

# **PROJECT MANAGEMENT PLAN**

Village of Hoffman Estates Local Energy Assurance Plan Project

June 14, 2010

## **WORK PERFORMED UNDER AGREEMENT**

DE-OE0000365

### **SUBMITTED BY**

Village of Hoffman Estates

1900 Hassell Road

Hoffman Estates, IL 60169

### **PRINCIPAL INVESTIGATOR**

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### **SUBMITTED TO**

U. S. Department of Energy

National Energy Technology Laboratory

Ryan Watson

Submitted through: <https://www.eere-pmc.energy.gov/SubmitReports.aspx>

## 1. EXECUTIVE SUMMARY

**Provide a description of the project that includes the objective, project goals and expected results.**

Village of Hoffman Estates

Local Energy Assurance Planning (LEAP) Initiative Project Summary

**Project Director:** David Christensen, Emergency Management Coordinator

**Project Title:** Hoffman Estates Energy Assurance Planning Program

**Project Objectives:**

- 1) Conduct a thorough inventory of all Village owned/controlled facilities power requirements (including fire houses, police station, village hall, public works buildings, lift stations, water towers, and communications hubs) to ensure adequate power redundancy and capabilities to fully support essential village functions. The analysis will be focused upon Village facilities and will not include facilities owned by local utilities.
- 2) Create an energy contingency plan (*energy assurance plan*) which will include an energy emergency management system and communications plan consistent with existing state and federal energy emergency response plans, identify critical energy needs for operation of essential public services during an energy supply disruption, include situation monitoring and information exchange and a menu of energy conservation strategies with options to reduce demand for petroleum, natural gas, or electricity.
- 3) Work with the local utilities, promote and encourage smart grid practices and legislation.
- 4) Conduct community and business education in the benefits of a modern grid. The village will promote and encourage more effective scrutiny and control of energy consumption to reduce overall electricity use/costs, participation in future electricity markets for demand response, spinning reserve, energy, etc, and encourage future value added services that may be enabled by a modern grid.
- 5) Provide an expedited code conformance process for new and established businesses wishing to install auxiliary and backup power sources.
- 6) Generate a village government continuity of operations plan segment to enhance the Emergency Operations Plan.

**Project Description and Methods:** All Village facilities are believed to be able of continuing to operate at full capability for a limited period of time without assistance during an energy disruption however sustainability and efficiency remain in question. Therefore, the Village has chosen to develop a strategy that more adequately meets Village needs in time of energy disruption. This plan will be developed in connection with the existing plan from the local utility and will also incorporate local business participation in sustainable energy practices. The direct benefits from the development of a plan will be the continuation of municipal and business operations as well as the established coordination between the Village and utilities on a regional local level. In order to develop the plan, the Village plans to use an energy preparedness consultant as a support tool and information resource.

**Project Participants:** Village of Hoffman Estates, Commonwealth Edison, to-be-determined consultant, and Hoffman Estates businesses.

## 2. TECHNICAL APPROACH

The Recipient shall provide a brief description of the technical approach for developing a new (or revising an existing) Energy Assurance Plan and implementation activities. This section should also include a list of collaborative parties such as city/state agencies, private companies, and other appropriate entities that will be involved in the energy assurance planning process. Indicate their roles and responsibilities throughout the project period.

If a substantial portion (greater than 50% of total grant amount) of the work is being performed by a contractor, please provide a "Statement of Substantial Involvement" in this section indicating how the Prime Recipient will oversee and remain significantly involved in the program as well as develop in-house expertise.

Proposed technical approach / strategy

- 1) A task force would be created to manage the project and provide necessary oversight during the development and implementation of the plan. This task force would include members from the Public and Private sector. A suggested list of participants is included below:

### PROBABLE TASK FORCE MEMBERS & PROJECTED ROLES

Public Sector	Role	Private Sector	Role
General Government	General project coordination		
Public Works - Fleet Management	Deployment and maintenance of vehicles	Electric Utilities (Commonwealth Edison)	Coordination during development of EAP
Public Works - Facilities Management	Management of facilities and equipment used and training in energy technology	Natural Gas Utilities (Nicor Gas)	Coordination during development of EAP
Fire Suppression and Prevention	Emergency Operations Management & training in energy technology	Petroleum Industry	Coordination during development of EAP
Law Enforcement	Emergency Operations Management & training in energy technology	Pipeline Operators	Coordination during development of EAP
Code Enforcement	Training in energy technology, health standards and assistance in business training/ Plan initiation	Transit Operators	Coordination during development of EAP
Health and Human Services	Training in health issues threatened by energy emergency	Hoffman Estates Chamber of Commerce	Outreach assistance to local businesses
Emergency Management Agency	Overall emergency operations management, primary plan development	St. Alexius and Behavioral Health Hospitals	Assured energy

