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(Previous Editions Obsolete)

U.S. DEPARTMENT OF ENERGY

ENVIRONMENTAL QUESTIONNAIRE

I. INSTRUCTIONS

The proposer shall prepare this Environmental Questionnaire (EQ) as accurately and completely as possible. Supporting information can be provided as attachments. The proposer must identify the location of the project and specifically describe the activities that would occur at that location. The proposer must provide specific information and quantities, regarding air emissions, wastewater discharges, solid wastes, etc., to facilitate the necessary review. In addition, the proposer must submit with this EQ a FINAL copy of the project's statement of work (SOW) or statement of project objective (SOPO) that will be used in the contract/agreement between the proposer and the U.S Department of Energy (DOE).

II. QUESTIONNAIRE

A. PROJECT SUMMARY

1. Solicitation/Project Number: DE-FOA-0002740 Proposer: City of Lake Worth Beach
2. This Environmental Questionnaire pertains to a: ☒ Recipient or Prime Contractor ☐ Sub-recipient or Subcontractor
3. Principal Investigator: Edward Liberty Telephone Number: (561) 586-1670
4. Project Title: Smart Grid Deployment
5. Expected Project Duration: 60 months
6. Location of Activities covered by **this** Environmental Questionnaire: (City/Township, County, State):
   City of Lake Worth Beach, Palm Beach County, Florida
7. List the full scope of activities planned (only for the location that is the subject of this Environmental Questionnaire).
   Upgrade and enhance existing electric transmission and distribution infrastructure to include SMART grid technology: sectionalizing devices, interconnections and battery storage for community solar, fiber optic cable in existing right of way, and metering.
8. List all other locations where work would be performed by the primary contractor of the project and subcontractor(s). Each of the following must have an individual Environmental Questionnaire.

Subcontractor or sub-recipient	Location of activities for this project
	City of Lake Worth Beach
	~1 sq mi in the Village of Palm Springs

9. Identify and select the checkbox with the predominant project work activities under Group A, B, or C

Group A

☐ Routine administrative, procurement, training, and personnel actions. Contract activities/awards for management support, financial assistance, and technical services in support of agency business, programs, projects, and goals. Literature searches and information gathering, material inventories, property surveys; data analysis, computer modeling, analytical reviews, technical summary, conceptual design, feasibility studies, document preparation, data dissemination, and paper studies. Technical assistance including financial planning, assistance, classroom training, public meetings, management training, survey participation, academic contribution, technical consultation, and stakeholders surveys. Workshop and conference planning, preparation, and implementation which may involve promoting energy efficiency, renewable energy, and energy conservation.

STOP! ***If all work activities related to this project can be classified and described within categories under Group A, proceed directly to Section III CERTIFICATION BY PROPOSER. No additional information is required.***
If project work activities are described in either Group(s) B or C; then continue filling out questionnaire.

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Group B

☐ Laboratory Scale Research, Bench Scale Research, Pilot Scale Research, Proof-of-Concept Scale Research, or Field Test Research. Work DOES NOT involve new building/facilities construction and site excavation/groundbreaking activities. This work typically involves routine operation of existing laboratories, commercial buildings/properties, offices and homes, project test facilities, factories/power plants, vehicles test stands and components, refueling facilities, utility systems, or other existing structures/facilities. Work will NOT involve major change in facilities missions and operations, land use planning, new/modified regulatory/operating permit requirements. Includes work specific to routine DOE Site operations and Lab research work activities, but NOT building construction and site preparation. DOE work typically involves laboratory facilities and lab equipment operations, buildings and grounds management activities; and buildings and facilities maintenance, repairs, reconfiguration, remodeling, equipment use and replacement.

