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1,3,4 - AEC - Attn: F.C. Schlemmer
#5 GR Prout - FK McCune
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#7 AB Greninger - OH Greager
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August 22, 1949

[redacted]

This Document consists of 3 Pages No. [redacted]

Atomic Energy Commission
Hanford Operations Office
Richland, Washington

Attention: Mr. F. C. Schlemmer, Manager

Gentlemen:

234-5 REMOTE MECHANICAL LINE DESIGN BASES AND SCHEDULES

With reference to the instructions contained in A.E.C. Executive No. EM-12, Modification No. 3, dated July 8, 1949, we wish to call attention to the following facts regarding the directive to complete Phase III of the 234-5 Building Program by June 30, 1950. Particular reference to the Remote Mechanical Line Project is intended herein.

A. Production Capacity Limitations of the Remote Mechanical Line

1. Recent instructions received by General Electric from the Atomic Energy Commission ("Hanford Production Objectives," F. C. Schlemmer to G. R. Prout, dated August 15, 1949) have outlined a pile production goal at least 30% higher than the Remote Mechanical Line is currently being designed to handle in accordance with the original scope. Present design is based on operation on a nominal single-shift 40-hour week (except for certain operations which must be handled on second and third shifts).

2. Continuous operation of the Remote Mechanical Line as presently designed on a 24-hour seven-day week basis will still fail to attain the production rate mentioned in (1) above in at least one, and possibly two, out of the seven major tasks involved.

3. It is necessary that design changes be made in this task, and perhaps others, in order to obtain the desired production capacity in 234-5 if the entire pile output as stated in your letter of August 15, 1949 is to be processed at Hanford, particularly if a reasonable amount of excess capacity is to be provided over and above presently visualized pile production goals.

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B. Design Status of Remote Mechanical Line

1. Project Proposal C-198, Part V, dated April 22, 1949, predicted completion of the Remote Mechanical Line by June 30, 1950, provided the then curtailed design activity was restored to full level by May 1, 1949. Since authorization to continue this design was not obtained until July and the gearing up of the reinstated design program is still in progress, at least three months should be added to the schedule for the design time lost.

2. The recent change in core design from Model 050 to Model 090 will require changes in the present Remote Mechanical Line design and contributes to the production capacity bottleneck described above. Rumored further changes to a Model 100 may or may not have similar effects.

3. Experience in the operation of the Rubber Glove Line since its completion and start-up has revealed a number of design deficiencies which can be directly attributed to the "crash" program followed in its design and construction. It can be most positively predicted that, if adequate time is not allowed for careful and intelligent consideration of design and for correction and elimination of either design or fabrication mistakes when found, similar end-result difficulties will be obtained with the Remote Mechanical Line. It is strongly advised that the schedule for completion of the Remote Mechanical Line be made flexible enough to avoid this. We assure you, however, that General Electric is very anxious to complete the installation of the Remote Mechanical Line at the earliest feasible date and will take every action to attain this objective.

C. Summary

In summary, we can make no commitment for the completion date of the Remote Mechanical Line until adequate time has been allowed for integration of all of the factors listed above into an intelligently planned design and construction schedule. This will involve the following:

1. Clarification of the production capacity design basis for future 234-5 operations. The Atomic Energy Commission is requested to inform General Electric whether or not Bldg. 234-5 is to be designed for the entire pile production goals outlined in its letter of August 15, 1949. Is Los Alamos to receive a definite and continued fraction of this output and should this have any bearing on the design basis of this project?

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2. A careful examination of specific needs for design revisions required to accommodate production increases and core design changes.

3. Redrafting of design and construction schedules to include the above and more adequate time for design and fabrication periodics.

Yours very truly,

C. H. GROSS, MANAGER
MANUFACTURING DIVISIONS

A. E. GREISEN, MANAGER
TECHNICAL DIVISIONS