

November 13, 2001

MEMORANDUM TO: William D. Travers  
Executive Director for Operations

FROM: Patricia G. Norry */RA/*  
Deputy Executive Director for Management Services

SUBJECT: WAIVER OF COMMISSION POLICY ON AVOIDANCE OF  
CONTRACTOR ORGANIZATIONAL CONFLICTS OF INTEREST

Attached for your review and signature is a proposed waiver of our policy on avoidance of organizational conflicts of interest (COI) under Contract NRC-02-97-009 with Southwest Research Institute for establishment and operation of the Center for Nuclear Waste Regulatory Analyses (Center). The waiver was developed following the guidelines provided under 48 CFR Subpart 2009.570, NRC Organizational Conflicts of Interest.

Dr. Martin McCann, a consultant under a subcontract with the Center, is an expert in the area of probabilistic seismic hazard assessment (PSHA). He has been working with the U.S. Nuclear Regulatory Commission (NRC) in the review of the Private Fuel Storage (PFS) license application since 1997. His continued support is required to complete the review of the PFS application and to be an expert witness for the NRC in the PFS evidentiary hearings. Dr. McCann is one of only a few known experts in the PSHA field. Of the other known experts in this area of equivalent stature, one is the State of Utah's expert witness for the PFS proceedings, and the other two have both provided technical assistance to the applicant and are anticipated to be PFS's expert witnesses at the hearings. Although it is possible that there might be a more junior expert available in this field who is conflict-free, that person would have less specific and direct experience in this narrow field. In addition, the staff estimates that it would require a minimum of six (6) months to acquire the services of such an individual and for that individual to become familiar with the issues. Further, the Office of Nuclear Material Safety and Safeguards believes that NRC's position would be significantly diminished if we do not have an expert of equal standing representing us in this area.

During June and July of 2001, Dr. McCann performed work for the Electric Power Research Institute (EPRI) in the area of PSHA by developing a guidance document for seismic siting of new commercial nuclear power plants. The applicant in the upcoming hearing, PFS, is a consortium of seven utilities, five of which are EPRI members. Therefore, Dr. McCann was working concurrently in the same or similar technical area (PSHA) for both NRC (NRC's evaluation of the PFS project) and for EPRI (a membership organization whose members include five of seven utilities of the PFS consortium applicant that have licenses regulated by NRC). There may be an organizational COI "Where the offeror or contractor provides advice and recommendations to the NRC in the same technical area where it is also providing

CONTACT: Barbara Meehan, ADM/DCPM/CMB2  
301-415-6730

consulting assistance to any organization regulated by NRC.” [48 C.F.R. 2009.570-3 (b)(1)(i)(1993)]. Based on these considerations, the Contracting Officer has determined that there is a potential for COI. Consequently, the NRC finds it necessary to waive the COI policy to utilize Dr. McCann to complete the PFS review and to be an expert witness for NRC in an upcoming PFS adjudicatory proceeding before an Atomic Safety and Licensing Board Panel.

The COI procedures in NRC’s contract with the Center require disclosure by the contractor of any proposed work that might result in a potential COI.<sup>1</sup> Although the EPRI guidance document work was disclosed by the Center in a June 8, 2001, letter to the NRC, Dr. McCann performed the work in June and July without first obtaining the required NRC approval through the Center. Dr. McCann does not anticipate performing new work for EPRI during the period that he would be supporting NRC on the PFS project. However, it is possible that he may be asked to provide limited consultation to EPRI related to the recently prepared guidance document. The COI clause in NRC’s contract with the Center requires Dr. McCann (through the Center) to obtain NRC’s permission before entering into any new work which might result in a potential COI. We have informed the Center of our COI concerns and will follow-up to ensure that they make appropriate revisions to their internal COI review procedures. The Division of Contracts and Property Management will also assure that the Center Review Group takes this issue into consideration during the annual award fee determination meeting.

Based on the foregoing and in accordance with the provisions of 48 CFR Subpart 2009.570, NRC Organizational Conflicts of Interest, I recommend that you sign the attached waiver.

The Office of Nuclear Material Safety and Safeguards concurs, and the Office of the General Counsel has no legal objection to this recommendation.

Attachment: As stated

and recommendations to the NRC in the same technical area where it is also providing consulting assistance to any organization regulated by NRC.” [48 C.F.R. 2009.570-3

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<sup>1</sup>Please note that Dr. McCann also performed seismic related work in 1997-1999 for EPRI which involved supporting modifications to a software code, EQHAZARD, and provided training in the code. This work, just recently disclosed to NRC, has been completed since 1999, and is noted for informational purposes only.

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Based on the foregoing and in accordance with the provisions of 48 CFR Subpart 209.570, NRC Organizational Conflicts of Interest, I recommend that you sign the attached waiver.

The Office of Nuclear Material Safety and Safeguards concurs, and the Office of the General Counsel has no legal objection to this recommendation.

