### IN CONFIDENCE

# Dr. G. H. Stafford, Building 412

#### Cost of nuclear research in Britain

The following figures are approximate:

## Cost of nuclear research supported by D.S.I.R.

## I CERN

| 1 0  | SKN  |  |          |
|------|--|--|----------|
|      | U.K. contribution (25%) to CERN budget   | £1½ million<br>p.a.                          |          |
| II D | S.I.R. support of university work  |  |          |
| 1    | At CERN - present commitment 1959/64   | £20,000                                      |          |
| 2    | Maintenance of the big machines  |  |          |
|      | Birmingham approx. Glasgow " Liverpool "                                       | £34,000 p.a.<br>£24,000 p.a.<br>£42,000 p.a. |          |
|      | Small machines at Oxford and Cambridge "                                       | £ 6,500 p.a.                                 |          |
| 3.   | Development of existing machines   |  |          |
|      | Glasgow (increase of energy) Commitment at 1/3/60                              | 244,000                                      |          |
|      | Birmingham (injector) foreseeable new commitment                               |  | € 50,000 |
| 4.   | New machines   |  |          |
|      | Manchester linear accelerator<br>Commitment at 1/3/60                          | £285,000                                     |          |
|      | Foreseeable new commitment   |  | € 80,000 |
|      | Birmingham cyclotron (ex Cambridge)  | £ 23,000                                     |          |
|      | Liverpool Van de Graaf<br>foreseeable new commitment                           | £405,500                                     | £ 10,500 |
|      | New machine at Birmingham or Glasgow foreseeable commitment (nominal sum only) |  | £100,000 |
| 5.   | Liquid hydrogen bubble chamber   |  |          |
|      | Commitment at 1/3/60   | 2614,000                                     |          |
|      | Foreseeable new commitment   |  | £116,000 |
| 6.   | Other nuclear research (mostly small grants)                                   |  |          |
|      | Committed prior to 1/4/59  " in 4/59 " " 6/59 " " 12/59                        | £124,000<br>50,000<br>106,000<br>108,000     |          |
|      | Second stage of large shower experime  | ent  |          |
|      | foreseeable commitment   |  | £100,000 |

Dr. G. H. Stafford (continuation)

This gives the cost of the present 5 year plan, and adds up to

£2,339,500 existing commitments £ 456,500 foreseeable "

Two new large projects can be foreseen which cannot be met from the 5-year plan:

1. Oxford University

£1,000,000

2. Glasgow

£ 600,000 approx.

This is the project for which £100,000 was allowed above.

You will see that no real allowance is made for supporting university work at CERN. The £20,000 shown has already been committed. £500,000 was originally allowed for the 5 years, but no detailed estimates have been made of what is required.

The total grant for 1959/64 was originally £3,250,000 of which £140,000 was "lost" by underspending in the previous quinquenium. A substantial slice of the £500,000 is still available for work at CERN, therefore, but this may have to be raided for new commitments not yet foreseen.

T. G. Pickavance

Rutherford High Energy Laboratory, Building 470.1 11th April, 1960.