United States of America
Nuclear Regulatory Commission
before the
Atomic Safety and Licensing Board

In the Matter of

YANKEE ATOMIC ELECTRIC COMPANY

(Yankee Nuclear Power Station)

Docket No. 50-029-LA

OBJECTION TO AND MOTION OF YANKEE ATOMIC ELECTRIC COMPANY FOR RECONSIDERATION OF A PORTION OF PREHEARING CONFERENCE ORDER

Pursuant to 10 C.F.R. §§ 2.730 and 2.752, Yankee Atomic Electric Company ("Yankee") objects to and seeks reconsideration of so much of this Board's "Prehearing Conference Order (Ruling on Contentions)" dated March 17, 1999 ("LBP-99-14") as admitted what the Board restated and renumbered as "Contention 4." By its ruling, this Board has converted a voluntary undertaking into the equivalent of a regulatory requirement, in contravention of the governing regulations and its own ruling to the contrary elsewhere in LBP-99-14.

Statement of the Case.

The "site release criteria" governing the litigation of the adequacy of final status survey plans contained in license termination plans are contained in 10 C.F.R., Part 20, Subpart E. 10 C.F.R. § 50.82(a)(11)(ii). Subpart E, in turn, divides the world into two groups: those to which the codified criteria of § 20.1402 apply, and those to which they do not (but as to which, rather, the criteria of the SDMP Action Plan of April 16, 1992 will continue to apply). 10 C.F.R. § 20.1401.

The Commission has previously approved a decommissioning plan submitted by Yankee for the Yankee Nuclear Power Station ("YNPS"). Indeed, the YNPS decommissioning plan was approved twice. *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), LBP-96-18, 44 NRC 86 (1996), *rev'd denied*, *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-9, 44 NRC 112 (1996).

U.S. NUCLEAR REGULATORY COMMISSION
RULEMAKINGS & ADJUDICATIONS STAFF
OFFICE OF THE SECRETARY
OF THE COMMISSION

Document Statistics

Postmark Date 3/29/99 (faxed)
Copies Received 3
Add'l Copies Reproduced 0
Special Distribution
RIDS, OGC

Given the prior approval of its decommissioning plan and its pre-August, 1998 submittal of the LTP, YNPS is an SDMP plant, as this Board has previously realized. 10 C.F.R. § 20.1401(b)(2) & (3); *LBP-99-14* at 16-18. As this Board has ruled, "the governing regulatory standard for the LTP here is that set forth in the SDMP." *Id.*, at 17.

The SDMP site release criteria, which depend primarily on surface activity readings and an exposure rate pass value of 5 μR/hr, do not include a "total effective dose equivalent" ("TEDE") criterion, do not require the determination of a TEDE to the average member of the critical group, and do not require that either the "average member" or the "critical group" be defined. *See* 57 Fed. Reg. 13,389 (1992).

Yankee has prepared for YNPS a plan that in a number of ways is more rigorous than is required by the governing regulatory standard. In particular, the YNPS LTP Final Status Survey Plan ("FSSP") elects to apply a TEDE criterion, and it elects to set a pass value of 15 mrem/yr, rather than the 25 mrem/yr that the regulation (§ 20.1402) imposes on those plants that *are* subject to the Subpart E criteria. As to these undertakings, the FSSP embodies steps that are beyond what the governing regulations require.

Yankee has also elected to assume that all Cs^{137} found in disturbed soil areas, including asphalt, comes from plant activities, though this, too, is not required by any regulatory requirement.

The intervenors have propounded a number of proposed contentions relating to the sufficiency of the FSSP's TEDE application, notwithstanding the lack of any regulatory requirement that the FSSP apply *any* TEDE analysis. The Board rejected most of the intervenor's objections to the FSSP, but admitted a contention to the effect that the FSSP's formulation of the "critical group" was inadequate.[1]

---

[1]The admitted contention was renumbered and restated by this Board thus:

> "**Contention 4.** Contrary to the requirements of 10 C.F.R. § 50.82, the methodology YAEC employs in the LTP for the selection of applicable scenarios for the calculation of its final release doses is not adequate to demonstrate that the LTP will assure the protection of the public health and

Argument.

I.

