

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judge  
Peter B. Bloch

In the Matter of ) ) THE CURATORS OF ) THE UNIVERSITY OF MISSOURI ) ) (Byproduct License ) No. 24-00513-32; ) Special Nuclear Materials ) License No. SNM-247)	Docket Nos. 70-00270 30-02278-MLA RE: TRUMP-S Project ASLBP No. 90-613-02-MLA
--	--

AFFIDAVIT OF DR. J. STEVEN MORRIS  
REGARDING RENEWED STAY REQUEST

I, J. Steven Morris, being duly sworn, hereby state as follows:

1. I am Interim Director of the University of Missouri-Columbia Research Reactor Facility ("MURR"), a position I have held since March 1, 1989. My background and qualifications are described in the companion Affidavit of Dr. J. Steven Morris Regarding Safety Analysis (Licensee's Exhibit 3).

2. I have reviewed the Written Presentation of Arguments of Intervenors and Individual Intervenors ("Intervenors' Written Presentation") (October 15, 1990) including Exhibits 1-19 thereof, and other relevant materials, including Intervenors' Renewed Request for Stay Pending Hearing ("Renewed Stay Request") (October 15, 1990).

3. The effect of the temporary stay ordered by the Presiding Officer on October 20, 1990 has been detrimental to the University by: causing the experimentation with the actinide elements to be ceased; causing delays in the recruitment of graduate students; causing the contract negotiations for the continuation funding to be suspended; causing a planning trip to Japan to be postponed; causing inaccurate local and national media accounts; causing the MURR staff to be characterized as incompetent; and causing the Columbia community to become unnecessarily concerned about the safety of the research project.

1 4. Intervenors have asked that a stay be issued until this  
2 hearing is completed, in essence an indefinite period. The  
3 effect of such an indefinite stay would be to continue the harm  
4 already caused by the temporary stay. The effect of such an  
5 indefinite stay would be more profound and could result in the  
6 end of actinide research at the University for the following  
7 reasons:

8 a. Graduate research --involving faculty, staff,  
9 students and sophisticated research facilities such as the  
10 Alpha Laboratory-- cannot be conducted under a cloud of  
11 uncertainty such as already exists under the temporary stay  
12 and would be exacerbated under a new stay. For example, of  
13 the five related research activities identified in Affidavit  
14 of J. Steven Morris (May 25, 1990) ("May 25 Morris  
15 Affidavit") at p. 3, § 7, substantial progress had been made  
16 on only the actinide chemistry objective at the time the  
17 research was stayed (October 20, 1990). Most faculty have  
18 been reluctant to commit to a research program that may be  
19 stopped at any time. The temporary stay has served to  
20 reenforce this reluctance. A new, indefinite stay would  
21 likely convince otherwise interested faculty that it is not  
22 possible to build a productive, continuous research program,  
23 utilizing the actinide elements.

24 b. The current contract under which the TRUMP-S  
25 research is being conducted will expire on January 21, 1991.  
26 This contract is currently supporting two MURR staff members  
27 and one graduate student. A follow-on contract commencing  
28 prior to January 21, was being negotiated at the time the  
29 project was stayed. As a part of that negotiation, the  
30 Principal Investigator and the Vice-Provost for Research  
31 were to travel to Japan for discussions with TRUMP-S program  
32 and research representatives at Kawasaki Heavy Industries  
33 (KHI) and the Central Research Institute for the Electric  
34 Power Industries (CRIEPI). These meetings included on the  
35 agenda an opportunity to explore the scope of the research  
36 for the next several years.

37 c. The new contract was to provide significant salary  
38 support for four faculty members, five MURR professional  
39 staff and a secretary. In addition, funds were being sought  
40 to support three graduate students<sup>1/</sup>. Project support  
41 from numerous personnel in the machine shop, electronics  
42 shop, engineering groups and computer group was also being  
43 sought. The temporary stay has caused the negotiations to

---

44 <sup>1/</sup> Only one graduate student is currently being supported. As  
45 mentioned above, the recruitment of additional graduate  
46 students, in the current climate, is deemed imprudent by the  
47 faculty.



1 be postponed. A new, indefinite stay may make it impossible  
2 to negotiate an acceptable contract and the University is  
3 unable to carry the project without outside support.

4 5. Intervenors have argued in their Renewed Stay Request  
5 for Stay that they could be injured were a stay not ordered.  
6 This is not correct. Licensee, in its October 30, 1990 filing  
7 along with this filing, have shown that the concerns expressed by  
8 Intervenors --and especially those amplified by the Presiding  
9 Officer in his Temporary Stay Order --have been carefully  
10 considered by the Licensee, and in each case, comprehensively and  
11 satisfactorily answered. Licensee has, as a result of the  
12 temporary stay, retained outside experts to review the adequacy  
13 of the ventilation system and to consider the dispersion of  
14 particulate actinide material resulting from an incredible  
15 accident scenario. These experts have provided additional  
16 assurances that the TRUMP-S research can continue without placing  
17 the public at unnecessary risk (Licensee's Exhibits 1 and 7).

18 6. Intervenors have argued in their Renewed Stay Request  
19 the public interest lies with granting a stay. This is not  
20 correct. The TRUMP-S research as it has been implemented at the  
21 University of Missouri is an important part of the U.S.  
22 scientific agenda. In the Affidavit of Dr. Truman S. Storvick  
23 Regarding Academic and Research Objectives of the TRUMP-S Program  
24 (Licensee's Exhibit 14), Dr. Storvick points to two relevant,  
25 National Academy of Sciences studies that underscore: the  
26 national need for research on nuclear wastes and the nuclear fuel  
27 cycle; the national need to support university research reactors;  
28 and especially, the national need to train more nuclear  
29 scientists and engineers<sup>2/</sup>. Clearly the public interest lies  
30 with training its young people to cope with the existing and  
31 future nuclear age.


32 7. In summary, the temporary stay now in place has been  
33 harmful to the University. The basis for the stay has, by  
34 Licensee's October 30 filing and Licensee's Written Presentation  
35 being submitted on November 14, 1990, been completely eroded. It  
36 should be dissolved. A new indefinite stay, even assuming it  
37 were dissolved at some time in the future, could make it  
38 impossible for the University to sustain the project during the  
39 interim period.

---

40 <sup>2/</sup> In fact, the National Academy of Sciences has recently  
41 concluded a study of nuclear engineering education in the  
42 U.S. calling for a much-needed revitalization of this area.  
43 The report on this study is eminent.

1 Subscribed and sworn  
2 before me in  
3 BOONE County,  
4 Missouri this 13<sup>th</sup> day of  
5 November 1990

  
\_\_\_\_\_  
J. Steven Morris  
Interim Director

6   
7 Sharon Weathers, Notary Public, State of Missouri,  
My commission expires February 21, 1991  
Boone County, Missouri  
8 My Commission Expires  
9 2-21-91