

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:

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

AFFIDAVIT OF MICHAEL D. QUINTON
REGARDING MR. BURSEY'S MOTION FOR ADMISSION
OF NEW CONTENTION REGARDING STEAM GENERATORS

Michael D. Quinton, being first duly sworn according to law comes forward and states:

My name is Michael D. Quinton. I am employed by South Carolina Electric & Gas Company as Director of Mechanical Engineering within the Nuclear Engineering Department. I previously submitted an affidavit in this proceeding (April 23, 1982) regarding FUA's "Petition to Intervene and Request for Hearing."

I have read the "Motion for Admission of New Contentions" dated April 14, 1982 and filed by Brett A. Bursey in this docket.^{1/} The purpose of my Affidavit is to assess the significance of safety questions which Mr. Bursey seeks to raise in his New Contention 1. I have concluded the steam

^{1/}Mr. Bursey's motion is very similar to FUA's petition as to steam generator tube wear problems. Accordingly, I wish to incorporate in this Affidavit my April 23, 1982 Affidavit. A copy is attached for convenient reference.

generator tube wear matter referred to by Mr. Bursey does not present a significant risk to the health and safety of the public. In my Affidavit dated April 23, 1982, I have described the Applicants' involvement with this problem and with utility and vendor efforts to identify the cause and develop an effective remedy. I also described Applicants' commitments relative to interim operation of the Virgil C. Summer Nuclear Station and evaluation of proposed modifications leading to installation of an effective and approved "fix."

Contrary to Mr. Bursey's argument that the accelerated tube wear problem "raises significant safety questions" (Motion at 2) and "threatens the health and safety of the public," it is my opinion that the operation of the V. C. Summer Nuclear Station Unit No. 1 under the conditions set forth in the Nichols to Denton letter of February 19, 1982 as supplemented by the instrumentation commitment in the Nichols to Denton letter of April 14, 1982 presents no significant risk to the health and safety of the public. The basis for that opinion is set forth in my Affidavit of April 23, 1982 and Mr. Fletcher's Affidavit of April 22, 1982.

To address Mr. Bursey's New Contention 1 specifically, I note first that an underlying premise in the contention regarding releases to the environment is that the Summer unit will be operated at a power level at which flow-induced vibrations in the preheater region will act to cause tube

wear leading to tube rupture, which he assumes would be coupled with numerous other events. This premise is incorrect. The Applicants' interim commitment is to limit operation of the unit to 50% power (or to an appropriate level of power above 50%) which precludes significant tube damage; Applicants also are committed to make permanent modifications which are proven effective in correcting the problem.

Since the accelerated tube wear problem will not arise during interim operation (or after a permanent modification is made to preclude the problem), there is no basis to postulate, as Mr. Bursey does, tube rupture possibly in combination with PORV failure or possibly leading to degraded core cooling, as a consequence of accelerated tube wear. Both Mr. Fletcher and I commented on those matters in our previous Affidavits.

Likewise, I disagree with Mr. Bursey's unsupported conclusion that "if the plant is not safe to operate at full power, it should not be allowed to operate at half power." The plant will in fact be safe to operate at full power after we make the permanent modification to correct the problem which we intend to do when we are sure that the modification will prove effective. Prior to the permanent modification, the plant will be operated only at levels which will preclude significant tube wear. All of this is explained in greater detail in my April 23, 1982 Affidavit and in Mr. Fletcher's April 22, 1982 Affidavit.

My conclusions regarding the safety significance of FUA's similar contention apply equally to Mr. Bursey's contention. Applicants are well aware of the potential for premature tube wear problems in Westinghouse Model D steam generators. We recognize the need for corrective action and are working with the vendor and the NRC to develop, verify and install a suitable modification to eliminate the problem. Based upon our understanding of the mechanisms involved, we have developed and committed to an interim operating program to insure significant steam generator tube wear does not occur. By virtue of our actions in this matter, operation of the V. C. Summer Nuclear Station does not present undue risk to the public health and safety.

Michael D. Quinton
Michael D. Quinton

STATE OF SOUTH CAROLINA)
COUNTY OF RICHLAND) ss

SWORN to before me this
11th day of April, 1982.

Notary Public for South Carolina

My Commission Expires: 7-2-83.