

DR. RICHAVANCE.

PROTON SYNCHROTRON PROJECT

(Building Progress)

Notes of a meeting held in Mr. Bowles office on Thursday, 19th June 1958.

Present:	Mr. P. Bowles	-	Chairman
	Mr. A. L. Cuthbert		
	Mr. A. G. Entwistle		
	Mr. G. M. Harbert		
	Mr. H. Kerr		
	Mr. A. R. Lang		
	Mr. J. B. Marsh		
	Mr. G. E. Simmonds		
	Mr. J. N. Sagar		
	Mr. F. M. Telling	-	Secretary

1. ALTERNATOR HOUSE.

Mr. Bowles said that the English Electric Co. had recently visited the Westinghouse Company in the U.S.A. The experience gained from this visit together with their own calculations have prompted English Electric to consider the design of rotary plant having a slower speed than originally specified. The Group will discuss these proposals at a meeting with the Contractors on 20th June. If these design modifications are accepted then information on foundations and ducts may not be available until the end of 1958. This will require a re-arrangement of the civil construction work for the Alternator House to allow terminal dates to be kept.

Mr. Bowles tabled the following proposed dates for the supply of floor details for the Alternator and Converter Houses:

	<u>English Electric Alternator House</u>	<u>Brown Boveri Converter House</u>
Steelwork erected	1.7.59	1.5.59
Working instructions to site showing dates, ducts, machine foundations and hole in floor.	15.5.59	15.3.59
Merz and McLellan start on working drawings	15.3.59	15.1.59
Latest date for information from Contractors	15.2.59	15.12.58
Date requested for Contractors to supply information	1.1.59	1.11.58

After a discussion on the methods of building construction it was generally agreed that these dates could be incorporated in a revised programme. Mr. Lang was asked to prepare this revised programme and circulate copies to all concerned.

2. ANGULAR PLANT ROOM.

Mr. Bowles pointed out that information on service ducts from the Power Supply Contractors may be delayed.

It was agreed that the shallow service ducts could be put in at some later date. The complexity of the ducting at under floor level would determine the completion of the floor. The drawings for excavation work should be available by 15.10.58, and foundation work was programmed to commence on 1.10.58.

Mr. Bowles said that since the Ventilation Plant would be required for use in the Magnet Room the programme should be re-examined with a view to bringing forward the completion date. If possible the foundation work should be programmed to commence on 1.8.58.

3. VACUUM PUMP EXHAUST.

Mr. Entwistle said that the proposed exhaust ducts from the vacuum pumps were routed through the roof of the Magnet Room and this could cause difficulties when forming the earth mounding on this roof. An alternate scheme would be for several pumps to exhaust into a common main and then route these pipes alongside the escape hatches in the roof.

It was agreed that this alternative scheme be adopted.

4. PIPE WORK SPECIFICATION.

Mr. Entwistle said that the tenders for this contract were at present being examined by the Quantity Surveyors. It was hoped to place this contract in time for work in the Injector Room to commence to programme. If, however, it was not possible to place this contract in time, then arrangements will be made for an extension to an existing contract so that work would not be delayed on the Injector Room.

Mr. Simmonds asked when the Group could expect to see the final pipework drawings. Mr. Entwistle promised that these would be available within the next 3 months.

Mr. Simmonds quoted from a letter by Merz and McLellan which gave figures for the difference in cost of heat exchangers depending on the magnet coil cooling water outlet temperature. Mr. Entwistle agreed that this point was not clearly expressed and promised to write again and clarify the position.

5. BUILDING RESEARCH.

Mr. Marsh said that the Building Research Establishment have shown considerable interest in this project and proposed putting ~~stems~~ gauges and thermocouples in the Shielding Bridge monolith. They now wish to put similar measuring devices in the Magnet monolith.

Mr. Bowles asked Mr. Marsh to outline on paper the specific proposals. The B.R.E. should be asked to outline clearly their policy regarding this project and the estimated expenditure.

It was agreed that these should be one co-ordinated policy which will require the preparation of an acceptable scheme. Merz and McLellan and New Works Division should be asked to co-operate in the discussions and in the examination of the final report to be drawn up by the Building Research Establishment.

6. MAGNET SOLEPLATE.

Mr. Simmonds said that he was awaiting setting out details from the Industrial Group. Mr. Cuthbert replied that these details have now been agreed and he would let Mr. Simmonds have this information.

7. PROTOTYPE BLOCK.

Mr. Cuthbert reported that the contractors have made several shutters for the moulds and these were being examined. A measuring jig was also being fabricated.

F. M. Telling.

Proton Synchrotron Group,
A.E.R.E. Harwell

26th June, 1958.