



**Public Service Company of Colorado**

12015 East 46th Avenue, Suite 440; Denver, CO 80239

March 4, 1980  
Fort St. Vrain  
Unit No. 1  
P-80036

Mr. Themis P. Speis, Chief  
Advanced Reactors Branch  
Division of Project Management  
Nuclear Regulatory Commission  
611 Ryan Plaza Drive  
Suite 1000  
Arlington, Texas 76012

Subject: FSV Fuel Particles OPyC  
Microporosity

Reference: Letter Speis to Fuller  
February 6, 1980

Dear Mr. Speis:

In the opinion of the Public Service Company of Colorado, the subject of OPyC microporosity was reported to the NRC in a timely fashion based upon the information originally presented to PSC by GA and in light of the in reactor performance of the fuel to date.

The original information concerning microporosity presented to PSC was that a higher than anticipated fertile particle OPyC failure rate may be expected if the data from the referenced capsule irradiation test was interpreted correctly. Even if the higher rate of fertile fuel particle failure were to occur, the total anticipated number of failures was not expected to exceed the number of failures assumed in the FSAR.

The release of fission products from the failed fertile particles was then assumed to occur following complete hydrolysis of these particles resulting in a circulating inventory of fission products in the primary coolant that exceeded that allowed by the Technical Specifications if the plant was operated in excess of approximately 75% of rated thermal power.

Insofar as the plant is presently limited to 70% of rated power, the increased particle failure, if it occurs, is expected to start to occur toward the end of Cycle 2, and because the present rate of release of fission products from the fuel results in a circulating inventory of fission products that is a factor of 30 less than design at 70% power,

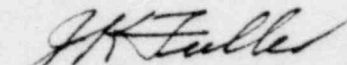
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it was PSC's considered opinion that further testing should be completed prior to informing the NRC to assure the initial information from GA was infact valid. Under these circumstances, PSC considers their notification to the NRC to be both timely and prudent and in compliance with the Technical Specifications and regulations concerning submission of such reports.

Very truly yours,

  
J.K. Fuller, Vice President  
Engineering and Planning

JKF/FES:pa