

No. 16261

**UNITED STATES OF AMERICA
and
UNITED KINGDOM OF GREAT BRITAIN
AND NORTHERN IRELAND**

**Agreement relating to atomic energy: research on reliability
techniques. Signed at Washington on 10 October 1975**

Authentic text: English.

Registered by the United States of America on 27 January 1978.

**ÉTATS-UNIS D'AMÉRIQUE
et
ROYAUME-UNI DE GRANDE-BRETAGNE
ET D'IRLANDE DU NORD**

**Accord relatif à l'énergie atomique : recherche en matière
de fiabilité. Signé à Washington le 10 octobre 1975**

Texte authentique : anglais.

Enregistré par les États-Unis d'Amérique le 27 janvier 1978.

AGREEMENT¹ BETWEEN THE UNITED STATES OF AMERICA AND THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND RELATING TO ATOMIC ENERGY: RESEARCH ON RELIABILITY TECHNIQUES

An agreement made the tenth day of October 1975 between the United Kingdom Atomic Energy Authority acting on behalf of the National Centre of Systems Reliability (hereinafter called "the Authority"), of the one part, and the United States Nuclear Regulatory Commission (hereinafter called "the NRC"), of the other part;

Whereas the Authority through its Systems Reliability Service have undertaken investigations with the application of quantified reliability techniques and have a background of experience in reliability assessments; and

Whereas the Authority and the NRC have an interest in developing the techniques with particular application to nuclear power systems; and

Whereas the NRC intends to make a financial contribution to a programme of research and investigational work associated with the assessment of the validity of reliability predictions to be undertaken by the Authority;

It is agreed as follows:

1. SCOPE

(1) The special area of work for research and investigation shall be specified by the Authority but shall include work in the following areas:

(i) *A survey of the Authority's experience.* The reliability assessments carried out in the past by the Authority will be surveyed, selected and summarized to provide a set of predicted reliability parameters over a range of plant items of equipment and systems but excluding structures.

Wherever possible corresponding information would be sought, retrieved and analyzed on the values that have been observed in practice for the same reliability parameters. The aforementioned range of plant items will be selected such that it is pertinent to understanding the validity of reliability predictions for items of equipment and systems incorporated in nuclear installations.

(ii) *A survey of other related experience.* A similar survey to (i) above will be made by seeking the collaboration of at least 2 other organizations working in the reliability analysis field. Such organizations could include the Associate Members of the Systems Reliability Service (a service to industry operated under the National Centre of Systems Reliability) and various other organizations who are known by the Authority and the NRC to be working in the appropriate reliability field.

(iii) *An analysis of results.* Correlations will be investigated between the predicted and observed values of reliability parameters and comments made on any trends, limitations or assumptions that appear. Reasons for any lack of correlations will also be investigated.

(2) The detailed programme of work shall be determined by the Authority as consistent with the general scope described in subparagraph (1) of this clause, but may be modified from time to time by the Authority who will notify the NRC of any changes. Changes to the general scope described in subparagraph (1) of this clause will not be

¹ Came into force on 10 October 1975 by signature, with retroactive effect from 21 August 1975, in accordance with paragraph 2.

made without the prior written agreement of the NRC which shall not be unreasonably withheld. Should the NRC wish to extend the programme to cover additional spheres of investigation they will notify the Authority who will give reasonable consideration to such a request.

2. PERIOD OF AGREEMENT

The Agreement shall take effect from August 21, 1975, and shall remain in force until September 30, 1977.

3. FINANCE

(1) The Authority and the NRC shall each be responsible for meeting their own costs which may be incurred in executing the programme of work.

(2) The NRC will pay to the Authority a sum of £12,500 or forty per cent of the total costs incurred by the Authority under this Agreement, whichever is the lesser amount. The Authority will notify the NRC of the total costs which they have incurred which will be calculated in accordance with their normal commercial practice.

(3) The contribution to be paid to the Authority by the NRC may be varied by mutual agreement of both Parties in the event of the programme of work being substantially changed.

4. PAYMENT

(1) The NRC shall pay to the Authority the sum of £6,000 within one month after the date of this Agreement. The balance of the sum due under clause 3 of this Agreement shall become payable within one month after the date of notification by the Authority to the NRC of the total costs which the Authority have incurred provided that the NRC has received the final report described in clause 8 (Authority Report).

(2) Payment of the amounts due shall be made to:

The National Westminster Bank Ltd.
23 Sankey Street
Warrington, England

for the account of the United Kingdom Atomic Energy Authority by means of a sterling cheque free of all deductions.

5. PROJECT MANAGEMENT

(1) The Authority will appoint a representative who shall be responsible for agreeing [to] the extent of the work and supervising its execution. The name of the appointed representative shall be notified in writing to the NRC and may be changed at any time.

(2) The NRC shall nominate a representative who will be responsible for acting as liaison officer and to whom all formal communications shall be addressed.

6. FACILITIES TO BE PROVIDED BY THE AUTHORITY

(1) The Authority shall provide suitable staff and facilities to undertake the programme of work.

(2) The Authority shall provide such facilities as may be required from time to time to members of the NRC's staff for occasional visits to the Authority's premises.

7. INFORMATION AND FACILITIES TO BE PROVIDED BY THE NRC

(1) The NRC will make best efforts to provide, or to make suitable arrangements for other organizations situated in the United States to provide, to the Authority, infor-

mation, basic data, information on analytical methods of prediction, details of equipment and its operational situation and performance, etc., of a similar nature to that described in clause 1(1)(i)(Scope). Such provision or arrangements by the NRC shall be in accordance with the U.S. Federal law. Provision of the final report described in clause 8 to the NRC is not contingent upon NRC providing the aforementioned information to the Authority. The Parties recognize that other organizations may impose proprietary restrictions on the information that they furnish to the NRC.

