

Legislation: Authority for FEMP activities: Title V, Part 3, of the National Energy Conservation Policy Act (NECPA), as amended, 42 U.S.C. §§ 8251-8259, 8262, 8262b-k

Estimated Funds Available: \$400,000

Estimated Number of Projects: 2

Funding Ceilings/Expected Range of Funding: \$200,000

Cost Share: 25% is required. Higher cost share is encouraged.

Background and Objectives:

Chartered in 1973, the Federal Energy Management Program (FEMP) is a comprehensive Federal program that works to enhance security and reduce the costs and environmental impact of the government by:

- Advancing energy efficiency and water conservation;
- Promoting the use of renewable and distributed energy; and,
- Improving utility management decisions at Federal sites.

Since the 1970s, the Federal government has been called upon to demonstrate leadership in the energy management of its own operations. Policymakers recognized that the U.S. Federal government, as the nation's largest energy consumer, bears responsibility for improving the efficiency of its own facilities so that taxpayer dollars are spent efficiently and emissions that contribute to air pollution and global climate change are reduced.

With more than 500,000 buildings and facilities, the Federal government has an opportunity to lead the nation in energy-efficient building design, construction, and operation. Furthermore, the Federal government is an attractive working laboratory for emerging energy efficient and renewable energy technologies. For more information, visit the FEMP web site at www.eere.energy.gov/femp.

Objective 1: Pull the Market for Energy Efficient and Renewable Energy Products

As a major consumer that spends \$10 billion annually on energy-using products and services for its buildings, operations, and transportation, the Federal government can help pull the market for energy-efficient, renewable energy, and water conserving products. FEMP is working with agencies to encourage early adoption of energy efficiency and renewable energy technologies within the Federal government. As these commercially available products improve in efficiency, all consumers benefit from more efficient products in the marketplace. If Federal, state, and local governments can join forces in a coordinated effort to purchase certain energy efficient products, the impact will be even greater.

Objective 2: Improving Energy Reliability for Critical Missions

In the wake of 9/11 and periodic electricity black-outs, many Federal facilities with critical missions have an increased demand for reliable power. Distributed energy resources have the potential to help Federal agencies meet increased demand, reduce peak operating costs, enhance energy security, and improve the reliability of electric power generation. However,

given limited resources, many facilities continue to rely exclusively on backup diesel generators that have often proven unreliable during emergency situations.

As Federal agencies tackle these reliability challenges, FEMP is encouraging coordination with state and local governments to ensure the best use of limited investment dollars. In particular, FEMP is interested in promoting joint Federal, state, and local reliability planning in key areas so that critical functions (e.g., fire, safety, health, defense, communications, etc.) performed by various levels of government remain viable. If Federal, state, and local governments can jointly plan investments in distributed generation, communities will be better prepared for short and long-term outages. Significant cost savings and social benefits can accrue if parties interested in emergency preparedness, energy efficiency, and environmentally preferred technologies, come together to identify and implement win-win solutions.

Projects Requested/Areas of Interest:

(1) Large Scale Adoption of Energy Efficient or Renewable Energy Products by Federal, State, and Local Governments: Coordinated Bulk Procurement or Other Approach

FEMP is seeking applications that would result in a large-scale use of one or more energy efficient or renewable projects. If focused on bulk procurement, proposals should describe how a solicitation for the product(s) would be initiated; how a competitive price would be guaranteed; marketing strategy to Federal, state, and local and/or other users; as well as a list of likely Federal, state, and local facilities that have already expressed interest in using such products where possible. In addition, the applications should project the penetration rates for the given technology in their state during the project period, focusing on results in years 0-3. Projected benefits for out years can be included as well. Applicants can offer alternative approaches (rather than bulk procurement) that also result in large scale adoption of a specific technology by Federal, state, and local governments. While applications that suggest adoption by all levels of government are encouraged, other proposals that focus on only one or more levels of government will also be considered. Public/private partnerships can be included as well where beneficial.