Transportation and Engineering	Temporary lighting and signage assistance		
Development Services	Assistance in plan development and business training and outreach. Revision of Codes and processes		
Park District	Trained in energy best practices and reviewed plans/ coordination of facility use		

2) The Development of an Energy Assurance Plan (EAP)

- a) The Village intends to utilize a three pronged approach to develop the plan:
  - i) Connect with local utilities and other municipalities to ensure the final developed plan will coordinate with plans already in place.
  - ii) Bring awareness of energy planning and assurance methods to local businesses in order to coordinate municipal and business operations in times of energy distress.
  - iii) Hire a consultant to perform an energy preparedness audit of municipal facilities and advise the Village of alternatives or necessary changes to improve energy emergency preparedness.

*Further objectives during the development of the EAP*

- (1) Seek state and federal funding to assist in the modernization of the Village’s electric grid resulting in increased reliability.
- (2) Promote improvements and upgrades by developers, associations, and the utility companies.
- (3) Utilize the proposed Task Force above, evolve into an Energy Efficiency Authority
- (4) Reduce energy consumption by Village government with increased green technology and employee awareness.
- (5) Strengthen energy and building codes.
- (6) Expand peak load management.
- (7) Launch an energy awareness campaign.

*Statement of Substantial Involvement:*

The hired consultant will be performing at least 50% of the work performed on this project and will be reimbursed with more than 50% of the LEAP ARRA funds. The consultant shall be named in this document in Fall 2010, after they have been selected. In order to mitigate risk to the Village and to reducing wasteful spending, the Village will create a detailed request for proposal or request of qualification to ensure that candidates are prepared to take on the job. To ensure that the consultant remains on-task, staff will be consulting with the Consultant firm weekly-bi-weekly and share project schedules.

### 3. RISK MANAGEMENT

The Applicant (Recipient) shall provide a summary description of the proposed approach to identify, analyze, and respond to perceived risks associated with the proposed project. Project risk events are uncertain future events that, if realized, impact the success of the project. Since risk is inherent to all projects, regardless of the level of complexity, cost or visibility, project risk must be addressed to the appropriate level for every project

**Example:**

**Risk:** *{Anticipated Risk}*

**Impact:***{Potential Impact to project timeline, success criteria, etc.}*

**Mitigation Method:** *{Description of Mitigation Method employed to reduce impact}*

**Risk:** Consultant does not meet expectations

**Impact:** Fail to meet Village objectives and spending could be wasteful

**Mitigation Method:** Village will create a detailed request for proposal or request of qualification to ensure that candidates are prepared to take on job. The Village will also examine a minimum of three proposals prior to selection to ensure a variety of individuals have been informed of the work. To ensure that the consultant remains on-task, staff will be consulting with the Consultant firm weekly-bi-weekly and share project schedules.

**Risk:** Lack of Business Participation

**Impact:** Without Village business and resident “buy-in”, any future energy projects could be difficult to see-through.

**Mitigation Method:** The intent of the business education is to make energy projects less burdensome for local businesses. By attending events and meetings that local businesses are already attending, the message will be presented to a captive audience. Additionally, resources will be available in a variety of mediums, including web and print.

**Risk:** Corrections will cost too much

**Impact:** Village will not incur cost or energy savings from project

**Mitigation Method:** Let consultant know up front that the Village is primarily looking for reasonable and efficient solutions that are not cost intensive. If there turn out to be problems with the current facilities that cannot be quickly mitigated, this plan will be able to set a future plan and will assist in budget planning. The Village and/or the consultant will only perform analysis and look for potential improvements, and will not make any improvements that involve construction or equipment purchases with LEAP ARRA Funding. Executing this project may also make the Village a better candidate for future grant funding.

#### 4. MILESTONE LOG

The Recipient is to provide milestones for the project. Each milestone is to include a title, planned completion date and a description of the method/process/measure used to verify completion. The milestones developed should be quantitative and show progression towards project goals.

Milestones are different than success criteria in that milestones typically show progress through the execution of the project, whereas success criteria are used by the DOE to determine if specific goals were met the completion of the project.

