the proceeding." *Id.* at 165-166.

On review, the Commission outlined in "some detail" what safety (and environmental) issues are within the scope of a license renewal proceeding. *Turkey Point*, CLI-01-17, 54 NRC at 6. The Commission stated, among other things, that "license renewal review focuses upon those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs" (*Id.* at 7), and that it is not "necessary or appropriate to throw open the full gamut of provisions in a plant's [CLB] to re-analysis during the license renewal review" (*Id.* at 9). The Commission affirmed the Board's rejection of the contention. It noted that although a number of spent

fuel pool structural components and related systems are subject to an aging management review, the petitioner's "claims go to the adequacy of the plant's current licensing basis, which is not within the scope of the license renewal review." *Id.* at 23.

**B. McGuire and Catawba License Renewal Proceeding**

In connection with the license renewal proceeding for the McGuire and Catawba facilities, a petitioner asserted that the Applicant's license renewal application improperly failed to provide a human reliability analysis that evaluated the impacts of workforce aging and critical skills retention and availability. *McGuire and Catawba*, 55 NRC at 114. In support of the contention, the petitioner cited the requirements in 10 CFR §§ 54.21 and 54.4 for evaluation of safety-related systems in a licensee's Integrated Plant Assessment and various other systems included in the scope of a license renewal proceeding that depend upon operator performance and human reliability. *Id.* The Board determined that the contention did not raise any aging issues falling within the scope of the proceeding, agreeing with arguments raised by the Applicant and Staff. *Id.* at 117. Specifically, the Applicant had asserted that the contention "ignores that ongoing operational issues are being addressed by normal ongoing regulatory processes," and "[i]ssues ... which are already the focus of ongoing regulatory processes [ ] do not come within the NRC's safety review at the license renewal stage." *Id.* at 115-16 (quoting Applicant's Answer).

The petitioner also alleged deficiencies in the steam generator surveillance and water chemistry programs and challenged the adequacy of the Alloy 600 aging management review program. In particular, it asserted that "continuation of the current practices in the license extension period will also be inadequate." *Id.* at 84. As the basis for the contention, the petitioner pointed to steam generator tube ruptures at two other

facilities (the Indian Point 2 and Palo Verde 2 reactors) and the discussion in various scientific papers regarding stress corrosion cracking to demonstrate the inadequacy of steam generator performance and regulation. *Id.* at 81.

In rejecting the contention, the Board found that the petitioners had failed to specifically relate the industry's generic experience with steam generators to deficiencies in the aging management programs of the McGuire and Catawba units. *Id.* at 84. The Board observed that "the license renewal regulations focus on the *effects* of aging, and such generic issues as initiating mechanisms of cracking and other aging effects are not part of this focus in and of themselves, absent a connection with specific issues relating to the plants at issue and the management of aging effects in those plants." *Id.* (emphasis in original).

### C. Millstone License Renewal Proceeding

In the Millstone license renewal proceeding, a Licensing Board rejected a safety contention related to emergency planning. *Dominion Nuclear Connecticut, Inc.*, (Millstone Nuclear Power Station, Units 2 and 3), LBP-04-15, 60 NRC 81, 96-97 (2004). The petitioner in that proceeding alleged that if there was a serious nuclear accident at Millstone, "parts or all of Connecticut and Long Island will need to be evacuated and these areas cannot as a factual matter be evacuated." *Id.* at 96. In rejecting the contention, the Board stated that

because the agency's ongoing regulatory process ensures that existing emergency plans are adequate throughout the life of any facility, notwithstanding changing demographics and other site-related factors, "[e]mergency planning . . . is one of the safety issues that need not be re-examined within the context of license renewal."

*Id.* at 96-97 (quoting *Turkey Point*, CLI-01-17, 54 NRC at 9).

