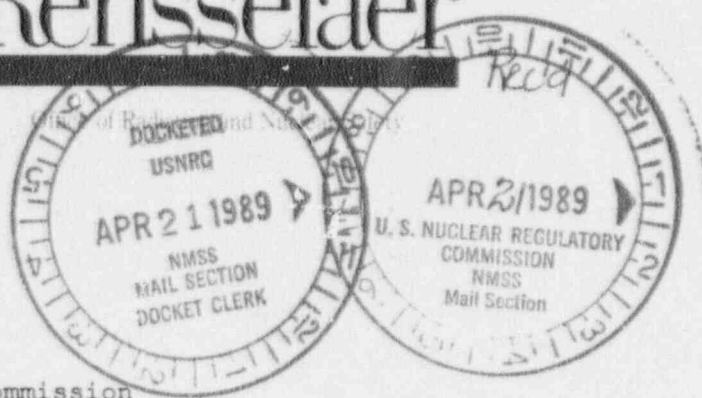




7-920  
PDR

# Rensselaer



April 12, 1989

Mr. W. Scott Pennington  
U.S. Nuclear Regulatory Commission  
Uranium Fuel Licensing Branch  
Division of Fuel Cycle and Nuclear Safety  
Washington, D.C. 20555

Reference: SNM-910

Subject: Additional information to Rensselaer's request for amendment dated February 22, 1989

Gentlemen:

Enclosed please find 6 copies of Figure 1, Spert Fuel Pin and 6 copies of a Rensselaer memo listing the fission chambers that will be used with the Fuel Assembly For Fissile Assay (FAFFA) described in the February 22, 1989 request for amendment.

Sincerely,

Robert M. Ryan  
Director  
Office of Radiation and Nuclear Safety

RMR/sms

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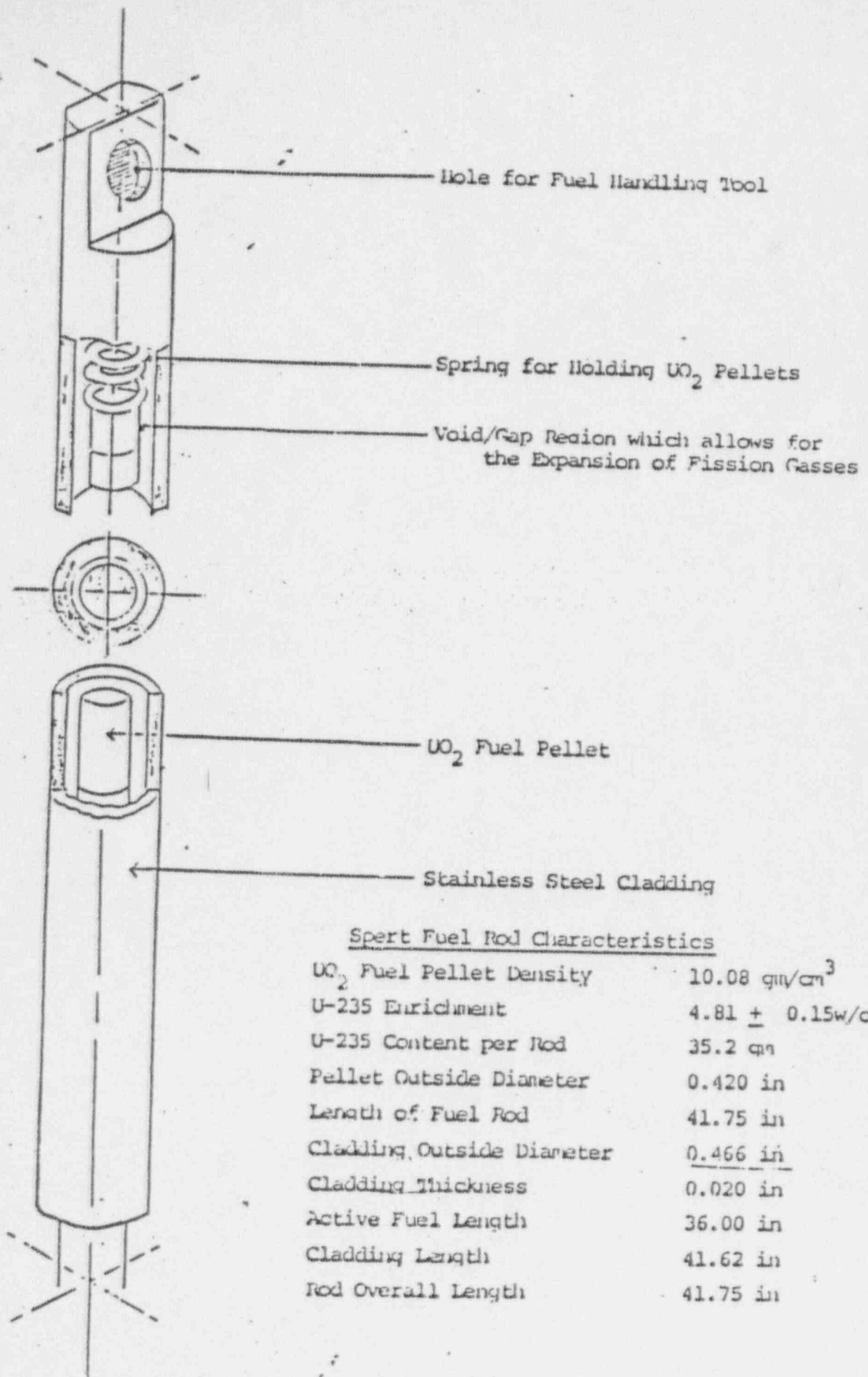


Figure 4.7 SPERT FUEL PIN

FIGURE 1.



