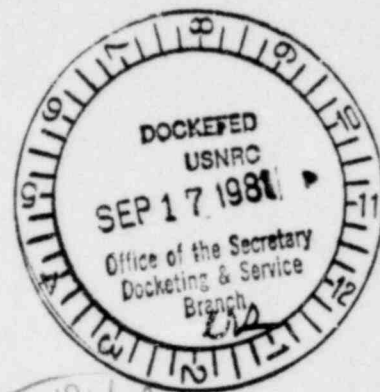


UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
ATOMIC SAFETY AND LICENSING BOARD

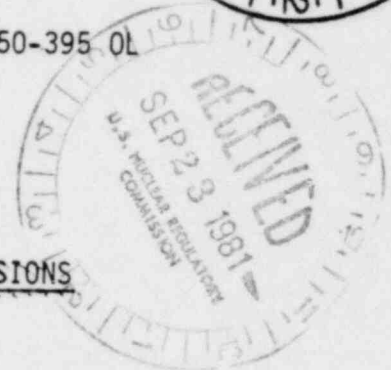


In the Matter of:

SOUTH CAROLINA ELECTRIC & GAS  
COMPANY, et al.

Virgil C. Summer Nuclear Station,  
Unit 1

Docket No. 50-395-OL



INTERVENOR'S FINDING OF FACTS AND CONCLUSIONS

Three contentions are to be addressed in this preliminary filing of facts and conclusions: Applicant's Financial Capability (A-2), Quality of Workmanship (A-9), and Health Effects (A-10).

Intervenor's Contention A-2.

A-2(a). The Applicant lacks the financial qualifications necessary to safely operate and decommission the Summer station in compliance with NRC Rules (42.050,2232) and regulations.

A-2(b). The sum allocated by the Applicant for decommissioning of the Summer plant is grossly inadequate and does not conform to the requirements of 10 CFR 50.33(f).

It is the Intervenor's position that the adequacy of funding for decommissioning is necessarily tied to the proposed mode of decommissioning. Accepting the Applicant's 70 million dollar (1978 dollars) estimate for complete dismantlement, the 30 year life span of the plant could require between \$733.7 million and \$4.9 billion for decommissioning (given 7-14% inflation). Tr. 2746. Staff witness Peterson asserts, and Applicant agrees, that projecting inflation rates for the life of the facility is "so speculative that it is not very meaningful," Tr. 2738. This off-handed treatment of the Applicant's responsibility to responsibly project adequate funding for decommissioning is underscored by

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their plan for a "non funded" reserve. (Ford testimony pp. 1-2, Wooten testimony p. 4) This proposed plan will have the rate payers assessed an indefinite amount that the Applicant will use to invest in their own corporation. When decommissioning becomes necessary, the Applicant will sell bonds to raise decommissioning capital. These bonds will be paid by future generations of rate payers. The admittedly speculative economic and technological aspects of decommissioning compel this licensing board to require the establishment of a "funded reserve" of \$70 million (1978 dollars). This reserve should be held in an interest bearing trust by a third party. This method provides the only reasonable assurance of adequate funding for decommissioning under all contingencies.

Staff financial witness Peterson stated that the funded reserve provides greater financial assurance of safe, adequate decommissioning than the unfunded approach. Tr. 2740.

The Applicant's argument that the NRC has no authority over ratemaking (in regard to decommissioning costs) does not preempt the Licensing Board's responsibility to insure the Applicant has adequate funding for decommissioning. It is within this Board's authority to require an external, funded reserve a condition of the operating license.

The Applicant's assertion that the term "permanent shutdown" means decommissioning at the end of the facility's normal life is a self-serving interpretation. Common sense dictates that decommissioning of a facility occurs at the end of its useful life - whether that is 3 months or 30 years after operation commences.

The Applicant alludes to a variety of possible options to raise funds for premature decommissioning.

The TMI accident happened with approximately 450 commercial reactor years of operating experience. With 80 reactors operating, we can expect another TMI type accident within the next 6 years. Prudence dictates that this licensing

board not rely on previous financial requirements that will leave a utility vague options to fund decommissioning under all contingencies.

The only way this licensing board can assure the Applicant's financial capability to deal promptly and safely with decommissioning under all contingencies is to mandate an external, funded reserve of \$70 million, 1978 dollars, as a condition of the operating license.

Intervenor's Contention A-9.

The quality control of the Summer plant is substantially below NRC standards as evidenced by substandard workmanship in several aspects, during the construction of the plant.

The Applicant's position on welding quality control can be likened to a great deal of smoke, many sparks, but absolutely no possibility of fire. Clarence Crider, the welder who brought many deficiencies to light, is characterized by the Applicant as self serving. Mr. Crider's motives aside, none of the 15 particularized allegations contained in Report No. 79-35 were dismissed as frivolous, and in fact, were all confirmed at least in part.

The Applicant admits having serious difficulties adhering to code and, in part, dismisses the problem as a generic shortcoming not peculiar to the Summer site. Tr. 1414,3525.

The failure to meet ASME Code Section 111, 71 & 73 that requires pipe with drawal 1/16th of an inch prior to welding (Allegation H - Crider) was substantiated by the I & E Report. The Applicant's position is to take issue with the code itself by arguing:

- (a) even if they did not follow the code, there is no safety problem;
- (b) the welding process itself defeats the purpose of the code.

