

May 24, 2002

Mr. Clinton Bastin
987 Viscount Court
Avondale Estates, Georgia 30002

Dear Mr. Bastin:

Thank you for your letter to Chairman Meserve dated April 15, 2002, and sharing your experience and the Department of Energy safety record achieved by DuPont related to the Savannah River plant.

In your letter you informed the Nuclear Regulatory Commission (NRC) about DuPont's experience regarding the use of "minimum thickness holes" to monitor corrosion and erosion on the inside of pipes or vessels at the Savannah River Plant. The use of "minimum thickness holes" is based on the principle that the pipe or vessel will leak first before it breaks when the metal is thinned because of corrosion and erosion from the inside, therefore, an observable leak will develop through the hole and the plant can be shut down for repairs. As I am sure you recognize, the corrosion at Davis-Besse did not start from the inside of the vessel head and that the inside of the vessel head was clad with stainless steel which is not vulnerable to boric acid corrosion under plant operating conditions. Given this, the use of "minimum thickness holes" would not have been effective in detecting the degradation.

Nuclear power plants in United States are designed and erected in accordance with the requirements of American Society for Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section III, Rules for Construction of Nuclear Power Plant Components. The ASME Code does not employ "minimum thickness holes" to monitor corrosion and erosion of piping and vessels. Instead, the Code requires that after nuclear plant components are manufactured, the components must be examined for defects using various nondestructive examination methods depending on the component's safety classification, Class 1 being the highest classification while Class III being the lowest. Class 1 safety-related piping and components are ultrasonically examined in accordance with the pre-service requirements of the ASME Section XI, Rules for Inservice Inspection of Nuclear Power Plant Components, before being placed into service. Once the nuclear power components are placed into service, they are inspected and examined in accordance with the requirements of ASME Code, using various nondestructive examination methods so that any new defects are properly identified and corrected.

Nuclear power plants also employ different leak detection strategies. Fluids leaking from plant components are collected in sumps and the fluid inventory is closely monitored in accordance with the facility's applicable technical specifications (TS). If the plant instrumentation indicates a higher fluid inventory than the one allowed by the plant's TS, plant operators are required to take appropriate action, which may include the initiation of plant shutdown.

Mr. Bastin

- 2 -

The NRC also issues generic communications such as Information Notices and Bulletins to alert nuclear power plants of potential problems that may apply to their facilities. In doing so, the industry is provided with advanced information so that potential problems are promptly identified and corrected.

In conclusion, I would like to assure you that NRC is closely monitoring the investigation of the Davis-Besse issue and the rules and regulations that provide for safe operation of nuclear power plants are followed, and thus, public health and safety is ensured.

Sincerely,

/RA/

John A. Zwolinski, Director
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Mr. Bastin

- 2 -

The NRC also issues generic communications such as Information Notices and Bulletins to alert nuclear power plants of potential problems that may apply to their facilities. In doing so, the industry is provided with advanced information so that potential problems are promptly identified and corrected.

In conclusion, I would like to assure you that NRC is closely monitoring the investigation of the Davis-Besse issue and the rules and regulations that provide for safe operation of nuclear power plants are followed, and thus, public health and safety is ensured.

Sincerely,

/RA/

John A. Zwolinski, Director
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

DISTRIBUTION:

PUBLIC

PD3-2 r/f

NRR Mailroom (Y020020129)

S. Collins/J. Johnson

J. Zwolinski/T. Marsh

B. Sheron/K. Johnson

S. Bajwa

A. Mendiola

S. Sands

D. Pickett

T. Harris

G. Grant, RIII

W. Borchardt

L. Cox

A. Howell

ADAMS Accession No.: Response: ML021400606

Incoming: ML021210443

Package: ML021400624

OFFICE	PM:LPD3-2	LA:LPD3-2	BC:EMCB	SC:LPD3-2	PD:LPD3	D:DLPM
NAME	SSands	CRosenberg for THarris	WBateman	AMendiola	SBajwa	JZwolinski
DATE	05/22/02	05/22/02	05/23/02	05/23/02	05/23/02	05/24/02

OFFICIAL RECORD COPY