What procedures are in place for collecting and documenting agency seismic safety information and for assessing and providing the information to FEMA when necessary?

The OSH is the designated lead on Seismic Safety. All information concerning the EO 12699 is passed through this office prior to field dissemination. The reverse is true when the need for gathering information for FEMA is required. The information is collected in the OSH and then forwarded to the Bureau of Reclamation (BOR) which is the Departmental lead agency.

Has your agency adopted seismic safety design and construction standards for agency use? If so how are they used?

The FWS has adopted the seismic safety design and construction standards as outlined in the Guideline and is documented in the FWS Manual 360.

Formal reviews are held for seismic safety design, and field inspections are conducted to insure compliance with EO 12699.

Describe special initiatives and accomplishments of your agency in achieving improved seismic safety for new building construction.

The primary initiative and accomplishment in achieving seismic safety, other than implementation, was the formalization of seismic safety in the FWS manual.

3. Progress on Implementation Plan

Report the progress your agency has made on its implementation plan for the Order. Are responsibilities clearly assigned?

The FWS has fully implemented the EO 12699. Responsibilities are set and clearly assigned within the FWS Manual.

Describe changes within the agency in the administration of the seismic safety program, policy, budget, organizational, and staff changes. Has a viable administrative framework been established for implementation of the requirements of the Order and for addressing the substantive and procedural steps set out in the Guidelines?

No specific changes were made. The organizational structure already in place effectively implements EO 12699.

Is your agency's seismic safety organization, staff and budget adequate? If not, identify actions being taken to overcome the deficiencies.

The organization, staff, and budget are adequate. The seismic safety in new construction was implemented through the continued use of current codes, which establishes cost and the normal process for budgeting.

Report on the provisions made to insure that the seismic safety actions being taken are technically sound.

Formal review of design and construction is a continual process which ensures that recommended seismic standards are incorporated.

4. Impact on Agency Operations

Assess the impact of the agency changes on the effectiveness of accomplishing seismic safety objectives.

Overall the implementation of EO 12699 has had a negligible impact on FWS operations. Costs have risen insignificantly since the FWS included seismic recommendations into its construction activities.

Provide information on the impact of the Order on agency operations, both positive and negative. Beneficial impacts can be expressed by reduced risks to lives of building occupants, improved capability of critical buildings to function during and after an earthquake, and reduce potential for damage losses. Negative impacts can include such aspects as excessive additional costs, or major time delays in construction, regulatory approval or provision of Federal financial assistance.

The impact on FWS operations has been positive. The benefits have resulted in reduced employee and visitor risks in times of earthquakes. In addition, the savings to valuable equipment and wildlife has more than covered the cost of meeting seismic safety recommendations.

Report on agency seismic safety training and education activities which your agency has performed or supported. Identify actions being taken to strengthen these activities.

Other than the workshop provided by FEMA on the introduction of seismic safety, no training has been provided. The normal engineering design specifications and code compliance have been an ongoing part of engineering practices in FWS. As classes become available, employees with seismic safety responsibilities will be further trained.



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
DIVISION OF SAFETY MANAGEMENT
P.O. BOX 2186
ALBUQUERQUE. NEW MEXICO 87103

Mr. Charles E. Anderson DOI Seismic Safety Coordinator Bureau of Reclamation, D-3130 P.O. Box 25007 Denver, CO 80225

Per your June 16, 1992 FAX request, the Bureau of Indian Affairs 1992 progress report on the Seismic Safety Program pursuant to Executive Order 12699 is enclosed for your information and disposition.

Should you have any questions, please call the Division of Safety Management, Albuquerque, New Mexico, Virgil Pochop or Dave Newcomb (505) 766-2863.

Sincerely,

Chief, Division of Safety Management

Enclosure

BUREAU OF INDIAN AFFAIRS

SEISMIC SAFETY PROGRAM FOR NEW CONSTRUCTION 1992 PROGRESS REPORT TO FEMA ON EXECUTIVE ORDER 12699

1. Introduction

The Bureau of Indian Affairs is responsible for implementing and enforcing the seismic safety requirements for new federally owned buildings constructed to support Bureau programs. Buildings provided are schools, gymnasiums, law enforcement centers, administrative offices, shops, warehouses, employee quarters and miscellaneous support facilities at over 200 locations in twenty six states.