Format for the milestone log should be as follows:

*Title: {Milestone Title}*

*Planned Date:{Planned Completion Date}*

*Verification Method:{Milestone Verification Method}*

1) Title: Create Task Force

Planned Date: June 30, 2010

Verification Method: List of members

SOPO Task/Deliverable: Subtask 4.2

2) Title: Consultant RFQ/RFP

Planned Date: July 31, 2010

Verification Method: Document completed

SOPO Task/Deliverable: Task 4.0

3) Title: Select Consultant

Planned Date: September 30, 2010

Verification Method: Bid Notice & Meeting

SOPO Task/Deliverable: Task 4.0

4) Title: Execution of Contract

Planned Date: October 31, 2010

Verification Method: Contract signed

SOPO Task/Deliverable: Task 4.0

5) Title: Analysis performed by Consultant

Planned Date: December 31, 2010

Verification Method: Written evaluation and analysis from Consultant

SOPO Task/Deliverable: Subtask 4.1

6) **Title:** Consultant training Village staff

**Planned Date:** Concurrent with analysis and plan creation (by June 1, 2011)

**Verification Method:** Training points/schedule execution of RFP requirements

**SOPO Task/Deliverable:** Done during Subtasks 4.1 & 4.5 & Task 3.0

7) **Title:** Create curriculum and outreach plan for businesses

**Planned Date:** April 30, 2011

**Verification Method:** Written plan/outline and examples of any published media

**SOPO Task/Deliverable:** Subtask 4.4

**Title:** Plan Creation by Consultant and Staff

**Planned Date:** June 1, 2011

**Verification Method:** Plan Document completed

**SOPO Task/Deliverable:** Task 3.0 and Subtask 4.5

**Title:** Board approval of the Emergency Assurance Plan

**Planned Date:** July 1, 2011

**Verification Method:** Village Board Meeting agenda, minutes, ordinance

**SOPO Task/Deliverable:** Deliverable 3.0

**Title:** Outreach to businesses

**Planned Date:** July 31, 2011

**Verification Method:** Agendas, minutes, example letters to businesses

**SOPO Task/Deliverable:** Subtask 4.4 & Deliverable 4.0

**Title:** Village Code conformance and revisions

**Planned Date:** December 31, 2011

**Verification Method:** Revised Village Codes

**SOPO Task/Deliverable:** Subtask 4.3 & Deliverable 4.0

5. FUNDING AND COSTING PROFILE

The Recipient shall provide a table that shows, by year, the amount of government funding going to each project member and cost share provided (if applicable) by members. The table shall also calculate totals and cost sharing percentages. *The Funding Profile must be consistent with the approved budget in the Assistance Agreement (Attachment 4 of the Agreement).*

Table 1 – Project Funding Profile

Budget Category	Year 1	Year 2	Total
Personnel	\$3,897	\$9,092	\$12,989
Fringe Benefits	\$1,670	\$3,897	\$5,567
Travel			
Equipment			
Supplies	\$1,000	\$14,000	\$15,000
Contractual	\$25,000	\$40,000	\$65,000
Other			
Total Direct Charges			
Indirect Charges			
<b>Total</b>	<b>\$31,567</b>	<b>\$66,989</b>	<b>\$98,556</b>

The Recipient shall also provide a table that projects, by month, the expenditure of the government funds for each year. While it is recognized that out year costing profiles are less certain and the nature of specific tasks are dependent on successful or unsuccessful completion of the current project planning approach, the Recipient should provide their estimates of out-year costs to the extent practical. Table 2 - "Project Spending Plan" provides an example.



Table 2 – Project Spending Plan

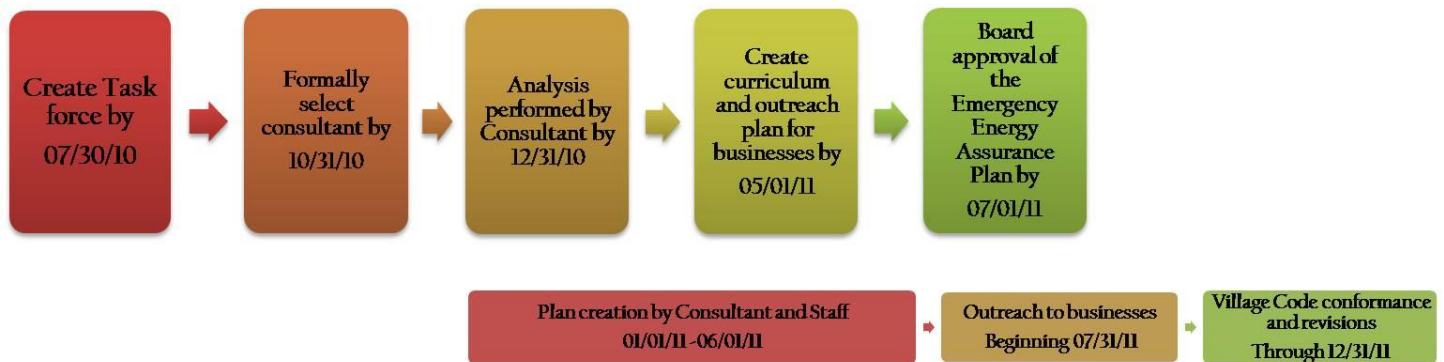
Monthly Spending Plan (Year 1)	
April	0
May	0
June	0
July	2
August	0.5
September	0.5
October	20
November	6
December	1
January	0.5
February	0.5
March	0.5
Total (\$s in thousands)	31.5

