

Agreement on Heavy Water Reactor

December 16, 1963

AGREEMENT BETWEEN THE GOVERNMENT OF INDIA AND THE GOVERNMENT OF CANADA IN COLLABORATION IN THE DEVELOPMENT OF HEAVY WATER POWER REACTOR SYSTEMS

New Delhi

This Agreement made as of the 16th day of December 1963 between :

ATOMIC ENERGY OF CANADA LIMITED

therein after called "AECL" which expression shall include its successors and assigns)

OF THE FIRST PART

and

THE PRESIDENT OF INDIA

(hereinafter called the "Government of India" which expression shall include its successors and assigns)

OF THE SECOND PART

WHEREAS the parties to this Agreement have heretofore collaborated and desire to continue to collaborate in the exchange of information of interest to both which has arisen and may arise out of the prosecution of their programs;

AND WHEREAS each of the parties has a program for the development of heavy water moderated power reactor systems;

AND WHEREAS Canada has from the inception of its atomic energy research and development program concentrated on heavy water moderated reactor systems, has built and is operating a nuclear power demonstration plant, and is in the course of completing the same for a purpose necessarily incidental to the recipient's own program, and then only on condition that such information or detailed design data shall not be used for any other purpose.

In recognition of AECL's substantial contribution to the exchange of information and AECL's undertaking to make available detailed design data referred to in Section 5 hereof, the Government of India accepts a valuation of Five Million Dollars (\$ 5,000,000) to be discharged in accordance with arrangements to be completed separately.

This Agreement shall continue for a period of eight years and may be extended by mutual agreement.

IN WITNESS WHEREOF the parties hereto have caused these presents to be executed.

New Delhi.

Atomic Energy of Canada Limited

Sd/-

J.L. GRAY,

President Atomic Energy of Canada Limited.

The Government of India

Sd/-

H.J. BHABHA,

Secretary

Department of Atomic Energy.

AGREEMENT

AGREEMENT, dated the 16th day of December, 1963 between the Government of Canada and the Government of India relating to the Rajasthan Atomic Power Station and the Douglas Point Nuclear Generating Station.

The Government of Canada and the Government of India, having cooperated closely in the development of nuclear energy for peaceful purposes during the past several years, having jointly participated in the construction of the Canada-India Reactor in Trombay, having engaged in a subsequent exchange of extensive and mutually useful information, assistance and technology in the nuclear energy field, and being desirous of continuing and expanding this cooperation for the mutual benefit of both countries and for the further development and application of nuclear energy for peaceful purposes, and having agreed to exchange information on the development and operation of nuclear reactors that are moderated wholly or partly by heavy water, have agreed as follows :

Article I

The Government of Canada will cooperate with the Government of India in the construction of a heavy water moderated nuclear power station, hereafter referred to as the Rajasthan Atomic Power Station, in accordance with such financial and technical arrangements as may be agreed between the two Governments.

Article II

The Government of Canada will provide, through Atomic Energy of Canada Limited, the necessary information and the design with detailed drawings and specifications of the stations upto and including the steam raising equipment.

Article III

The Government of India will be responsible for the erection of the station and will provide the design and detailed drawings of the part of the station beyond the steam raising equipment, including the layout of the stations and the detailed drawings and specifications for the generating equipment, the cooling water system, all ancillary equipment, service and buildings.

Article IV

The selection of the principal firm of engineering consultants for the Rajasthan Atomic Power Station will be by agreement of the two Governments.

Article V

The Government of India will procure from Canada as much of the material and equipment for the station as is available on reasonable terms and which cannot be procured in India.

Article VI

The Government of Canada will provide credit facilities for the purchase of Canadian supplied material, equipment and fuel for the Rajasthan Atomic Power Station in accordance with the provisions of the Canadian Export Credits Insurance Act and arrangements agreed upon by the two Governments.

Article VII

The two Governments agree that half the fuel elements for the initial charge plus such numbers of additional fuel elements as may be required by the Government of India from time to time for the Rajasthan Atomic Power Station will be supplied from Canada by Atomic Energy of Canada Limited at a price, f.o.b. manufacturing plant no higher than that at which similar fuel elements are available at the same time for the Douglas Point Nuclear Generating Station in Canada. It is also agreed that

uranium for the continuing requirements of the Rajasthan Atomic Power Station, to the extent it is not available from indigenous sources within India, will be procured from Canada provided it is available on financial terms no less favourable than those from other sources.

Article VIII

The Government of Canada and the Government of India agree to exchange information on a continuing basis with regard to the design, construction, operation and use of the Rajasthan Atomic Power Station and the Douglas Point Nuclear Generating Station research and development related thereto and problems of health, and safety connected therewith.

Article IX

The two Governments emphasize their common interest in ensuring, and hereby undertake that the fissionable material produced in the Rajasthan Atomic Power Station in India and in the Douglas Point Nuclear Generating Station in Canada will be used only for peaceful purposes.

Article X

The Government of India guarantees that no nuclear material used or produced in the Rajasthan Atomic Power Station will be transferred to unauthorized persons or beyond the jurisdiction of the Government of India except as may be mutually agreed. The Government of Canada likewise guarantees that no nuclear material used or produced in the Douglas Point Nuclear Generating Station will be transferred to unauthorized persons or beyond the jurisdiction of the Government of Canada except as may be mutually agreed.

