



Information Item

Date: August 30, 2012

To: Mayor and City Council
From: Dean Kubani, Director of Office of Sustainability and the Environment
Subject: Solar Access Policy Update

Introduction

This report provides information regarding existing and potential policy and regulatory options for protecting and improving solar access for residents and property owners in Santa Monica.

Background

Solar access, as discussed in this report, refers to the potential shading of solar collectors by neighboring structures or vegetation. Once a solar system has been installed, protecting the solar system's access to sunlight ensures the system will continue to generate electricity and, over time, pay back the property owner's investment in the system.

The State of California has enacted laws to encourage solar access and prevent restrictions on solar energy systems. The Solar Rights Act of 1978 prohibits local governments from restricting the installation of a solar system based on aesthetics and limits building officials' review of solar installations to specific health and safety requirements. It also prohibits homeowner associations from preventing solar installations by owners willing to take responsibility for roof repair and to indemnify the association for any damage caused by the solar system. The California Shade Control Act of 1979 protects solar systems from shading by vegetation, but does not protect installed solar energy systems from shading caused by structures. SB 1399, enacted in

2008, amended the Public Resources Code to exempt trees and shrubs planted prior to the installation of a solar system from the requirements of the Shade Control Act. Also exempted are trees and shrubs that are subject to a local ordinance, or the replacement of trees or shrubs that had been growing prior to the installation of the solar device.

The City of Santa Monica has adopted standards for solar systems into its building code but does not currently have specific standards regarding solar access (except as described below in the Land Use and Circulation Element). [On September 9, 2008](#), the City adopted the first fire solar safety standards in California which require solar panels to be set back from the edges of roof lines to allow access to the building in the event of a fire. On [July 14, 2009](#), City Council approved solar energy design standards for new solar systems which amended the Zoning Code to establish non-discretionary approval of solar systems in compliance with the Solar Rights Act. The solar installation standards provide guidance to the solar industry and property owners and also support the City's long-term commitment to renewable energy and the City's sustainable energy goals.

Since the Solar Santa Monica program was launched in 2006, over 370 solar electric systems have been installed on roofs throughout the community. If the solar industry continues to flourish in Santa Monica and property owners continue to invest in solar, it is possible that a solar access conflict could arise between neighboring property owners.

Solar access was initially brought to the attention of City Council in 2008 when a homeowner with a solar system was notified that his neighbor was adding a second floor that would potentially shade his solar system and prevent electricity generation. To date this is the only known concern regarding solar access that has been reported to City staff. A Council inquiry to the City Manager regarding this issue in 2009 initiated a staff review of potential options for addressing solar access in Santa Monica.

Discussion

Staff from the Office of Sustainability and the Environment, the City Attorney's Office, and the Planning and Community Development and Community and Cultural Services departments initially met in 2009 to discuss potential solar access protection options. At that time the processes to update both the Urban Forest Master Plan and the Land Use and Circulation Element (LUCE) were underway. Since both of these policy documents could include policy related to solar access issues staff focused its efforts at the time on researching existing and potential policy options that could be considered. That information as well as information regarding subsequent City policy actions is presented below.

Existing and Potential Policy Options

The State's Solar Rights Act was amended by AB 2473 in 2004 to provide property owners the opportunity to protect future solar access via a negotiated easement with neighboring property owners. Such an agreement must contain the following elements:

- The vertical and horizontal angles, expressed in degrees, at which the solar easement extends over the property subject to the solar easement.
- Any terms and/or conditions under which the solar easement is granted or will be terminated.
- Any provisions for compensation of the benefitting property owner in the event of interference with the solar easement or compensation to the property owner subject to the solar easement for maintaining the solar easement.
- Description of the property subject to the easement and a description of the property benefitting from the easement.
- Definitions of the solar energy devices, systems, or structural design features covered under the solar easement law.

The solar easement is attached to the deed of the neighboring properties and can be used to address concerns regarding neighboring structural changes. Solar easements are voluntary which limits their effectiveness because system owners have no guarantee of an agreement with a neighbor.