2. Status of Agency Procedures

The Bureau has adopted and uses seismic design and construction standards for all new structures and portions thereof. This has been a design requirement of the agency health and safety inspection program manual for several years. Earthquake design requirements are specified to be in conformance with the current edition of the Uniform Building Code (UBC). Designs are reviewed for earthquake compliance by agency structural engineers during the design development. Qualified field inspectors are employed to assure compliance with the design plans and specifications during construction. Design, construction and field inspection services are performed by contract with private A/E firms and construction contractors.

Presently there are no procedures in place for the collection, documentation and assessment of agency seismic information for reporting to FEMA. A letter of information and questionnaire was distributed to program directorates at all levels asking for information for determining the overall scope and/or applicability of the various program activities under the Seismic Safety Program. This will provide the base line information needed to establish the procedures for implementation, monitoring and compliance with the reporting requirements. Agency policies and procedures will be implemented as the Department program becomes functional.

3. Progress on Implementation Plan

The Division of Safety Management (DSM) has been designated by the agency to have overall responsibility for the Seismic Safety Program.

The Facilities Construction and Construction Center (FMCC) is responsible for most of the new building construction programs administered by the agency. Although the UBC has been in place for all new building design, procedures must still be established and implemented to require design A/E firms to certify earthquake designs and Inspection firms to certify construction compliance. This will be accomplished by including these requirements in all future design, construction and inspection contracts.

4. Impact on Agency Operations

Policies and procedures are to be developed and adopted based on the Executive Order guidelines for all affected agency activities. The program implementation, recording, tracking, monitoring and reporting will be accomplished with existing staff. The benefits derived from these efforts will be the improved capability of critical buildings to function during and after earthquakes, reduced potential for damage losses and reduced risk to lives of building occupants.

Other than for technical training of engineering personnel, no seismic safety training has been performed for agency staff. Engineering staff responsible for monitoring earthquake design and construction are technically qualified.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT SERVICE CENTER DENVER FEDERAL CENTER, BUILDING 50 P.O. BOX 25047

DENVER, COLORADO 80225-0047

In Reply Refer To: 9151 (WO 1500.08) (SC-673)

Memorandum

To: DOI Seismic Safety Coordinator

From: BLM Seismic Safety Contact

Subject: 1992 Progress Report, Executive Order 12699

The following progress report is transmitted in response to FEMA's request for information on our program implementing the Executive Order on seismic safety of new construction. This report covers the period from January 5, 1990 to the end of Fiscal Year 1992.

1. INTRODUCTION

BLM has the responsibility for new building construction and leased space for BLM on public lands. Public lands under BLM responsibility are mainly located in the western half of the United States and are under the control of 12 state offices. The Service Center located in Denver, Colorado provides the engineering expertise to the state offices for new building designs. The designs are accomplished in-house or by architect/engineer contracts. New buildings include small restroom facilities, office buildings, visitor centers, and warehouses.

All of our in-house designs are checked for lateral seismic loadings according to the "Uniform Building Code" and our architect/engineer contracts require the A/E firm to comply with the seismic provisions of the "Uniform Building Code." Our BLM lease agreements require certification by a registered structural engineer that the building meets the seismic provisions of the current "Uniform Building Code."

STATUS OF AGENCY PROCEDURES

Currently, we have no written regulations or procedures for implementing the requirements of Executive Order 12699 on seismic safety. It has been part of our normal engineering design practices to consider all possible loadings on our structures. To comply with Executive Order 12699, the BLM plans to write a policy on seismic safety establishing the minimum acceptable seismic design standards for those building programs that affect the BLM.

The policy, in the form of a BLM Instruction Memorandum, will be issued by our Washington Office and disseminated throughout the BLM system. This policy will eventually be incorporated into our BLM Policy Manuals. We expect to have the Instruction Memorandum issued, after all of our reviews, comments, and approval, approximately December 1992.

Our policy will reference the "Uniform Building Code" for seismic design for our western U.S. geographic locations. Design for wind forces on a building may be included in this policy because we feel that it could be the governing condition on lighter buildings and that its exclusion could diminish its importance in structural design.