In ruling on petitioner's appeal, the Commission stated that the Board had declined to admit the emergency planning contention because "it did not relate to aging and therefore . . . it lay outside the scope of the license renewal proceeding." *Dominion Nuclear Connecticut, Inc.*, (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-06, 60 NRC 631, 640 (2004). The Commission agreed with the Board that *Turkey Point* was "dispositive of this issue" and affirmed the decision, stating that the Board had "applied the correct standards for evaluating the proposed contentions and reached the correct result in refusing to admit each of them." *Id.* at 640-41.

**D. Monticello License Renewal Proceeding**

Most recently, in the license renewal proceeding for the Monticello facility, the petitioner challenged the Applicant's treatment of reactor component inspection and testing during the renewed license term. The petitioner generally asserted the need for timely inspection of all reactor components and additional testing of replaced piping. *Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant), LBP-05-31, 62 NRC \_\_, \_\_ (slip op. at 22-23) (Nov. 1, 2005). In finding the contention inadmissible, the Licensing Board criticized the petitioner for "attempt[ing] to bring reactor components which are subject to routine monitoring and oversight, into the license renewal review." *Id.* at 23. It found that "these component issues are, however, everyday operating issues that are unrelated to an aging analysis of the plant's structures, systems, and components." *Id.* Further, the Board determined that to the extent the contention suggested that required inspection and maintenance was inadequate during the current licensed term, it impermissibly attacked Commission regulations. *Id.* (citing 10 CFR § 2.335(a)).

**E. AmerGen's Analysis of the Legal Principles Governing the Scope of the Proceeding**

Applying this regulatory history and past precedent, it is clear that measures to monitor for and manage potential corrosion of the OCNGS drywell shell are part of the plant's CLB. At the same time, Appendix B of the OCNGS License Renewal Application adequately describes the programs and activities that are credited for managing aging effects during the period of extended operation. Those programs and activities include monitoring of the drywell shell for corrosion, because AmerGen has determined that such monitoring is necessary to ensure that the CLB will be maintained during the period of extended operation.

Not *all* matters related to potential drywell shell corrosion, however, are "fair game" for this proceeding. There are certain limiting principles that help identify matters beyond the scope of the proceeding that are well-established. These are as follows:

- Issues to be litigated are bounded by the scope of the admitted contentions, which are limited to the supporting bases argued by the Petitioners. *See, e.g.,* Policy on Conduct of Adjudicatory Hearings; Policy Statement, 41872, 41874 (Aug. 5, 1998). Thus, the Board should carefully construe the proposed contention and not expand its reach to encompass matters that have not been placed in issue by the Petitioners.
- Issues associated with drywell shell corrosion that do not call into question AmerGen's program to provide reasonable assurance that the CLB will be maintained in the period of extended operations also are outside the scope of the proceeding. Such issues would include, for example: corrosion effects occurring during the current license term, or challenges to the

adequacy of the Commission's regulations governing license renewal.

Again, the Board should ensure that issues to be litigated fall within the clearly defined bounds of the regulatory "envelope" established by the Commission's regulations governing license renewal.

## II. NJDEP COMBUSTION TURBINE CONTENTION

The Board next asks a series of questions related to the New Jersey Department of Environmental Protection's ("NJDEP") contention regarding the OCNGS Combustion Turbines ("CTs") owned by First Energy. AmerGen's responses are provided below.

### A. Contractual Agreements

The Board first asks the parties to identify "with specificity the **contractual agreement (or its equivalent)** which demonstrates that AmerGen can rely on First Energy to maintain, inspect, and test the combustion turbines in accordance with AmerGen's aging management plan." Order at 2-3 (emphasis in original).

