PMC-ND U.S. DEPARTMENT OF ENERGY (1.08.09.13) OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY NEPA DETERMINATION RECIPIENT: Board of Trustees of St. Petersburg College STATE: FL PROJECT St. Petersburg College Green Living Demonstration Center TITLE : Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number DE-EE0001207 GFO-0001207-001 Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination: CX, EA, EIS APPENDIX AND NUMBER: Description: A9 Information Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), gathering, data analysis (including, but not limited to, computer modeling), document preparation (including, but not analysis, and limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and dissemination information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental

monitoring. (See also B3.1 of appendix B to this subpart.)

B1.15 Support Siting, construction or modification, and operation of support buildings and support structures (including, but not limited to, trailers and prefabricated and modular buildings) within or contiguous to an already buildings developed area (where active utilities and currently used roads are readily accessible). Covered support buildings and structures include, but are not limited to, those for office purposes; parking; cafeteria services; education and training; visitor reception; computer and data processing services; health services or recreation activities; routine maintenance activities; storage of supplies and equipment for administrative services and routine maintenance activities; security (such as security posts); fire protection; small-scale fabrication (such as machine shop activities), assembly, and testing of non-nuclear equipment or components; and similar support purposes, but exclude facilities for nuclear weapons activities and waste storage activities, such as activities covered in B1.10, B1.29, B1.35, B2.6, B6.2, B6.4, B6.5, B6.6, and B6.10 of this appendix.

B5.1 Actions to (a) Actions to conserve energy or water, demonstrate potential energy or water conservation, and promote conserve energy efficiency that would not have the potential to cause significant changes in the indoor or outdoor energy or water concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, manufacturers, and designers), organizations (such as utilities), and governments (such as state, local, and tribal). Covered actions include, but are not limited to weatherization (such as insulation and replacing windows and doors); programmed lowering of thermostat settings; placement of timers on hot water heaters; installation or replacement of energy efficient lighting, low-flow plumbing fixtures (such as faucets, toilets, and showerheads), heating, ventilation, and air conditioning systems, and appliances; installation of drip-irrigation systems; improvements in generator efficiency and appliance efficiency ratings; efficiency improvements for vehicles and transportation (such as fleet changeout); power storage (such as flywheels and batteries, generally less than 10 megawatt equivalent); transportation management systems (such as traffic signal control systems, car navigation, speed cameras, and automatic plate number recognition); development of energy-efficient manufacturing, industrial, or building practices; and small-scale energy efficiency and conservation research and development and small-scale pilot projects. Covered actions include building renovations or new structures, provided that they occur in a previously disturbed or developed area. Covered actions could involve commercial, residential, agricultural, academic, institutional, or industrial sectors. Covered actions do not include rulemakings, standard-settings, or proposed DOE legislation, except for those actions listed in B5.1(b) of this appendix. (b) Covered actions include rulemakings that establish energy conservation standards for consumer products and industrial equipment, provided that the actions would not: (1) have the potential to cause a significant change in manufacturing infrastructure (such as construction of new manufacturing plants with considerable associated ground disturbance); (2) involve significant unresolved conflicts concerning alternative uses of available resources (such as rare or limited raw materials); (3) have the potential to result in a significant increase in the disposal of materials posing significant risks to human health and the environment (such as RCRA hazardous wastes); or (4) have the potential to cause a significant increase in energy consumption in a state or region.

B5.15 Small-

and development and pilot

scale renewable Small-scale renewable energy research and development projects and small-scale pilot projects, provided energy research that the projects are located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

projects

Rationale for determination:

St. Petersburg College (SPC) would utilize DOE and cost share funding to design, construct and maintain a LEED certified demonstration facility known as the Green Living Demonstration Center (GLDC) that would be used to exhibit green building techniques, alternative energy initiatives and technologies that reduce energy consumption. Educational programming is also planned to engage students, businesses and the public and provide them with hands-on learning opportunities that promote urban sustainability and mitigation effects of climate change. This project originally received a categorical exclusion from NETL in September 2009 but the project location was changed and a new NEPA Determination is required.