In California, the County of Santa Cruz has developed a process for registering solar energy systems to provide additional protection to solar energy system owners. The County of Santa Cruz's Building Regulations Code requires that any obstructions of solar access to a registered solar energy system be mitigated to the maximum extent feasible during the review of any permit to construct a building, wall, fence or other structure, or part of structure on a property that could have an impact on the system. The County of Santa Cruz's Code also contains a provision to protect registered systems from shading by vegetation on neighboring property. Upon registration, the County's Building Official notifies impacted property owners that their property may have development restrictions placed on it and ensures that the solar system owner locate the system where it least restricts potential development on the impacted property. Implementation of a similar solar easement requirement in Santa Monica would entail establishment and maintenance of a solar easement database by City staff and require a designated City official to determine if solar access should restrict development or require an existing system be relocated. If a solar easement dispute is caused by a neighbor's construction plans, the City could be drawn into a lengthy property rights dispute.

Rather than requiring registration of solar easements, the City of West Hollywood's Zoning Code addresses solar access issues by prohibiting construction or the planting of vegetation in a residential district (including single and multi-family buildings) that obstructs an existing solar system from functioning. The City has the discretion to modify this requirement if it finds that strict compliance would unduly limit property development, or unduly interfere with the development potential as envisioned for the area in the General Plan or Zoning Ordinance. If the owner of the property where the solar energy system is installed is willing to relocate the system, the City has the

discretion to require the property owner whose structure, fence, wall or vegetation may obstruct the solar energy system to pay the reasonable relocation costs. This ordinance, according to West Hollywood Planning staff, once resulted in a dispute between a property owner with a solar system and a pending commercial development, but was resolved administratively.

City Actions to Address Solar Access

City Council adopted LUCE on [July 6, 2010](#) which includes provisions to protect solar access in certain situations. LUCE goals 16.1 and 16.2 (LUCE 2.1-23) require a step down building envelope between commercial and lower adjacent residential buildings. Shade and solar studies were prepared and incorporated into the adopted building height and setback standards for mixed use boulevards, the Bergamot Transit Village, and the Downtown District.

The City's Urban Forest Master Plan assigns substantial environmental benefits of the urban forest from stormwater mitigation, water conservation, decreased energy use needed for air conditioning, improved air quality, and increased carbon sequestration by mature trees. The plan was adopted by Council on [December 13, 2011](#) and includes street tree planting standards for various zones in Santa Monica with specific tree species, but does not address whether those trees when fully-grown will shade the roofs of nearby buildings rather than the sides of buildings. This issue will be addressed by the newly-appointed Urban Forest Task Force when it begins meeting in 2012. Currently, property owners with existing solar systems that were installed prior to the planting of a street tree can contact the City's Public Landscape Division to request that the tree be trimmed. Tree trimming requests are currently evaluated on a case-by-case basis in order to maximize the health of the tree and the urban forest and facilitate the installation of solar systems on all suitable roofs. Trees on private property are adequately addressed by the State's Solar Shade Control Act which prohibits planting of tree species or vegetation that will likely grow to shade an existing solar system on a neighboring building.

Summary

Existing state regulations and City code requirements provide a certain level of protection of solar access for property owners and provide voluntary means to address issues that do arise. The California Shade Control Act protects solar energy systems from shading by vegetation; state regulations allow property owners to negotiate solar easements with neighboring property owners; the City has a process in place to address shading of solar systems by existing street trees; and the LUCE includes setback standards for commercial buildings adjacent to residential zones in order to protect solar access. However, the City does not currently have explicit requirements that prohibit solar energy systems from shading caused by structures within residential zones. Although there are now hundreds of solar energy systems installed on Santa Monica rooftops, to date there has been only one known instance in where a new development affected the access of an existing solar system to the sun. For this reason staff doesn't recommend the creation of additional local requirements regarding solar access. However, if solar access conflicts between neighboring property owners increase in the future staff may propose Council adoption of an ordinance, similar to one currently in place in West Hollywood, which prohibits construction of a structure that obstructs an existing solar system.

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