

chargeable specifically to the European reactor as opposed to the one which it is already proposed to build in Canada would be mainly limited to the actual fabrication costs of the reactor components themselves.

11. Mr. Watson suggests by implication that this approach might be possible, with the reactor for Europe where conventional power costs are higher being constructed somewhat earlier and with less refinement of design, but concludes that there would be political difficulties in building such a reactor abroad before it could be done in Canada. I am not myself convinced that this is necessarily the case. There seem to me very practical reasons as outlined above for regarding such a project as advantageous to Canada in practical and commercial terms. If this proves upon expert and more detailed examination to be the case, it should not be impossible to persuade the Canadian Government and public to contemplate such a plan.

12. This memorandum has gone on probably longer than is justified by the very preliminary thinking which we have so far put on these matters. I would not propose to explore these concepts in greater detail at present therefore, but would suggest that if they commend themselves to you they might be discussed at an early meeting at which there could be present officials better qualified than we to comment upon the various factors involved. If you found it convenient, a preliminary discussion might take place at your meeting tentatively scheduled for 2:30 on Tuesday, April 29.

RODNEY GREY

[PIÈCE JOINTE/ENCLOSURE]

Note du secrétaire de l'Énergie atomique du Canada Ltée
Memorandum by Secretary, Atomic Energy of Canada Ltd.

[Ottawa], April 9, 1958

CANADIAN ASSISTANCE TO EURATOM

The Energy Situation in the Euratom Countries

It is clear that the Euratom countries have a strong and urgent need for atomic power. Their electricity consumption is growing rapidly, doubling every 10 to 12 years. These countries already import 23% of their total energy requirements and even with the maximum development of their indigenous sources of energy they cannot expect to meet in this way more than one-third of the increase of their electricity needs in the next 20 years. Their energy problem is more threatening than the one the United Kingdom faces. In the report "A Target for Euratom" an ambitious target of the installation of 15 million kilowatts of nuclear power by 1967 is proposed. This would allow for the stabilization of fuel imports from 1963 onwards.

The availability of the very large capital investment involved is a major problem. The present rapid growth of electricity demand is already putting a severe strain on the investment resources of the electricity industries in the Euratom countries. The capital investment for a nuclear plant is at least twice that for a conventional generating plant of the same output. The building of nuclear plants instead of conventional ones, therefore, would substantially increase the investment problem.