We have no procedures in place for collecting and documenting our seismic safety information because we are unsure what type of information is required. We need FEMA to be more specific on this requirement. Interpretation of the Executive Order could lead to collecting a lot of unnecessary information. We hope this requirement can be realistic and not include any research tasks that we are not capable of doing.

3. PROGRESS ON IMPLEMENTATION PLAN

Mr. L.J. Porter, Chief, Branch of Building Engineering has been designated as the Bureau of Land Management's point of contact. Mr. Daniel Kawamoto, a structural engineer in the Branch, has been named as an alternate. This Branch has been assigned the responsibility for establishing Bureau policy for seismic safety.

Because seismic safety has always been a part of our design process, we plan no changes to our procedures. The policy we plan to issue on seismic safety will be a written verification of those procedures. Therefore, we see no changes to our organization, budget, or staff in the near future unless any implementation requirements greatly impact our priority design work.

4. IMPACT ON AGENCY OPERATIONS

We see no negative impact to BLM operations in accomplishing seismic safety objectives. We will continue to design our buildings to resist seismic forces and feel that the written policy will not change our procedures or increase our costs.

Our structural personnel are continually updating their skills in the area of seismic safety by attending classes and seminars on any code changes, design philosophy, or to increase our awareness. We plan to increase our ability in seismic design by utilizing computers and structural software that will do dynamic analysis. This program is already in place.

1) Touter

If you have any questions, please contact L.J. Porter at (303) 236-0119 or Daniel Kawamoto at (303) 236-2242.

cc: Duane Tabb WO-730



United States Department of the Interior

NATIONAL PARK SERVICE DENVER SERVICE CENTER 12795 W. ALAMEDA PARKWAY P.O. BOX 25287 DENVER, COLORADO 80225-0287

JUN 0 8 1992

A7615 (DSC-S)

Memorandum

To: Charles Anderson, DOI Seismic Safety Coordinator, Bureau

of Reclamation, D-3130

From: Safety Engineer, NPS Seismic Safety Coordinator, Branch

of Safety Management, Engineering Services Division,

Denver Service Center

Subject: NPS Seismic Safety Progress Report

The National Park Service (NPS) constructs a variety of employee and public buildings for administration, operation, and other park uses. Most of the buildings are designed and constructed by Denver Service Center (DSC) staff or through contracted A & E's. Buildings not constructed by the DSC are designed and constructed by NPS Regional Offices or by the parks. Therefore, all buildings constructed in the parks are the responsibility of the NPS to assure compliance with Executive Order (EO) 12699, Seismic Safety.

Presently, our method to implement EO 12699 is through our NPS-50 guideline on Loss Control Management, Sept. 1991. In the guideline, chapter 3 specifies the Uniform Building Code as our design standard for new construction. This code was specified because other model building codes lacked definitive seismic safety requirements. Since publication of our guideline, we have incorporated the Uniform Building Code seismic safety standard into all buildings designed and constructed by the DSC, region or park.

Now we have learned that other model building codes have adopted the National Earthquake Hazard Reduction Program (NEHRP) recommended provisions. This adoption will improve our use of their design codes in regions of the country not familiar with the Uniform Building Code. The implementation of this change will need to be made in our NPS-50 guideline during the next revision cycle. In the interim, we will use the NPS Staff Directive approach to make the change. This should be accomplished by October 1992. In addition, the directive would include other aspects of EO 12699 necessary to initiate the development of a seismic safety program. The program would then cover items such as policy, responsibility, reporting, training, budgeting, staffing, seismic data collection, existing buildings, risk assessment, and measuring effectiveness.

At present, I have been assigned the responsibility of developing the NPS seismic safety program. Staff, budget, and organizational impact have not been evaluated for either administrative viability or adequacy concerning implementation of seismic safety standards. I expect to have information on these factors by summer's end in order to address them in the staff directive. Until then, I have little knowledge of the positive and/or negative aspects of EO 12699 concerning costs, benefits, reduced risks, time delays, etc.

