JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION
NATIONAL NUCLEAR SECURITY ADMINISTRATION
OFFICE OF DEFENSE NUCLEAR NONPROLIFERATION
RESEARCH AND DEVELOPMENT
DE-NA0003208
March 15, 2016

I. AGENCY IDENTITY AND CONTRACTING OFFICE

The Office of Defense Nuclear Nonproliferation Research and Development (NA-22), Office of Proliferation Detection (PD) of the U.S. Department of Energy (DOE), National Nuclear Security Administration (NNSA) plans to contract for evaluation services (an assessment be conducted) by South Carolina State University (SCSU) by means of other than full and open competition. The contracting activity is the NNSA Non-M&O Contracting Operations Division (NA-APM-12).

II. NATURE AND/OR DESCRIPTION OF THE ACTION BEING APPROVED

This document sets forth the justification and approval of the use of one of the exceptions to full and open competition allowed under the Competition in Contracting Act (CICA) of 1984. This new contract DE-NA0003208 is for a two year acquisition to South Carolina State University (SCSU), a Historically Black College and University (HBCU) located in Orangeburg, SC is to conduct an evaluation of NA-22 University Consortia on Nuclear Security. The National Nuclear Security Administration's Office of Defense Nuclear Nonproliferation Research and Development (NA-22) administers the nuclear security portion of the Integrated University Program (IUP). Enacted by Congress in 2009 the IUPs objectives are (1) developing the nation's intellectual capital in nuclear science and engineering (NSE); (2) supporting NSE research and development programs at universities and integrating these programs with the national laboratories and US industry; (3) improving US NSE educational infrastructure and (4) Facilitating the transfer of knowledge from an aging NSE workforce to the next generation. In Fiscal Year (FY) 2010, NA-22 made its first IUP university/laboratory consortia award with the University of California, Berkeley as the lead institution. Subsequently in FY14, two new IUP university awards were made with the University of Michigan and North Carolina State University accepting the leads in their respective consortia.

The goals of the SCSU evaluation are to offer NA-22 a process for feedback that can contribute to improvements; to solicit information that can contribute to existing and future elements of each project; to demonstrate the value and to the accomplishments of the program to the participants of the consortia, NA-22, and other interested parties; and to provide support for program direction, critical decision-making, and any external

accountability that may be placed on the consortia. To make this a successful activity all participants in the evaluation are to be fully informed about the need to emphasize these goals in the assessments.

III. DESCRIPTION OF SUPPLIES AND/OR SERVICES

South Carolina State University (SCSU), are proposing to evaluate in two areas; (Task 1) will be a follow-up on all consortia participants to determine their contributions to the nuclear security community; (Task 2) will be a review of educational program models, which include individual; consortia; single university and laboratory-based; this task will also review the effectiveness of programs including undergraduate scholarships; graduate fellowships; design team support; internships and practica; postgraduate appointments; junior faculty awards; distinguished scientists awards; institutional awards for education and research; and research awards.

The estimated value of this 2-year acquisition is $175,000.

IV. AUTHORITY

The statutory authority permitting other than full and open competition is 41 USC 3304(a)(3), as implemented by the Federal Acquisition Regulation (FAR) Subpart 6.302-3 entitled, "Expert Services."

V. APPLICATION OF AUTHORITY

Dr. Ken Lewis, former Dean of the College of Engineering and Engineering Technology at South Carolina State University and Mr. Craig Williamson, Director of South Carolina Universities Research and Education Foundation (SCUREF) will lead this effort. As Co Principal Investigators neither Dr. Lewis nor Mr. Williamson has any direct connection with any of the consortia and expect that this *independence* will allow for a free exchange of information among the participants and institutions that are contributing to this assessment.

Dr. Lewis has had two careers spanning 40 years initially as a laboratory scientist in Oak Ridge TN and as a nuclear science and engineering educator at South Carolina State University. Dr. Lewis led the effort at SCSU in establishing the first newly accredited nuclear engineering program in the United States in over 30 years, and the only one established at a Historically Black University. Dr. Lewis holds a Ph.D. in nuclear engineering from the University of Illinois. He is an American Nuclear Society (ANS) Fellow and is an Arthur Holly Compton Awardee, which recognizes his outstanding achievements in nuclear science and engineering education.

