

Dear

A number of us have been worried about the slow progress in the United States in the field of atomic energy, particularly in view of the atomic explosion in Russia. We have felt that the scientists have given the American public the impression that we think everything has been going very well in the atomic energy field, and that it is time that we made public the grave doubts that very many of us have had. The enclosed statement is one which has been drawn up after many and lengthy consultations between a number of us. It represents a compromise of our opinions about the best method to present what we all unanimously agree to be the true facts. Those who were in most of the discussions include: Harrison Brown, Harold Urey, Fred Seitz, Thorfin Hogness, Leo Szilard and Joseph Mayer.

You will notice that no reference is made in the statement to the Russian accomplishments. Certain individuals have expressed a reluctance to sign any statement which can be interpreted to be a call for an armaments race. The omission of our position vis-a-vis Russia is a concession to these opinions.

Some of us are loath to attack the personnel of the Commission although we have all agreed that even in those things in which the Commission was not pushed by Congress, its record has not been as good as it should have been. You will notice that the statement represents a concession to this view in that it attempts to avoid recriminations against the personnel of the Commission.

Senator McMahon is aware that a statement of this general nature may possibly be issued and signed by a number of scientists. It is our intention to communicate the complete statement to him before it is issued to the press as a courtesy to the Chairman of the Joint Congressional Committee.

Arrangements are being made for Thorfin Hogness and Fred Seitz to show the statement to Lilienthal in the near future. Although we do not intend to change the statement because of any objections which may be raised by Lilienthal or members of the Commission, it is quite conceivable that they may bring back information which would lead us to alter some parts of it.

I am enclosing a form letter which I beg you to return within a few days asking you your opinion of the statement. I also enclose a list of the names to whom this letter is being sent. A more extended reply than is required by the form letter would be welcome but would you kindly fill out at least one part of the form and return it? Of course if you agree to be a signatory to the statement we shall first consult you before issuing any altered version should alterations appear to be called for.

Very sincerely yours,

*Joseph E Mayer*

Joseph E. Mayer



To: Joseph E. Mayer

Ref: Statement concerning the inadequate progress in  
atomic energy in the United States

Please check one of the following:

- A) I believe the statement to be unwise and under no  
circumstances would I permit my name to be used as  
signatory. \_\_\_\_\_
- B) I have no strong objection to the statement but I  
do not wish to appear as signatory. \_\_\_\_\_
- C) I approve the statement and am willing to appear as  
signatory. \_\_\_\_\_
- D) I approve the statement in principle and am willing  
to appear as signatory provided certain changes are  
made which are explained in the accompanying letter. \_\_\_\_\_

\_\_\_\_\_  
(Signature)



During this last year the Atomic Energy Commission was subjected to a congressional investigation arising out of the charges made by Senator Hickenlooper. The scientific community, with no single voice dissenting, supported the Commission against these particular charges.

However, for a long time now scientists, who kept in touch with the research and development work in this field, were increasingly uneasy about our progress in new developments of atomic energy. Had the Commission not been attacked by Senator Hickenlooper for the wrong reasons, it is very likely that scientists would have voiced their criticism before this time.

While the Commission was exposed to attacks which scientists in general considered unjustified, apparently no scientist felt impelled to come forward and to volunteer information unfavorable to the Commission. But from now on scientists are going to speak up for they cannot be expected individually to exercise such restraint any longer, and there must be no conspiracy amongst scientists aimed at the concealment of the truth.

The truth is that, as far as the general development of the field of atomic energy is concerned, our record is bad. The most important area of this field is the development of new methods for producing fissionable materials in general, and in particular, the development of new type reactors. In these past four years, not only have we failed to build reactors of any new type, but construction has not even been started on any such reactors. This failure is a necessary consequence of the fact that the job of enlisting scientific and technical talent has not been adequately handled.



The Commission was not even able to hold on to the best men who remained at work in this field at the time when it took over.

There are notable exceptions. There are at present three or four outstanding scientists working on a full-time basis in the field of atomic energy directly for the Commission or under its auspices.

The record of the extended hearings before the Joint Committee on Atomic Energy presents a grossly misleading picture, and we believe that it is the duty of the scientists to correct that picture. We believe that scientists ought to inform the chairman of the Joint Committee, Senator McMahon, of what they know about the performance of the Commission and make constructive proposals on how this performance could be improved in the future.

The scientific community has high regard for the Chairman of the Commission, David Lilienthal, who time and again has given expression to their belief in the fundamental importance of our basic freedoms. The other members of the Commission are also good men--men of intelligence and goodwill. We do not look to changes in the composition of the Commission as the way to improve the performance of the Commission.