While we do not have a documented seismic safety program in place at this time, we are designing and constructing buildings in accordance with seismic safety standards. This essentially meets our responsibility outlined in section 1 of EO 12699.

If you have questions concerning this approach in fulfilling our responsibility to implement EO 12699, please give me a call at (303) 969-2196.

Smult Referreff
Kenneth Rueff



United States Department of the Interior

GEOLOGICAL SURVEY RESTON. VA 22092

MEMORANDUM

DATE : June 17, 1992

FROM: E. Şafak, USGS Seismic Safety Contact & STO: C. Anderson, DOI Seismic Safety Coordinator

SUBJECT: Progress on implementation of Executive Order 12699

This memorandum is to inform you on the progress at the U.S. Geological Survey on implementation of the Executive Order 12699 of January 5, 1990, Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction.

With a few exceptions, all the buildings occupied by the USGS are owned or leased by the General Services Administration. The Office of Facilities and Management Services (OFMS) of the USGS is informed of the Executive Order and its requirements. The OFMS has determined that currently there are only two new buildings under construction owned by the USGS. One is in Menlo Park, California, and the other is in Sioux Falls, South Dakota. Both buildings meet or exceed the seismic design criteria given in the three model building codes recommended by the Interagency Committee on Seismic Safety in Construction (ICSSC, RP 2.1).

We are considering to adopt a formal policy which will require that the designs of all new buildings leased or constructed by the USGS comply with the NEHRP Recommended Provisions for the Development of Seismic Regulations for New Buildings developed by FEMA, or with seismic provisions in one of the following three codes as recommended by the ICSSC: the Uniform Building Code by the International Conference of Building Officials, the National Building Code by Building Officials and Code Administrators International, and the Standard Building Code by the Southern Building Code Congress. If the Department of Interior decides to have a general seismic safety policy applicable to all of its agencies, we will then follow the department's policy.

Since most of the USGS buildings are owned or leased by the GSA, the implementation of the Executive order is not expected to have any major impact on the USGS's operations.



United States Department of the Interior L



MINERALS MANAGEMENT SERVICE WASHINGTON, DC 20240

2 9 JUN 1992

Memorandum

To: Department of the Interior Seismic Safety Coordinator

From: Chief, Engineering and Technology Division

Subject: Federal Emergency Management Agency (FEMA) Request for

Seismic Safety Progress Report

With reference to your request of June 16, 1992, I am forwarding the subject progress report. The Minerals Management Service (MMS) is the regulatory agency for offshore oil and gas operations and, as such, is not responsible for any "new building construction" as called for in the National Institute of Standards and Technology's document, NISTIR 4852, entitled "Guidelines and Procedures for Implementation of the Executive Order on Seismic Safety of New Building Construction." However, MMS reviews and adopts appropriate current industry standards for the seismic design of new platforms and pipelines which are to be located in offshore areas subjected to earthquakes.

Should you desire additional information on this matter, please call Charles Smith, MMS Seismic Coordinator, at 703-787-1559.

Defaloup

E. P. Danenberger

Attachment

U.S. Department of the Interior Minerals Management Service 1992 Progress Report on Executive Order 12699

"Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction"

- 1. Introduction: The Minerals Management Service (MMS) of the U.S. Department of the Interior, assesses the nature, extent, recoverability, and the value of leasable minerals on the Outer Continental Shelf (OCS). Within this framework, MMS has the statutory authority to regulate the exploration and development of oil and gas and other mineral resources on the OCS. A major part of this effort is to assure that developments are conducted in a safe, pollution-free manner. Specifically, this authority is under the OCS Lands Act and its amendments, and the Submerged Lands Act. Leasing and operation activities on the OCS are also subject to the requirements of some 30 other Faderal laws administered by numerous Federal departments and agencies.
- 2. Status of Agency Procedures: The MMS regulatory program for the design and construction of new facilities offshore, both platforms and pipelines, was initiated in accordance with the OCS Lands Act, as amended in 1970, which specifies "the

Secretary (of the Interior) ... shall require, on all new drilling and production operations, the use of the best available and safest technologies which the Secretary determines to be economically feasible whenever failure would have a significant effect on safety, health, or the environment.... Based on this portion of the OCS Lands Act, MMS regularly reviews its regulations for compliance with current standards for the design and installation of facilities offshore. Specifically, MMS has adopted portions of the American Petroleum Institute's standards for seismic design. In addition to this, MMS conducts a progressive Technology Assessment and Research (TA&R) Program which has the responsibility for assessing and evaluating operational technologies and design criteria for offshore facilities. The TA&R Program has several active seismic research projects underway to enhance the reliability of structures placed in earthquake areas. Also, several members of the MMS technical staff maintains active participation on professional and engineering societies which are concerned with the reductions of hazards associated with earthquakes.

