



1. Reportable Occurrence Report No. 50-313/77-7
2. Report Date: 3/10/77                      3. Occurrence Date: 2/24/77
4. Facility:     Arkansas Nuclear One-Unit 1  
                         Russellville, Arkansas
5. Identification of Occurrence: Damage to fuel pins in new fuel assembly.

6. Conditions Prior to Occurrence:

|  |  |
|--|--|
| Steady-State Power _____                               | Reactor Power    0        MWth                       |
| Hot Standby                    _____                   | Net Output         0        MWe                      |
| Cold Shutdown                _____                     | Percent of Full Power    0    %                      |
| Refueling Shutdown <u>  X  </u> _____                  | Load Changes During Routine<br>Power Operation _____ |
| Routine Startup<br>Operation                    _____  |  |
| Routine Shutdown<br>Operation                    _____ |  |
| Other (specify)  |  |

7. Description of Occurrence:

At approximately 2325 hours on February 24, 1975, while loading a new fuel assembly into Core Position L-2, two fuel pins were damaged. The fuel assembly was being moved into position between two other assemblies with the bottom of the new assembly approximately 2 feet above the grid. The assembly was being moved in this manner due to the difficulty of placing the new assembly into position.

8. Designation of Apparent Cause of Occurrence:

|                               |       |  |       |
|-------------------------------|-------|--|-------|
| Design                        | _____ | Procedure  | _____ |
| Manufacture                   | _____ | Unusual Service Condition<br>Including Environmental | _____ |
| Installation/<br>Construction | _____ | Component Failure<br>(See Failure Data)              | _____ |
| Operator                      | _____ |  |       |
| Other (specify)               | X     |  |       |

Slight warping of fuel assemblies.

9. Analysis of Occurrence:

The adjacent assemblies showed no evidence of damage. Since the damaged assembly was an unirradiated assembly and experienced no fuel cladding failure, there was no release of fuel or fission products. Therefore, there was no hazard to the health and safety of the public.

10. Corrective Action:

The fuel assemblies involved were inspected with video equipment to determine their damage. There was no damage except to the one assembly. This assembly had one fuel pin out of the upper end fitting and one other pin was bent. A decision was made to remove this assembly from the Reactor with the new fuel handling tool and the Reactor Building Crane. This assembly was placed in the transfer carriage for transfer to the spent fuel pool, removed for decontamination, and shipped to the fuel vendor for inspection and repair. A new fuel assembly is being readied for shipment to the site in the event the damaged fuel assembly can not be repaired before the new fuel assembly can be shipped.

The fuel loading was continued after this assembly was removed for decontamination with its core position left empty until it or a replacement is returned from the vendor. The refueling operators were instructed not to try to place an assembly from the side without prior approval of the supervisor of operations and then only if the assembly is less than 3 inches off the lower grid.

11. Failure Data:

There has been no other failure of this type. Fuel assembly serial number NJ00J2.