These two welding problems exemplified by items A and H of Report 79-35 affect over 15,000 welds. These were brought to the Board's attention by one worker. The consistent testimony before this board about faulty welding and

haphazard quality control raises a reasonable doubt as to the ultimate integrity of thousands of safety related welds. Under these circumstances the Board should refuse to issue an operating license to the Applicant. Should a license be ultimately granted, the Applicant should be restricted to operating at 5% of the reactor's thermal capacity for 6 months to insure the integrity of safety related welds.

Intervenor's Contention A-10.

"I feel at the present time with the data on record that I could not support the claim that they have been overly conservative. I feel in some respects just the inverse of that, that is, they have chosen values that would tend to depreciate the risk rather than to perhaps exaggerate the risks." (Dr. Morgan, Tr. 2489)

Dr. Morgan's observation that the Applicant and Staff are not forthcoming in their estimation of health effects is borne out by the obscuring of "bottom line" figures in both the Applicant's and Staff's documents.

Although the Staff and Applicant go to lengths to discredit Dr. Morgan's testimony, Dr. Brannagan admits (Tr. 3823) and the Applicant concurs there is no major disagreement in the "total range of health effects."

It is interesting to note that nowhere in Staff or Applicant documents do we see Dr. Morgan's unrefuted projection of 35 fatalities, 70 cancers (Tr. 2494) and 1700 genetic disorders. The Staff and Applicant relied on a jumble of numbers unintelligible to the average person to obscure the actual health risks of operating the V.C. Summer plant.

The Applicant has asserted that the FES figures combined with the results of BEIR III leads to the conclusion that "there will be no measurable health impact on man" from the operation of the V.C. Summer plant (Barker, prefiled testimony, p. 6).

The Applicant states on the one hand that there is no major disagreement in the total range of health effects as postulated by Dr. Morgan versus the FES. (this range being up to 35 fatalities, 70 cancers and 1700 genetic disorders), while presenting sworn testimony on the other hand that concludes no measurable health impact on man. This glaring contradiction indicates that

the Applicant has a wholly different assessment of "measurable health impact(s)" than rational thought processes can follow. Certainly a different view than the 70 people who may contract cancer as a result of the operation of this plant may have.

The Applicant seems to hope that the Intervenor and the Board will get lost in the scientific quagmire of how certain figures are reached, rather than the bottom line costs of cancer deaths and genetic abnormalities so carefully hidden from public view over the 8 years of licensing hearings for this facility.

This Board surely has the common sense to know that the industry figures for the cost-benefit of health effects have been historically as understated as in the instant case. Dr. K.Z. Morgan, a nuclear scientist of the highest integrity since the splitting of the first atom, provides this Board with as broad and frank an insight into their task as can be found: "(I)t is incumbent on us to try to develop an understanding with members of the public as to what the true risks are, what the spread of uncertainties are...the public should be made aware of these uncertainties and what the possible consequences to them and their children are." Tr, 2498.

The nuclear industry and this Applicant have a long history of denigrating the negative effects of nuclear power - a high-priced, high-powered misrepresentation of the facts of this proceeding.

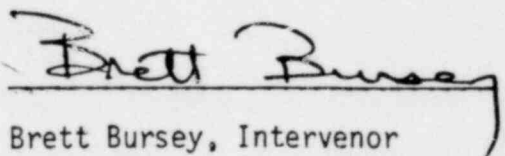
This Board has the historic opportunity to concern itself with the democratic representation of the informed will of the people, rather than perpetuating



the myths the nuclear industry has been built upon. If the facts of the health effects expected from the operation of this nuclear plant had been honestly represented to the public eight years ago, the plant in all probability would never have been built. The momentum of a billion dollar investment is a ponderous force to reckon with, but the lives that will be lost and genetically impacted without their informed consent represents a chilling turn from democracy that cannot in good conscience be countenanced.

This Board's responsibility to democratic principles far outweighs any homage to profit-making corporations. Were the impacted citizenry informed of their risks, the lack of need for power alone would dictate a denial of this operating license. Given the fact that the costs are incurred against the lives of a misled public, this Board has no option other than to deny the benefit of excess power to the Applicant's stockholders.

If in the final assessment, this Board decides not to represent the interest of the people, and opts to cast more lives to a bankrupt future - to allow technology to take the path of maximum profit - you must not continue to hide the costs you have determined are justifiable. The ill-advised granting of an operating license must clearly state how many cancers, how many deaths and how many genetic disorders we can expect to suffer - should nothing go wrong at the V.C. Summer plant.

  
Brett Bursey, Intervenor

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of: )

SOUTH CAROLINA ELECTRIC &  
GAS COMPANY and )

SOUTH CAROLINA PUBLIC  
SERVICE AUTHORITY )

(Virgil C. Summer Nuclear  
Station) )

Docket No. 59-395 CL

CERTIFICATE OF SERVICE

I hereby certify that copies of "Intervenor's Finding of Facts and Conclusions" were served upon the following persons by deposit in the United States mail, first class postage, this 8th day of September, 1981:

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