Group C

☑ Pilot Test Facilities Construction, Pilot Scale Research, Field Scale Demonstration, or Commercial Scale Application. Work typically involves facility construction, site preparation/excavation/groundbreaking, and/or demolition. This work would include construction, retrofit, replacement, and/or major modifications of laboratories, test facilities, energy system prototypes, and power generation infrastructure. Work may also involve construction and maintenance of utilities system right-of-ways, roads, vehicle test facilities, commercial buildings/properties, fuel refinery/mixing facilities, refueling facility, power plants, underground wells, and pipelines, and other types of energy research related facilities. This work may require new or modified regulatory permits, environmental sampling and monitoring requirements, master planning, public involvement, and environmental impact review. Includes work specific to DOE Site Operations and Lab operation activities involving building and facilities construction, replacement, decommissioning/demolition, site preparation, land use changes, or change in research facilities mission or operations.

B. PROPOSED PROJECT ALTERNATIVES

1. If applicable, list any project alternatives considered to achieve the project objectives.

Alternatives have been considered, there is no project alternative to the proposed work.

C. PROJECT LOCATION

1. Provide a brief description of the project location (physical location, surrounding area, adjacent structures).

All work will take place on existing electric transmission and substation infrastructure, in existing and disturbed urban ROW environments.

2. **Attach** a project site location map of the project work area.

Attached Project Site Location Map of the Project Work Area.

D. ENVIRONMENTAL IMPACTS

NEPA procedures require evaluations of possible effects (including land use, energy resource use, natural, historic and cultural resources, and pollutants) from proposed projects on the environment.

1. Land Use

a. Characterize present land use where the proposed project would be located.

☑ Urban	☐ Industrial	☑ Commercial	☐ Agricultural
☑ Suburban	☐ Rural	☑ Residential	☐ Research Facilities
☐ Forest	☐ University Campus	☐ Other: _____	

b. Identify the total size of the facility, structure, or system and what portion would be used for the proposed project.

The AMI/MDM project will be replacing all existing electric power meters. The transmission projects will identify power transmission faults, communicate and facilitate service restoration. The fiber optics project will install new fiber optic cables to substations. The solar component will expand connections to existing solar power generation on landfill.

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c. Describe planned construction, installation, and/or demolition activities, i.e., roads, utilities system right-of-ways, parking lots, buildings, laboratories, storage tanks, fueling facilities, underground wells, pipelines, or other structures.

☐ No construction would be anticipated for this project.

This project replaces equipment on existing infrastructure.

d. Describe how land use would be affected by operational activities associated with the proposed project.

☑ No land areas would be affected.

e. Describe any plans to reclaim areas that would be affected by the proposed project.

☑ No land areas would be affected.

f. Would the proposed project affect any unique or unusual landforms (e.g., cliffs, waterfalls, etc.)?

☑ No ☐ Yes (describe)

g. Would the proposed project be located in or near local, state, or federal parks; forests; monuments; scenic waterways; wilderness; recreation facilities; or tribal lands? ☐ No ☑ Yes (describe)

SMART Grid Infrastructure, such as AMI Meters, data collectors and radio base stations would be potentially installed in local parks to replace the failing infrastructure. Permitting has already been obtained.

2. Construction Activities and/or Operation

a. Identify project structure(s), power line(s), pipeline(s), utilities system(s), right-of-way(s) or road(s) that will be constructed and clearly mark them on a project site map or topographic map as appropriate. ☐ None

In the attached Project Site Map, all AMI meters are in blue and black, all transmission lines terminate in the substations labeled yellow, and solar site is outlined in purple.

b. Would the proposed project require the construction of waste pits or settling ponds?

☑ No ☐ Yes (describe and identify location, and estimate surface area disturbed)

c. Would the proposed project affect any existing body of water? ☑ No ☐ Yes (describe)

d. Would the proposed project impact a floodplain or wetland? ☑ No ☐ Yes (describe)

e. Would the proposed project potentially cause runoff/sedimentation/erosion? ☑ No ☐ Yes (describe)

f. Would the proposed project include activities located on perma-frost, near fault zones, or involve fracturing, well drilling, geologic stimulation, sequestration, active seismic data collection, and/or deepwater operations?

☑ No ☐ Yes (describe)

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g. Would the proposed project involve any of the following: nanotechnology; recombinant DNA or genetic engineering; facility decommissioning or disposition of equipment/materials; or management of radioactive wastes/materials?

☑ No ☐ Yes (describe)

3. Biological Resources

a. Identify any State or Federally listed endangered or threatened plant or animal species potentially affected by the proposed project.

