

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of:

SOUTH CAROLINA ELECTRIC AND )  
GAS COMPANY, et al. )  
(Virgil C. Summer Nuclear ) Docket No. 50-395-OL  
Station, Unit 1) )

APPLICANTS' MEMORANDUM OF POINTS AND AUTHORITIES  
IN SUPPORT OF ITS MOTION FOR SUMMARY DISPOSITION  
RESPECTING INTERVENOR, BRETT A. BURSEY'S  
CONTENTION 10A REGARDING HEALTH EFFECTS

I. Background

On February 25, 1977, South Carolina Electric and Gas Company and South Carolina Public Service Authority ("Applicants") applied to the Nuclear Regulatory Commission ("NRC" or "Commission") for authority to operate the Virgil C. Summer Nuclear Station, Unit No. 1 ("Summer"). In response to the April 18, 1977 Commission notice regarding the subject application (42 Fed. Reg. 20203) Brett A. Bursey filed a late petition for leave to intervene. By Order dated February 3, 1978, the Licensing Board granted Mr. Bursey intervention in this proceeding. Subsequently, by Order dated April 24, 1978, the Board ruled that several contentions raised by Intervenor Bursey, including Contention A10 relating to health effects, would be admitted. Despite a series of discovery attempts and associated Board orders dating back to 1978, Intervenor Bursey

has provided little information regarding his health effects contention. In light of the nature of the responses received, as well as the content thereof, Applicants submit that Intervenor Bursey's Contention 10A, relating to health effects, fails to present a genuine issue of material fact which needs be resolved in this proceeding. Therefore, pursuant to 10 CFR §2.749, Applicants have moved that this contention be dismissed. The instant Memorandum serves to support such motion.

## II. Argument

### A. General

Pursuant to 10 CFR §2.749(d), upon an appropriate motion for summary disposition, "the presiding officer shall render the decision sought" where it is shown "that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law." To provide more definitive guidance in rendering such judgments, the Commission stated that Section 2.749 "has been revised to track more closely the Federal Rules of Civil Procedure." See 37 Fed. Reg. 15135 (1972). 1/

---

1/ See also, Alabama Power Company (Joseph M. Farley Plant, Units 1 and 2), ALAB-182, 7 AEC 210, 217 (1974); Gulf States Utilities Co. (River Bend Station, Units 1 and 2), LBP-75-10, 1 NRC 246, 247 (1975); Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), LBP-74-36, 7 AEC 877, 878 (1974).

In accordance with the Federal Rules of Civil Procedure, to defeat an appropriate motion for summary disposition an opposing party must present facts in the proper form; conclusions of law will not suffice. 2/ The opposing party's facts must be material 3/ and of a substantial nature 4/ not fanciful, or merely suspicious. 5/ One cannot avoid summary disposition

on the mere hope that at trial he will be able to discredit movant's evidence; he must, at the hearing, be able to point out to the court something indicating the existence of a triable issue of material fact. [6 Moore's Federal Practice 56.15(4). (Emphasis added)].

One cannot "go to trial on the vague supposition that something may turn up." 6 Moore's Federal Practice 56.15(3). See Radio City Music Hall v. U.S., 136 F.2d 715 (2nd Cir. 1943). See also Orvis v. Brickman, 95 F.Supp. 605 (D.D.C. 1951), wherein the Court in granting the defendant's motion for summary judgment under the Federal rules said:

---

2/ Pittsburgh Hotels Association, Inc. v. Urban Redevelopment Authority of Pittsburgh, 202 F.Supp. 486 (W.D. Pa. 1962), aff'd. 309 F.2d 186 (3rd Cir. 1962), cert. denied, 376 U.S. 916 (1963).

3/ Egyes v. Magyar Nemzeti Bank, 165 F.2d 539 (2nd Cir. 1948).

4/ Beidler and Bookmeyer v. Universal Ins. Co., 134 F.2d 838, 831 (2nd Cir. 1943).

5/ Griffin v. Griffin, 327 U.S. 220, 236 (1946). Banco de Espana v. Federal Reserve Bank, 28 F.Supp. 958, 973 (S.D.N.Y. 1939) aff'd, 144 F.2d 433 (2nd Cir. 1940)).

All that plaintiff has in this case is the hope that on cross-examination...the defendants... will contradict their respective affidavits. This is purely speculative, and to permit trial on such basis would nullify the purpose of Rule 56, which provides summary judgment as a means of putting an end to useless and expensive litigation and permitting expeditious disposal of cases in which there is no genuine issue to any material facts.

