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

INTERVENORS' MOTION FOR RECONSIDERATION OF MEMORANDUM AND ORDER OF NOVEMBER 1, 1990 (Licensee's Partial Response Concerning Temporary Stay) AND EMERGENCY ORDER THAT STAFF HOLD IN ABEYANCE ORDER OF NOVEMBER 1

PART I

Intervenors have no objection to that much of the order which continues in effect the temporary stay. However, Intervenors respectfully submit that the Presiding Officer has erred in the remainder of the order, and in numerous respects in the accompanying Memorandum, and requests that those rulings be withdrawn. Intervenors understand that their motion for reconsideration is due on November 16, 1990, and will do their best to meet that deadline, if possible. However, some matters are of such urgency that they should not wait until then. Accordingly, Intervenors are filing their Motion for Reconsideration in two parts. This is the

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first part, and will concern only the most urgent matters. Intervenors respectfully submit that the Presiding Officer should ***immediately*** direct the Staff to hold in abeyance the Order of November 1, 1990, until the propriety of that order has been resolved.

1. The Presiding Officer has no authority to authorize issuance of the proposed license amendment, which has not been applied for, which has not been referred to him for hearing, which is the subject of a hearing request under Subpart G, which not even the Staff can issue at this time, and which could not properly be issued by anybody at any time because it does not meet the requirements of the regulations

The Presiding Officer has recognized (pp.5-6) that the Licensee possesses an isotope which it is not authorized to possess, plutonium 241. Further, the Presiding Officer recognizes that the Licensee intends to possess what is estimated at 1.992 curies of radioactive materials under this Part 70 license amendment, including 1.21 curies of plutonium 241, a total of approximately 280% of the amount authorized by the license amendment at issue.[1] That recognition should be sufficient to cause the Presiding Officer to set aside the license summarily.

However, the Presiding Officer went on to authorize the Staff of the Nuclear Regulatory Commission to amend SNM 247 to permit the possession of this isotope which was never disclosed, until these Intervenors disclosed it, and to permit the Licensee to have, under this license, a quantity of curies of approximately 280% of the authorized quantity.

1. There is no application for the proposed license amendment -- indeed,

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[1] At note 11 the Presiding Officer indicated that he disagreed with the fact that the license authorizes the Licensee to use no more than .71 curies of plutonium. But Amendment No. 12 is expressly limited by the representations made in the letter of February 21, 1990, and attachment dated February 20, 1990, which expressly recites "710 mCi." There can be no doubt about the authorized limit of curies.

the Licensee insists that no amendment is needed or desired. No application for amendment has been assigned to this Judge, under Subpart G or any other regulation. No hearing has been held on any such application or amendment, although a request for hearing has been timely filed. Intervenors have been unable to locate any regulation which authorizes the Presiding Officer, in a Subpart L proceeding, simply to authorize a new license amendment which nobody has requested, and which has not been assigned to him, authorizing possession of a new isotope, and 280% of the authorized curies. The regulations spell out procedures by which persons can apply for licenses or license amendments, and the Staff can review the matter, and interested persons have an opportunity to be heard, and oppose the application. Section 70.21[2] sets forth detailed requirements for filing, and § 70.22 sets forth detailed requirements for the application. The public is entitled to request a hearing. If a hearing is requested, as it has been here, the matter is to be assigned to an administrative law judge, and a hearing is to be conducted. All of those requirements have been ignored here. All of the procedural safeguards, including Staff review and opportunity for public participation, are cast aside when an administrative law judge, without warning, without any request, without hearing arguments from either side, without taking evidence from either side, simply authorizes a significant amendment. Not even a superficial semblance of due process of law can survive such actions.

2. A Subpart L presiding officer has no authority over an amendment of a material license which was not licensee-initiated. 10 CFR § 2.1201. All licensing actions which are initiated by the NRC itself must be conducted under Subpart G. § 2.1201. See letter of October 1, 1990, from Licensee's counsel to the Office of

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[2]Citations to regulations refer to Title 10 of the Code of Federal Regulations.

the Secretary re Request for Hearing filed on September 17, 1990, copy of which was sent to this Judge. This Presiding Officer-initiated amendment, if it came to pass, would not fit within the parameters of § 2.1201. The Administrative Law Judge in this matter has no authority whatever to do anything at all with respect to the amendment which he himself is now proposing. Any hearing on the proposed amendment, which was not licensee-initiated but was initiated by the NRC, will be a Subpart G hearing, in which the Staff has no authority to issue the amendment before the hearing is concluded, and the Judge of course cannot authorize the amendment until the hearing has been concluded. § 2.760. Indeed, a formal request for such a Subpart G hearing has been filed, and it has not yet been assigned to any judge. Accordingly, this Subpart L judge has no authority over any such proposed amendment.

