



U.S. Department of Energy Categorical Exclusion Determination Form



Program or Field Office: Office of Energy Efficiency and Renewable Energy:
Phase III Xlerator Program

Funding Opportunity Number DE-FOA-0000397

Applicant Name: Universal Display Corporation

Location: Ewing, NJ

Project Title Energy Saving Phosphorescent OLED Luminaires

Proposed Action or Project Description American Recovery and Reinvestment Act:

Organic light emitting diodes (OLEDs) are potentially inexpensive and highly efficient diffuse light sources that may compete directly with and offer a 'green' alternative to incandescent and fluorescent light sources. OLEDs also offer unique design possibilities that could potentially revolutionize the industry through entirely novel, non-hazardous, thin form factor lighting products. In 2009, lighting consumed 9.84 quads of primary energy in the U.S, accounting for approximately 25% of total energy consumption. Incandescent lighting is the leading energy consumer followed by fluorescent lighting. OLED lighting provides quality benefits that are not possible using fluorescent or even LED lighting for general lighting in commercial applications. In this proposal, Universal Display Corporation (UDC) proposes to lead the solid state lighting industry by developing energy efficient OLED luminaires that will pave the way for mainstream OLED commercial lighting applications. In this proposed program UDC and Acuity Brands Lighting will team to develop a general purpose luminaire targeting high-end Commercial and Institutional spaces based on Red, Green, and Blue (RGB) striped OLED panels. The end-use areas would include office, education, hospitality, retail, and healthcare, including public buildings. The target luminaire will have a total luminous output of 4,000-5,000 lumens, a tunable CCT of 2700K to 4000K, a luminaire efficacy (including driver) of over 70 lm/W, an initial panel luminance emittance of 6,000 lm/m² and a lifetime (LT70) of 25,000 hrs. UDC proposes that this work will help accelerate the commercialization of OLED technology by delivering OLED lighting panels to the next generation of U.S. lighting professionals, designers, and manufactures, and it will reduce the need for imported energy, reduce energy-related emissions, including greenhouse gases, improve energy efficiency in buildings, and will also promote U.S. technical leadership for advanced energy technologies.

Conditions: None

Categorical Exclusion(s) Applied: B3.6, B5.1

*-For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, see Subpart D of 10 CFR 10 21

This action would not: threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including DOE and/or Executive Orders; require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities, but may include such categorically excluded facilities; disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; or adversely affect environmentally sensitive resources (including but not limited to those listed in paragraph B.(4)) of Appendix B to Subpart D of 10 CFR 1021). Furthermore, there are no extraordinary circumstances related to this action that may affect the significance of the environmental effects of the action; this action is not "connected" to other actions with potentially significant impacts, is not related to other proposed actions with cumulatively significant impacts, and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211.

Based on my review of information conveyed to me and in my possession (or attached) concerning the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

ORO NEPA Compliance Officer

James L. Elmore

Date Determined:

9/14/2010