☑ None

b. Would any designated critical habitat be affected by the proposed project? ☑ No ☐ Yes (describe)

c. Describe any impacts that construction would have on any other types of sensitive or unique habitats.

☐ No planned construction ☐ No habitats ☑ None ☐ Impact (describe)

d. Would any foreign substances/materials be introduced into ground or surface waters, soil, or other earth/geologic resource because of project activities? How would these foreign substances/materials affect the water, soil, biota, and geologic resources? ☑ No ☐ Yes (describe)

e. Would any migratory animal corridors be impacted or disrupted by the proposed project? ☑ No ☐ Yes (describe)

4. Socioeconomic and Infrastructure Conditions

a. Would local socio-economic changes result from the proposed project? ☐ No ☑ Yes (describe)

The proposed project would create good-paying, skilled professional and STEM job opportunities for the local community in Lake Worth Beach.

b. Would the proposed project generate increased traffic use of roads through local neighborhoods, urban or rural areas?

☑ No ☐ Yes (describe)

c. Would the proposed project require new transportation access (roads, rail, etc.)? Describe location, impacts, costs.

☑ No ☐ Yes (describe)

d. Would the proposed project create a significant increase in local energy usage? ☑ No ☐ Yes (describe)

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5. Historical/Cultural Resources

a. Describe any historical, archaeological, or cultural sites in the vicinity of the proposed project; note any sites included on the National Register of Historic Places. ☑ None

b. Would construction or operational activities planned under the proposed project disturb any historical, archaeological, or cultural sites? ☐ No planned construction ☐ No historic sites ☐ Yes (describe) ☑ No Impact (discuss)

c. Has the State Historic Preservation Office been contacted with regard to this project? ☑ No ☐ Yes (describe)

d. Would the proposed project interfere with visual resources (e.g., eliminate scenic views) or alter the present landscape?
☑ No ☐ Yes (describe)

e. Would the proposed project be located on or adjacent to tribal lands, lands considered to be sacred, or lands used for traditional purposes? Describe any known tribal sensitivities for the proposed project area.

None

6. Atmospheric Conditions/Air Quality

a. Identify air quality conditions in the immediate vicinity of the proposed project with regard to attainment of National Ambient Air Quality Standards (NAAQS). This information is available under the Green Book Non-Attainment Areas for Criteria Pollutants located at http://www.epa.gov/air/oaqps/greenbk/astate.html

	Attainment	Non-Attainment
O_3 - 1 Hour	☑	☐
O_3 - 8 Hour	☑	☐
SO_x	☐	☐
PM - 2.5	☑	☐
PM - 10	☑	☐
CO	☐	☐
NO_2	☐	☐
Lead	☐	☐

b. Would proposed project require issuance of new or modified local, state, or federal air permits to perform project related work and activities? ☑ No ☐ Yes (describe)

c. Would the proposed project be in compliance with local and state air quality requirements? ☑ Yes
If not, please explain.

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d. Would the proposed project be classified as either a New Source or a major modification to an existing source?
☑ No ☐ Yes (describe)

e. What types of air emissions, including fugitive emissions, would be anticipated from the proposed project, and what would be the maximum annual rate of emissions for the project?

	Maximum per Year	Total for Project
☐ SO_x		
☐ NO_x		
☐ PM - 2.5		
☐ PM - 10		
☐ CO		
☐ CO_2		
☐ Lead		
☐ H_2S		
☐ Organic solvent vapors or other volatile organic compounds--List:		
☐ Hazardous air pollutants -- List:		
☐ Other -- List:		
☑ None		

f. Would any types of emission control or particulate collection devices be used?
☑ No ☐ Yes (describe, including collection efficiencies)

g. How would emissions be vented?

No Emissions will be emitted by the proposed project.

7. Hydrologic Conditions/Water Quality

a. What nearby water bodies may be affected by the proposed project? Provide distance(s) from the project site.

No impact to nearby water bodies.

b. What sources would supply potable and process water for the proposed project?

No potable or process water is required.