Attachment: As stated

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## Waiver of Commission Policy on Avoidance of Contractor Organizational Conflicts of Interest

This document discusses a waiver of organizational conflict of interest (COI) for probabilistic seismic hazard assessment (PSHA) work being performed at the Center for Nuclear Waste Regulatory Analyses (Center) by a subcontractor, Dr. Martin McCann of Jack R. Benjamin & Associates, Inc., for the U.S. Nuclear Regulatory Commission's (NRC) evaluation of the Private Fuel Storage (PFS) project under Contract NRC-02-97-009. For reasons described herein, the staff requests Executive Director for Operations (EDO) approval of this COI waiver request, in order to use Dr. McCann's specialized technical services for the PFS project and upcoming adjudicatory proceeding before the Atomic Safety and Licensing Board Panel (evidentiary hearings).

The policy of the NRC, in accordance with 48 CFR Subpart 2009.570, requires the agency to avoid, eliminate, or neutralize contractor organizational COI. Consequently, the NRC generally would not enter into a relationship where a contractor would be placed in a position where its judgment might be biased or where it might receive an unfair competitive advantage. Thus, NRC's contract with Southwest Research Institute (SwRI) provides that the contractor agrees to forego entering into consulting or other contractual arrangements with any firm or organization, the result of which may give rise to a COI for work being performed under the contract. The clause requires the contractor to ensure that all employees under the contract as well as proposed consultants abide by its provisions. This contract supports NRC's Federally Funded Research and Development Center (FFRDC). The special circumstances necessitating sponsorship of the FFRDC include the need to avoid conflicts of interest with regard to NRC's technical assistance and research program related to the Nuclear Waste Policy Act of 1982, as amended (NWPA). However, the NRC COI policy may be waived in situations where the work to be performed is vital to an NRC program; where the work cannot be satisfactorily performed except by a contractor whose interests give rise to a question of COI; and where contractual and/or technical review and surveillance methods can be employed by the NRC to neutralize the conflict.

### Background

On October 15, 1987, the NRC awarded, on a competitive basis, a contract to SwRI to establish and operate the Center. This contract was renewed on October 15, 1992, and again on September 27, 1997, for five year periods. The Center was established to enable the NRC to carry out, on a timely basis, the major responsibilities it was charged with under the NWPA. The NRC is charged with the responsibility of regulating the Department of Energy's (DOE) activities for managing the construction, operation, and permanent closure of the high-level waste (HLW) geologic repository, proposed to be located at Yucca Mountain, Nevada. The mission of the Center is to provide high-quality technical assistance and research in support of the NRC's HLW regulatory program.

In addition to the Yucca Mountain repository work, the Center provides NRC with support on several other projects under this contract which have been determined to be related to NRC's responsibilities under the NWPA. One of these projects is for technical assistance in the review of a topical safety analysis report (TSAR) submitted by Private Fuel Storage (PFS), Limited Liability Company for the Private Fuel Storage Facility (PFSF). PFS has submitted an application to construct and operate a proposed away-from-reactor independent spent fuel

storage installation (ISFSI). This project requires certain specialized technical expertise provided by the Center and technical continuity during the entire review process. These technical experts are required to have professional credentials in the technical areas assigned to them that would qualify them as expert witnesses for testifying at evidentiary hearings. One of the areas of technical expertise required is PSHA. Dr. Martin McCann is the consultant to the Center that has been providing this support to NRC.

Dr. McCann has participated in the review of the PFS license application since the earliest stages of the review which was initiated in 1997. The bulk of his technical work was completed before September 2000, when the staff's safety evaluation report (SER) was published. Dr. McCann was involved in the review of PFS's request for an exemption from the requirements of 10 CFR 72.102, which calls for the use of deterministic methods in the analysis of the geologic and seismologic characteristics of a site proposed for use by an ISFSI. PFS proposed to use PSHA instead, as PSHA is a more current and more accurate methodology. From October 2000 through the end of calendar year 2000, Dr. McCann provided some assistance in preparation for evidentiary hearings. This year, Dr. McCann worked on the review of a license application amendment submitted by PFS. Dr. McCann's efforts here dealt primarily with a review of the new data submitted by the applicant to determine what effect it would have on the conclusions reached the previous year. Since September 2001, Dr. McCann has been continuing to provide technical assistance on seismic issues for the PFS application, some of which are the subject of contentions that are scheduled to be heard in an evidentiary hearing in April 2002.

During June and July of 2001, while concurrently working for the NRC on the PFS project, Dr. McCann entered into a contract with the Electric Power Research Institute (EPRI) to develop generic guidance for seismic siting of new commercial nuclear power plants. This work is in the same technical area (PSHA) as the work he has been performing for the NRC, although it is not PFS related. PFS, the applicant, is a consortium of seven utilities, five of which are EPRI members. Therefore, Dr. McCann was working concurrently in the same or similar technical area (PSHA) for both NRC (NRC's evaluation of the PFS project) and for EPRI (a membership organization whose members include five of seven utilities of the PFS consortium applicant that have licenses regulated by NRC). There may be an organizational COI "Where the offeror or contractor provides advice and recommendations to the NRC in the same technical area where it is also providing consulting assistance to any organization regulated by NRC." [48 C.F.R. 2009.570-3(b)(1)(i)(1993)]. This potential for COI arises from utilizing Dr. McCann as an expert witness in the PSHA area for the NRC, in light of his concurrent work for EPRI in the PSHA area. Based on these considerations, the Contracting Officer has determined that there is a potential for COI.