3. <u>Progress on the Implementation Plan</u>: As noted above, MMS regularly reviews its regulatory requirements for the design and installation of offshore platforms and pipelines. By stating specific performance requirements for the design and

installation of new offshore facilities, and by referencing the appropriate sections of current relevant industry standards, it is felt that the agency is implementing the requirements of the Executive Order. In addition, the agency is provided funding for research initiatives which, in certain instances, are in cooperation with the industry, to improve our understanding of the effects of earthquakes on offshore facilities. By continually assessing our regulations, industry's design standards, and actively taking part in seismic research, the public can be assured of reliable facilities offshore.

Order 12689 has had a positive impact on the agency's effectiveness for accomplishing the desired seismic safety objectives. Although MMS has always sought measures to mitigate seismic hazards offshore, the awareness of potential problems onshore has served to focus our activities to ensure that we have safe and pollution-free facilities offshore.





Washington D.C 20530

AUG 25 1982

Mr. Wallace E. Stickney
Director
Federal Emergency Management Agency
Washington, DC 20472

Dear Mr. Stickney:

Thank you for your letter of June 30, 1992, concerning information to be provided by the Department of Justice in satisfaction of requirements contained in Executive Order 12699, "Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction."

Enclosed is the Department's response to the various questions raised by the Federal Emergency Management Agency on the progress of our program toward actions required by the Executive Order.

If you have any questions regarding this response, please have a member of your staff contact our seismic program coordinator, Mr. George V. Ferra, on (202) 633-2874.

Sincerely,

Harry H. Flickinger
Assistant Attorney General
for Administration

Enclosure

1. Introduction:

As an executive agency, the Department of Justice (DOJ) is responsible to ensure the seismic safety for all of its programs affected by Executive Order 12699, "Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction." This includes both new construction programs and new leasing programs.

2. Status of Agency Procedures:

Because DOJ is comprised of a number of components, an implementation guideline will be established through the Justice Property Management Regulations (JPMR) for new construction and leasing programs. This implementation guideline will ensure full compliance with the Executive Order and recommendations of the Interagency Committee on Seismic Safety in Construction. At a minimum, our planned guideline will establish the 1991 International Conference of Building Officials Uniform Building Code as the seismic standard for DOJ. The implementation guideline is expected to be in place prior to February 1, 1993.

It should be noted that a significant number of facilities housing DOJ activities are either constructed or leased by the General Services Administration (GSA) for occupancy by the components. In instances where GSA will be furnishing space for DOJ, it is GSA's responsibility to ensure that the space meets established seismic safety standards.

In response to the July 1991, Guidelines and Procedures for Implementing the Executive Order, RP2.1, DOJ has not had to make any significant changes in its seismic safety program. Procedures for collecting and documenting agency seismic safety information and providing the information to the Federal Emergency Management Agency when necessary are expected to be in place in the near future.

3. Progress on Implementation Plan:

Earlier this year, DOJ began development of an implementation guideline to be issued through the JPMR to establish a seismic design standard for new design and construction programs nationwide. In addition, an overall seismic safety program coordinator has been designated within DOJ. Each bureau has been asked to designate a seismic safety coordinator/point-of-contact.

4. Impact on Agency Operations:

To date, the Executive Order has had little negative impact on DOJ's planning, programming, budgeting, design, and execution of new construction programs. However, requiring designers of buildings to use codes they are not familiar with may have the effect of reducing competition and increasing costs for future programs. Positive impacts on agency operations include safer buildings in the future with reduced risk of loss of life or injury to building occupants.