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c. Quantify the wastewater that would be generated by the proposed project.

		Gallons/day	Gallons/year
☐	Non-contact cooling water	0	0
☐	Process water	0	0
☐	Sanitary	0	0
☐	Other -- describe:	0	0
☑	None		

d. What would be the major components of each type of wastewater (e.g., coal fines)? ☑ No wastewater produced

e. Identify the local treatment facility that would receive wastewater from the proposed project.
☑ No discharges to local treatment facility

f. Describe how wastewater would be collected and treated. ☑ No wastewater produced

g. Would any run-off or leachates be produced from storage piles or waste disposal sites? ☑ No ☐ Yes (describe source)

h. Would project require issuance of new or modified water permits to perform project work or site development activities?
☑ No ☐ Yes (describe)

i. Where would wastewater effluents from the proposed project be discharged? ☑ No wastewater produced

j. Would the proposed project be permitted to discharge effluents into an existing body of water?
☑ No ☐ Yes (describe water use and effluent impact)

k. Would a new or modified National Pollutant Discharge Elimination System (NPDES) permit be required?
☑ No ☐ Yes (describe)

l. Would the proposed project adversely affect the quality or movement of groundwater? ☑ No ☐ Yes (describe)

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m. Would the proposed project require issuance of an Underground Injection Control (UIC) permit?

☑ No ☐ Yes (describe)

n. Would the proposed project be located in or near a wellhead protection area, drinking water protection area, or above a sole source aquifer or underground source of drinking water (USDW)?

☑ No ☐ Yes (describe)

8. Solid and Hazardous Wastes

a. Identify and estimate wastes that would be generated from the project. Solid wastes are defined as any solid, liquid, semi-solid, or contained gaseous material that is discarded, has served its intended purpose, or is a manufacturing or mining by-product (See EPA Municipal Solid Waste and Municipal Solid Waste by State).

	Annual Quantity
☐ **Municipal solid waste (e.g., paper, plastic, etc.)**	
☐ **Coal or coal by-products**	
☐ **Other -- Identify:**	
☐ **Hazardous waste – Identify:**	
☑ **None**	

b. Would project require issuance of new or modified solid waste and/or hazardous waste related permits to perform project work activities? ☑ No ☐ Yes (explain)

c. How and where would solid waste disposal be accomplished?

☑ None generated
☐ On-site (identify and describe location)
☐ Off-site (identify location and describe facility and treatment)

d. How would wastes for disposal be transported?

None

e. Describe hazardous wastes that would be generated, treated, handled, or stored under this project. Hazardous waste information can be found at EPA Hazardous Waste website. ☑ None

f. How would hazardous or toxic waste be collected and stored? ☑ None used or produced

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g. If hazardous wastes would require off-site disposal, have arrangements been made with a certified TSD (Treatment, Storage, and Disposal) facility?

☑ Not required ☐ Arrangements not yet made ☐ Arrangements made with a certified TSD facility (identify)

9. Health/Safety Factors

a. Identify hazardous or toxic materials that would be used in the proposed project.

☑ None ☐ Hazardous or toxic materials that would be used (identify):

b. Describe the potential impacts of this project's hazardous materials on human health and the environment.

☑ None

c. Would there be any special physical hazards or health risks associated with the project? ☑ No ☐ Yes (describe)

d. Does a worker safety program exist at the location of the proposed project? ☐ No ☑ Yes (describe)

The City and the International Brotherhood of Electrical Workers (IBEW) Union have established Worker Safety Programs.

e. Would additional safety training be necessary for any new laboratory, equipment, or processes involved with the project?

☑ No ☐ Yes (describe)

f. Describe any increases in ambient noise levels to the public from construction and operational activities.

☑ None ☐ Increase in ambient noise level (describe)

g. Would project construction result in the removal of natural or other barriers that act as noise screens?

☐ No construction planned ☑ No ☐ Yes (describe)

h. Would hearing protection be required for workers? ☑ No ☐ Yes (describe)

10. Environmental Restoration and/or Waste Management

a. Would the proposed project include CERCLA removals or similar actions under RCRA or other authorities?

