

From: Ullrich, Elizabeth
Sent: Wednesday, August 31, 2011 7:54 AM
To: Crmidmr@aol.com
Cc: Frank Kolodziej
Subject: deficiencies RE: DFP from ICI

International Cyclotron, Inc.
License No. 52-31352-02
Docket No. 030-37957
Control No. 144277

David,

I appreciate your quick revision of the DFP, but we need the explanations that go along with the changes; at the very least, the supporting tables. Below are the items that need to be addressed, based on what was submitted in the August 5 DFP/cost estimate and what you provided yesterday (the total costs table only).

The cost estimate of \$139,918 in the August 5 DFP is significantly different than the cost estimate of \$375,962 stated in the January 13 draft DFP. The cost estimates for decommissioning similar cyclotrons licensed by the NRC are in the range of \$350,000 to \$570,000. Your cost estimate of \$139,918 appears to be exceptionally low. The revised total decommissioning cost estimate of \$440,024 submitted on August 30 is within the range stated above, but no bases to support the changes in these numbers were provided.

You must re-submit your DFP and cost estimate in full, with all tables and any additional pages to provide sufficient description of the bases for your work and cost estimates. In particular, address the following items:

a. In accordance with NUREG 1757 "Consolidated NMSS Decommissioning Guidance", Volume 3, "Financial Assurance, Recordkeeping, and Timeliness" (NUREG-1757, Vol. 3), Appendix A.3.1.1 and A.3.4, your facility description should include the number and dimensions of facilities and components that may require decontamination. In Section A.3.4 of your DFP, you stated that only the cyclotron and its components will be addressed. Tables A.3.5 and A.3.7 lists only the cyclotron under facility components that may require decommissioning. However, it is our understanding that facilities outside the cyclotron will require assessment of contamination and possible decontamination or waste disposal, such as target work areas, hot cells, radioactive waste storage areas, ductwork and filtration systems, concrete flooring under the cyclotron, and other similar areas where long-lived contamination may be present. Revise the DFP to include such areas in Tables A.3.5 and A.3.7 and adjust the cost estimate.

b. Table A.3.6, "Planning and Preparation (Work Days) of the August 5 DFP lists significantly fewer days of work in all categories, compared to the Table A.3.6. submitted with the January 13, 2011 draft DFP. The estimated work days in the August 5 submission seem inadequate for decommissioning of your facility. Please note that, in accordance with the guidance in NUREG-1757, Vol. 3, Appendix A.3.1, you should assume that a) inventories of materials and wastes are consistent with routine activities; b) decommissioning occurs

immediately when operations cease, without multiple years for decay of radioactive materials; and c) all work will be performed by a third party. Revise your estimates, and explain the bases for these work day estimates.

c. Table A.3.14 lists only costs for packing materials and shipping costs. It does not include any cost for waste disposal. Please note that, in accordance with the guidance in NUREG-1757, Vol. 3, Appendix A.3.1, you should assume that inventories of materials and wastes are consistent with routine activities, without any delay of multiple years for decay of radioactive materials. These wastes, such as targets and activated components, as well as other wastes from decommissioning, must be included in your waste disposal costs. Although the August 30 total cost now includes a waste disposal estimate, no basis for this estimate was provided (Table A.3.14 was not submitted). Explain the bases of the cost estimate. If necessary, revise the DFP to include waste disposal cost, and revise the total cost estimate.

d. Table A.3.16 does not list any costs for analyses of samples by a laboratory. Such samples may include removable contamination samples (wipes) as well as concrete samples or other media. Please note that, in accordance with the guidance in NUREG-1757, Vol. 3, Appendix A.3.1, you should assume that all work will be performed by a third party, and you cannot reduce your decommissioning costs by assuming you will perform your own analyses at no cost. Although the August 30 total cost now includes a laboratory cost estimate of \$10,000, no basis for this estimate was provided (Table A.3.16 was not submitted). Explain the bases of your cost estimate. If necessary, revise the DFP to include laboratory costs, and revise the total cost estimate.

e. Table A.3.17, "Miscellaneous Costs" of the August 5 DFP estimates a total of \$3050, compared to the Table A.3.17 estimate of \$40,000 submitted with the January 13, 2011 draft DFP. Although the August 30 total cost changed to \$30,000, no basis for this estimate was provided (Table A.3.17 was not submitted). Explain the bases for your Table A.3.17 cost estimates. If necessary, revise your Table A.3.17 estimates and the total cost estimate for the DFP.

We will be sending a letter addressing the above issues, the CFA and items we discussed during yesterday's meeting, with copies to you at the office address and to Dr. Kolodziej at his home address. That letter is still being reviewed. This email is to give you some advance time to re-work the DFP and cost estimate, including more detailed descriptions and explanations, for our final acceptance review.

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From: Crmidmr@aol.com [<mailto:Crmidmr@aol.com>]

Sent: Tuesday, August 30, 2011 4:31 PM

To: Ullrich, Elizabeth

Subject: DFP from ICI

Betsy,

Thanks for the information regarding the DFP. Attached is a updated version that you requested. Let me know if I need to readdress any values. Our number will be a little on the high side based on the additional shipping cost.

Once you finish your review and there are no more recommendations, I will forward it to the Doctor for his signature.

Once again, thanks for your help.