

226/15

Q.S.N.I.(G.P.)(58) 2

QUARTERLY STATEMENT NO. 2

7 GeV Proton Synchrotron

1. This report is submitted in accordance with the discussion made at the first meeting of the General Purposes Committee held on Friday, 6th September, 1957.
2. The Statement shows the approved estimates, the expenditure and commitments up to the Quarter ending 4th January, 1958.
3. In Appendix I the revised estimate of £7,030,000 is shown and a breakdown of this is:-
 1. The Plant estimate is unchanged at £5,000,000.
 2. The revised Building estimate is now £1,960,000 which includes £70,000 to cover the approved cost of an ancillary building.
4. Appendix II shows expenditure to 4th January, 1958 compared with predicted expenditure to 31st March, 1958 and the original estimated expenditure for the financial year 1957/58.
5. Appendix III shows the expenditure and commitments up to the quarter ending 4th January, 1958.
6. Appendix IV shows the contract action likely to be taken during the next quarter, together with the action sought from the General Purposes Committee.
7. Appendix V shows the financial position in graphical form.

D. W. FRY
Chairman, Project Committee

A.E.R.E., Harwell.
11th February, 1958.

APPENDIX I7 GeV PROTON SYNCHROTRONREVISED COST ESTIMATES 4th JANUARY, 1958.

<u>Item</u>	<u>£ million</u>	
1. <u>Magnet</u>		
Yoke	1.5	
Pole Pieces	0.2	
Coils	0.6	
Special jigs and fixtures	0.15	
Installation	0.15	
	<u>2.6</u>	2.6
2. <u>Injector</u>	<u>0.3</u>	0.3
3. <u>R.F. Equipment</u>	<u>0.15</u>	0.15
4. <u>Vacuum System</u>		
Vacuum chamber, pumps, etc.	0.35	
Installation and sundries	0.05	
	<u>0.4</u>	0.4
5. <u>Power Supply</u>		
Motor alternator	0.6	
Ignitrons and firing circuits	0.2	
Flywheels, bearings, bedplate	0.1	
Cabling, installation, etc.	0.2	
Saturating choke	0.2	
	<u>1.3</u>	1.3
6. <u>Controls</u>	<u>0.15</u>	0.15
7. <u>Cooling System</u>	<u>0.1</u>	<u>0.1</u>
		5.0
8. <u>Buildings</u>		
Main Building Works	1.30	
Engineering & Services	0.52	
Fees	0.14	
Ancillary services building	0.07	
	<u>2.03</u>	2.03
Total		<u>7.03</u>

APPENDIX II

EXPENDITURE STATEMENT

	<u>Financial Year</u>	<u>Expend. to 4/1/58</u>	<u>Predicted to Year End</u>	<u>Estimate</u>
Plant	1957/58	NIL	£20,000	£200,000
Build.	1957/58	£86,650	£200,000	£200,000
Plant	1958/59	-	-	£1,425,000
Build.	1958/59	-	-	£960,000

APPENDIX III

7 GeV PROTON SYNCHROTRON

RECORDED CONTRACTS AND EXPENDITURE UP TO 4TH JANUARY, 1958.

No.	Item	Contract Number	£ Value	Firm	£ Expenditure	Remarks
1	<u>MAGNET</u> Magnet yoke Power supply for Magnet Block Testing	2A. 12158 A. 8986	{ 64,600 1,329,400	Joseph Sankey Ltd. English Electric Co. Ltd.	NIL NIL	Increase caused by Paper N.I.(G.P.)(58) 1. Contract placed on 26/9/57. Contract placed on 18/9/57
2	<u>INJECTOR</u> Electro-Static Generator 650 KV Electro-Static Generator 300 KV	3B. 12213 3B. 14864	15,050 1,989	S.A.M.E.S., France S.A.M.E.S., France	NIL NIL	Contract placed on 15/10/57. Contract about to be placed. Needed for experimental programme and can later be incorporated on Injector System.
3.	<u>PERITVE</u> Ferrite Frames	3B. 12235	39,000	Phillips, Eindhoven - Holland	NIL	Contract placed 17/1/58. Authority to place Paper N.I.(G.P.)(57) 9.
4	<u>VACUUM SYSTEM</u>					
5	<u>POWER SUPPLY</u>					
6	<u>CONTROLS</u>					
7	<u>COOLING SYSTEM</u>					
			<u>1,460,668</u>		<u>NIL</u>	

