Supply-Health and Welfare

grants leave to me to absent myself from further discussion on the estimates that come under the authority of the Minister of National Health and Welfare.

DEPARTMENT OF NATIONAL HEALTH AND WELFARE B—Civil Defence—

251. Expenses of the civil defence program, \$7,220,817.

Mr. Monteith (Perth): I do not propose to make any extensive statement on the item of civil defence. The Prime Minister has covered the transition from the situation as it has existed to what we propose to do. One year ago, when my estimates were before the committee it will be recalled that General Graham was in the midst of making his survey. The ultimate setting up of a cabinet committee resulted in the Prime Minister's announcement of March 23 in the house, and then this was followed by discussion with the provinces on April 24, at which time they showed complete agreement, most enthusiastic agreement, with our suggestions. Eventually, order in council 1959/656, which was tabled next day, gave instrumentation to these suggestions. It has been proposed now that we hold a further discussion with the provinces in a meeting to be held early in October, at which time the conclusion of these arrangements which we have entered into and the outcome of the committee will show we hope, just what further steps should be taken and how we may further co-ordinate the whole civil defence effort.

I should like, however, to make a brief reference to a subject upon which I have been queried in the house by the hon. member for Essex East and which I know is uppermost in everybody's mind. I refer to shelter and evacuation. I would point out, very briefly, that for something in the neighbourhood of five years, that is from about 1948 to 1953 or thereabouts, the scale of probable attack was assumed to be an atomic bomb of 20 to 100 kilotons. This is equivalent to 20,000 to 100,000 tons of TNT. At this stage there was little or no thought of evacuation of the target area population and little stress was placed on the organization of reception areas for those who may leave the larger urban centres.

I think I might point out that the advent of the H-bomb made necessary a drastic revision of this phase of civil defence policy. From about 1953 on, the emphasis began to shift from static defence, where people stayed put to mobile defence, involving the large scale dispersal or evacuation of our urban populations. Moreover, the greatly increased destructive power of the thermonuclear bomb—ranging in size from 1 megaton to 20

megatons, the equivalent of 1 million tons to 20 million tons of TNT—meant that a single bomb, properly placed, could almost completely wipe out any but the largest of our urban target areas.

These greatly increased areas of destruction, together with the newly discovered realization of the great dangers over large areas of radioactive fallout, meant that it was no longer realistic to assume that the population of the average city could survive the blast by taking shelter, and then emerge with its resources and facilities substantially intact to undertake its own rescue and rehabilitation work. Civil defence began to emphasize that distance is the best defence against the H-bomb; and planning for the rapid and orderly evacuation of large urban populations in the event of emergency began to feature the civil defence policies of most of the western democratic countries.

But, Mr. Chairman, times of course are changing. As military science advances we move from the era of the H-bomb and the manned intercontinental bomber to that of the intercontinental ballistic missile equipped with a nuclear warhead. Increasingly in the future we shall be unable to count on any advance warning time. Moreover, the over-all need for the adequate provision of relatively light and inexpensive shelters, if only for shielding from widespread radioactive fallout, emerges as an increasingly urgent problem. While the cost of providing heavy anti-blast shelters on any large scale continues to appear prohibitive, recent United States studies, notably that of the Rand Corporation, and the testimony recently given before the Hollifield committee of the U.S. congress, point to the feasibility of developing light and resonably effective shelters, particularly against fallout, at cost magnitudes considerably less frightening than the estimates previously given. Recent studies have been made by our own defence research board which seem to point to the same conclusions.

All these materials and reports are now being carefully studied and reviewed, and while it would not be wise or proper to hasten unduly the work of the committee which has been established to study and report upon this question, I believe that within the next few months we will be in a position to discuss with provincial authorities some proposals for establishing an appropriate balance between evacuation and shelter, particularly shelter against fallout.

There is one brief word I should like to say in conclusion, Mr. Chairman. As you know, civil defence in essence means preparedness to meet disaster from whatever quarter it may come. While our civil defence preparations are designed primarily to