Dear Mr. President:

I enclose a report on the special project, which is being pushed vigorously, both in the War Department and in the Office of Scientific Research and Development, in accordance with your direct instructions based on the report on this subject of June 13, 1942.

The situation has changed notably since that report. There can no longer be any question that atomic energy may be released under controlled conditions and used as power. Furthermore, there is a very high probability that the same energy may be released under suitable conditions in such a small interval of time as to make a super-explosive of overwhelming military might. One cannot be absolutely certain on this last point, however, until the first bomb has been constructed and this requires a considerable amount of material. The estimate of the amount of material for each bomb has unfortunately been increased by the scientists since last June. Our time schedule now contemplates availability during the first half of 1945 of a sufficient quantity of material to produce six super-bombs. This can only be attained if the recommendations herewith transmitted are approved and the highest priorities assigned to this project. We still do not know where we stand in the race with the enemy toward a usable result, but it is quite possible that Germany is ahead of us and may well be able to produce super-bombs sooner than we can.

Of the four methods under way in June, one has now dropped out of the race. It does not seem possible to discard another safely on the basis of present experience, even although we now enter the phase of full-scale construction.
For these reasons the total estimates for a full program reach the serious figure of $400,000,000. To date financing has been handled by means of a War Department authorization to the Chief of Engineers to use construction funds now available to the extent of $85,000,000. This is sufficient for the immediate future, but it is not sufficient for the contract obligations which must be entered into at this time if the full program is to go forward.

The British have now no large-scale program in England. They are transferring some of their scientists to Canada where they will work on one phase of the subject. In accordance with your instructions, close scientific interchange with the British has been maintained. Future relations in regard to interchange need to be clarified.

It appears, therefore, that we now need your specific instructions on several points. These are presented, with recommendations, in the report. Especially we need your instructions as to whether this program is to be rigorously pushed throughout. It would be ruinous to the essential secrecy to have to defend before an appropriations committee any request for funds for this project and it is therefore recommended that some time in the spring you request the Congress for the needed funds ($315,000,000); such funds to be expended at your discretion. It is also recommended that you now authorize the Chief of Engineers to incur such contract obligations including governmental assumption of liability, as yet undeterminable as to amount and time-duration, as may in his opinion be necessary to carry on the project.

This report is being presented for review to the Vice President, the Secretary of War, and the Chief of Staff, before being placed in your hands. Specifically, I request that I be informed whether you approve the recommendations at the end of the report.

Respectfully yours,

V. Bush.

Added note attached.
Note added to letter dated December 16 to The President from V. Bush.

Since this letter and report were written, the British position on interchange has been stated in a letter from Mr. Akers which is inserted at the back of this report. Included with it is a summary of the American and British views on interchange in parallel columns.

The British will undoubtedly object if we do not extend the interchange to include plants and production, in addition to the present scientific interchange. Since their position should be in mind when a decision on this point is reached, this summary and letter have now been discussed with Mr. Wallace, and placed in the hands of Mr. Stimson, both of whom have approved the report and recommendations.