## PROJECT AGREEMENT III

## **BETWEEN**

THE UNITED STATES DEPARTMENT OF ENERGY (DOE)
AND THE

NATIONAL COOPERATIVE FOR THE STORAGE OF RADIOACTIVE WASTE IN SWITZERLAND (NAGRA) IN THE AREAS OF SITE CHARACTERIZATION, REPOSITORY PERFORMANCE, VALIDATION, AND SORPTION

Whereas, the United States Department of Energy (DOE) and the National Cooperative for Storage of Radioactive Waste in Switzerland (NAGRA), hereinafter the "Parties," are engaged in an exchange research and development information and participation in joint research efforts under the terms of a Cooperative Agreement dated April 19, 1985, as extended by and exchange of letters on August 8 and 15, 1990, and as amended and extended by agreement dated \_\_\_\_\_\_, hereinafter called the "Waste Management Agreement";

Whereas, DOE and NAGRA have a mutual interest in improving methods to analyze the safety of undergroung nuclear waste disposal, DOE contractors and Yucca Mountain Project (YMP) participants have extensive experience in this field, the NAGRA program is producing appropriate data from field measurements in boreholes, and DOE YMP participants are also producing appropriate data from field and laboratory measurements; and

Whereas, the Parties have a mutual interest in conducting a joint project in the areas of site characterization, repository performance, validation and sorption under the Waste Management Agreement.

The Parties hereby agree as follows:

- 1. The objective of this Project Agreement is to provide a framework for joint research on a technical project (hereinafter "Joint Project") concerning: (1) optimization of site characterization methods; (2) an improved understanding of specific key processes which determine repository performance; (3) validation of specific models on data collection procedures; and (4) derivation of bulk sorption parameters of radionuclides on natural rocks and validation of transport models. The results from the Joint Project shall be used in both the United States (U.S.) and Switzerland.
- 2. Each Party shall appoint a Technical Coordinator. The Technical Coordinator shall meet alternatively in Switzerland and the U.S., at least annually, to review the activities of the past years, to evaluate the status of cooperation, and to approve project plans for the upcoming years including specific detailed plans for activities for the following year. The Technical Coordinators shall have the authority to approve and implement changes to the scope of work, provided that such changes do not significantly affect the Joint Project or the Parties' total financial contributions thereto.

- 3. A Technical Advisory Committee (TAC) shall be established with representatives from both the U.S. and Switzerland as designated by the Technical Coordinators. This TAC shall meet alternatively in Switzerland and the U.S., at least annually or more often as mutually agreed upon by the Technical Coordinators, to review proposed and ongoing activities under the Joint Project and shall make recommendations to the Technical Coordinators.
- 4. The tasks under this Project Agreement shall be carried out using data obtained from laboratories, boreholes test sites, underground rock laboratories, and potential waste disposal sites in Switzerland and laboratories and field sites in the U.S. The output of these studies shall generally be reports on the work performed, computer program listings, and examples of applications. Appendix A contains the detailed scopes of work and budgets for each of the tasks under the Joint Project as well as requirements for planning and reporting.
- 5. A. DOE shall provide funding for the services of YMP participants and DOE contractors, the use of laboratories and other appropriate facilities, necessary equipment and supply costs, and ancillary staff services, as required, to support the tasks outlined in Appendix A. Such U.S. contributions to the Joint Project is estimated at \$3 million. The estimated breakdown by U.S. fiscal years (FY) is as follows:

FY	1991	\$	450,000
FΥ	1992		600,000
FΥ	1993		600,000
FY	1994		600,000
FΥ	1995		600,000
FΥ	1996		150,000
TOTAL		\$3	,000,000

- B. In addition, DOE shall provide further funding to cover the U.S. project management costs related to the Joint Project.
- 6. NAGRA shall provide the services of necessary NAGRA or contractor staff to support the tasks outlined in Appendix A. These services shall include the costs of the required manpower valued approximately at a total of \$13,900,000 over the 5-year period under this Project Agreement. Data already acquired by NAGRA to be used under this Project Agreement have been collected at a cost of \$6,160,000. Additional field costs, laboratory time, and manpower may be contributed at the discretion of NAGRA.
- 7. Neither DOE, the U.S. Government, or persons acting on its behalf guarantee the correctness of any cost estimate for the performance of work (either for this Project Agreement or individual tasks hereunder) and there shall be no liability on

the part of DOE, the U.S. Government, or persons acting on its behalf by reason of errors in the computation of estimates or differences between estimates for the tasks and the actual cost of the work.

- 8. Prior to the attachment of staff under this Project Agreement, both Parties shall put in place a separate attachment agreement as outlined in Article 5 of the Waste Management Agreement.
- 9. Both Parties agree that no information or equipment identified as requiring protection for national security reasons (such as that which is classified) by either Party shall be provided under this Project Agreement. In the event that such information or equipment should unintentionally be created or furnished in the course of projects of cooperation under this Project Agreement, it shall be protected from unauthorized disclosure under applicable laws, regulations, and administrative practices. Where information or equipment has been inadvertently disclosed to unauthorized recipients, the originating Party shall be informed. Any difficulties in providing appropriate protection for sensitive information or equipment shall be the subject of consultations between both Parties.
- 10. The terms of the Waste Management Agreement, amended and extended, shall apply to this Project Agreement unless specifically changed by this Project Agreement.
- 11. The work to be performed under this Project Agreement shall be considered to be "joint research" within the meaning of paragraph 3.B(2) of Article 6 of the Waste Management Agreement, as amended and extended.
- 12. This Project Agreement shall not supersede the international obligations, national laws and regulations of each Party with respect to transfers and release of information and equipment subject to export and re-export laws and regulations.
- 13. Except when otherwise agreed in writing, all costs resulting from cooperation under this Project Agreement shall be borne by the Party that incurs them. It is understood that the ability of each Party to carry out its obligations under this Project Agreement is subject to the availability of appropriated funds.
- 14. This Project Agreement shall enter into force upon signature by both Parties and remain in force for 5 years. It may be amended or extended by mutual written agreement, and it may be terminated at any time by either Party upon 6-months advance written notice to the other Party, without prejudice to the rights which may have accrued under this Project Agreement to either Party up to the date of such termination. All joint

efforts and experiments not completed at the expiration or termination of this Project Agreement may be continued, upon mutual written consent, until their completion.

Done at WETTINGEN	this 232d day
of SEPTEMBER	, 1991.
FOR THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA:	FOR THE NATIONAL COOPERATIVE FOR THE STORAGE OF RADIOACTIVE WASTE IN SWITZERLAND:
(Signature) Sattlett	J. W Chillems (Signature)
JOHN W. BAKTLETT (Printed Name)	Haw ISSLER CHARGE M'CMISE (Printed Name)
DIRECTOR OCRWM	President TELL VIECTO