A government agency which has the task of developing the field of atomic energy is confronted with many difficulties. It is subjected to many pressures and it frequently moves along the line of least resistance. We believe that irrespective of who the members of the Commission may be no substantial improvement in the performance of the Commission can be expected unless--from here on--it will be subjected to public criticism on the part of the scientists who are acquainted with the field of atomic energy.

A number of distinguished scientists are members of the General Advisory Committee of the Commission which in some measure shares the



responsibility for the Commission's record. Among these scientists who have followed the activities of the Commission sufficiently closely to be able to speak with sufficient assurance, there are only comparatively few who are in an independent position and free to criticize. This increases rather than decreases the responsibility of these few. It is important that as time goes on the number of those who are informed as well as independent should considerably increase and that they should vigorously exercise the right and duty to criticize, publicly if necessary.

The main obstacles to progress in this field are two-fold:

1) No progress is possible if the Commission is harassed by charges of losing a few grams of fissionable uranium at a time when Russia is producing such material in quantity; if the Commission is harassed by charges of sending radio-isotopes to Norway at a time when Norway, as we now know, might have obtained those isotopes from Russia; if the Commission is harassed by charges of failing to keep our advances secret at a time when the only important secret was that we were not making any significant advances.

As long as Congress approaches the problem of atomic energy in an attitude which, for want of a better term, scientists have begun to call "hickenlooperism", it will not be possible to make appreciable progress in this field.

2) The incentives normally operating in the field of private enterprise are not sufficient to insure a rapid development of atomic energy and therefore the major part, if not the whole, of this development must of necessity remain a government financed operation. No progress is possible, however, if we do not succeed in freeing the research and development in this field from the impediments that usually



afflict research and development work carried on within a large scale government operation. We must find a way to set up "research and development" units which can give their staff a reasonable assurance that the staff can look forward to accomplishing the task which they have set themselves, and that they will remain unhampered by rules and regulations which may be issued by the office of the General Manager of the Commission. Some way must be found to enable research and development units to operate in this field in much the same way as a private corporation would operate.

Even if the Commission should now undergo a change of heart and try to persuade first-class scientists to work in this field on a full-time basis, it will not succeed in doing so as long as it offers them nothing but frustration. The scientists have become distrustful of the Commission and will not now enter the field of reactor development unless some set-up is first created in which they can have confidence. The public discussion of these issues might perhaps produce the constructive proposals which are needed.

As far as the development of the bomb is concerned in these past four years, there were no outstanding scientists who concerned themselves with this field and devoted their full time to it. Correspondingly, this development was insignificant and followed conservative lines. The disinclination of first-class scientists to work in this field goes much deeper than the reasons listed for their unwillingness to enter the field of reactor development. It would go beyond the scope of this statement to give a full explanation of this point, but it must be said that it is not at present entirely within the power of the Commission to enlist the cooperation of outstanding scientists in this field for radically new departures in bomb development.



THE UNIVERSITY OF CHICAGO  
CHICAGO 37 · ILLINOIS  
INSTITUTE FOR NUCLEAR STUDIES

November 9, 1949

Dr. Fred Seitz  
Department of Physics  
University of Illinois  
Urbana, Illinois

Dear Fred:

The enclosed letter, list of names and statement is my final suggestion. The statement is essentially the statement of Szilard's that you saw. You will probably be surprised to see in the letter that you are scheduled to go to Washington with Thorfin Hogness to see Lilienthal about the statement.

I believe you approved this course of action and Thorfin feels it very necessary. He has agreed to go with you and will make the arrangements with Cyril Smith. The Emergency Committee will pay the expense of the trip. If, by any chance, you feel you could not make this trip we will get somebody else but I think you would be the best candidate. Do you approve of the plan and the final form of the statement?

Could you give the addresses of the following men? Ed Creutz, Bernard Feld, Gale Young, Newson, Lyle Borst.

Sincerely yours,

Joseph E. Mayer

cc: T. Hogness  
H. Urey  
L. Szilard ✓

JEM/jp  
Encls.

P.S. Thorfin has just been to see me and the question of blackmail which was brought up in yesterday's conversation appears to be taken seriously. It may be necessary for us to hold this up for a short while because of this.



THE UNIVERSITY OF CHICAGO  
CHICAGO 37 • ILLINOIS  
INSTITUTE FOR NUCLEAR STUDIES

November 9, 1949

Dr. Thorfin R. Hogness  
Institute of Radiobiology & Biophysics  
University of Chicago  
Chicago 37, Illinois

Dear Thorfin:

I am enclosing a copy of my letter to Fred  
and my proposal of the way to handle the statement.  
Does this meet with your approval?

Sincerely yours,

Joseph E. Mayer

JEM/jp  
Encls.



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