A Comprehensive Review of Solar Access Law in the United States Suggested Standards for a Model Statute and Ordinance

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EXECUTIVE SUMMARY

Solar energy systems require direct access to sunlight in order to operate efficiently. The installation of a solar energy system on a new or existing building requires exterior modifications that are subject to building codes and private regulation. This report reviews the ability of existing law and regulation to protect solar access and recommends specific measures to improve solar access.

The solar access issue will be separated into two distinct areas: solar easements and solar rights. "Solar Easements" refers to the ability of one property to continue to receive sunlight across property lines without obstruction from another's property (buildings, foliage or other impediment). "Solar Rights" refers to the ability to install solar energy systems on residential and commercial property that are subject to private restrictions, i.e., covenants, conditions, restrictions, bylaws, condominium declarations as well as local government ordinances and building codes.

The United States has held that there is no common law right to sunlight. This has required that specific statutory authority be established to protect the rights of solar users in terms of both their ability to install a solar energy system on their property, and then once that system in installed, to protect their access to sunlight so the system remains operational.

Land use planning, authority for solar easements, and prohibiting covenants, conditions and restrictions that impede the use of solar have all been employed to protect solar access, with varying degrees of success. This report reviewed traditional legal mechanisms that govern the operation of public and private governments, as well as solar specific ordinances and statutes that have evolved over the years. It concluded that most current law was ineffective or too expensive due to the lack of enforcement mechanisms.

The recommended elements of a comprehensive approach to protecting solar access were outlined and a model solar statute was developed based upon the best practices found across the United States. The model statute is intended to serve initially as a strawman for discussion among stakeholders, and will be revised to reflect feedback based upon needs of the stakeholders.

COMPONENTS OF SOLAR ACCESS LEGISLATION

State Level: Develop a model statute that will address state and local practices on use of solar energy equipment. It would include prescriptive measures, such as community design, solar easements, permitting fees and practices, standards and certification (IEEE,

IEC, UL, SRCC, FSEC, etc), as well as prohibitive measures, such as measures that restrict the use of solar energy.

Local Level: Focus on implementation and enforcement of state law, adoption of solar codes and standards, requirement that site plan review and approval include an element to addresses the current and future use of solar energy (such as solar easements, landscaping building height restriction and orientation). Also, provide for reduced permit fees and streamlined approval of solar permit applications; establish distinct solar permits, rather than electrical, plumbing, roofing permits. It may also include identification of trades that are authorized to install solar energy systems. [Option: consider establishing model solar contractor licensing laws and rules, incorporating NABCEP as baseline where no solar contractor licensing exists, or where NABCEP can provide a higher tier of expertise. This may overlap with other tasks.]

MODEL STATUTE/ORDINANCE TO ENCOURAGE SOLAR ACCESS

STATE/CITY/COUNTY
CHAPTER/SECTION NO
A LAW PROVIDING FOR SOLAR EASEMENTS; INVALIDATING PUBLIC AND
PRIVATE RESTRICTIONS RESTRICTING THE USE OF SOLAR ENERGY
SYTEMS; ESTABLISHING GUIDELINES FOR THE INSTALLATION OF SOLAR
ENERGY SYSTEMS, INCLUDING STANDARDS AND PERMIT REQUIREMENTS;
PROVIDING FOR CERTIFICATION OF INSTALLERS OF SOLAR ENERGY
SYSTEMS; PROVIDING FOR ENFORCEMENT AND PENALTIES; SUPERSEDING
ALL LAWS IN CONFLICT OR INCONSISTENT HEREWITH; PROVIDING AN
EFFECTIVE DATE.
WHEREAS, the State/City/County of wishes to advance the use of solar energy by all of its citizens, businesses and industries; and,
the use of solar energy by all of its citizens, businesses and industries; and,
WHEREAS, the State/City/County ofhas determined that public
and private land use and property restrictions can impair the ability of our citizens,
businesses and industries to install said systems; and,
WHEREAS, properly designed land use standards can prepare communities for greater
access to solar energy; and,
WHEREAS, the installation of solar energy systems according to established guidelines
by properly trained and certified personnel is essential to the safe and efficient operation
of said systems;
LADD OTHER CTATE ORDOUGLO BOLLOWS THAT MIGHT BE OUTED HERE!
[ADD OTHER STATE SPECIFIC POLICIES THAT MIGHT BE CITED HERE]
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NOW, THEREFORE, it is in the interest of the health, welfare and safety of the people of
to provide the infrastructure to assure the effective deployment of
solar technology.