Applicants submit that fundamental precepts of administrative process mandate that Intervenor Bursey be required to present evidence supporting its position at this stage of litigation or that the Licensing Board rule favorably on Applicants' motion. To permit otherwise would be to countenance unwarranted delay. In this regard see 10 CFR §2.749(b) wherein it is stated that:

When a motion for summary decision is made and supported as provided in this section, a party opposing the motion may not rest upon the mere allegations or denials of his answer; his answer by affidavits or as otherwise provided in this section must set forth specific facts showing that there is a genuine issue of fact. If no such answer is filed, the decision sought, if appropriate, shall be rendered.

B. Issues Raised By Intervenor

Intervenor Brett A. Bursey's Contention A10 is as follows:

Contention A10. The following effects - on a long term basis - have been sufficiently underestimated by the Applicant and the Staff so as to compromise the validity of the favorable Benefit-Cost balance struck at the construction permit phase of this proceeding:

a) The somatic and genetic effects of radiation releases, during normal operation, to restricted and unrestricted areas, said releases being within the guidelines and/or requirements of 10 CFR Part 20, and Appendix I to 10 CFR Part 50;

b) The health effects of the uranium fuel cycle, given the release values of the existing Table S-3 of 10 CFR Part 51. (Should the Commission modify Table S-3 prior to the litigation of this contention, the Board will entertain motions from any of the parties respecting modifications to this contention.)

As can be seen, this contention does not challenge the appropriate dose limits and release values of the regulations, for indeed if it did it would be susceptible to dismissal pursuant to the Vermont Yankee doctrine. See, Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station) ALAB-138, 6 AEC 520, 528 (1973). See also Potomac Electric Power Company (Douglas Point Nuclear Generating Station, Units 1 and 2) ALAB-218, 8 AEC 79, 89 (1975) which, in holding that an intervenor may not go behind and challenge the basis of Table S-3 to 10 CFR Part 51, states:

to go behind [the figures set forth in Table S-3] and challenge the basis on which they rest is in effect a challenge to the regulation itself. It may well be that these values rest on unfirm footing. The Licensing Board, however, is not the proper forum for consideration of such matters. The Commission's regulations provide that "any rule or regulation of the Commission, or any provision thereof, ...shall not be subject to attack...in any adjudicatory proceeding involving initial licensing..." 10 CFR §2.758 (1974 rev.)

Further, the contention does not challenge Applicants' compliance with, or operation well within, such regulations, nor does it contest the estimated releases, exposures and

population and occupational doses. Rather, the contention, in essence, asserts that the health effects associated with such doses are greater than estimated by Applicants and Staff and are so great as to warrant denial of the operating license application. 6/

To ascertain the nature, basis and scope of this contention, Applicants requested an order at the November 25, 1980 Prehearing Conference requiring Intervenor Bursey to restate all of his proposed evidence on all of his contentions, including A10. The Board issued such an order on December 30, 1980 requiring Intervenor Bursey to reveal his direct evidence by January 31, 1981. Intervenor Bursey failed to respond. However, on February 23, 1981 he filed a document which named certain individuals as witnesses on

---

6/ As noted, Contention A10 does not challenge the radiological dose contribution occasioned by operation of the facility; rather, the contention focuses on health effects associated with such doses. However, to provide a decisional basis to permit the Board to find that the radiological impact on man arising from routine operation does not tip the benefit-cost balance against the grant of an operating license, Applicants have attached the Affidavit of James H. Barker. Mr. Barker has reviewed the doses presented in the DES and has concluded that such are conservative. Given the fact that the NRC Staff has concluded in the DES that the health effects associated with such conservative doses are insignificant as to both normal operation and the uranium fuel cycle and given the fact that the Staff's evaluation of such health effects has been concurred in by Dr. Leonard D. Hamilton, an evidentiary basis exists to enable the Board to make the above suggested finding at this time.

Contention A10. The Board regarded this filing as insufficient. See Memorandum and Order of March 9, 1981. Then, at the Prehearing Conference session on April 7, 1981, Intervenor Bursey submitted a Summary of Contentions, and certain documents purporting to summarize direct evidence. See Prehearing transcript Tr. 349. On page 8 of the Summary, Intervenor Bursey addresses Contention A10 by making reference to several potential witnesses 7/ and providing copies of various articles which he indicated serve to summarize their testimony. 8/

An examination of the information submitted with the

---

7/ Intervenor Bursey's Summary of Contentions does not reference Dr. Kaku as a potential witness, however during the Prehearing Conference such was alluded to. Prehearing transcript Tr. 438-9.