As this Board has recognized and the regulations dictate, the site release criteria of 10 C.F.R. § 20.1402 do not apply to YNPS. *LBP-99-14* at 17. *See also Tr.* 18-19, 54-55, 61 (Jan. 26, 1999). It is the § 20.1402 criteria, however, that contain a TEDE calculation requirement. Plants, such as YNPS, that remain subject to the SDMP are not obliged to do a TEDE analysis and are not subject to any TEDE site release criterion. This division by the Commission was deliberate:

> "The Commission continues to believe that sites being decommissioned under previously approved decommissioning plans should be grandfathered from the provisions of the final rule. Similarly provisions should apply to licensees whose decommissioning plans are in the final stages of preparation or of NRC review. From a health and safety perspective, the NRC believes the criteria identified in the SDMP Action Plan are reasonably consistent with the final rule's dose criteria. The contamination levels defined in the SDMP Action Plan are within the range of measurable values that could be derived through the site-specific screening and modeling approaches defined in guidance supporting this final rule. The Commission believes the grandfathering approach will facilitate the timeliness of decommissioning and ensure licensees that resources spent to develop and implement a decommissioning plan are justified."

62 Fed. Reg. 39,058, 39,080 (1997). Consequently, if the YNPS LTP contained *nothing* relating to the definition of a "critical group," any contention that it was deficient on that ground would be required to be excluded for lack of any anchoring regulatory requirement.

---

safety."

LBP-99-14 at 41. This is based on the assertion that the "critical group" should apparently consist of "gardeners." *LBP-99-14* at 18-19:

> "Beyond their claim to have children considered, which we have discussed earlier and rejected, they seek a gardening scenario in which the exposed individual spends more of his time outside, performing gardening-type activities. . . . To the extent NECNP/CAN Contention A.3 challenges the scenario used in conjunction with the critical group referenced in the LTP, it sets forth an acceptable contention which, if proved, would required the LTP to be amended to define the average member of the critical group to be a gardener."

While the Board seemed to recognize that Yankee had made a voluntary undertaking, it nonetheless admitted a contention to the effect that Yankee's undertaking would be insufficient to satisfy the § 20.1402 criteria (which don't apply to YNPS):

> "Contention A.3, to the extent it seeks [site release] criteria more restrictive than 5 μR/h above background, would constitute such a claim [amounting to an impermissible challenge to the regulations] and hence (to the extent it seeks more restrictive criteria) is rejected as a challenge to the regulations.
>
> "On the other hand, the Licensee additionally has committed, in the LTP, to site-release criteria that require that the TEDE to the average member of the critical population group from residual contamination be maintained at less than 15 mrem/yr . . . . Because the LTP in fact commits to the 15 mrem/yr [TEDE] dose criteri[on] that is consistent with 10 C.F.R. § 20.1402, *we will also treat that standard as governing (as well as the SDMP release criteria).*"

LBP-99-14 at 17-18 (emphasis added). In effect, the Board has ruled that if a licensee makes a voluntary undertaking to do more than the applicable regulation requires, it may be challenged on the ground that its voluntary undertaking is still less than an *inapplicable* regulation would require.

Yankee respectfully submits that there is no legal basis for admitting a contention that claims that a plan fails adequately to meet a standard that has been voluntarily assumed, or for the proposition (necessarily implicit in the admission of such a contention), that approval of an LTP could be denied on the ground that a licensee's voluntary election to do more than is required is nonetheless insufficient. By definition, all that is required is that which the regulations require, as this Board apparently recognized in another context[2] and has been the law of this agency since

---

[2]As noted above, another of Yankee's voluntary undertakings in this matter was to assume that all Cs^{137} found in disturbed soil areas (including asphalt) is plant related, *i.e.*, to eschew any determination that any level of Cs^{137} in these locations might derive from "background" or non-plant-related sources. This Board properly ruled that it lacked legal authority to take this undertaking and make it a binding regulatory requirement. *LBP-99-14* at 34-35. The two rulings are, Yankee respectfully submits, irreconcilably inconsistent, for the Board's pronouncement on page 35 would be equally true had the Board written:

its inception. *E.g.*, *Statement of Policy: Further Commission Guidance for Power Reactor Operating Licenses*, CLI-81-16, 14 NRC 14, 17 (1980) (Commissioners Ahearne and Hendrie, concurring); *Public Service Company of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-422, 6 NRC 33, 42-43 (1977);[3] *Maine Yankee Atomic Power Company* (Maine Yankee Atomic Power Station), ALAB-161, 6 AEC 1003, 1005-10 (1973), *aff'd*, *Citizens for Safe Power* v. *NRC*, 524 F.2d 1291 (D.C. Cir. 1975).

