

Supply—Industry

single site. Agreement has been reached with Ontario hydro that a nuclear power station of approximately 500,000 kilowatts capacity should be designed, and A.E.C.L. is now designing the nuclear part of such a power station and Ontario hydro is designing the conventional part of the power generating system. Negotiations are currently under way between the federal government, the government of Ontario and Ontario hydro on arrangements that could be made for the construction of a number of these very large stations in the province of Ontario.

Mr. Douglas: Are these heavy water using plants?

Mr. Drury: Heavy water using plants.

Mr. Douglas: These large plants, these 500,000 kilowatt plants—

Mr. Drury: They are designed to use heavy water as the moderator.

Looking further into the future, A.E.C.L., in co-operation with Canadian industry, is studying ways to improve further heavy water nuclear power systems. The heavy water moderator nuclear power system is the technique which A.E.C.L. has been extraordinarily and uniquely successful in developing, and it is with a view to securing a greater use of that technique that the conversations and negotiations are being conducted with Ontario hydro.

Mr. Douglas: Before the minister leaves that point, what are the arrangements between Ontario hydro and his department regarding costs? Are costs shared for installation and operation?

Mr. Drury: There is no general formula for cost sharing as between A.E.C.L. and Ontario hydro. There are different cost arrangements in relation to the initial reactor at Rolphton, Ontario, and the one that is now nearing completion at Douglas point. There will probably be different arrangements yet again in relation to the larger plants on which negotiations are just starting. There is, however, a clear definition of functional responsibilities, in that A.E.C.L. takes full responsibility for the proper design and successful operation of the nuclear energy portion of a generating station, whereas Ontario hydro concerns itself with the design and proper functioning of the so-called conventional elements using the energy to convert it into electricity.

Mr. Douglas: Is the same type of financial co-operation available to other utilities across Canada?

Mr. Drury: I would say that in general the government would contemplate making available to any other province, or hydroelectric

[Mr. Drury.]

commission of a province, the same kind of financial arrangements which have been made in respect of Ontario.

Although Ontario is at present the province with the main interest in nuclear power, A.E.C.L. recognizes its responsibility for advising and assisting Canadian utilities in other provinces that might be interested in incorporating nuclear power stations in their systems. Canadian manufacturers are also being kept informed and are being assisted in learning the new technology so they will be in a position to supply components for nuclear power stations in Canada and abroad. A.E.C.L. is constantly having technical discussions with Canadian manufacturers. It welcomes the attachment of scientists and engineers from industry to work as members of its design and development teams, and it places development contracts with industry to a total value of approximately \$5 million per annum.

Several countries have been showing a growing interest in the Canadian nuclear power system which I have described, and this has been demonstrated quite dramatically in the last few weeks. Toward the end of October A.E.C.L. announced that a technical agreement had been concluded with the United Kingdom atomic energy authority. This authority is building a heavy water nuclear power station that will have a generating capacity of 100,000 kilowatts. This station is different in some ways from those designed in Canada, but it also employs heavy water as the moderator. Under the agreement the United Kingdom atomic energy authority has paid A.E.C.L. \$750,000 for the information developed in this country on heavy water moderated reactors. Canadian industry is, however, protected in that Canadian knowledge on nuclear power stations and their fuel will only be passed to British industry under licence.

Last week my colleague the Secretary of State for External Affairs announced that two agreements had been reached with the government of India. One was for technical co-operation between A.E.C.L. and India's department of atomic energy. The other was an agreement between the governments for the construction of a 200,000 kilowatt station—similar to the one nearing completion at Douglas point—in the state of Rajasthan in India. The Indian government chose the Canadian designed station as the best means of generating electricity in this part of India. They satisfied themselves that electricity from this power station would be cheaper than any alternative conventional electricity generating station, even though the station is to be built on normal commercial terms. There is no Colombo plan or other aid, either as