# Rensselaer

Department of Nuclear Engineering & Engineering Physics

## MEMORANDUM

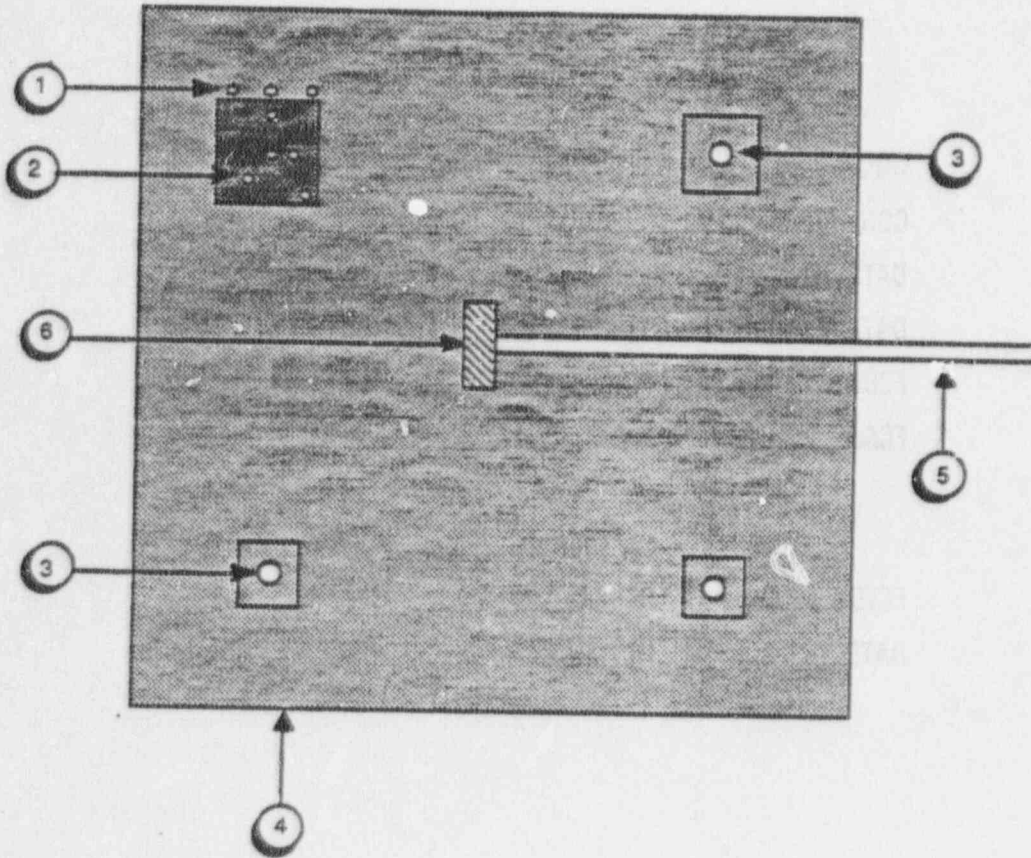
TO: R. Ryan *R. Ryan*  
FROM: F. Rodriguez-Vera  
DATE: April 12, 1989

Per your request this morning regarding information about fission chambers to be used along with the Fuel Assembly For Fissile Assay (FAFFA), for the "Fissile Assay of Spent Fuel Using Slowing-Down-Time Device" project, the following should be stated.

- A. We have 17 fission chambers that we intend to use at several configurations around the FAFFA, when placed inside of the lead spectrometer. However we do not plan to use all 17 chambers at the same time. A typical arrangement would be as that shown in Fig. 2.2 "Lead Spectrometer Arrangement" of E. Vanterpool's PhD thesis (enclosed).
- B. The type, serial number, fissile/fertile material, and amount for each chamber is given as follows.

1.	WX32504-743501	0.36 gr Th-232
2.	WX32504-771302	0.36 gr Th-232
3.	WX32504-771303	0.36 gr Th-232
4.	WX32504-771304	0.36 gr Th-232
5.	WX32504-771305	0.36 gr Th-232
6.	WX32504-823901	0.36 gr Th-232
7.	WX32504-823903	0.36 gr Th-232
8.	WX32604-743504	0.36 gr U-238
9.	RS-P6-0805-157-P5426	132.8 mg U-238
10.	RS-P6-0805-157-P5427	132.8 mg U-238
11.	RS-P6-0805-157-P5430	132.8 mg U-238
12.	RSN-34A-N7-F2198	149 mg U-238
13.	FC4/U233/300; SK289	0.3 mg U-233
14.	FC4/300/PU239; SL638	0.3 mg PU-239
15.	FC4/1000/U235; Tk34	7.0 mg U-235
16.	FC4/1000/U235; TK-35	7 mg U-235
17.	SG1807	0.3 mg PU-239

Fuel Assay Fission Chambers - 1  
Fuel Assay Test Assembly - 2  
Flux Monitor Fission Chamber - 3



Lead Spectrometer - 4  
LINAC Drift Tube - 5  
Target - 6

Figure 2.2 Lead Spectrometer Arrangement

DOCKET NO. 70-920

CONTROL NO. 25443

DATE OF DOC. April 12, 1989

DATE RCVD. April 21, 1989

FCUF  PDR

FCAF \_\_\_\_\_ LPDR \_\_\_\_\_

I & E REF.

SAFEGUARDS

FCTC  OTHER \_\_\_\_\_

DATE 4/21/89 INITIAL JW