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WALTER KEEB NUCLEAR LABORATORIES, INC.

975 Stewart Avenue
Garden City, N.Y.

June 17, 1955

Mr. Robert L. Ziegfeld
Lead Industries Association
1200 Lexington Avenue
New York 17, New York

Dear Mr. Ziegfeld:

Following our discussion of June 1, 1955, we have given thought to the organization of a survey of the atomic energy field as a market for lead products. We wish to present a proposal for such a survey, which would initially make maximum use of information now in our files or obtainable at a few known locations, and which would proceed in stages to a more thorough study if the initial phase were promising.

As designers of nuclear reactors, shielding, radiochemical laboratories and devices for utilizing radioactive materials, we have a broad understanding of the present uses of lead in the atomic energy field as well as potential uses based on its unique physical properties. In addition to our classified library, we have access to AEC libraries both in New York and at Brookhaven National Laboratory. I am enclosing another copy of our brochure which describes company facilities and personnel.

We visualize a survey which would be carried out as a series of phases, with a pause for reconsideration after each phase. The study would proceed approximately as follows:

Phase I

Listing and analysis of all present uses for lead and lead alloys based on AEC information. Estimate of market for each use in existing installations. Listing of possible uses where it would displace other materials (concrete, steel, hydrocarbon, etc.), and discussion of basis for material choice.

Phase II

Preparation of detailed questionnaire for general use in overall survey based on results of Phase I. Analysis of available designs for new production or power reactors to determine use of lead. Contacting of known industrial users of isotopes to determine experience, suitability, possible increase or decrease in use.

Mr. Robert L. Ziegfeld

- 2 -

June 17, 1955

Phase III

More detailed study or development based on results of Phase II. Possibly design of lead products to displace other materials now in use. Recommendation of desirable properties to seek in new lead alloys.

The completion of Phase I would provide a preliminary estimate of the present market in atomic energy for lead, as well as some indication of the possible rate of increase or substitution of lead for other products. If Phase II is then deemed advisable, it could be laid out in detail based on Phase I. Ultimate activity, depending on promise shown in Phase II, might include some creative thinking along the lines of alloy and product development to suggest profitable directions for research.

We estimate that Phase I could be completed in about three months for a cost of about \$2500, and we would engage to do this study either on a lump sum basis for this amount or on a per diem basis at our standard rate of \$100 per man day. Since the succeeding phases would depend on the results of Phase I, we would prefer not to estimate their cost at this time. In any case you would not be obligated beyond Phase I.

This type of study is of great interest to us as a development company in this field, and we would give it our best effort.

Yours very truly,

W. L. Thompson