8/ Intervenor Bursey identified Dr. Chauncey Kepford as a potential witness on the health effects of the uranium fuel cycle. Intervenor Bursey did not provide any information regarding the nature of Dr. Kepford's testimony regarding health effects; rather, Intervenor Bursey stated that such would be available by April 21, 1981. Prehearing transcript Tr. 440. To date, Applicants have yet to receive any information from Intervenor Bursey concerning Dr. Kepford. Such failure to provide information is in direct conflict with the Board Orders of December 30, 1980 and March 9, 1981 and the Board's instruction at the April 7, 1981 Prehearing Conference. Tr. 440. In addition, such failure has prejudiced Applicants' ability to address that aspect of Contention A10 which relates to the uranium fuel cycle. Under such circumstances Applicants move that this Board, in the exercise of its inherent power to regulate the conduct of this proceeding (10 CFR §2.718), to dismiss the

(Footnote continued on next page.)

Summary of Contentions reveals that the central thesis, or underlying premise, of Intervenor Bursey's proposed witnesses' position is that low level radiation not only causes cancer and genetic damage, but may indeed be even more harmful than higher doses per unit exposure.

The effects of low level radiation have been considered by the competent authorities for some years. The Advisory Committee on the Biological Effects of Ionizing Radiation

---

(Footnote continued from previous page.)

uranium fuel cycle aspect of this contention. Authority for such action is well-documented in NRC case law which holds that pursuant to 10 CFR §2.707, an intervenor can be dismissed from the proceeding for its failure to comply with discovery orders. Northern States Power Co. et al. (Tyrone Energy Park, Unit 1), LBP-77-37, 5 NRC 1298 (1977); Offshore Power Systems (Manufacturing License for Floating Nuclear Power Plants), LBP-75-67, 2 NRC 813 (1975); Public Service Electric & Gas Co. (Atlantic Generating Station, Units 1 & 2), LBP-75-62, 2 NRC 702 (1975). Applicants would note that they are aware of Dr. Kepford's participation in Duke Power Company's (Perkins Nuclear Station, Units 1, 2 and 3) Docket Nos. STN 50-488, -489, -490. The Perkins Licensing Board in LBP-78-25 (8 NRC 87 (1978)) referenced Dr. Kepford's argument that the linear assumption (which is discussed infra.) is not conservative; however, like the instant case, Dr. Kepford failed to present any evidence in Perkins to support this position. Id. at 96. Dr. Kepford did make reference to some published papers. Id. at 96. To the extent that the information Dr. Kepford would present regarding the linear assumption in this case is similar to that referenced by Intervenor Bursey in the Summary of Contentions, the instant memorandum is responsive. In the event Dr. Kepford raises new matter, such should be stricken, in that, as noted above, Applicants have been prejudiced by Intervenor Bursey's failure to comply with discovery.

("BEIR"), Division of Medical Sciences, National Academy of Sciences issued a report in 1972 entitled "The Effects of Populations of Exposure to Low Levels of Ionizing Radiation" ("BEIR I"). The BEIR I report noted that, even though lower bounds of risk from exposure to low level radiation could include zero (suggesting that low linear energy transfer ("LET") radiation at low dose rates might be less harmful per unit exposure than radiation at higher doses and dose rates) nevertheless it assumed that the linear proportional dose and tumor induction observed at much higher doses and dose rates can be extrapolated down to the lowest doses. See attached Affidavit of Leonard D. Hamilton. Dr. Hamilton notes that the BEIR I report has been corroborated by the United Nations Scientific Committee on the Effects of Atomic Radiation (1977) and the subsequent BEIR Committee report of 1980 ("BEIR III").

