peak storage cost very little because otherwise the facilities of the power system downstream would be idle and because unused capacity in a hydro-electric plant does not materially reduce total cost whereas the cost of providing storage may be considerable. They could claim, therefore, that most of the downstream power generated from the released storage should belong to them.

## Compromise Needed

It is evident that these opposite views must be reconciled in order to reach a satisfactory arrangement. Some compromise will have to be worked out whereby the upstream areas will receive an adequate and fair share of downstream power. I am convinced that this claim of the upstream interests is perfectly justified. It should be noted that the power made available under those particular conditions is a joint product resulting from the joint enterprise of upstream and downstream interests. The downstream areas provide the head which is certainly a valuable resource, but the upstream areas contribute the storage sites which are required to regulate the flow of water and also may permit flooding above the boundary to increase the head below. It cannot be denied that a topography favourable to storage sites is a very valuable asset which can be utilized in perpetuity. It follows therefore that when downstream and upstream areas decide to use their respective physical assets jointly for the generation of power, they both have a claim on the end-product. Moreover, they both make their contribution in physical terms-even though some expenditures are involved to develop the natural resources-so that they are both entitled to a quantity of the joint product in physical terms . . .

In our country, the doctrine of sharing downstream benefits is in the process of becoming the explicit policy of the Government of Canada which is directly concerned with this problem. According to the Canadian Constitution, works built on rivers in Canada and having an effect outside the country fall under the jurisdiction of Parliament even if they are entirely located in one province. Up to now, the Government of Canada has felt that it was unnecessary to exercise this jurisdiction and to legislate in this field. Conditions are rapidly changing, however, and, as I pointed out, a second period in the development of the Columbia River System is now starting during which important international problems will arise. Special legislation will be needed to cope with these questions and to provide guiding principles of policy designed for the protection of the public interest of the Canadian people. That is why the Parliament of Canada has been asked to enact Bill No. 3, entitled "The International River Improvements Act".

Under this Bill, an "international river improvement" means a dam, obstruction, canal, reservoir or other work the purpose or effect of which is

- (i) to increase, decrease or alter the natural flow of an international river,
- (ii) to interfere with, alter or affect the actual or potential use of the international river outside Canada.

Such works, unless specifically excepted by regulations or by the Act, would require a licence from the Government of Canada. The Bill would also enable the Governor in Council to make regulations concerning the construction, operation and maintenance of these works for the purpose of developing and utilizing the water resources of Canada in the national interest.

The Government of Canada has already made known the general principles which would serve to interpret the national interest in this respect. They require that a project must be compatible with present and future needs of the country