

June 3, 2002

Dr. James F. Devine,  
Senior Advisor for Science Application  
Office of the Director  
U.S. Geological Survey  
U.S. Department of the Interior  
12201 Sunrise Valley Drive  
Reston, VA 20192

SUBJECT: MEMORANDUM OF UNDERSTANDING BETWEEN THE U.S. GEOLOGICAL SURVEY AND THE U.S. NUCLEAR REGULATORY COMMISSION

Dear Dr. Devine:

Attached is a Memorandum of Understanding (MOU) between the U.S. Geological Survey (USGS) and the U.S. Nuclear Regulatory Commission (NRC). The purpose of this MOU is to establish a basic understanding and framework under which the USGS will provide technical expertise to the NRC under an Interagency Agreement (IA) that will be developed and signed by both Agencies. The scope of this agreement will cover site safety reviews related to the areas of geology, hydrology, and seismology for Early Site permit applications. Specific requirements will be detailed in task order Statements of Work (SOW) following the guidance contained in NRC Management Directive (MD) 11.8, "NRC Procedures for Placement and Monitoring Work with Other Federal Agencies Other than DOE." A copy of this MD was furnished to you under separate cover.

Subsequent to the signing of the attached MOU, the NRC will prepare and issue the aforementioned IA for your approval. This IA will provide the procedures by which the task orders will be placed. If you have questions regarding this matter or the attached MOU, please contact Dr. Cliff Munson at 301-415-2529.

Sincerely,

***/RA by EXI for CAC/***

Charles A. Casto, Acting Division Director  
Division of Engineering  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission

Enclosure: As stated

**ADAMS ACCESSION NUMBER: ML021550404**

OFFICE	EMEB:DE		DE		DE		EMEB:DE		EMEB:DE	
NAME	CMunson		BGrenier		GBagchi		KManoly		Elmbro	
DATE	05 / 21 /02		05/ 24 /02		05/ 28 /02		05/ 28 /02		05/ 28 /02	

OFFICE	OGC		DE:DD		DE:D	
NAME	EWilliamson		RBarrett		CCasto	
DATE	06/ 03 /02		06 / 03 /02		06/ 03 /02	

**OFFICIAL FILE COPY**

Memorandum of Understanding  
between the  
United States Geological Survey  
and the United States Nuclear Regulatory Commission

This Memorandum of Understanding (MOU) is entered into between the United States Nuclear Regulatory Commission (NRC) and the United States Geological Survey (USGS).

The authorities for this agreement are: 1) the Economy Act of June 30, 1932, 31 U.S.C. 1535 and 2) Section 205 (c) of the Energy Reorganization Act of 1974, 42 U. S. C. 5845(c).

By the National Earthquake Hazard Reduction Act (PL-95-124) of 1977, the USGS has the primary responsibility for geologic hazard studies and evaluations. The USGS has long been recognized as the lead agency in the U.S. government in the areas of geology, hydrology, and seismology. The purpose of this MOU is to provide a mechanism for coordinating activities to be engaged in between the NRC and the USGS. Under this MOU, an interagency agreement will be developed to obtain technical assistance, as needed, to be furnished by the USGS to the NRC on site safety reviews related to the areas of geology, hydrology, and seismology.

NRC's guidance documents for conducting the site safety reviews stem from Title 10 of the *Code of Federal Regulation (CFR)* Parts, 50 and 100. The portions of 10 CFR relevant to site natural hazard safety reviews are:

1. 10 CFR Part 50: Appendix A, General Design Criterion# 2 -- Design bases for protection against natural phenomena,
2. 10 CFR Part 100.23 Geologic and seismic siting criteria,
3. 10 CFR Part 100: Appendix A, Seismic and Geologic Siting Criteria for Nuclear Power Plants,
4. 10 CFR Part 52, Subpart A -- Early Site Permits,

Additional guidance associated with the above regulations is provided by the Standard Review Plan (NUREG 0800) and several regulatory guides.

For Construction Permits, Operating Licenses and Early Site permit applications, the USGS will assist NRC in conducting site safety reviews in accordance with the applicable guidance listed above. For each specific application, the NRC will furnish materials from the application and identify and provide copies of applicable guidance material specific to the review request. The USGS will assign employees with the appropriate expertise to review the assigned sections of the application and to prepare input for a technical evaluation report identifying additional information that will be needed to draw a safety conclusion using the acceptance criteria in the NRC furnished guidance. This report will be submitted to the NRC technical monitor, who will review and discuss the information need with the principal investigator at the USGS, finalize the information need, and submit the request for information to the NRC project manager for the application. The applicant's response will be provided to the USGS principal investigator by the NRC, who will then revise the draft safety evaluation report and submit the revised report to the NRC technical monitor. Activities associated with these evaluations may necessitate a literature review, confirmatory analysis and a site visit as appropriate. USGS reviewers may be

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required to make presentations on their work at public meetings and to prepare and present testimony at hearings.

Specific requirements, related to the technical assistance furnished by the USGS to the NRC on site-specific reviews, will be detailed in a Statement of Work (SOW) and processed under an Interagency Agreement, following the guidance in NRC Management Directive (MD) 11.8, "NRC Procedures for Placement and Monitoring Work with Other Federal Agencies Other than DOE." A copy of MD 11.8 is furnished herein for ease of reference.

In addition to the technical assistance furnished by the USGS to the NRC on site-specific reviews, this agreement also provides for an annual exchange of technical information related to site-specific review topics. These topics would include recent advances in the area of seismic hazard analysis as well as other areas pertinent to site safety reviews.

This agreement shall become effective on the last signature date below, and shall remain in effect until it is terminated or renegotiated upon request by either party. Either party may terminate this Agreement upon providing the other party a ninety day (90) days written notice. If either party finds that its terms need to be modified or amended, the other party shall be notified in writing of the specific change(s) desired, with proposed language, and the reason(s) therefor. A proposed change shall become effective upon written mutual consent of both parties, and shall then become a part of this Agreement.

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Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission

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Office of the Director  
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U.S. Department of the Interior