Moreover, Yankee respectfully submits than any such ruling would transcend mere legal error and constitute a policy judgment quite destructive of any Commission goal that licensees be encouraged to do more than the minimum. Yankee's voluntary undertaking in this situation (typical of the Yankee approach) ought to be lauded and encouraged, not penalized. To declare, as this ruling effectively does, that if one commits to do more than the minimum you may be held to do more than you have committed to do is to erect a powerful disincentive to making—or retaining (once challenged)—such otherwise laudable and desirable but entirely gratuitous undertakings.

That the admission of this contention must be reconsidered may, Yankee respectfully submits, be demonstrated thus. Given that YNPS is an SDMP plant, as this Board has correctly observed, Yankee might have submitted an LTP that made no mention of TEDEs or critical population groups. Would NECNP/CAN have been able to complain that the bare 5 μR/hr criterion was insufficient? No, for as this Board has already ruled, that would be a challenge to the regulation. Would NECNP/CAN have been able to contend that, in addition to the SDMP 5 μR/hr criterion, the FSSP must *also* contain a TEDE requirement? Once again, no, for that would be challenge to the regulation that makes the distinction between SDMP plants and Subpart E

> "We perceive a dispute between YAEC and NECNP/CAN on [the matter of the critical population group definition] but, lacking any regulatory requirement that [an SDMP plant include any such definition], we could not grant the relief sought by NECNP/CAN and reject the contention on that basis."

[3]"Insofar as safety considerations are concerned, the Atomic Energy Act and the Commission's implementing regulations establish basic standards which, if met, entitle an applicant to a construction permit."

plants. In short, the only occasion NECNP/CAN had to even raise the TEDE-critical group issue is because Yankee included something in the LTP that the LTP was not required to contain.[4]

II.

The admission of Contention 4 would be equally devoid of a regulatory basis even if, contrary to the fact and contrary to this Board's acknowledgement, YNPS were not an SDMP plant.

Yankee's voluntary undertaking to do more than the regulations required is not limited to its opting to make a TEDE evaluation. Even for those plants that *are* subject to Subpart E, the regulatory pass value is 25 mrem/yr. Yankee, however, has coupled its voluntary TEDE undertaking with an additional voluntary undertaking to set the YNPS pass value at 15 mrem/yr. Thus, even were there doubt about whether YNPS is an SDMP plant or a Subpart E plant, the question of how a contention may be admitted that challenges the sufficiency of a voluntary undertaking—something *not* required by the Commission's regulations—remains.

The answer in this case is that it is insufficient to allege that the use of the "gardener" critical "group" would result in a TEDE of more than 15 mrem/yr—since a TEDE of more than 15 mrem/yr but less than 25 mrem/yr is still compliant with the regulations. Rather, one who contends that the "proper" critical group consists of gardeners would be entitled to relief if, and only if, substituting gardeners for ordinary residents would drive the "average member" TEDE above 25 mrem/yr. NECNP/CAN has offered no basis for such an intuitively improbable result.[5]

---

[4]Indeed, given that Yankee was not required voluntarily to assume an additional TEDE undertaking, what would happen were Yankee to amend the FSSP to remove it? (Certainly, as the LTP has yet to be approved, there is no limitation on the amendments that Yankee might make to it.) At that point, any contention such as Contention 4 must stand or fall on someone's ability to tie it into a requirement of the regulations themselves, which does not exist.

[5]The TEDE impact of changing the fractions of the year spent in the various residential activities can be determined by running the ResRad or DandD programs, with the source term values kept constant. (In fact, the DandD code is in the public domain; *see* "Supplemental Information on the Implementation of the Final Rule on Radiological Criteria for License Termination," 63 Fed. Reg. 64,132

III.

There are additional deficiencies with Contention 4 as this Board has framed it.

First, putting aside that YNPS is an SDMP plant, and putting aside that the governing TEDE pass value is 25 mrem/yr, not 15 mrem/yr, the contention admitted by this Board suffers the very same defect as those that it rejected, namely it employs for TEDE calculational purposes not the *average* member of a group, but rather *one particular individual* with non-average parameters. This, the Board correctly ruled, is a challenge to the § 20.1402 regulations:

> "Thus, to the extent these contentions attempt to substitute *a defined individual* (*e.g.*, child) for an *average member of a critical group*, they also constitute a challenge to NRC regulations, particularly the dose criteria defined in 10 C.F.R. § 20.1402. To the extent they attempt to substitute a defined individual for a critical group, these contentions are also rejected because they challenge 10 C.F.R. §§ 1402 and 20.1003. The Commission has already ruled in this regard that such challenges are not permissible."

