SUSTAINABLE DESIGN
RENEWABLE ENERGY REQUIREMENTS

1. ISSUE: Current guidance regarding renewable energy does not clearly identify renewable energy requirements for construction and renovation projects.

2. BACKGROUND: The Energy Policy Act of 2005 (EPAct 2005) requires federal agencies to generate a minimum of 7.5% renewable electrical energy. When reporting compliance, Department of Energy guidance allows federal agencies to “double-count” renewable energy that is both generated and consumed onsite.

VA has established a goal of meeting 15% of its annual electrical consumption as renewable energy. To meet this goal as an agency, all new construction and major renovation projects will need to either generate 7.5% renewable electrical energy onsite or import 15% renewable electrical energy from offsite.

In addition, the Energy Independence and Security Act of 2007 (EISA 2007) requires projects to meet 30% of hot water demand through the use of solar hot water technologies, if lifecycle cost effective. Due to the difference in energy sources, this requirement does not help satisfy the renewable energy requirements of EPAct 2005.

3. NEW STANDARD: All major construction and major renovation projects must include the installation of onsite renewable energy technologies sufficient for providing a minimum of 7.5% of the project’s expected annual electricity consumption, to the extent economically feasible and technically practicable. If the renewable energy requirement will be met from an offsite source, the source must provide at least 15% of the project’s annual electricity consumption.

In addition, all major construction and major renovation projects must include the installation of solar hot water equipment to provide a minimum of 30% of the project’s hot water demand, if lifecycle cost effective.

Project planning must include a determination of renewable energy potential. If a project site has poor potential for renewable energy, resulting in renewable energy not being cost effective, the project team must contact CFM to discuss alternatives.

4. CONTACT: James Symanski Jr., P.E., Facilities Standards Service at James.Symanski@va.gov.