

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

GOVERNING BOARD

Minutes of the meeting held at No. 5 Old Palace Yard,  
Westminster on 18th July, 1962

Present: Lord Bridges (Chairman)  
Dr. J. B. Adams  
Sir Robert Aitken  
Professor F. W. R. Brambell  
Professor J. M. Cassels  
Sir John Cockcroft  
Professor P. I. Dee  
Professor B. H. Flowers  
Sir Alan Hitchman  
Sir Keith Murray  
Sir William Penney  
Professor D. H. Wilkinson  
Dr. T. G. Pickavance  
Professor A. W. Merrison (Part time)  
Mr. C. Jolliffe  
Dr. J. A. V. Willis (Secretary)

Apologies for absence were received from Sir William Hodge, Sir Harry Massey, Sir Harry Melville and Sir John Wolfenden. Mr. Jolliffe attended at the Chairman's invitation to speak for the D.S.I.R. in the absence of Sir Harry Melville.

1. Minutes of the last meeting

The Board approved the minutes of the meeting on 22nd May, 1962. It was agreed to leave any matters arising from the minutes for discussion at the next meeting.

2. The Electron Laboratory

2.1 Authorisation from the Minister for Science - Paper NI/62/7

The Chairman asked for a general discussion of the Minister's letter dated 13th July, 1962, copies of which had been circulated. The following points were made in the discussion:-

(a) The Board were assuming that the 2% per annum increase started from £6.5 million in 1962/63. A letter had already been sent from the Minister's Office to the Treasury to make sure that there was no misunderstanding on this point.

(b) Quite apart from the situation in 1967/68, which was dealt with in the Minister's letter, the total amount for the years 1962-7 according to the Minister's offer fell short by £310,000 of the total for the same years in our five-year forecasts, which had already been drastically pruned. It was however agreed that this would have to be accepted.

(c) It was important to make it clear that we were not accepting a 5-year budget, but were dealing with forward planning. We were asked to accept a bargain now, but circumstances might change within the 5-year period.

(d) It was also important to establish a means of determining changes in price levels. Costs involved in scientific research had probably increased more than had the general level of costs. The Secretary was asked to seek advice from the A.E.A. on the establishment of a "scientific cost-of-living index". The D.S.I.R. would also be interested.

(e) The estimate of cost of the electron synchrotron had not been revised since May, 1961. On the other hand the Board had at that time added a sum for contingencies and this should not now be absorbed in the initial plans.

(f) It was most important to avoid delays in obtaining a suitable site. A letter from the Chairman to the Cheshire County Council would probably be very helpful.

2.2 Reference was made to the effect of the limitation to 2% per annum increase of D.S.I.R. grants for currently approved schemes for research in nuclear physics, particularly as regards the support of work with N.I.R.N.S. facilities. Mr. Jolliffe said that the reduction was serious, as compared with forecast estimates, but had not yet been fully looked into in relation to subjects other than nuclear physics. He thought that the D.S.I.R. Research Grants Committee would arrange that the small grants were affected as little as possible, and this would mean that there would be a shortage of funds for further re-equipment of the five major nuclear physics schools with large facilities.

It was concluded that there would be a marginal loss of efficiency in the use of Institute facilities due to reduced support, but it was pointed out that only a small part of this support came from the D.S.I.R., the greater part falling on the Institute.

Finally it was pointed out that the limitation to 2% p.a. increase is stated to apply to currently approved schemes, so that the D.S.I.R., like the Institute, appear to be free to fight for new schemes not yet approved.

### 2.3 Decision on the Electron Laboratory scheme

The Chairman asked for any further comments on the scientific value of the scheme, in view of the delays which had occurred, and for any further general comments. The members present agreed unanimously to go ahead with the scheme.

ACTION 1. The Board decided to proceed with the Electron Laboratory scheme on the conditions stated in the letter from the Minister for Science dated 13th July, 1962.

The Chairman was invited to send a reply to the Minister conveying this decision, and also to issue the offer of appointment as Director for five years to Professor Merrison, as already agreed.

(At this point Professor Merrison joined the meeting at the Chairman's invitation).

### 3. Siting of the Electron Laboratory - Paper NI/61/24

Dr. Pickavance introduced paper NI/61/24 which had been prepared by the Electron Laboratory Working Party under his Chairmanship. The essential requirements were for good subsoil and for a site of about 20 acres with space for expansion to about 100 acres. A search in Lancashire and Cheshire had revealed two suitable sites, Wood Park, Wirral and Mickledale, Frodsham.

In discussion, it was made clear that Manchester University would prefer the Mickledale site, but not at the cost of delaying the project. It seemed likely that the difficulties of planning permission and acquisition

would prove greater at Mickledale and the price might prove to be higher than at Wood Park. On the understanding that a serious attempt would be made to obtain the Mickledale Site, the Board authorised the start of active negotiations on both sites, and authorised the Chairman to decide on one of them without a further meeting.

4. Initial action on the Electron Laboratory - Paper NI/62/6

The Chairman dealt with the more urgent of the items put forward in paper NI/62/6 by proposing that for the time being he should be authorised to give the Director of the Electron Laboratory such instructions and power as he needed at this stage. This was agreed.

The draft press notice appended to the paper was approved with certain amendments, and it was agreed that subject to consultation with Sir James Mountford, this would be issued when Professor Merrison had accepted the appointment. (Note added by the Secretary:- It is now understood that the Minister would want to announce the decision in Parliament before it was announced elsewhere.)

5. Research Reactors

Sir John Cockcroft said that the Research Reactor Committee had recommended that the offer of the A.E.I. Merlin reactor should be referred to the N.I.R.N.S. to consider whether the Institute should take it over for the university high-flux reactor work which they were sponsoring. However, after the Research Reactor Committee's meeting, the possibility of making space in A.E.A. reactors at Aldermaston or Harwell available had been re-considered, and it was clear that this could be done on more satisfactory terms than taking over Merlin. He had therefore written again to the D.S.I.R., to say that the Institute did not after all want the Merlin offer to be referred to them. He asked the Board for endorsement of this action.

Sir William Penney confirmed that space could be found in suitable A.E.A. reactors, but said that he would like the needs to be put clearly to the A.E.A., who would then suggest where they would best be met, perhaps giving several alternative suggestions.

The Board agreed that they did not wish to take over the Merlin reactor.

6. Proposed Glasgow 100 MeV electron linear accelerator

Professor Dee asked how the financial situation indicated in the Minister for Science's letter affected the prospects for the proposed 100 MeV electron linear accelerator.

Sir John Cockcroft said that his committee, in reporting to the Minister for Science, had recommended the re-equipment of the five major university nuclear physics centres in the D.S.I.R. major grants programme.

Mr. Jolliffe said however that the amount of money to be provided to the D.S.I.R. over the next five years would not allow this policy to be carried out fully. It would be quite impossible for money to be provided for the 100 MeV machine before 1964, and the programme from then on could not be planned until the grant for 1964/5 was known.

Professor Dee then asked if the Institute could again press the case of this accelerator. The Chairman said that their interest in it was known, but he was sure that this was not an opportune time to press it again.

7. Next meeting

The Chairman said that if there should be important business to be done before the next meeting on 22nd October, he might suggest that the G.P.C. meeting at 2.45 p.m. on 20th September should be converted into a joint meeting of the G.P.C. and the Board.