

engaged on this work. During this time he played a leading part, together with other manufacturers and the British Post Office, first in the establishment of the first electronic automatic exchange at Highgate operating on the time-division multiplex principle, and latterly in the establishment of the first large electronic exchange in Britain in which reed relay speech circuits are controlled by electronic logic circuitry. In recent years he has also been engaged in electronic applications to other forms of telephone switching, in data transmission studies, and methods of achieving economy of speech-band paths over linked transmission circuits. He is now extending his activities to the wider basis of the academic life, where his experiences, especially those of industrial research laboratories, should prove of great value in university research activities with which he will now become associated. He was recently granted a D.Sc. (Eng.) by the University of London for his publications in the fields of electronics and telecommunications, and his new career at the Birmingham College of Advanced Technology will be watched with interest by all who were associated with him in his early activities.

### Nuclear Power Stations

In a statement in the House of Commons on May 25, the Minister of Power, Mr. F. Leo, said that the Central Electricity Generating Board, in inviting tenders for the second nuclear power station to be built at Dungeness, had stated that besides tenders for an advanced gas-cooled reactor station of the kind developed by the Atomic Energy Authority, it was also ready to consider tenders from British industry for water-moderated reactor systems of proved designs such as those developed in the United States. The tenders, which included proposals for both these types, had now been assessed by the Generating Board in conjunction with the Atomic Energy Authority; the advanced gas-cooled reactor showed clear economic and technical advantages over the alternative systems, and had a good potential for further development. It would also generate base-load power more cheaply than a contemporary coal-fired station. Mr. Leo said he had accepted the joint recommendation that an advanced gas-cooled reactor should be adopted at Dungeness, and later added that the advantage would be at least 10 per cent. A corresponding statement was made the same afternoon in the House of Lords, when the advanced gas-cooled reactor was described as a remarkable technical break-through, and Lord Nunburnholme asked if some scheme for converting sea-water into fresh water could be incorporated in the contract.

### Expenditure on Overseas Development

In reply to a question in the House of Commons on June 1 as to the aid given by the Ministry of Overseas Development in agriculture, education and technology, Mr. A. E. Oram, Parliamentary Under-Secretary to the Ministry, said that in agriculture estimated expenditure on aid in 1964 was £1.885 million, excluding the cost of the Anti-Locust Research Centre (£140,000) and Desert Locust Control (£12,000), besides new commitments for grants (£3.8 million) and loans (£4.5 million). In addition, expenditure of £12.6 million was incurred in respect of earlier commitments. There were some 180 unfilled vacancies for technical assistance, but 1,342 Overseas Service Aid Scheme posts were filled in 1964 and 61 technical assistance posts. The demand was concentrated largely in East and Central Africa. In addition, under the National Agricultural Advisory Service and the Department of Agriculture for Scotland, 30 posts were created to enable experienced officers to be seconded overseas, and under a studentship scheme 20 British graduates were being trained for overseas service in agriculture. Britain's direct expenditure on education and training overseas in 1964-65, including Common-

wealth Education Co-operation, was more than £16.5 million, about £12.5 million being in the Commonwealth; there were also substantial contributions to international agencies such as the United Nations Educational, Scientific and Cultural Organization, the Expanded Programme of Technical Assistance, and the Special Fund. There were more than 42,000 Commonwealth students in Britain, and expenditure on training in the United Kingdom of students for developing Commonwealth countries, other than under Commonwealth Educational Co-operation arrangements, was estimated at £1.7 million. For 1964-65 estimated expenditure on British teachers overseas under the Overseas Services Aid Scheme was estimated at £1.6 million. Estimated expenditure on aid to technology in 1964 was £4.05 million, including expenditure by the British Council. New commitments for grants totalled £451,000 and for loans £6.86 million, while further expenditure of £18 million was incurred in respect of earlier commitments. It is expected that the whole of the new commitments in all the fields will require some years to disburse.

### Reports of the Estimates Committee

Two recent Special Reports from the Estimates Committee have attracted little attention although they bear closely on the efficiency of Parliament, particularly on its ability to criticize the Executive effectively. Of these, the Fifth Special Report for the Session 1964-65 (Pp. 4. London: H.M.S.O., 1965. 6d.) deals with temporary technical or scientific assistance for sub-committees of the Estimates Committee, which works through such sub-committees. For its evidence, it depends largely on senior officers of Government departments who are experts in the subject under examination, although informed and responsible persons from outside the Civil Service are also consulted. The Estimates Committee has reviewed the present system under which it examines the Estimates with the view of deciding whether its existing powers are sufficient. It considers that on occasion it might be valuable for it to engage the services of someone with scientific or technical knowledge on an *ad hoc* basis for the purpose of a particular enquiry, either to supply information which was not readily available or to elucidate matters of complexity within the Committee's order of reference. Such a person would attend meetings of the Sub-Committee conducting the enquiry when invited to do so, but without power to vote or to examine witnesses. There are two precedents for this procedure. When, in 1921, a Select Sub-Committee was set up to enquire into the organization and administration of the telephone service, the Committee was empowered to appoint from outside its own body such persons as it thought fit to obtain special expert or scientific information, or to advise on the subject-matter of its enquiry. Likewise in 1944, the Select Committee on House of Commons (Rebuilding) was empowered to invite any specially qualified persons it might select to attend any of its meetings in an advisory capacity. The Estimates Committee now recommends that as an experiment the House should pass an order, granting it a similar power limited to the two purposes indicated and on the understanding that anyone appointed will function in the way described. The sixth Special Report for the session (Pp. 4. London: H.M.S.O., 1965. 6d.) deals with sittings of sub-committees overseas. The Estimates Committee and its sub-committees are at present limited to sittings within the United Kingdom. When in the last two sessions members of one of the Sub-Committees were investigating military expenditure overseas they were only able to travel abroad to do so by courtesy of the Minister of Defence, who issued invitations to them and bore the expense on his Vote. Even so, they were not able to sit as a sub-committee to take evidence. The Estimates Committee does not think that it is satisfactory