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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SEP 20 1979

Docket No. 50-313

Ms. Mary Morgan  
Box N  
Rogers, Arkansas 72756

Dear Ms. Morgan:

Your letter to Chairman Hendrie regarding Arkansas Nuclear One, Unit 1 (ANO-1) has been referred to me for reply. In your letter you requested information on: (1) the differences and similarities between the Three Mile Island Nuclear Station, Unit 2 (TMI-2) and ANO-1, (2) the possibility of an accident at ANO-1 like the one at TMI-2, and (3) where the fuel rods will be stored after they are taken out of the reactor. These items are discussed below.

With regard to the similarities and differences between TMI-2 and ANO-1, the nuclear steam supply systems for the two units are very similar. The nuclear steam supply system includes the following components: reactor, steam generators, reactor coolant pumps, pressurizer, the emergency core cooling system and the instrumentation and control for these components. However, minor differences result in slightly different power levels for the unit. At ANO-1, the nuclear steam supply system operates at a power of 2568 megawatts and at TMI-2, at a power 2772 megawatts. The rest of the equipment required to generate electricity and maintain the nuclear steam supply system is called the balance-of-plant (BOP). The BOP includes items like the auxiliary feedwater system, rad-waste system, the turbine generator, and the structures which house the BOP and the nuclear steam supply system. The BOP for ANO-1 and TMI-2 are fundamentally the same, however, the design and layout of the BOP are different because two different architect/engineering firms designed and constructed the respective plants.

With regard to the second point in your letter, absolute assurance that a similar accident will never be repeated cannot be provided. However, we have taken steps to significantly reduce the risk of such an accident. As a result of our preliminary investigation of the accident we concluded that all Babcock & Wilcox reactors should be shutdown until certain steps were taken. The steps included modifications to the auxiliary feedwater system and its controls, modifications to the reactor protection system, additional analyses of small loss-of-coolant accident, additional operating procedures, and training of operators on reactor simulators. After ANO-1 completed these steps we inspected the unit and

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Ms. Mary Morgan

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concluded that the licensee had fully met our requirements. On May 31, 1979 the licensee was given permission to restart ANO-1. On June 2, 1979, before the reactor began power operations, we shutdown the reactor because we found a routine test resulted in the bypassing of the auxiliary feed-water system. A special inspection began on June 3, 1979 and on June 14, 1979 the licensee was again given permission to restart the reactor.

Regarding the third item, the fuel rods taken out of the reactor (spent fuel) are stored under water in a building separate from the containment building. The spent fuel will stay there until such time as a permanent or temporary spent fuel storage facility is available. The Department of Energy is planning an underground repository for the permanent disposal of spent fuel. Construction of this repository has not yet been started.

I trust the information provided above is responsive to your concerns.

Sincerely  
Original Signed by  
H. R. Denton

Harold R. Denton, Director  
Office of Nuclear Reactor  
Regulation

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Sunday, April 8

Dear Mr. Joseph Kendrick,

I am writing to urge you to fully investigate all seven plants built

by Subroad Wilcox. I

am concerned because I live in Ark. where we have a similar plant in Russellville. Would you

please tell me the differences

& similarities of the 3 mile

Island plant & the one at

Russellville?

Can you assure the people of Ark. that the plant at Russellville will not have an accident similar to the one in Penn.?

I urge you to give this plant a full investigation & answer questions of safety.

I understand that they are removing 1/3 of the Jule rocks at Russellville, now. Would you please tell me where & when these rocks will be stored.

Thank you,  
Mary Morgan

Box N, Rogers, Ark. 72756