Training and educational activities will be encouraged for DOJ's operational people to familiarize them with the provisions of the applicable seismic safety standards. Additionally, meetings with representatives of the National Institute of Standards and Technology will be scheduled with representatives of DOJ to further discuss the requirements of the Executive Order.





National Aeronautics and Space Administration

Washington D.C. 20546

NOV 9 1992

Reply to Attn of

JXF

Mr. Gary D. Johnson Assistant Associate Director Office of Earthquakes and Natural Hazards Federal Emergency Management Agency Washington, DC 20472

Dear Mr. Johnson:

I have reviewed your draft report on seismic safety of Federal building as requested in your letter of October 29, 1992, and note a marked absence of reference to NASA initiatives. Since my letter of June 30, 1992, to Director Stickney, I have issued a letter within NASA for the implementation of Executive Order 12699. In that letter, I have provided a copy of the Executive Order and have stated that to implement the order all new NASA facilities should be in accord with "Recommendation of Design and Construction Practices in the Implementation of Executive Order 12699 by Interagency Committee on Seismic Safety in Construction (ICSSC)" dated March 4, 1992. Also, I stated that special seismic standards and practices may be required for unique Center missions.

It is our practice to allow significant latitude for NASA center facility engineers to meet user requirements provided sound engineering and environmental practices are used. I consider the implementation of the executive order within the realm of sound engineering practice. Facility designs are checked by a center's in-house engineering staff for A/E contracted work and peer review for in-house designs.

With regard to leased and grant funded buildings we intend to provide suggested boiler plate language to our procurement and legal offices for insertion into new leases and grants.

I appreciate the opportunity to comment on your draft report.

Sincerely,

Billie J. McGarvey

Director,

Facilities Engineering Division



National Aeronautics and Space Administration

Washington, D C 20546

Reply to Attn of

JXF

Mr. Wallace E. Stickney Federal Emergency Management Agency 500 C Street, SW Washington, DC 20472

Dear Mr. Stickney:

This is in response to your letter of March 20, 1992, regarding Executive Order 12699 and seismic safety of new Federal building construction.

NASA intends to meet or exceed all the design and construction safety requirements of the Executive Order, and follows the "Earthquake Hazards Reduction Act of 1977" (Public Law 95-124, as amended) to reduce risk to life and property. In areas with high risk potential for seismic events, NASA provides design and construction which is equal to or exceeds local requirements.

All NASA offices which have design and/or construction responsibilities will be advised to comply immediately with the Interagency Committee on Seismic Safety in Construction Recommendation of March 4, 1992. Similarly, I will advise our procurement office that all buildings constructed under Federal regulation, or funded with Federal assistance, such as loans, grants, and loan or mortgage guarantees, must meet similar standards within three years of the promulgation of the Order.

Sincerely,

Billie J. McGarvey

Director, Facilities Engineering Division

cc:

G/Mr. Frankle
H/Mr. Bush
Q/Col. Gregory



Washington, DC 20408

National Archives

JUL 1 5 1992

Mr. Gary D. Johnson Assistant Associate Director Office of Earthquakes and Natural Hazards Federal Emergency Management Agency Washington, DC. 20472

Dear Mr. Johnson:

The following information is provided in response to your request for this Agency's progress in implementing Executive Order 12699.

National Archives and Record Administration's involvement in the seismic safety program will be focused on the construction of Presidential Libraries. Under the Presidential Libraries Act of 1986 (PL 99-323) NARA is given the responsibility providing architectural and design standards construction of Presidential Libraries. The NARA Presidential Libraries Manual contains the architectural and design standards as required under that Public Law. The requirements of Executive Order 12699 are being incorporated into the Manual and have been provided to those involved in the initial planning for the George Bush Presidential Library. This Agency will obtain written verification of compliance with the Order through the design and construction phases of the project. We will require the use of nationally recognized private sector seismic safety standards where possible.

As required under section 5 of the Order I will be the Agency official responsible for providing information to FEMA when requested.

Thank you for the opportunity to provide the status of implementation of the Order, if you need additional information please contact me on (202) 501-5010.

Sincerely,

ARY E. MARINO

Director. Facilities and Materiel

Management Division