Mr. Williamson has over 35 years experience in the establishment, management, oversight, and evaluation of education and research programs in nuclear science and engineering (NSE). In the early 1980s, he was the developer and administrator of the first set of new graduate fellowships in nuclear engineering, plasma physics, and health physics. These programs reestablished the efforts made by the Atomic Energy Commission Special Fellows program, which expired in 1973. Since that time Mr. Williamson has lead efforts to expand and enhance education and academic research in nuclear engineering, health physics, and radiochemistry. His NSE work has included support for both energy and defense sectors.

Office of Defense Nuclear Nonproliferation Research and Development has agreed to support the evaluation by staffing it with a Next Generation (Nuclear Security) Graduate Fellow. This individual will be available for assistance in gathering and interpreting data, making suggestions on the evaluation approach, providing editorial assistance, and serving as a liaison with NA-22.

This project will also cover Mr. Williamson's participation in the International Nuclear Security Education Network (INSEN). His continued involvement in this network will allow him to access information on nuclear security education programs throughout the world. At INSEN he is engaged in two principal activities.

1. He is performing a "gap analysis" on worldwide universities and their particular value in participating in INSEN. He will make recommendation to INSEN leadership regarding the relative need to invite specific institutions to become active INSEN members.
2. As a member of the promotional (Working Group III) committee for INSEN, he is engaged in the development of job descriptions in nuclear security. This comprehensive listing of technical and scientific positions can be used to assess whether or not nuclear security educational programs have aligned themselves well with actual jobs that are being offered by national laboratories, industry and nuclear facilities that support nuclear security activities.

Overall, the combined expertise and experience of the Co-Principal Investigators at SCSU aligns well with the goals of this project to provide evaluation services and offer NA-22 a process for feedback that can contribute to improvements; to solicit information that can contribute to existing and future elements of each project; to demonstrate the value and the accomplishments of the program to the participants of the consortia, NA-22, the public, and other interested parties.

VI. EFFORTS TO IDENTIFY ADDITIONAL SOURCES

No additional efforts were made to identify additional sources. A technical evaluation performed by the DOE/NNSA Program Office revealed that only one known responsible and available source can meet the Government's requirement. Statements of work for full and open competition are not available because the effort proposed by South Carolina State University to conduct an assessment of NA-22 University Consortia on Nuclear Security *is outside the scope* of past and current NA-22 Funding Opportunity Announcements (also reference: Steps to Foster Competition below).

VII. DETERMINATION OF REASONABLENESS OF COST OR PRICE

It is the determination of the Contracting Officer that the anticipated costs will be fair and reasonable based on a technical analysis of cost. By signing the justification, the contracting officer makes a determination that the costs/prices to the government are expected to be fair and reasonable.

VIII. MARKET RESEARCH

No market research was conducted to identify additional sources. The SCSU and SCUREF team was identified based on NA-22 expert knowledge of the marketplace for this requirement. SCUREF (which includes SCSU) was the lead organization on a previous nuclear workforce analysis that was integral to the performance metrics of the university consortia model under review. This fact, combined with SCUREF's close familiarity with the Integrated University Program (with DOE/NE, NNSA, and the NRC) makes them uniquely qualified.

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IX. OTHER FACTS

A technical evaluation performed by the DOE/NNSA Program Office revealed that only one known responsible and available source can meet the Government's requirement. Statements of work for full and open competition are not available because the effort proposed by South Carolina State University to conduct an assessment of NA-22 University Consortia on Nuclear Security *is outside the scope* of past and current NA-22

Funding Opportunity Announcements (also reference: Steps to Foster Competition below).

X. INTERESTED SOURCES

No other interested sources were solicited.

XI. STEPS TO FOSTER COMPETITION

NA-22 strongly supports competition and issues multiple Funding Opportunity Announcements (FOA) for research and development (example of past Funding Opportunity Announcement: DE-FOA-0000568 for Proliferation Detection Research and an example of a current Funding Opportunity Announcement: DE-FOA-0001300 for Nuclear Science and Engineering Nonproliferation Research Consortium). However, the effort proposed by South Carolina State University to conduct an assessment of NA-22 University Consortia on Nuclear Security *is outside the scope* of both FOAs.

XII. CERTIFICATIONS

Acquisition Initiator/Technical Representative:

I certify that the facts and representations under my cognizance, which are included in this justification and which form a basis for this justification, are complete and accurate.

Jeffrey Rivas 3/17/16

Signature Date

Contracting Officer:

I certify that this justification is accurate and complete to the best of my knowledge and belief. Since this effort is below $650K, this certification serves as APPROVAL."

3/17/16

Signature Date