Applications that promote renewable energy and energy efficient technologies either separately or jointly will be considered. Technologies of particular interest to FEMP are advanced T-8s, intelligent lighting controls, and task ambient lighting; however, FEMP strongly encourages proposals that provide strategic approaches for the application of renewable and energy efficient technologies. All applications should focus on energy efficient or renewable energy technologies that are commercially available but underused in the marketplace. Applications that include plans for using public benefit funds, utility rebates, or other incentives to reduce the initial costs are strongly encouraged. Through DOE's national laboratories, FEMP can provide additional technical assistance and analysis if needed on a limited basis.

(2) Regional Energy Reliability Planning and Implementation

FEMP is seeking applications that outline how a state or a portion of a state (e.g., one metropolitan area) will undertake coordinated energy reliability planning. Planning efforts should include relevant local governments, state agencies, and Federal facilities located within the planning boundaries, in addition to other major interests such as utilities and large industrial and commercial businesses.

Describe how the interests of community businesses, utilities, and Federal, state and local governments will be addressed in the planning process. Include plans for outreach and education to consumers, businesses, and others concerning the potential risks of long-term outages, the benefits of various investments in reliability, and the social, economic, and environmental trade-offs of various options. Describe how decisions will be made; who will lead the planning effort, etc. Outline the scope and timeline of the planning process (i.e., which of the following steps will the planning process include and complete: a vulnerability assessment, identification of existing backup power systems, identification of all critical needs in the planning area, consideration of additional investment options, other necessary steps).

The planning process should result in an energy reliability plan that ensures reliable power for all critical functions in the planning area during a long-term outage. The definition of “long-term” can be determined by the planning committee, but should be no less than one week. The resulting energy reliability plan should identify where additional investments are needed; provide a strategy for financing these investments (e.g., private sector financing; joint Federal, state, and local financing; other); and include a timeline for making the investments. In addition, the plan should describe how the investments selected will result in the greatest benefit to the overall planning area (i.e., describe how various benefits – ensured reliability of critical functions, environmental benefits, cost savings, land use protection, improved grid performance, etc. – were considered and optimized in the planning process).

Applications that include at least partial implementation of the plan (i.e., implementation of new grid management and/or communication practices, installation of, or initial financing for, new supplemental power systems or back-up power systems) will be considered favorably.

Evaluation Criteria:

APPROACH AND DESCRIPTION OF WORK: The technical merit of the project and clearly stated goal and objectives of the project; in particular, the potential for the project to encourage market transformation. FEMP will consider both applications that suggest proven approaches as well as more innovative methods. If proposed, evidence of the ability to plan and host conference/workshop events. Detailed descriptions of deliverables and time lines for task completion should be included. **(WEIGHT 40)**

A table outlining the following is recommended:

- a. Project deliverables
- b. Schedule for completing interim milestones and final deliverables
- c. Responsible organization (who is performing the work)
- d. Dollars required for completion of each milestone -- both Federal dollars and the cost-share dollars for that milestone if applicable

PARTNERSHIPS: Evidence of how state, local, and Federal government entities, as well as other organizations if relevant, will work together to implement the project. States should include a list of proposed partnerships and outline which Federal, state, and local government entities are collaborating on the proposed work. Applications that demonstrate partnerships between at least two levels of government will be considered favorably. Letters of commitment, outlining specific roles or tasks, from the identified partners are desirable. Include list of relevant personnel from partnering organizations where possible, along with qualifications. **(WEIGHT 20)**

BENEFITS: Ability of the project to clearly deliver energy, reliability, cost or other relevant benefits. The application should include how these benefits will be measured, an initial estimate of benefits, where possible and a timeframe for when benefits will be realized. **(WEIGHT 20)**

TIMELINESS OF EFFORT: Evidence of a commitment to initiate and complete the project in a timely manner. Results should be delivered within 2 years of receiving the award; 1 year preferably. **(WEIGHT 10)**

REPLICABILITY: Evidence that the project has significant potential to be widely replicated in other States across the country or within specific regions. **(WEIGHT 10)**