Even though the Commission did not expressly use the Appendix I FES to quantify generally the significance of the health effects, and, thus, they may be adjudicated, as a matter of policy, the Commission believes that unnecessary adjudication should be avoided. It serves no useful purpose to litigate this issue when there is no serious contest as to the result. The Commission also recognizes that it should be able to make use of a NEPA record already compiled in discharging its duties. Cf. Offshore Power Systems (Floating Nuclear Power Plants), CLI-79-9, 10 NRC 57 (1979). Accordingly, it strikes as reasonable that a Licensing Board take official notice of the environmental record compiled in the Appendix I

The Commission in Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), CLI-80-31, 12 NRC 264 (1980) recently endorsed the use of the BEIR report. Therein, the Commission stated:

rulemaking in reaching conclusions as to the health effects from releases within Appendix I. In particular, we believe that a Licensing Board could take official notice that releases within Appendix I levels result in radiation exposures that are small fractions of doses from natural background radiation and that the 1972 BEIR Report contains a "generally accepted evaluation of the effects of ionizing radiation." This does not mean of course that health effects of Appendix I releases cannot be contested. It only means that litigation regarding these issues need not begin on a clean slate, and that, for example, the BEIR estimates can be relied on in the absence of a contest and may be used, along with other evidence, in ruling on summary disposition motions and rendering initial decisions. [Footnote omitted.]  
10 NRC at 277.

Both Staff and Applicants have relied upon, inter alia, the BEIR report in assessing health effects associated with routine operation and the uranium fuel cycle. 9/ See DES Sections 4.5 and 4.7 and attached Affidavit of Leonard D.

---

9/ Applicants note that Intervenor's Contention A10 is limited to existing Table S-3. Such table does not now have (nor did it have at the time the contention was admitted) a value for radon 222 and accordingly this matter is not part of Contention A10. This is not to say that the radon matter will not be addressed in the evidentiary hearing, particularly in light of the express interest of the Board in this regard. See the November 25, 1980 Prehearing Conference transcript at Tr. 299-300. The FES in this case will no doubt cover radon 222 contributions to the uranium fuel cycle and associated health effects in that such has been addressed in the FES.

Hamilton. Staff and Applicants have concluded that such health effects are insignificant. Id.

To overcome Staff and Applicants conclusions relative to health effects, Intervenor must raise a persuasive challenge to the use of the BEIR report, in that the Commission in Black Fox has recognized that BEIR based health effect assessments are prima facie conservative. If Intervenor Bursey can be said to have attempted any such challenge, it must be through the documents referenced in his Summary of Contentions and distributed at the April 7, 1981 Prehearing Conference. Dr. Leonard D. Hamilton, in his attached Affidavit, has thoroughly reviewed Intervenor's documents. Dr. Hamilton's Affidavit demonstrates (1) the appropriateness and conservatism of the BEIR report and its recognition of the linear assumption, and (2) that the documents referenced in Intervenor Bursey's Summary of Contentions do not provide substantive evidence to call into question the conservatism of health estimates derived from the use of the BEIR report's linear assumption. Id. Such being the case there is no genuine issue of material fact and summary disposition should be granted. This is particularly the case in regard to the generally accepted nature of health effects estimates based on the use of the BEIR report and

the insignificance of health effects at or within regulatory limits, levels or guides. See Black Fox, supra, wherein the Commission, as noted above, stated that:

The BEIR estimates can be relied on in the absence of a contest and may be used, along with any other evidence, in ruling on summary disposition motions and rendering initial decisions. [Footnote omitted.]  
12 NRC at 277. 10/

### III. Summary and Conclusions

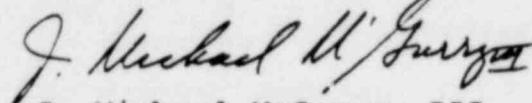
In summary, population doses (10 CFR Part 50 Appendix I), and health effects resulting therefrom, have been underestimated by Applicants and NRC Staff but rather have been conservatively estimated. Similarly occupational doses (10 CFR Part 20) and resulting health effects have been shown to be conservatively estimated. Finally, release values of the uranium fuel cycle (10 CFR Part 51 Table S-3) and associated health effects have been shown to be conservatively estimated. Therefore there is no genuine dispute of material fact and no basis for the proposition that such health effects (including somatic and genetic effects) may have been underestimated.

---

10/ As suggested in Black Fox, supra Applicants call upon the Board to take official notice of the BEIR report in that such contains a generally accepted evaluation of the effects of ionizing radiation.

For all of the foregoing reasons, and taking into account the matters of which this Board may take official notice and the affidavits of Leonard D. Hamilton and James H. Barker, Applicants' motion for summary decision as to Intervenor Bursey's Contention A10 should be granted.

Respectfully submitted,

  
J. Michael McGarry, III