3. Even within the parameters of Subpart L, the Presiding Officer is not commissioned to rove around at will, authorizing new amendments willy-nilly, even though no amendment has been requested, no application has been filed, the public has been given no notice, the request for hearing respecting that proposed amendment has not been assigned to him, and there has been no hearing. The Presiding Officer's role is indeed limited under Subpart L. He is to decide the question presented, not to authorize license amendments not requested or referred to him, significantly expanding the Licensee's authority to use special nuclear materials. The question which the Intervenors are allowed to present is whether there is "any deficiency or omission in the license application." Section 2.1233(c). Since that is the question which is to be presented, that is the question to be decided by the Presiding Officer. See Intervenors' written presentation of October 15, 1990, pp. 11-13. "Matters not put into controversy by the parties may not be

examined and decided by the presiding officer." § 2.1251(d). He has no authority to take off and issue a license amendment, allowing new isotopes and nearly tripling the curie activity authorized by the license amendment. Here, the Presiding Officer has determined that the license application was deficient. That should end the matter. The license amendment should be set aside. At that point, the judge has exhausted his authority.

4. Even if there were a proper application, and even if the Presiding Officer had jurisdiction over the proposed amendment, he could not approve it or disapprove it until "after completion of . . . [the] hearing." § 2.1251(a). This hearing has not been completed. The Presiding Officer cannot yet even approve the amendment which is before him.

5. An unsolicited ruling purporting to "authorize the Staff . . . to amend the license," issued in what was supposed to be a contested case, dealing with an issue no one has ever presented or litigated, would open the door to the Licensee, in subsequent litigation, to argue that the validity of the new license had already been determined. Such an argument would, of course, be ridiculous, because there has been no hearing, or even an opportunity for a hearing, and there has been no evidence directed toward any such license amendment, and there has been no opportunity to make a ruling in a contested case. Nor does this *sua sponte* ruling fulfill any of the requirements of § 2.1251(c). Nevertheless, the ruling gives the superficial appearance of constituting a real, deliberate ruling. At best, such a ruling would lead to massive confusion when the validity of the new license amendment is litigated. At worst, it would lead to a determination that the issues are res judicata, which would constitute an outright denial of due process of law.

In summary, the Presiding Officer lacks jurisdiction to authorize the

proposed license amendment for multiple reasons, including the following:

1. No application for an amendment has been filed.

2. No application or amendment of this nature has been assigned to him, under either Subpart G or Subpart L.

3. A request for hearing has been filed, and the matter must be assigned to a Judge.

4. The proceeding will have to be a Subpart G Proceeding, not a Subpart L proceeding, because the action is not Licensee-initiated.

5. Until that hearing is completed, the assigned Judge will have no authority to approve the amendment.

6. In the meantime, not even the Staff can issue the amendment, because the proceeding will be a Subpart G proceeding, not a Subpart L proceeding, and this Judge in this proceeding surely cannot authorize the Staff to issue an amendment illegally.

Further, even if anybody had jurisdiction to authorize the proposed amendment (which the Licensee has not applied for), the amendment would have to be disapproved. Even if the application for amendment were "considered" to be retroactively amended to set forth the ^{241}PU and its isotopic content (a fiction which strains the imagination beyond the breaking point), the application would have been totally insufficient, for failure to realize and acknowledge that some of the ^{241}PU has yielded to americium 241, which requires a thick metal shield and other equipment and practices appropriate for gamma emitters, which even the fictional application did not specify. No such amended procedures are set forth in the non-existent amended application for the newly disclosed isotopic mix of the plutonium material.

For the foregoing reasons, so much of the Memorandum as purports to authorize the issuance of a license amendment, and paragraph 2 of the Order, should be deleted.

2. The Presiding Officer has no authority to "consider the license application to be amended to contain this new information"

Over the centuries, few, if any, judicial proclivities have led to as much difficulty, confusion, and general injustice as the old-fashioned practice of "deeming" things to be the opposite of what they are. In the 20th century, this practice has fallen into some degree of disrepute. Intervenors are greatly disappointed to see it resuscitated here.

