## **Alternative Energy**

The term "alternative energy" covers a variety of technologies, including geothermal, wind and solar power. The guidelines below apply equally to each of these technologies, unless otherwise specified. The overall goal of the guidelines and the Historic Preservation Commission is to encourage the preservation of existing features that support sustainability, as well as the flexible implementation of new technologies to enhance it.

**AE1** New alternative energy systems should be located to minimize their visibility from public streets and sidewalks. These systems should not be located on the primary elevation of a building, but should be on a secondary elevation and/or screened behind existing architectural features. Location on an accessory structure may also be an acceptable alternative. Related mechanical equipment and mounting structures should also be as inobtrusive as possible, with a non-reflective finish and a color that matches surrounding materials.

**AE2** Historic or character-defining building or site features should not be damaged or obscured by the alternative energy system or removed to accommodate the installation. Solar shingle laminates, glazing, or similar materials should not replace original or historic materials.

**AE3** Installations should be done in a manner that is as readily reversible as possible, so the components could be removed in the future with minimal impact to the original character of the building and/or site. The proposed method and materials for installation should be clearly identified in any Certificate of Appropriateness (COA) application for an alternative energy system installation.

These solar panels are appropriately located on the rear elevation minimizing their visual impact.

**AE4** When mounting an alternative energy generation system, consider and address threats to the structural integrity of the building that the installation may create, including excessive weight, forces that may be generated by windstorms, and water infiltration.

**AE5** New structures are encouraged to incorporate integrated alternative energy features into the initial design. These features should be located in areas not highly visible from the public right-of-way whenever possible.

**AE6** Free-standing or detached on-site solar panels or wind turbines should be installed in locations that minimize visibility from the public right-of-way and adjacent properties. Screening with appropriate fencing and/or vegetation is highly encouraged. The placement and design of these structures should not detract from the character of the district or destroy important site or landscape features.



**AE7** For solar panels – if placed on the sloped roof of a structure, the angle of the solar panels should match the roof angle, and the panels should not extend beyond the edge of the roof on which the panels are installed. On flat-roofed structures, the panels should be set back from the roof edge to minimize visibility. Pitch and elevation should also be adjusted to reduce visibility from the public right-of-way. Total roof area covered by a solar installation should not exceed 90%.

**AE8** For solar panels – solar devices that appear as an awning may be considered for installation on the primary façade of a building.

**AE9** For solar installations – adhesive solar technologies are most appropriate for use on a flat or membrane roof. This type of thin-film solar coating may not be used on a character-defining roof material such as slate or tile.

**AE10** Any alternative energy devices that fall into a state of disrepair or cease to be fully operational should be removed promptly and properly discarded. Any necessary building repairs should also be made promptly. If those repairs will include an alteration to the appearance or materials of the building, a COA may be required.

The solar panels on the Nashville, Indiana church at right are the same color and set at the same pitch as the roof, helping them to be almost invisible at street level.



The solar panels in the above example would have been more appropriately installed in a less conspicuous location set back from the front plane of the house. The tangle of wires leading down from the panels is also not consistent with these design guidelines.

