

OAK RIDGE
NATIONAL LABORATORY

MANAGED BY UT-BATTELLE
FOR THE DEPARTMENT OF ENERGY

ORNL/MD/LTR-78
Level 1

**Fissile Materials Disposition
Program Light Water Reactor
Mixed Oxide Fuel Irradiation
Test Project Plan**

Revision 2

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May 2000

Fissile Materials Disposition Program

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ORNL-27 (4-00)

Revision History

Revision Number	Date Issued	Reason for Revision
0	July 1997	
1	February 1998	To revise Table 3 to reflect actual and current best-estimate milestone dates.
2	May 2000	Revise Sections 6.0 and 8.0 to incorporate plans for extension of burnup to 50 GWd/MT for some capsules. Also, miscellaneous text changes as necessary to update to current status.

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Fissile Materials Disposition Program Light Water Reactor Mixed Oxide Fuel Irradiation Test Project Plan—ORNL/MD/LTR-78, Level 1 (Revision 2)

Revision 0 of this Test Project Plan for the irradiation of MOX fuel prepared from weapons-derived plutonium at representative average linear heat generation rates within the Advanced Test Reactor (ATR) was issued in July 1997. This Project constitutes Task 4.1.1 "Irradiation Tests and Post Irradiation Examination," as described in the FY 2000 Annual Operating Plan for the Fissile Materials Disposition Program under the Department of Energy's Office of Fissile Materials Disposition.

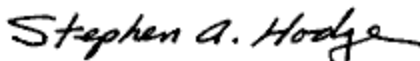
Revision 1 was issued in February 1998 to revise the estimated milestone completion dates previously listed in Table 3 to reflect the actual milestone status at that time.

Revision 2 is now issued to incorporate plans for the extension of burnup for some capsules from the previously planned 30 GWd/MT to 50 GWd/MT. These changes include modifications to cost and milestone estimate tables as appropriate. The text is also modified throughout the report as necessary to reflect the current status of the test irradiation.

It is important to note that this Test Project Plan continues to pertain only to the average power test. A separate document will be prepared for any other test to be conducted under the auspices of this project in the future.

The text modifications incorporated by Revision 2 were approved by Bob Pedersen at INEEL, Don Spellman at ORNL, plus Jon Thompson and Pat Rhoads at DOE. The signature sheet circulated with Revision 0 is considered to remain applicable and is included with this release of Revision 2. This is a Level-1 document as defined in Section 7.0, *Project Documentation Hierarchy and Control* of this Test Project Plan. Any future modifications to this average power test plan will be promulgated only through appropriate revisions to this document.

Sincerely,



Stephen A. Hodge, Manager
MOX Irradiation Test Project

SAH:rcp

Enclosure: As Stated

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