(2) The NRC shall provide such facilities as may be required from time to time to members of the Authority's staff for occasional visits to the NRC's premises.

8. AUTHORITY REPORT

(1) The Authority shall produce a report on completion of the work to be carried out under this Agreement for use by the NRC.

(2) The purpose of the report will be to give an appreciation of the correlation between the results of using methods of predicting reliability characteristics of equipment and systems and the measurements of these characteristics in practical applications.

(3) The form of the report shall be agreed with the NRC but it shall be of a generic nature only and may not include specific data or information which is considered to be proprietary or confidential.

(4) The Authority will afford to the NRC an opportunity to comment upon a draft of the report.

(5) The Authority shall deliver not more than five (5) copies of the final report.

9. RESTRICTIONS ON THE USE AND DISCLOSURE OF INFORMATION

(1) All supporting reports, data, drawings, specifications and other information or intellectual property of any kind arising from the activities of the Authority under this Agreement shall be and shall remain the property of the Authority. It is understood and agreed between the Parties hereto that in the event information and data of a proprietary nature is exchanged, such exchange shall be made on a confidential basis. All such information and data shall carry proper legends specifying that such information and data is confidential and proprietary and is being transmitted under the terms of this Agreement, and shall not be disclosed or reproduced or used in any manner inconsistent with this Agreement, or the national laws of the Parties hereto.

(2) The NRC shall not disclose the draft report to any third Parties.

10. USE OF SUPPORTING INFORMATION AND DATA

(1) Subject to any pre-existing rights of any third Parties, all supporting information and data provided by the Authority or the NRC under this Agreement shall remain the property of the Authority and the NRC respectively. Such supporting information and data shall not be disclosed to any third Party without the prior written consent of the Authority or the NRC respectively.

(2) Subject to any pre-existing rights of any third Parties, the Authority shall have the right to use all supporting information and data provided to the Authority by the NRC under this Agreement, solely for the purposes of the work to be carried out under this Agreement and for incorporation in the Data Bank operated by the Systems Reliability Service of the Authority and to apply it to appropriate cases provided that the information when so used shall not be attributable to the NRC and/or its source or origin unless otherwise agreed.

11. RESPONSIBILITY FOR INFORMATION

Whilst the Authority shall take all reasonable measures to ensure that any final report, advice, assessment or information provided by them to the NRC under the provisions of this Agreement is accurate and accurately reflects current thinking and procedures within the Authority, the Authority gives no warranty that the said final report, advice, assessment or information is in fact accurate and the Authority shall not be liable to the NRC in contract or tort or otherwise for any claims arising from the use of such report, advice, assessment or information or arising from the design, manufacture, installation or use of any article or process consequent upon the use of the said report, advice, assessment or information. In the event that the NRC shall distribute copies of the final report, the following legend shall be affixed to each such copy: "This report was prepared under partial sponsorship of the U.S. Government. Neither the United States nor the U.S. Nuclear Regulatory Commission, nor any of their employees, nor any of their contractors, subcontractors, or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness or usefulness of any information, apparatus, product or process disclosed, or represents that its use would not infringe privately owned rights."

12. PATENTS

(1) The Parties agree that, with respect to all right, title, and interest in and to any invention or discovery made or conceived by either Party in the course of, in connection with or under the technical work performed under and during the term of this Agreement, or any patent application or patent thereon:

- (i) the authority shall be entitled to all such right, title and interest in all countries other than the United States of America, subject to a royalty-free, non-exclusive, irrevocable license, with the right to grant sub-licenses, to the NRC;
- (ii) the NRC shall be entitled to all such right, title and interest in the United States of America, subject to a royalty-free, non-exclusive, irrevocable license, with the right to grant sub-licenses, to the authority.

(2) Each Party agrees to waive, and does hereby waive, any and all claims against the other Party for compensation, royalty and award as regards the use of any such invention, discovery, patent application or patent in the production or utilization of atomic energy or special nuclear material, and agrees to release, and does hereby release, the other Party with respect to any and all such claims.

(3) As to inventions and patents under paragraph A, neither Party shall discriminate in the granting of any license or sub-license for the reason that the proposed licensee is a citizen of the country of the other Party.

(4) The Parties agree that all situations not specifically covered shall be settled by mutual agreement governed by the basic principle of equivalent benefits to both Parties.

13. OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

14. COVENANT AGAINST CONTINGENT FEES

The Authority warrants that no person or selling agency has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a

commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Authority for the purpose of securing business. For breach or violation of this warranty, the Commission shall have the right to annul this Agreement without liability, or in its discretion to deduct from the consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

15. ENTIRE AGREEMENT

This Agreement contains the entire and only Agreement between the Parties affecting the rights and obligations of the Parties to this Agreement, and prior negotiations, commitments, and writings with respect thereto are superseded hereby. No waiver, alteration or modification of any of the provisions hereof shall be binding unless incorporated in a duly executed amendment of this Agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this document as of the day and year first above written.

United Kingdom
Atomic Energy Authority:

J. GAUNT
Attaché, Atomic Energy
British Embassy

United States of America
by United States Nuclear
Regulatory Commission:
LEE V. GOSSICK
Executive Director for Operations