APPENDIX III

No.	Item	Contract Number	£ Value	Firm	£ Expenditure	Remarks
8	<u>BUILDINGS</u>					
	<u>A. BUILDING WORKS</u>					
	Opening up Contract	J 3073	82,638	W. E. Chivers & Sons Ltd.	60,000	
	Exploratory Boring	J 3022	2,513	The Cementation Co.	2,513	
	Trial Bore Holes	NW 16/N	1,376	W. E. Chivers & Sons Ltd.	1,130	
	Reinforcing Rods	B 4571	3,022	Whitehead Iron & Steel Co.	3,022	
	Main Civil Contract	B 8231	8,131		7,405	
		J 3017	1,065,377	W. E. Chivers & Sons Ltd.		
	Arcon Buildings	J 3017/8	42,000	Taylor Woodrow		
	Miscellaneous		180		180	
	<u>B. ENGINEERING AND SERVICES</u>					
	Electrical Cables	A 8984	3,507	Sterling Cable Co.		
	E.H.T. Switchgear	J 3020	7,565	Reynolds Ltd.		
	Transformers	A 8987	2,934	Yorkshire Electric Co.		
	20 ton Crane	J 3076	8,384	Wharton Crane Co.		
	Special Motion Cranes (3)	J 3100	33,692	Wharton Crane Co.		
	Miscellaneous Cranes (4)	3A 3137	33,311	Wharton Crane Co.		
	Lifts, Passenger & Goods - Main Building	J 3129	3,790	Evans Lifts Ltd.		
	<u>C. FEES</u>					
	Consultants	J 3033	100,000	Mertz & Mc Lellan	12,400	
	Quantity Surveying	J 3074	40,000	Faulkner & Partners		
			<u>1,438,420</u>		<u>86,650</u>	
						Contract includes provision for a fifth crane of 8 tons at an extra cost of £4,740.
						Approval for £70,000 given - paper N.I.(G.P. 57) 6 refers.
						Includes 3 Structural steel contracts and floods to Shelding Blocks.

APPENDIX IV

7 GeV BROOKLYN SYNCHROTRON

KNOWN AND ANTICIPATED CONTRACT ACTION DURING PERIOD 5-1-58 TO 30-4-58.

No.	Item	Contract Number	£ Value	Firms likely to be considered	Remarks	Action sought from G.P.O.
1	<u>MAGNET</u>		NONE			
2	<u>INJECTOR</u> H.T. Platform Modulators		4,000 15,000	Competitive tender action		NONE NONE
3	<u>R.F. SYSTEM</u> D.C. Bias Supply Drive Chain		6,000 7,000	Competitive tender action Competitive tender action		NONE NONE
4	<u>VACUUM SYSTEM</u> Pumping units		Approx. 100,000	Competitive tender action in February and March.	The sum of £100,000 is a provisional estimate. It is hoped to place a contract by 30/4/58 and further details will be given in a paper to be submitted later.	NONE at this stage. A special meeting will be required to consider a separate paper.
5	<u>POWER SUPPLY</u> Magnet Power Supplies		1,100,000	The General Electric Co. Brown Boveri & Co. Metropolitan-Vickers Ltd. C. A. Parsons & Co. British Thomson Houston Ltd. The English Electric Co.		Approval sought. A paper will be submitted as soon as tendering action is finalised.

APPENDIX IV

No.	Item	Contract Number	\$ Value	Firms likely to be considered	Remarks	Action sought from G.P.C.
6	<u>CONCRETS</u>		NONE			
7	<u>COOLING SYSTEM BUILDINGS</u>		NONE			
8	<u>A. BUILDING WORK</u> <u>B. ENGINEERING & SERVICES</u> Ventilation & Air Conditioning		NONE 55,000		 Contract should be placed during this quarter.	NONE. Approval given at last G.P.C. meeting.