#### Waiver Justification

Dr. McCann is one of a very small group of geoscientists and engineers in the Americas and Europe who are considered expert in the use of PSHA. His expertise is the speciality evaluation of seismic ground motion hazard and its conversion to engineering seismic design bases. Of those experts with knowledge and experience of the geologic conditions in the Western United States and also in the application of PSHA for both power plants and other nuclear fuel facilities, the pool of experts is very small. In the United States and the European community, virtually all such experts practice on nuclear facilities such as nuclear power plants.

Of the other known experts in this area of equivalent stature, one is the State of Utah's expert witness for the PFS proceedings, and the other two have both provided technical assistance to the applicant and are anticipated to be PFS's expert witnesses at the hearings. The Office of Nuclear Material Safety and Safeguards (NMSS) staff believes that Dr. McCann is the only known expert of equivalent stature to the State's and the applicant's experts. Although it is possible that there might be another more junior expert available in this field who is conflict-free, that person would have less specific and direct experience in this very narrow field of expertise. In addition, the staff estimates that it would require a minimum of six (6) months to acquire the services of such an individual and for that individual to become familiar with the issues, and review the work already performed to represent NRC at the hearings. Further, NMSS believes that the NRC's position would be significantly diminished if we do not have an expert of equal standing representing us in this area. Consequently, in this case, the NRC finds it appropriate to waive the conflict of interest policy so that Dr. McCann can continue to support NRC in its review of the PFS application and as an expert witness in the PFS evidentiary hearings.

### Mitigation

Several factors limit the extent of the potential conflict of interest and mitigate against its potential adverse effects. These factors are discussed below.

1. Although the work performed by Dr. McCann for EPRI was generic in scope, it was developed for the siting of new nuclear power plants, not for the PFS application or ISFSIs in general.
2. The guidance document work performed by Dr. McCann for EPRI is relatively small in scope and dollar amount in comparison with the work he has performed for NRC. Dr. McCann's compensation for this EPRI work was \$11,824. His compensation by NRC for his work on the PFS project is \$40,305 to date.
3. The remaining work that Dr. McCann will perform for NRC in the PFS area is limited to some final review of the PFS application and as an expert witness in the PFS evidentiary hearings. This work will involve only minimal additional assessment of the applicant's PSHA for the completion of the revised SER and in preparation for the hearings.

In order to avoid the potential for conflict of interest during performance on the remaining PFS work, a number of controls will be in place. Dr. McCann's assessment of the applicant's PSHA has been completed. His remaining work involves documenting his assessment for inclusion in the revised SER and assisting the staff as an expert witness in the evidentiary hearings. The staff has documented Dr. McCann's input to the original SER, which was released in September 2000, almost a year before the EPRI work was done. The staff, therefore, has a baseline against which to assess Dr. McCann's more recent review of the PFS license application amendment. Further, a Center manager who is an expert in the seismic area, the NRC Program Element Manager, and one of the two Spent Fuel Project Office Technical Review Section Chiefs who does not have direct oversight responsibilities for the Center contract have reviewed and will continue to review all recommendations and opinions submitted by Dr. McCann. Also, the NRC Program Element Manager for the PFS project has reviewed the input Dr. McCann provided to EPRI and has concluded that it appears to have used a similar logic process with regard to his review of the PFS PSHA for NRC. In addition, the staff

considered the use of a peer review of Dr. McCann's input to the NRC SER, but concluded that it would not be feasible since the other known equivalent experts in this field are working for/representing either PFS or the State of Utah in this action. Finally, the provisions of the Organizational Conflicts of Interest clause will remain otherwise in effect requiring Dr. McCann (through the Center) to obtain NRC's permission before entering into any new relationships of this nature.

Conclusion

For the reasons discussed above, the Director, Division of Contracts and Property Management, has recommended that the Commission's policy on avoidance of contractor organizational conflicts of interest be waived for Dr. McCann in this instance. The Director, Office of Nuclear Material Safety and Safeguards, has concurred in this recommendation.

Waiver Request Approved:

Based on the foregoing, and after consultation with the Office of General Counsel, I make the following determinations:

1. The work to be performed by Dr. Martin McCann for the PFS project under NRC contract NRC-02-97-009 is vital to the NRC mission;
2. The work cannot be satisfactorily performed except by a contractor whose interests give rise to a question of conflict of interest;
3. Technical and administrative controls will be employed to neutralize the potential conflict of interest posed by the use of Dr. Martin McCann; and,
4. It is in the best interest of the United States to waive the Commission's policy on avoidance of contractor organizational conflicts of interest.

Pursuant to the waiver procedures specified in 48 CFR 2009.570-9, the policy of avoiding organizational conflicts of interest is waived for Dr. Martin McCann's continued support in the review of the PFS application and as an expert witness in the PFS evidentiary hearings.

    /RA/      
William D. Travers  
Executive Director for Operations

    11/13/01      
Date