

Executive Summary:

The University of Maryland aims to establish a fellowship opportunity for its top tier Ph.D. candidates. The program is requesting a total amount of \$399,107 to fund two students over four years. A highly competitive selection process identifies candidates with superior academic credentials and who are committed to entering the nuclear industry. Ph.D. fellowship recipients will be evaluated on research and academic performance, adherence to the fellowship program's objectives and ability to meet the program milestones, as well as their commitment to the development and growth of the nuclear sector. The success of our fellowship program will be gauged by a comprehensive evaluation plan that measures the ability of the fellowship program to continue to recruit new potential candidates, prepare students for professional nuclear careers, and ensure that students acquire and retain such nuclear-related careers. Semi-annual progress reports will be sent to the NRC detailing student progress as well as the fellowship program's success in achieving its goals. Radiation facilities at the University of Maryland include a 250kW research reactor, a large 125kCi cobalt-60 gamma source, and two linear accelerator electron beams; these facilities permit a diverse range of research, including many projects of interest to the NRC. This is the first time the University of Maryland Nuclear Engineering Graduate program has applied for such NRC educational grant program. Additional financial support from non-Federal entities for our fellowship program will include \$20,000 from Northrop Grumman.