What is to be litigated in this proceeding is whether there is "any deficiency or omission in the license application." 10 CFR § 2.1233(c). If there is, then the license amendment is to be set aside.

Intervenors have previously pointed out that other aspects of Subpart L, particularly the "verdict first, hearing afterwards" aspect, are strongly reminiscent of Lewis Carroll. But this new venture, considering the application to have been amended whenever the Intervenors correctly point out a deficiency in the application, matches that aspect in its strangeness. The entire proceeding becomes a perfect circle if the Intervenors intervene, point out that the license application is deficient, obtain a finding that it is deficient, and then confront a ruling that the application will be "considered to be amended to contain" the isotopes and curies omitted, and authorizes the amendment which was not requested.

This ruling is even more incomprehensible in view of the Licensee's contention that the application is sufficient, and need not be amended. See Licensee's Submittal of October 30, 1990.

Intervenors are unable to discern any purpose in the entire process if the Presiding Officer is simply going to "consider the application amended" to include whatever was omitted. Why are we all spending time and money on this exercise?

Intervenors have been unable to locate any regulation which confers on the Presiding Officer the authority to "consider the license application to be amended" to correct deficiencies he has ruled do indeed exist in the application as submitted. Since it is the sufficiency of the license application which we are litigating, it seems abundantly clear that the Presiding Officer has no authority to rewrite the application retroactively. If there were any regulation authorizing such action, it would be a flagrant denial of due process of law. Rewriting the license application retroactively, for the applicant (over the objection of all parties), by the Presiding Officer, deprives the public of any opportunity to participate, to be heard, to present evidence, and to explain why the newly "deemed" application is insufficient. The Presiding Officer is not to do the applicant's job for it, when the applicant has failed to do it; he is to rule whether the applicant has submitted a proper application.

The Presiding Officer has ruled that the application was deficient, and that the license does not authorize the Licensee to possess what it possesses. There is only one proper remedy: set aside the license amendment.

If the University wants to file an amended application, Intervenors will have an opportunity to be heard, and to show why that amended application is insufficient. "Verdict first, application afterwards" compounds the due process denial of the fundamentally deficient Subpart L proceeding, "verdict first, hearing afterwards."

So much of the Memorandum as deals with considering the application to

be amended, and ¶ 2 of the Order, should be stricken.

3. Even if the application had disclosed the existence and curie content of the plutonium 241, and the amendment of the license had authorized that isotope and those curies, both the application and the license would still be deficient

At note 9 on page 2 of the Memorandum the Presiding Officer finds that it is not necessary to include the americium content of the special nuclear material in computing "the amount of plutonium," by which the Presiding Officer apparently means the curies to be authorized in the material requested. This finding is erroneous.

In apparently concluding that the proposed license amendment would be sufficient to support the proposed use of special nuclear material under Part 70, the Presiding Officer has apparently determined that neither the application nor the license need disclose the americium. This determination, also, is erroneous.

Section 70.22 (a)(4) requires the application to set forth the name, amount, and specifications (including isotopic content) "of the special nuclear material the applicant proposes to use." The Presiding Officer now recognizes, and even the Licensee at last admits, that, in addition to omitting the plutonium 241 it has also omitted the americium 241, which is 50 times as toxic as plutonium 241 (NUREG 1140, Table 13), and is a gamma emitter as well as a long-lived alpha emitter. Apparently the Licensee admits to 70 millicuries of americium. See Licensee's Correction of November 5, 1990. This is more than enough to administer a dose far in excess of allowable limits, unless special precautions are taken.

The Presiding Officer has not explained why he apparently believes, if he really does, that an application is sufficient if it fails to disclose the americium and ^{241}PU in the material, and the americium curies in the material in question need

not be included in determining whether the license amendment reaches the threshold level of two curies, which triggers other requirements. Without explanation, Intervenors cannot determine what impression needs to be dispelled.