Monthly Spending Plan (Year 2)	
April	1
May	3
June	5
July	45
August	10
September	1
October	0.5
November	0.5
December	1
January	0
February	0
March	0
Total (\$s in thousands)	67

**Note:** Create one spend plan for each year during the project period (actual starting month may be different than in the example). Cost sharing is not required for this grant. However, recipients may reflect non-federal funds in the Project Funding Profile and as a separate column in the Project Spending Plan, if applicable. The Recipient may use calendar year, state or federal fiscal year, or any 12-month project cycle to depict the Funding Profile and Spending Plan, so long as the 12-month cycle is apparent to the reader of the Project Management Plan.

## 6. PROJECT TIMELINE

The Recipient shall provide a timeline of the project broken down by each task and subtask, as described in the Statement of Project Objectives. The timeline shall include for each task, a start date, end date, and team members participating on the task and their role. The timeline shall also show any interdependencies with other tasks and note the milestones identified in the Milestone Log (Section 3). The Project Timeline may be in the form of a table or a Gantt chart.



## 7. STATEMENT OF PROJECT OBJECTIVES

The Statement of Project Objectives (SOPO) from the Assistance Agreement shall be inserted here by the Recipient.

### STATEMENT OF PROJECT OBJECTIVES (SOPO)

#### A. OBJECTIVES

The initiative will focus on building regional energy assurance capability to allow Cities to better coordinate and communicate state-wide and with one another, on energy security, reliability, and emergency response issues. The objectives of this initiative are to: 1) strengthen and expand local government energy assurance planning and resiliency, (2) reduce the impacts from energy supply disruptions, and (3) create jobs and save jobs in energy assurance planning at the city level.

#### B. TASKS TO BE PERFORMED

##### Task 1.0 - Project Management Plan

The Recipient shall prepare and maintain a Project Management Plan (PMP). The PMP shall detail the work elements required to manage and report on activities in accordance with the ARRA and grant requirements. This PMP shall also document the project plan, schedule and project budget for carrying out all Tasks and completing all Deliverables under this Grant. It is anticipated that the PMP will be periodically revised during the performance period, but should at all times provide sufficient detail to plan, carry out and monitor all project activities.

#### Task 2.0 – Workforce Development Plan

The Workforce Development Plan (WDP) shall document the jobs created or saved as a direct result of this grant. The WDP shall be revised as necessary to provide the status of its implementation and any changes to the WDP during the course of the project.

#### Task 3.0 – Energy Assurance Planning

The Energy Assurance Plan (new or revised) shall be modeled after the Local Energy Assurance Guidelines

(<http://www.pti.org/docssust/LocalGovernmentEnergyAssuranceGuidelines.pdf>) developed by Public Technology Institute (PTI) and DOE Office of Electricity Delivery and Energy Reliability (OE). The Energy Assurance Plan should incorporate response actions for new energy portfolios, including Smart Grid technologies, and be integrated with the respective State Energy Assurance Plan. Energy assurance planning will be coordinated with appropriate entities, such as the emergency management office, homeland security office, fire departments, public utility commissions, state energy office, private sector utilities, etc.

Task 4.0 - Energy Assurance Plan Implementation Activities modeled after the “Top 10 Things Local Governments can do to Improve Energy Assurance Efforts” identified in the PTI Local Government Energy Assurance Guidelines.

Subtask 4.1 – Conduct thorough inventory of all Village owned/controlled facilities power requirements to ensure adequate power redundancy and capabilities to fully support essential village functions.

Subtask 4.2 – Create a task force to manage the development of the Energy Assurance Plan.

Subtask 4.3—Encourage/promote local utilities to use smart grid practices and legislation.

Subtask 4.4—Conduct community and business education on the benefits of a modern grid.

Subtask 4.5—Generate a continuity of operations plan to enhance the Emergency Operations Plan for the Village of Hoffman Estates.

#### B. DELIVERABLES

Reports shall be submitted in accordance with the "Federal Assistance Reporting Checklist" and the instructions accompanying the checklist included as Attachment 3 to the Assistance Agreement. In addition, the following deliverables are required.

Deliverable 1.0 – Project Management Plan (PMP) (PMP due 45 days following award and subsequent revisions (if needed), due quarterly throughout the performance period.)

Deliverable 2.0 – Workforce Development Plan (WDP) (WDP due 45 days following award and subsequent revisions (if needed) due quarterly throughout the performance period.)

Deliverable 3.0 – Energy Assurance Plan – (due at end of project period)

Deliverable 4.0 – Energy Assurance Plan Implementation Report documenting completion of all identified subtask 4.1 – 4.5 (Due one (1) month before end of project period.)