LBP-99-14 at 18 (emphasis added). However, immediately after recognizing the difficulty with NECNP/CAN's "outlier" analysis, this Board then substitutes one of its own:

> "[T]hey seek a gardening scenario, in which *the exposed individual* spends more of his time outside, performing gardening-type activities."

Id. at 19 (emphasis added). In point of fact, § 20.1402 does not require the calculation of a TEDE for the member of the critical group who is atypically exposed, whether on account of sex, age, or stature—or hobby; § 20.1402, rather, looks only at the average

---

(Nov. 18, 1998).) NECNP has acknowledged that it has access to the program, but apparently elected to make no showing on this point. There are two reasons, most likely, why this is so.

First, NECNP never intended to advocate a "critical population group" of gardeners. The language the Board quotes as advancing and supporting the perceived Contention 4 was, rather, part and parcel of NECNP's advocacy of a "most exposed individual" test—which the Board properly rejected. *See* note 9, *infra*. Second, as experience teaches (and familiarity with the DandD model confirms), the only dose differential between an hour outdoors and an hour gardening comes from inhalation dose, which is insignificant.

member of the critical group (and assumes that some may receive more and some might receive less).

Second, the supposed contention was not supported by the type of basis that 10 C.F.R. § 2.714 requires (because, in fact, NECNP was not advocating the sort of contention that the Board perceived and admitted). In order for Contention 4 to be admissible (were § 20.1402 applicable), NECNP's contention would have to have been that the *average* member of the critical group is a full-time gardener—*i.e.*, that when, as and if the YNPS site is used for residential purposes, virtually everyone is going to spend the bulk of the waking hours planting. NECNP/CAN never made such a facially extreme assertion and never offered such a contention.[6]

The residential scenario that NECNP pointed to as underlying the LTP includes 88 hours per year gardening. Given New England weather and assuming one can "garden" for four months of the year, this amounts to more than 5 hours per week, *on average* for the members of the residential population.[7] This scenario captures the fact that some people may spend more hours gardening, while some will spend less (and some will spend none at all). In order to contend for something qualitatively different in Franklin County, NECNP was obliged to provide some basis (i) for believing that Franklin County is qualitatively different in an unusual and extreme way from the rest of the world and (ii) some basis for using some specified value. However, all that NECNP offered, and all that this Board identified, was the assertion (made in oral argument, not in the contention submission) that:

> "This standard has no relevance to our community."

CLI-99-14 at 19, quoting *Tr.* 67. The balance of the material quoted by the Board merely describes what NECNP perceived was the standard the LTP contains. The mere *ipse dixit* that "[t]his standard has no relevance to our community," is not the

---

[6]The language quoted by this Board at *LBP-99-14* at 19 says nothing of the sort.

[7]8766 × 0.01 = 87.66; 52 ÷ 12 × 4 = 17.16; 87.66 ÷ 17.16 = 5.11. Note that under the model, time spent gardening is in addition to other time (33.7 hours per week) spent outdoors: 8766 × 0.20 = 1753; 1753 ÷ 52 = 33.7.

basis required by § 2.714(b)(2)(ii)[8] sufficient to demonstrate that there is a genuine issue of fact that the *average* resident in the area spends materially more than 5 hours per week gardening during the gardening season.

Finally, Contention 4 is hopelessly vague. Neither the language quoted by the Board in support of its admission nor the statement of the Contention itself (nor anything else) supplies what NECNP contends *is* the right number of hours for the "average" gardener in the area, and thus: (i) since the Contention doesn't specify a number, there is no way that one can "prove" or "disprove" the contention in a trial, and (ii) since the contention does not specify a number, there is no way Yankee could ever calculate a dose based on it. Neither as framed by NECNP nor as framed by the Board does Contention 4 provide "a specific statement of the issue of law or fact to be raised or controverted" as required by 10 C.F.R. § 2.714(b)(2).[9]

---

[8] *I.e.*, "A concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing, together with references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion."