Perhaps the Presiding Officer thought that the quantity was insignificant. If so, the Presiding Officer was clearly incorrect. As the Presiding Officer emphasized in his Memorandum and Order of October 20, 1990, at page 8, Regulatory Guide 10.3, § 4.3, requires disclosure of the curie activity of the special nuclear material to be used, down to ***microcuries***. 70 millicuries exceed one microcurie by a factor of 70,000. One need only glance at the Licensee's licenses to see that these quantities may not be dismissed so casually. The Licensee needed an amendment for only 10 millicuries of neptunium 237. The Licensee was required by law to obtain Amendment No. 67, March 6, 1987, to possess americium in a ***sealed source*** not to exceed 50 millicuries, and cesium 137 in a ***sealed source*** not to exceed 10 millicuries. These amendments authorized far less hazardous possession and use than the ***unsealed*** americium (70 or more millicuries) which the Presiding Officer is ignoring. When the Licensee wanted californium 249 and curium 244 in ***unsealed form***, electroplated on foil or electroplated sources, the Licensee was required to obtain an amendment authorizing 10 ***micrograms***, less than the mass of this americium by a factor of 2,000, and for two sources of one ***microcurie*** each, each less than the curie activity of this americium by a factor of 70,000. See Amendment No. 70, January 11, 1989. In terms of dose contribution, a matter of particular interest to the Licensee in its recent submission, this americium is the equivalent of an additional 10 % of the dose-contributing alpha emitter or an additional gram of the material for which the amendment is sought. Surely the Presiding Officer could not have dismissed this americium as

insignificant.

Or perhaps the Presiding Officer thought that the americium contained in the Part 70 plutonium sample to be used does not matter because the Part 30 license authorizes possession of americium. That view would be invalid for at least two reasons. First, the Part 30 license is invalid for multiple reasons, including those set forth in Intervenors" Motion for Summary Disposition, etc., and Intervenors' Written Presentation of October 15, 1990. Second, § 70.22(a)(4) requires disclosure of the isotopic content of the special nuclear material the applicant plans to obtain and use under the authority granted in the Part 70 license amendment being applied for, not some other material being used under some other license.

There are good reasons why the regulation should and does require this. First, in terms of compliance, the Part 70 SNM is, and will always be considered by the Staff and the Licensee to be, entirely separate from the Part 30 license. They will never think of monitoring the americium possessed under this Part 70 license together with that possessed under the Part 30 license, to assure that the total does not exceed the limits of the Part 30 license. More important, however, is the need to handle this material with the respect it deserves. The gamma- and alpha-emitting americium is far more dangerous than the plutonium, which is primarily an alpha-emitter, and the radiation emitted is not only more penetrating but also behaves differently. It requires entirely different safety procedures and equipment. The Licensee recognized this in its application for authority to use americium under Part 30, at pages 18-19, describing a thick metal shield and special handling tools to protect the operating personnel. No such protections were described in the Part 70 application, at page 18, because the applicant did

not understand that americium was present in the material it was planning to use under the Part 70 license. In failing to provide such procedures, the application is deficient. If properly evaluated by a competent NRC Staff, the application would have to be rejected, for lack of description of minimal safety facilities and equipment. Although the Intervenors are prohibited from probing to ascertain the facts, because no discovery is permitted, the applications indicate that the Licensee's procedures for handling the plutonium do not include the procedures necessary to prevent exposing its students to unacceptable risk of exposure to gamma radiation throughout the plutonium experiments, simply because the Licensee was not then aware that americium was present in this special nuclear material, and did not require use of gamma shielding as the Licensee said it would in using pure americium. The license application was insufficient. Throughout all of the handling, storage, and use of this plutonium, all persons involved must be very much aware of this highly toxic material, emitting gamma particles, and must treat it in a very different manner from the way the alpha-emitting plutonium is treated.

Accordingly, the regulation is very sound, and means what it says, when it requires disclosure of the isotopic content and curie activity of ***this special nuclear material*** in the application. The Licensee must understand what it has, and treat it respectfully. The NRC Staff must be told what is there, and what precautions are to be taken in handling this material, and the Staff must evaluate the adequacy of the safety precautions. None of these things have been done. "Wishing will make it so," according to a popular song of the 1940's, but the Presiding Officer cannot make it all so by wishing it so.

Both the application and the license amendment are deficient in respect to

the americium, as well as the plutonium. All portions of the Memorandum indicating the contrary should be stricken, and the Memorandum should be amended to acknowledge this.

CONCLUSION

The portions of the Memorandum and Order noted above should be deleted. The Presiding Officer should ***immediately*** direct the Staff to hold in abeyance the Order of November 1, 1990, until the Presiding Officer has received the Licensee's response to this Motion, and has ruled on the propriety and legality of that Order.

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CERTIFICATE OF SERVICE

True copies of the foregoing were mailed this 14th day of November 1990, by ~~United States~~ Federal Express ~~Mail~~, postage prepaid, to:

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