

19th December, 1961

NI/GP/62/3

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

GENERAL PURPOSES COMMITTEE

Increased cost of the building for the Atlas Computer

Note by the Secretary

1. The N.I.R.N.S. Atlas Computer project was approved by the Treasury on 2nd August, 1961, at a total of £3.40 million, which figure was made up as follows, on the basis of studies and contract negotiations previously carried out by the Atomic Energy Authority:-

	£000
(a) Fixed price contract with Messrs. Ferranti for the computer plant	2,550
(b) Maximum contribution to Messrs. Ferranti's development costs	700
(c) Buildings	150
	<u>3,400</u>

The Treasury stated that if any items of the scheme should prove more costly than had been estimated they would expect corresponding economies to be made elsewhere in the scheme.

2. Dr. Howlett reported to the N.I.R.N.S. Atlas Computer Committee at their second meeting on 20th October, 1961, that the necessary buildings would cost about £360,000 instead of £150,000. The reasons were partly under-estimation, and the omission of provision for items such as external services, but also the use of early estimates of the size, power demands and heat dissipation of the machine, which estimates have proved to have been much too low.

3. The Atlas Computer Committee ordered an immediate critical review of the building proposals and a separate review of the plant requirements, to determine what plant items could least harmfully be cut out if it were necessary to save £200,000 or some lower sum on the plant, and to estimate what the effect would be on the fitness of the computer for its purpose.

These two reviews have been completed and the reports are now being submitted to the Atlas Computer Committee by correspondence and will be considered by Sir William Penney, the Chairman of the Committee, in the light of the Committee's comments. A special meeting of the Committee will be called if necessary. It seems probable that the conclusions will be that an additional sum of about £200,000 is necessary for the buildings, and that none of this can be found by omitting some of the plant without very seriously reducing the value of the computer for the large calculations which are its special function.

4. Subject to the Atlas Computer Committee's recommendation, therefore, authority for an application to the Treasury for an additional sum of about £200,000 may be required shortly. The Committee is invited to authorise Mr. Drake, in advance, to make this application on behalf of the Institute, on the request of the Chairman of the Atlas Computer Committee, Sir William Penney.

Rutherford High Energy Laboratory,
HARWELL, Didcot, Berks.