Article XI

The Government of India will notify the Government of Canada in advance regarding the disposition after removal from the Rajasthan Atomic Power Station of any nuclear fuel and fissionable material produced therein. The Government of Canada will likewise notify the Government of India in advance regarding the disposition after removal from the Douglas Point Station of any nuclear fuel and fissionable material produced therein.

Article XII

The two Governments agree that adequate systems of records shall be established to ensure accountability for all fuel and fissionable material that is on the premises of the Rajasthan Atomic Power Station and the Douglas Point Nuclear Generating Station.

Article XIII

The two Governments agree to further the exchange of technical information and operating experience between the two stations and to ensure that the provisions of this Agreement are being observed. Designated Technical representatives of the Canadian Government and Designated Technical representatives of the Indian Government shall maintain close contact and whenever the designated technical representatives of either Government so request, they shall thereupon be accorded access to all parts of the Rajasthan Atomic Power Station or the Douglas Point Nuclear Generating Station, as the case may be to all other places where fuel or fissionable material used in or produced by the station, or an equivalent amount thereof, is being used, stored or located to the relevant persons and to the relevant data including nuclear fuel records. The designated technical representative shall be entitled, in respect of such fuel and fissionable material, to make such observations and measurements as are relevant to the purposes mentioned herein. The two Governments agree that such observations and measurements as are relevant to the purposes mentioned herein. The two Governments agree that such observations and measurements shall be kept to the minimum consistent with the accomplishment of these purposes.

Article XIV

The two Governments agree to exchange quarterly reports, and special reports in the event of special circumstances at the request of either Government, regarding the operation of the Rajasthan Atomic Power Station and the Douglas Point Nuclear Generating Station. These reports shall contain such detailed information as may be reasonably requested by the recipient Governments.

Article XV

Recognizing the desirability of making use of the facilities and services of the International Atomic Energy Agency, the two Governments will consult with each other from time to time to determine in what respect and to what extent they desire to avail themselves of the services of the International Atomic Energy Agency with regard to this Agreement.

Article XVI

For the purpose of this Agreement, the following definitions will apply :

1. Rajasthan Atomic Power Station means the electrical generating power plant with a net output of approximately 200 MW consisting of one heavy water moderated and heavy cooled reactor of the CANDU type and associated equipment, facilities and premises, to be located at Rana Pratap Sagar, Rajasthan State, India.
2. Douglas Point Nuclear Generating Station means the electrical generating power plant, with a net output of approximately 200 MWe, consisting of one heavy water moderated and heavy water cooled reactor of the CANDU type and associated equipment, facilities and premises located at Douglas Point, Ontario, Canada.

Article XVII

This Agreement reflects the special relations and long standing cooperation existing between Canada and India in the peaceful uses of atomic energy commencing with their joint participation in the -India Reactor at Trombay and the

construction of the Canada reciprocal nature of the arrangements with regard to the Rajasthan Atomic Power Station and the Douglas Point Nuclear Generating Station.

Article XVIII

This Agreement shall come into force on the date of signature.

IN WITNESS WHEREOF the undersigned being duly authorised by their respective Governments have hereunto placed their signatures.

DONE at New Delhi this 16th day of December, 1963 in two original copies.

Sd/-

For the Government of India.

Sd/-

For the Government of Canada.

SUPPLEMENTARY AGREEMENT' AMENDING THE AGREEMENT BETWEEN THE GOVERNMENT OF INDIA AND THE GOVERNMENT OF CANADA RELATING TO THE RAJASTHAN ATOMIC POWER STATION

NEW DELHI, DECEMBER 16 1963

The Government of Canada and the Government of India,
cooperated closely in the development of nuclear energy for peaceful purposes during the past
several years,
HAVING concluded the Agreement relating to the Rajasthan Atomic Power Station and the Douglas
Point Nuclear Generating Station, signed on December 16, 1963,
AND being desirous of expanding cooperation for the further application of nuclear energy for
peaceful purposes,
AGREE as follows :

Article I

Article VII of the Agreement signed on December 16, 1963 is amended to read as follows :
The two Governments agree that half the fuel elements for the initial charge of the first reactor of
the Rajasthan Atomic Power Station to be constructed plus such numbers of additional fuel
elements as may be required by the Government of India from time to time for the Rajasthan
Atomic Power Station will be supplied from Canada by AECL at a price, f.o.b. manufacturing plant, no
higher than that at which similar fuel elements are available at the same time for the Douglas Point
Nuclear Generating Station in Canada. It is also agreed that uranium for the continuing requirements
of the Rajasthan Atomic Power Station, to the extent it is not available from indigenous sources
within India, will be procured from Canada provided it is available on financial terms no less
favourable than those from other sources."

Article II

Article XVI of the Agreement signed on December 16, 1963 is amended by substituting for paragraph
(a) of the Article the following new paragraph (a), to read as follows :
The Rajasthan Atomic Power Station means the electric generating power plant with a total net
output of approximately 400 MWe consisting of two heavy water moderated and heavy water
cooled reactors of the CANDU type and associated equipment facilities and premises to be located
at Rana Pratap Sagar, Rajasthan State, India."

This supplementary Agreement shall enter into force upon signature and shall thereafter remain in
force indefinitely as though it were an integral part of the Agreement of December 16, 1963. IN
WITNESS thereof the undersigned have signed this supplementary Agreement.

DONE, in two copies in the English French and Hindi languages each versions being equally authentic
at NEW Delhi the sixteenth of December 1966.

Sd/-

For the Government of India

Sd/-

For the Government of Canada