AmerGen has entered into an interconnection agreement and a station blackout services agreement with First Energy. The purpose of the interconnection agreement is to ensure interconnection services between First Energy's electricity distribution system and OCNGS. The purpose of the station blackout services agreement is to provide an alternative source of alternating current ("AC") power for a limited period of time (four hours) for coping with a potential loss of offsite and onsite AC power ("Station Blackout or SBO") in accordance with the requirements of 10 CFR § 50.63 (the SBO regulation). While those agreements do not explicitly address AmerGen's aging management programs, AmerGen has committed to a robust aging management program for the CTs as described in detail in its responses to NRC Staff Requests for Additional Information ("RAIs"). See "AmerGen's Answer Opposing NJDEP's Request for Hearing and

Petition to Intervene” (“AmerGen Answer to NJDEP”), at 27 n. 11. Whether by virtue of its agreements with First Energy or via other means, those commitments are binding upon AmerGen and provide reasonable assurance that aging effects associated with the CTs will be managed consistent with the CLB for the period of extended operation. As the NRC Staff stated in its December 12, 2005 “Answer to Request for Hearing and Petition to Intervene of the State of New Jersey Department of Environmental Protection” at 21, “[t]he Oyster Creek LRA and RAI Responses state that the effects of aging on the combustion turbines will be adequately managed by several aging management programs. Proposed Contention 3 . . . does not take issue with any of the factual assertions in the . . . LRA or RAI Responses.” This remains the case and serves as one of the reasons why the proposed contention lacks adequate bases and specificity to be admitted.

**B. Potential Unavailability of the CTs or Improper Implementation of AmerGen’s Aging Management Program**

The Board next raises a two-part question in which it asks the parties to discuss “what would happen (with cites to any governing regulatory, licensing, or contractual provision) if the combustion turbines become unavailable, or if AmerGen’s aging management plan for the combustion turbines is not properly implemented.” Order at 3 (emphasis in original). In response to the first part of the Board’s question, if the Board is inquiring about the potential unavailability of the CTs during the current license term, AmerGen has agreements in place with First Energy that address the actions to be taken in such circumstances. In addition, issues associated with operations, including corrective actions, during the current license term are outside the scope of this proceeding.

The second part of the Board's question asks what would happen if AmerGen's aging management program for the CTs is not properly implemented. In such circumstances AmerGen would assess the impact of the failure to implement the program and take appropriate corrective actions in accordance with its approved 10 CFR Part 50, Appendix B Quality Assurance Program.

As explained above, the purpose of the CTs is to provide an alternative source of AC power for coping with potential SBO in accordance with the SBO regulation. Failure to properly implement AmerGen's aging management program for the CTs would not necessarily result in a noncompliance with the SBO rule. Under such circumstances, in accordance with applicable NRC guidance,<sup>1</sup> AmerGen would perform a "functionality" assessment and may or may not conclude that the CTs remain functional—despite the hypothetical improper implementation of the aging management commitments. If the CTs were determined not to be functional, then AmerGen would take corrective action under its approved corrective action processes. *See* NRC Inspection Manual, Part 9900, Section 7. Options would include, among other things, taking steps to restore functionality, interim compensatory measures, a change in the plant as authorized by 10 CFR §§ 50.59 or 50.90, or a temporary exemption as authorized by 10 CFR § 50.12(a).

If the CTs were determined to still be functional, then AmerGen would proceed to address the issues associated with the improper implementation of the aging management commitments via its approved corrective action processes. Under either scenario, the

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<sup>1</sup> NRC Inspection Manual, Part 9900: Technical Guidance, "Operability Determinations & Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety," Sections 2 and 3.

NRC retains inspection and enforcement authority to ensure appropriate actions are taken under the circumstances posited by the Board.

**C. Section 50.63 and General Design Criterion 17**

Finally, the Board asks the parties to explain why 10 CFR § 50.63 and General Design Criterion (“GDC”) 17 “are sufficient (or not) to ensure that Oyster Creek will have an adequate source of backup power.” Order at 3. AmerGen believes that the NRC’s SBO-related regulatory requirements *are* sufficient to ensure that OCNGS has adequate sources of backup power, but that in any event, whether or not the regulations are adequate is clearly a matter that is beyond the scope of this proceeding. The NRC Staff has determined that AmerGen is in compliance with 10 CFR § 50.63 and GDC 17, despite First Energy’s ownership of the CTs.

