

Position Description
Engineering Specialist Management
Energy Efficiency for Municipal Government
State Energy Office/Division of Energy Services
WI DOA

POSITION SUMMARY

Under the general supervision of the Director of Commercialization and Market Development within the State Energy Office (SEO) this position has the responsibility for administering the Municipal Energy Efficiency Technical Assistance Program (MEETAP). The goal of this program is to assist municipalities (taxing authorities) including all K-12 Schools with energy efficiency projects. Most of these projects will be completed through the use of energy services companies (ESCOs). The role of the engineer will be to guide the local official or school district through the process, offering technical assistance and services. The engineer should have at least five years of experience working with ESCOs and at least ten years of energy management for a large (preferably government) organization. Certified Energy Manager status is a plus; the ideal candidate will be a PE but need not be registered.

POSITION DESCRIPTION

This position is directly responsible for the technical aspect of a new statewide municipal energy conservation program which will aim to serve municipal entities and schools throughout the state. In this capacity, this individual provides technical assistance to local officials to ensure that the implementation of the energy efficiency projects achieve the intended objective while minimizing the investment of public funds. A fundamental function of the position will be to provide outreach, communication, and liaison activities to all municipalities and schools to encourage energy efficiency.

This individual must have the ability to identify building mechanical problems impacting energy consumption; perform analysis of heating, cooling, ventilation, water, and lighting systems to determine optimum operating conditions; and analyze building control systems in order to improve operating efficiency. Additionally, ability to complete building modeling to forecast energy use of building modification alternatives; perform energy consumption and life-cycle cost analysis of energy conservation modifications; perform or direct a measurement and verification program, and perform energy data analysis and reporting. In addition, the individual will provide project management guidance to local officials implementing energy efficiency projects or contracting for those services with ESCOs

In addition, this individual will

- Provide guidance to public entities on energy conservation projects and the use of ESCO's to deliver the savings;
- Provide assistance in the review of energy conservation proposals and selection of energy services providers;
- Provide guidance on the components of the contract that pertain to the energy efficiency project and associated savings;
- Provide guidance on the management of the energy conservation projects;
- Provide assistance to facilities personnel in the design and selection of lighting technologies and systems; coordinate design and development of alterations to building systems to achieve energy consumption goals.

- Advise facility maintenance staff on energy efficient operation of building mechanical systems post project startup.

Specific areas of engineering service and responsibility include the following:

GOALS AND WORKER ACTIVITIE

A 40% Provide Technical Services for MEETAP.

- A1. Assist in customers in understanding the ESPC process and options for SEO support; Work closely with the Principle Investigator(PI) of MEETAP US DOE grant to develop and manage energy management projects, including those completed by energy service companies ESCOs); identify energy usage and savings.
- A2. Be familiar with the work of design professionals involved in energy management activities.
- A3. Function as the primary engineering specialist for MEETAP statewide program overseeing energy conservation initiatives for individual facilities, including municipalities, K-12 schools, and the Wisconsin Technical College System. Duties herein will include, but are not limited to:
 - i Assist in Energy Service Company (ESCO) selection (RFP, sealed bid, etc.);
 - ii Assist in proposal evaluation and performance contract preparation;
 - iii Assist in financial coordination and determination of best financing options;
 - iv Monitor implementation and project closeout progress
 - v Help with post project measurement and verification (M&V).
- A4. Communicate and coordinate with MEETAP PI and DOE grant manager to ensure that program data is accumulated and disseminated accordingly.
- A5. Attend meetings regarding energy conservation projects.
- A6. Assist in identification of best practices for energy efficiency and renewable energy measures in a variety of buildings;
- A7. Maintain program guidelines and overall program reporting to DOA

B 30% Provide assistance to municipalities on energy conservation initiatives.

- B1. Offer recommendations to municipalities on energy use practices for heating, cooling, ventilation, water, and lighting systems impacting energy conservation.

- B2. Offer input and technical support to facilities personnel and administration in the selection of equipment and technologies as it relates to construction projects related to energy conservation program initiatives that impact energy consumption.
- B3. Complete building modeling to forecast energy use of building modification alternatives; perform energy consumption and life cycle cost analysis of energy conservation modifications; and perform energy data analysis and reporting.
- B4. Provide coordination, technical support, and supervision to energy monitoring and energy management efforts of all municipalities.
- B5. Provide outreach, communication, and liaison activities to all municipalities and schools on sustainable and renewable energy conservation.

C. 20% Developing the Program/ Assisting with Marketing

- C1. Articulate the State's Energy Policy, act as "owner's representative" for the municipality or school district.
- C2. Develop training options both for State Energy Office colleagues and potential customers.
- C3. Conduct market outreach (i.e. build a successful program);
- C4. Identify all possible sources of funding for municipalities and all K-12 schools.
- C5. Selectively attend meetings in which Wisconsin's success stories are presented, or at which information on similar business assistance efforts are presented and discussed.

D 10% Advise Division of Energy Services staff on energy efficiency and conservation measures in municipalities.

- D1. Assist in the development of annual energy report as it relates to conservation initiatives in municipalities.
- D2. Sample/collect energy consumption data from statewide institutions.
- D3. Prepare written report incorporating statistical and graphical analysis of municipal energy use for publication and public distribution.
- D4. Direct and coordinate activities of other employees within the program.
- D5. Analyze data trends by entity, facility, building type, fuel source, and square footage.
- D6. Assess historical trends and impact of weather data on energy consumption.

Skills and Knowledge Needed

1. Knowledge of energy conservation strategies, practices, procedures, and guidelines. Ability to evaluate new technologies, processes, and programs to recommend specific actions for MEETAP.
2. Extensive engineering knowledge and the ability to apply that knowledge to energy conservation issues.
3. Working knowledge of facility operations, building maintenance programs, facility planning, and construction management.
4. Knowledge of team-building concepts and techniques. Ability to manage in a team environment and accomplish work through others.
5. Strong public relations skills, including excellent communication and interpersonal skills.
6. Strong leadership and program management skills.
7. Knowledge base in process development and application of energy conservation methodologies.
8. Knowledge of basic business practices. General knowledge of government business operations helpful.
9. Knowledge of contractual services terms and conditions and contract compliance monitoring techniques especially as it relates to energy service agreements.
10. Knowledge and skill in the project management processes.
11. Good oral and written communication skills.
12. Basic computer skills with a thorough knowledge and ability in technical spreadsheet applications and data base management.
13. Knowledge of and training in technical writing and editing.
14. Knowledge in measurement and verification techniques and processes.
15. Valid Wisconsin driver's license
16. Advanced knowledge of energy engineering principles
17. Basic knowledge of lending
18. Familiarity with WORD, spreadsheet, and or accounting software.
19. Excellent communication skills
20. Strong motivation to assist local governments, schools, and hospitals
21. Experience at administering large energy management program, preferably for a government entity
22. Very strong integrity and honesty
23. Advanced understanding of clean energy technologies
24. Receipt of awards and/or commendations for energy projects and management a plus.