

12th July, 1962.

Dr. Stafford

NI/62/6

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

GOVERNING BOARD

INITIAL ACTION ON THE ELECTRON LABORATORY

Note by the Secretary

The following are items on which early action will be required if it is decided to proceed with the Electron Laboratory:

1. Appointment of Director: Already approved by the Board. A letter of offer is ready for signature by the Chairman.
2. Site: (a) Negotiations with the Cheshire County Council should be re-opened by the Director, Electron Laboratory and the Secretary, N.I.R.N.S.

(b) A meeting with the Board of Trade and any other interested Government Department should be arranged, following the procedure worked out by the A.E.A. The Minister for Science's Office are already arranging this meeting.
3. Staff: The Board may wish the Director, as soon as he has taken up his post, to have authority to appoint some staff. Authority similar to that of the Director, Rutherford Laboratory may be appropriate; i.e. within the approved complement to "approve all appointments below the "banded" level, on the understanding that the practice and standards of the A.E.A. will be followed and that he will refer to the Personnel Committee or the Chairman any points of doubt or points on which he feels that they would like to be consulted" (Personnel Committee 1960, second meeting, action 2). The Electron Laboratory complement for 1962/3 approved by the Board last September (when it was expected to start the Laboratory much sooner) is 40.

4. Conditions of Service and Staff Consultation

The Institute adopted the A.E.A. conditions of service as a start and stated in June, 1960 that their policy at that time was to continue to base their conditions upon those of the A.E.A., and to maintain a broad equality, although some difference would inevitably arise (Personnel Committee, 1960, third meeting, 20.6.60). It needs to be confirmed that this policy applies to the Electron Laboratory also.

The Institute have a single Whitley Council, chaired by the Director, Rutherford Laboratory. This arrangement may need review, but perhaps not urgently.

The Institute have a Joint Negotiating Committee for negotiation with the Trade Unions, chaired by a Member of the Board, and a Joint Consultative Committee at the Rutherford Laboratory for local discussions. No change or immediate addition to these arrangements seems to be necessary.

5. Financial Powers

As soon as he has taken up his post, the Director will need some power to authorise financial commitments. For a start, I suggest £1,000 (excluding amenity items) and up to £10,000 at the Chairman's discretion after consulting the Chairman; any larger items being referred to the G.P.C. if they arise before the G.P.C. has been able to consider the delegations in more detail.

6. Contracts and orders

The question of contracts and orders for the Electron Laboratory will have to be discussed soon but not immediately, as all contracts and orders can for the time being be placed by the A.E.A. Contracts Department, Oxford Office, which places contracts for the Rutherford Laboratory.

7. Advisory Committee

The proposal in paper NI/61/25 that "The Director should have an Advisory Committee with strong representation from Liverpool, Manchester and Glasgow but with members from other places including the Rutherford Laboratory" has already been approved by the Board. This committee will need to be set up fairly soon.

8. Project Committee

In accordance with normal A.E.A. and Institute practice, there should be a project committee to assist the Director in the technical and financial supervision of the electron synchrotron project. It is suggested that the Director should be the Chairman of this committee and that he should be asked to make recommendations on its composition to the next meeting of the G.P.C.

9. Press Notice

A press announcement is clearly desirable as soon as the decision to proceed with the Laboratory is finally taken. A draft will be submitted at or before the meeting.

10. Name of Laboratory

It has been widely suggested that the Electron Laboratory should be named the "Thomson High Energy Laboratory". If the Board are inclined to decide on this at once, it would save a change later.

Rutherford High Energy Laboratory,
Harwell,
Didcot, Berks.

16th July, 1962.

R. G. H. Stafford
Addendum to NI/62/6

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

GOVERNING BOARD

DRAFT PRESS STATEMENT

The National Institute for Research in Nuclear Science announce the approval of their proposal to establish a second laboratory, which will contain a 4 GeV electron synchrotron. The new laboratory will be in the North of England and will be particularly associated with the Universities of Liverpool, Manchester and Glasgow, but scientists from other universities and institutions, as well as scientists on the Institute's own staff will also carry out research there. The capital cost of the laboratory and the synchrotron will be £3½ million. The first Director of the laboratory will be Professor A. W. Merrison, who is being released from departmental responsibilities at Liverpool University for a period of five years so that he may take up this post.

Background note

The N.I.R.N.S. provides equipment needed for nuclear research by scientists of universities and other institutions, which is too expensive to provide to any one university. A 7 GeV proton synchrotron "Nimrod" is under construction at the first N.I.R.N.S. Laboratory at Harwell, Berkshire, and a smaller accelerator, the 50 MeV proton linear accelerator has been in operation there for two years.

The 4 GeV electron synchrotron like "Nimrod" will be used for research into the nature of the fundamental particles of matter, but as it will produce high energy electrons rather than high energy protons, the experiments done will be quite different. The new accelerator will also be complementary to Nimrod as regards the universities to which it will be conveniently accessible. The Physics Departments at Liverpool, Manchester and Glasgow are particularly interested in this field of physics.

The 4 GeV electron synchrotron was selected as the right machine to build after a very careful study carried out by the N.I.R.N.S. in 1960 and the first half of 1961. The proposal to build it was announced in the Institute's annual report for 1960-61. A similar accelerator of higher energy is in operation jointly by Harvard and M.I.T. in the U.S.A., and another is under construction, at Hamburg.

Professor A. W. Merrison is 38. He was educated at Enfield Grammar School and King's College, London, and worked as a research physicist at the Signals Research and Development Establishment, Christchurch from 1944 to 1946 and at the Atomic Energy Research Establishment, Harwell from 1946 to 1951 when he was appointed to the staff of Liverpool University as Leverhulme Fellow and lecturer. Here he took part in the research in elementary particle physics, with the Liverpool 400 MeV synchro-cyclotron. He received his Ph.D. from Liverpool University in 1957 and in the same year joined the staff of the European Organisation for Nuclear Research (C.E.R.N.) in Geneva where he continued research in elementary particle physics with C.E.R.N.'s 600 MeV cyclotron and 30 GeV (30,000 MeV) proton synchrotron. He was the leader of a group which did experiments showing that the pi-meson can decay directly into an electron, in addition to its more usual mode of decay via a mu-meson. In 1960 he was appointed to the Chair of Experimental Physics at Liverpool.

Rutherford High Energy Laboratory,
Harwell, Didcot, Berks.