- With respect to Section 50.63, as discussed in AmerGen’s Answer to NJDEP at 25-26, the NRC Staff approved the transfer of the OCNGS license to AmerGen (and thus confirmed AmerGen’s compliance with the SBO rule) with the recognition that AmerGen was relying on contractual agreements to ensure compliance with that rule.
- With respect to GDC 17, as a result of its evaluation associated with the conversion of the OCNGS Provisional Operating License DPR-16 to the full-term Operating License DPR-16, the NRC Staff evaluated and accepted the OCNGS electric power systems licensing basis against GDC 17. *See* Chapter 8.0 of NUREG-1382, Safety Evaluation Report, January 1991, supporting the license conversion. The OCNGS commitment to GDC 17 is stated in the OCNGS Updated Final Safety Analysis Report.

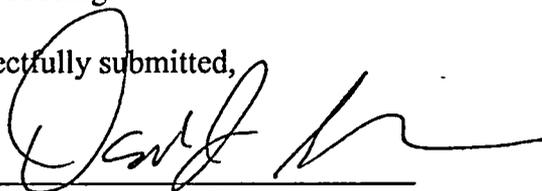
Finally, Section 161.b of the Atomic Energy Act authorizes the Commission to establish regulations to protect health and to minimize danger to life or property. 42 U.S.C. § 2201(b). The Commission has explained that “by definition compliance with our safety standards satisfies the ‘not inimical’ requirement in areas covered by the standards.” *Connecticut Yankee Atomic Power Company* (Haddam Neck Plant), CLI-03-7, 58 NRC 1, 7 (2003), *citing Maine Yankee Atomic Power Co.* (Maine Yankee Atomic Power Station), ALAB-161, 6 AEC 1003 (1973), *aff’d* CLI-74-2, 7 AEC 2 (1974), *aff’d sub nom. Citizens for Safe Power v. Nuclear Regulatory Comm’n*, 524 F.2d 1291 (D.C.Cir. 1975).<sup>2</sup> The Commission also has explained that “[i]f our safety regulations are in any way inadequate and need revision, the appropriate vehicle to ask the Commission to set a new standard is a petition for rulemaking.” *Connecticut Yankee*, CLI-03-7, 58 NRC at 7, *citing* 10 CFR § 2.802(a) (“Any interested person may petition the Commission to issue, amend or rescind any regulation”), and *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-8, 29 NRC 399, 416 (1989) (“An adjudicatory licensing hearing is not a permissible forum for a challenge to Commission regulations. . . . Such a challenge may be brought by means of a petition for rulemaking.”).

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<sup>2</sup> See also, *Dairyland Power Cooperative* (La Crosse Boiling Water Reactor), LBP-82-58, 16 NRC 512, 522 (1982) (A showing that releases comply with 10 CFR Part 50, Appendix I design objectives establishes conformance to ALARA requirement in regulations and “it follows that the emissions are . . . [not] inimical to public health and safety”).

A hearing before an NRC Atomic Safety and Licensing Board is not the appropriate forum for reevaluating the adequacy of those regulations, and NJDEP has not requested any such reevaluation. Thus, whether or not the regulations are adequate is clearly a matter that is beyond the scope of this proceeding.

Respectfully submitted,



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Dated in Washington, D.C.  
this 17th day of January 2006

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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CERTIFICATE OF SERVICE

I hereby certify that copies of AmerGen's Brief in Response to Order Directing Supplemental Briefing on Hearing Requests were served this day upon the persons listed below, by E-mail and first class mail, unless otherwise noted.

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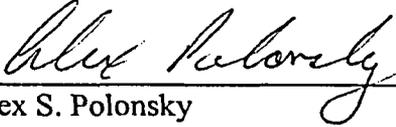
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