☑ No ☐ Yes (describe)

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b. Would the proposed project include siting, construction, and operation of temporary pilot-scale waste collection and treatment facilities or pilot-scale waste stabilization and containment facilities? ☑ No ☐ Yes (describe)

c. Would the proposed project involve operations of environmental monitoring and control systems?
☑ No ☐ Yes (describe)

d. Would the proposed project involve siting, construction, operation, or decommissioning of a facility for storing packaged hazardous waste for 90 days or less? ☑ No ☐ Yes (describe)

E. REGULATORY COMPLIANCE

1. For the following laws, describe any existing permits, new or modified permits, manifests, responsible authorities or agencies, contacts, etc., that would be required for the proposed project

a. Resource Conservation and Recovery Act (RCRA): ☑ None ☐ New Required ☐ Modification Required
Describe:

b. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):
☑ None ☐ New Required ☐ Modification Required
Describe:

c. Toxic Substance Control Act (TSCA): ☑ None ☐ New Required ☐ Modification Required
Describe:

d. Clean Water Act (CWA): ☑ None ☐ New Required ☐ Modification Required
Describe:

e. Underground Storage Tank Control Program (UST): ☑ None ☐ New Required ☐ Modification Required
Describe:

f. Underground Injection Control Program (UIC): ☑ None ☐ New Required ☐ Modification Required
Describe:

g. Clean Air Act (CAA): ☑ None ☐ New Required ☐ Modification Required
Describe:

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h. Endangered Species Act (ESA): ☑ None ☐ New Required ☐ Modification Required
Describe:

i. Floodplains and Wetlands Regulations: ☑ None ☐ New Required ☐ Modification Required
Describe:

j. Fish and Wildlife Coordination Act (FWCA): ☑ None ☐ New Required ☐ Modification Required
Describe:

k. National Historic Preservation Act (NHPA): ☑ None ☐ New Required ☐ Modification Required
Describe:

l. Coastal Zone Management Act (CZMA): ☑ None ☐ New Required ☐ Modification Required
Describe:

2. Identify any other environmental laws and regulations (Federal, state, and local) for which compliance would be necessary for this project, and describe the permits, manifests, and contacts that would be required.

None

F. DESCRIBE ANY ISSUES THAT WOULD GENERATE PUBLIC CONTROVERSY REGARDING THE PROPOSED PROJECT. ☐ None

Yes - the public is concerned that the SMART Grid innovations negatively impacts people having electromagnetic sensitivity disorder. The City of Lake Worth Beach is developing an Opt Out program to address the concerns.

G. WOULD THE PROPOSED PROJECT PRODUCE ADDITIONAL DEVELOPMENT, OR ARE OTHER MAJOR DEVELOPMENTS PLANNED OR UNDERWAY, IN THE PROJECT AREA?

☑ No ☐ Yes (describe)

H. SUMMARIZE THE SIGNIFICANT IMPACTS THAT WOULD RESULT FROM THE PROPOSED PROJECT.

☑ None (provide supporting detail) ☐ Significant impacts (describe)

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I. PROVIDE A DESCRIPTION OF HOW THE PROJECT WOULD BE DECOMMISSIONED, INCLUDING THE DISPOSITION OF EQUIPMENT AND MATERIALS.

Utility equipment will not be decommissioned and will remain in use for daily operations. All decommissioned material is processed by Material Management Department for disposal and recycling.

III. CERTIFICATION BY PROPOSER

I hereby certify that the information provided herein is current, accurate, and complete as of the date shown immediately below.

Signature: Jerry Kelly Digitally signed by Jerry Kelly Date: 2023.02.23 13:54:00 -05'00'

Date (mm/dd/yyyy): 02/24/2023

Typed Name: Francis J. Kelly

Title: Grants Analyst

Organization: City of Lake Worth Beach

IV. REVIEW AND APPROVAL BY DOE

I hereby certify that I have reviewed the information provided in this questionnaire, have determined that all questions have been appropriately answered, and judge the responses to be consistent with the efforts proposed.

DOE Project Manager

Signature:

Date (mm/dd/yyyy):

Typed Name: