



# 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: Infotility Inc.

Location: Boulder, CO

Project Title Commercializing the GridAgents Suite: Photovoltaics  
Integration Plus (PVI+) Software

Proposed Action or Project Description American Recovery and Reinvestment Act:

The SmartGrid requires large scale integration of Photovoltaics (PV), Demand Response (DR), and Electric Vehicles (PEV). The timing of back feeding electricity and charging creates uncertainty and strain on the local grid, impacting peak demand, energy costs, and local reliability. Some studies predict that adding large numbers of PV systems, plus a new charging infrastructure to existing networks will cause voltage and vol-amperes reactive (VAR) problems, overheating distribution assets reducing asset life and impacting system reliability. Since PV systems will be co located with PEV, they become much more efficient, increasing grid reliability, if integrated with PEV based storage and intelligent load controls. Current systems are not integrated and do not have distribution level visibility or control. During Phase I, Infotility, Inc., developed detailed software requirements and design specifications, and a beta version of the GridAgents applications was completed in Phase II. In Phase III, Infotility, Inc., proposes to bundle three major Photovoltaics Integration Plus (PVI+) capabilities: enhancements to the GridAgents platform and the PVI application itself; compilation of a standards library for issuing commands and retrieving data from multiple sources and publishing to an Application Programming Interface (API); and, integration with IBM's Secure Cloud computing environment using their SmartGrid infrastructure and utility integration platform. PVI+ will be a commercially ready product for utility network operators, energy managers and residential distributed energy resource owners. Phase III would include finalizing the go to market plan with IBM, securing venture capital funding, pilot demonstrations and partners, with full commercialization in late 2012.

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:

9/17/2010