[9] In defense of NECNP, Yankee respectfully submits that the language that this Board quotes on page 19 of its Decision was *not* offered by NECNP to support a supposed contention that the "right" scenario should be one in which the average member spends some different (but unstated) number of hours gardening; rather, this language was offered in support of the vastly different contention that NECNP was proffering (and that the Board correctly rejected), namely that the site release criteria should not be based on average exposures but rather exposures by atypically sensitive individuals. Thus, the only *mention* of gardening by NECNP in its written submission (which is where § 2.714 requires the basis and specificity to be) was offered in support of the proposition that at 5 μR/hr, some individuals (gardeners weren't mentioned) would receive a *direct* dose in excess of 15 mrem/yr:

> "A full-time resident, spending time indoors and outdoors, would receive a direct gamma dose of 17 mrem/year; other pathways would also contribute. Thus, for a full-time resident, the TEDE would exceed 15 mrem/year, under the YAEC survey methodology. A dose rate of 5 μR/h greater than background is only protective under a residential scenario in which an adult male spends 55% of the time indoors, 20% outdoors and 1% gardening. This restricted scenario for direct exposure level, together with other pathways, will maintain TEDE below 15 mrem/year *for a hypothetical adult male*, according to NUREG-1500, using the DandD software. Yet, a person, such as a child, stay-at-home parent, or home bound individual, would receive a direct gamma dose *greater* than 15 mr/y. These are likely and credible (not worst case) scenarios."

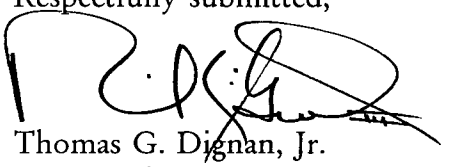
"NECNP Contentions" at 6-7 (emphasis in original). This material was offered in support of an entirely different contention ("Direct γ exposure rates of 5 μR/h are not protective"), which this Board has

In short, NECNP/CAN contended for a most-highly-exposed *individual* test. This Board (correctly) rejected that contention, but then crafted one of its own in which *everyone* was deemed to be the same as the most-highly-exposed individual. This is no less of a rejection of the § 20.1402 "average member of the critical group" test than what NECNP/CAN proposed—that one substitutes an *individual* who suffers more-than-average exposure because of his hobby rather than because of his age, stature or sex is a distinction devoid of legal significance—and it is something that NECNP/CAN did not propose. The contention admitted by the Board had no basis in its proponent's submission and, as admitted, it fails to meet the Commission's requirement for the specificity required of a contention.

Conclusion.

For the foregoing reasons, Yankee respectfully objects to so much of *LBP-99-14* as created and then admitted "Contention 4," requests that this Board reconsider the same and requests that, upon reconsideration, "Contention 4" be excluded.

Respectfully submitted,



Thomas G. Dignan, Jr.
R. K. Gad III
Ropes & Gray
One International Place
Boston, Massachusetts 02110
(617) 951-7000

Dated: March 28, 1999.

---

rejected. NECNP never offered "gardeners" on any other point.

CERTIFICATE OF SERVICE

I, Robert K. Gad III, one of the attorneys for Yankee Atomic Electric Company, do hereby certify that on March 28, 1999, I served the within pleading in this matter by United States Mail (and also where indicated by an asterisk, by facsimile transmission) as follows:

Commission:

Licensing Board:

The Hon. Charles Bechhoefer ←*
Administrative Judge
Atomic Safety and Licensing Board Panel
U.S.N.R.C.
Washington, D.C. 20555
FAX: 301-415-5599

The Hon. Thomas D. Murphy ←*
Administrative Judge
Atomic Safety and Licensing Board Panel
U.S.N.R.C.
Washington, D.C. 20555
FAX: 301-415-5599

The Hon. Dr. Thomas S. Elleman ←*
Administrative Judge
704 Davidson Street
Raleigh, North Carolina 27609
FAX: 919-782-7975

Parties:

Jonathan M. Block, Esquire ←*
Post Office Box 566
Putney, VT 05346
Fax: 802-387-2646
Attorney for NECNP

Ms. Deborah B. Katz ←*
Citizens Awareness Network, Inc.
Post Office Box 3023
Charlemont, MA 01339
Fax: 413-339-8768
On Behalf of CAN

Ann P. Hodgdon, Esquire ←*
Marian L. Zobler, Esquire
Office of the General Counsel
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555
FAX: 301-415-3725
Attorneys for the NRC Staff

Mr. Samuel H. Lovejoy ←*
c/o Franklin Regional Council of Governments
425 Main Street
Greenfield, MA 01301
Fax: 413-774-3169
On Behalf of FRCOG

Others:

Office of Commission Appellate Adjudication
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Office of the Secretary ←*
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555
FAX: 301-415-1672

R. K. Gad III