The GLDC is planned as a 2500 square foot residential building that would utilize a small residential sized groundmount solar photovoltaic system, solar hot water system, an energy efficient HVAC system, various water conservation techniques, and indoor air quality enhancements. If location analysis is favorable to power production, a small residential sized wind turbine may be installed. SPC is exploring the inclusion of an underground geothermal HVAC basement as part of the GLDC. If this solution is not viable, a more conventional vertical or horizontal loop GSHP system, thermally driven AC system, and/or Quiet Duct Wrap and light colored roof would be considered as possible alternatives. See the Award DE-EE0001207.007 SOPO uploaded to the PMC for more details on the renewable energy and energy efficiency measures considered for the project.

Part of the existing parking lot at the site would be repurposed to provide an area where the GLDC would be built. A portion of the project would require the removal of a small number of trees adjacent to the parking lot. The project would be constructed adjacent to, but not in, preserved wetlands. The agency responsible for the wetlands is the Southwest Florida Water Management District (SWFWMD) and the recipient will be required to get an Environmental Resource Protection permit from them. All regulations and permitting requirements of the SWFWMD will be adhered to and no impacts to the preserved wetlands are anticipated. SPC queried the State of Florida's official inventory of historical cultural resources and received a response indicating that the Florida Master Site File lists no previously recorded archaeological sites, one historic cemetery, and no standing structures near the proposed project site. The historic cemetery is almost a half a mile away and is not visible from the project location. Due to the developed/disturbed nature of the site, the response from the Florida Master Site File, and the above best management practice, DOE has determined that would not be any adverse impacts to cultural or historical resources. As part of best management practices for the project, DOE will require the following: If during project activities the recipient or their staff/subcontractor encounters any cultural material (i.e. historic or prehistoric), all activities should cease in the vicinity of the discovery immediately. The recipient must inform the Florida State Historic Preservation Officer and the DOE Project Officer of the discovery and a qualified specialist will be contacted to evaluate the discovery. An official species list was obtained from the U.S. Fish and Wildlife Service (FWS) and after informal consultation DOE has determined that there would be no effect to listed species or critical habitat.

Based on review of the project information and the above analysis, DOE has determined the proposed activities would not have a significant individual or cumulative impact to human health and/or the environment. DOE has determined the activities proposed are consistent with actions contained in DOE categorical exclusions A9 "Information gathering, analysis and dissemination", B1.15 "Support buildings", B5.1 "Actions to conserve energy or water", and B5.15 "Smallscale renewable energy research and development and pilot projects" and are categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Insert the following language in the award:

You are required to:

If during project activities the recipient or their staff/subcontractor encounters any cultural material (i.e. historic or prehistoric), all activities should cease in the vicinity of the discovery immediately. The recipient must inform the Florida State Historic Preservation Officer and the DOE Project Officer of the discovery and a qualified specialist will be contacted to evaluate the discovery.

If the inclusion of the underground geothermal HVAC basement in Subtask 1.2 is not viable and either the vertical borehole or horizontal loop field GSHP is chosen as the alternative to move forward, the recipient must submit GSHP system details and a site plan with loop field location to the DOE for further NEPA review. The recipient must await

authorization from the Contracting Officer prior to undertaking activities associated with installation of either a vertical borehole or horizontal loop field GSHP system.

Additionally, if SPC proposes to install a residental wind turbine in excess of 20kW in size, additional NEPA review will be required.

Note to Specialist :

This NEPA Determinations does require a tailored NEPA provision. **Building Technologies Office** Casey Strickland 04/02015

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:

NEPA Compliance Officer

Date: _ 4/0/2015

FIELD OFFICE MANAGER DETERMINATION

Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

- Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
- Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:

Field Office Manager's Signature:

Field Office Manager

Date: