Development of Nuclear Materials Engineering and Combustion Courses at the University of Nevada-Reno

Executive Summary

The objective of this proposal is to develop two courses on topics critical to the regulatory mission of the NRC that have not been taught at the University of Nevada-Reno (UNR) in the past. These courses are *Nuclear Materials Engineering* and *Introduction to Combustion*. These courses will be sustained because the College of Engineering has the resources to offer them on a regular basis after they are developed, and both are expected to serve roughly 15 undergraduate and graduate students each time they are taught. This work will be accomplished effectively because the courses will be developed by faculty members who conduct research in these areas. These courses will be innovative because they will incorporate methods and data developed from research at UNR. The *Nuclear Materials Engineering* course will also include a unique laboratory component. If funded, the College of Engineering will commit voluntary matching funds to have an adjunct professor teach a course in *Nuclear Power Fundamentals*, which will provide a context for students taking the courses being developed under this proposal. These courses are expected to stimulate the interest of students and motivate them to pursue employment and graduate study in nuclear-related engineering fields.

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