share are now being aired in Geneva. CERN is anxious not to prejudice in any way the ultimate energy and beam intensity of the machine, and in the first place it is thought that cuts will come by having only one experimental area instead of two, by cutting down on ancillary equipment, or by attaining the maximum energy in several steps. That CERN is optimistic of finding ways of bringing about a 20–25 per cent cut in the cost of the accelerator shows just how flexible the project is, something the British Government has so far failed to realize. It is now even clearer than it was in June that the curt "no" from Britain was unnecessary, that there was plenty of room for bargaining, and that a reduction in expenditure on the project was there for the asking.

Last week's decision by Italy has given a boost to the revision of the project now going on at CERN because it should encourage the smaller nations which are members of CERN to join in. The Italian contribution of 11·24 per cent to the basic programme of CERN makes it something of a link between France, Germany and Britain, contributing between them 64·8 per cent, and smaller nations such as the Scandinavian countries, the Netherlands, Spain, Switzerland and Greece, contributing the remainder. Just now the odd per cent or two of the smaller contributions are vitally important to the project. CERN is hoping that these countries will follow the lead now set by Italy.

It has to be recognized that the June decision by Britain puts the earlier declarations from Belgium, France and Austria in a new light. At the 38th council meeting in June, these countries were urged to reconfirm their decisions. This they are confidently expected to do, as the new plans will not require any increase in the individual contributions they are being asked to make. As far as the French are concerned, a great deal of water has passed under the bridge since their verbal agreement in June last year to participate, and their later written confirmation. The French government is, however, still felt to be favourably disposed towards high energy physics research.

Meanwhile the Intersecting Storage Rings (ISR) project, which forms part of the basic programme of CERN and to which Britain still contributes, is going ahead. Construction of the ISR, which will in many ways be equivalent to a conventional accelerator of 1,700 GeV but not to be regarded as in any way a substitute for the 300 GeV machine, has now reached the half-way stage, at an expenditure which is so far 5 per cent below the estimates. This seems to give the lie to the notion that the cost of CERN projects escalate in a manner reminiscent of the aircraft industry. It is true that the cost of the 28 GeV accelerator rose considerably from the original 1953 estimates, but CERN would have it that most of this increase was not to make the project realizable, but was rather an expansion of the investment in view of the success of the project. And it is impossible to deny that as international cooperation in ambitious scientific projects go, CERN has been a notable success. If it really was escalation of the costs of the 300 GeV machine which worried the British Government—and this must be less of a fear as CERN becomes more experienced—then the thing to do was to suggest to CERN that the project be looked at again with a view to checking the costs and reducing them where possible. CERN is having to do this now anyway, and by the look of things is succeeding.

BRITISH ASSOCIATION

More Support Wanted

As it meets this week in Dundee, the British Association is hopeful that it will be able to continue and expand its wide range of activities. But financial problems remain. This year the association has again shown a small surplus on its accounts, but, as the annual report reveals, to achieve this it has been necessary to impose some very strict economies.

The largest decrease in expenditure has been a cut of some £2,500 in the financial aid given to area committees. Local activities have, however, been maintained with aid from local education authorities. In some areas, notably the West Midlands and Sheffield, authorities have agreed to contribute a fixed sum per thousand pupils on an agreed programme of activities, while in other areas support is to be more closely linked with the activities undertaken, on the basis of local participation in each event. Overall support from local education authorities and other local sources increased from £4,360 in 1966–67 to £10,236 in 1967–68.

The branches and area committees foresee fairly cheerful prospects as long as the association itself continues to provide the administrative services. Their lack of administrative machinery meant that the whole of the £10,000 grant from the Ministry of Technology to branches and area committees in 1967–68 was not used. Hopes of improving the local administration as increased activities demand have been dashed by the failure of the parent association to obtain an increase in its grant from the Department of Education and Science. This grant has been renewed at its previous level of £12,500.

Hopes for the future lie in the association's membership and in donations from various sources. The question of membership has been reviewed this year by a special committee which is due to report to the general council in Dundee. One possibility is that local membership could be increased considerably. The association also hopes to be able to increase its income from donations from trusts, business, industry and individuals, many of whom are already giving generous support.

PRESIDENTIAL ADDRESS

Science and the Good Life

It has become customary for the president of the British Association to give an address that is not concerned with any specialized field of science. In Dundee on August 21, Dame Kathleen Lonsdale, president of the association this year, took advantage of this freedom to comment on some of the things about which she obviously feels strongly. Her topic was "Science and the good life", and she seemed to be giving a clear warning that although scientists are in a position to give us the good life, they might just as easily deprive us of it altogether.

Discussing some of the ways in which science has already affected life, Dame Kathleen argued that the human character has been influenced by the need to deal with increasingly complex moral problems. We feel guilty about people starving in India because with all the resources of science we ought to be able to help