NOW, BE ENACTED B	Y THE STATE OF	
OR		
NOW, THEREFORE, BI	E IT ORDAINED BY THE B	OARD OF CITY/COUNTY
COMMISSIONERS OF		, that:
	(City/County)	(State)

This Section Is Intended to be Interactive among Stakeholders to Explore the Options and Get Feedback from States/Cities with Best Practices as Identified in the Exemplary Law Section.

Section 1. Definitions

"Solar Energy Device" (active and passive): (Florida model) Solar energy device means the equipment and requisite hardware that provide and are used for collecting, transferring, converting, storing, or using incident solar energy for water heating, space heating, cooling, generating electricity, or other applications that would otherwise require the use of a conventional source of energy such as petroleum products, natural gas, manufactured gas, or electricity produced from a nonrenewable resource.

"Other renewable measures" (wind, geothermal, etc?):

Section 2. Solar Easements

(Massachusetts model, others to consider: New Jersey and New Mexico, City of Ashland)

- A. An easement of direct sunlight may be acquired over the land of another by express grant or covenant, or by a solar access permit as set forth in section 2. Any instrument creating a solar easement may include, but the contents are not limited to, all of the following:—
- (1) A description of the dimensions of the easement expressed in measurable terms, such as vertical or horizontal angles measured in degrees, or the hours of the day on specified dates during which direct sunlight to a specified surface of a solar collector, device, or structural design feature may not be obstructed, or a combination of these descriptions.
- (2) The restrictions placed upon vegetation, structures, and other objects which would impair or obstruct the passage of sunlight through the easement.
- (3) The amount, if any, of permissible obstruction of the passage of sunlight through the easement, expressed in measurable terms, such as a specific percentage of sunlight that may be obstructed.
- (4) The provisions for trimming vegetation that would impermissibly obstruct the passage of sunlight through the easement including any compensation for trimming expenses.
- (5) Any provisions for compensation of the owner of property benefiting from the easement in the event of impermissible obstruction of the easement.
- (6) The terms or conditions, if any, under which the easement may be revised or terminated.

Any instrument creating a solar easement shall be recorded in the registry of deeds in the county or district or, in the case of registered land, in the registry district of the land court in which the land affected is situated.

В. Zoning ordinances or community association by-laws may provide for special permits to protect access to direct sunlight for solar energy systems. Such ordinances or by-laws may provide that such solar access permits would create an easement to sunlight over neighboring property. Such ordinances or by-laws may also specify what constitutes an impermissible interference with the right to direct sunlight granted by a solar access permit and how to regulate growing vegetation that may interfere with such right. Such ordinances or by-laws may further provide standards for the issuance of solar access permits balancing the need of solar energy systems for direct sunlight with the right of neighboring property owners to the reasonable use of their property within other zoning restrictions. Such ordinances or by-laws may also provide a process for issuance of solar access permits including, but not limited to, notification of affected neighboring property owners, opportunity for a hearing, appeal process and recordation of such permits on burdened and benefited property deeds. Such ordinances or by-laws may further provide for establishment of a solar map identifying all local properties burdened or benefited by solar access permits. Such ordinances or by-laws may also require the examination of such solar maps by the appropriate official prior to the issuance of a building permit.

Section 3. Solar Rights

(Massachusetts model, others to consider: Hawaii and Wisconsin)

Solar energy systems; installation or use; restrictive provisions.

Any provision in an instrument relative to the ownership or use of real property which purports to forbid or unreasonably restrict the installation or use of a solar energy system or the building of structures that facilitate the collection of solar energy shall be void. A community association shall not adopt and shall not enforce any rule related to the installation or maintenance of solar collectors, if compliance with a rule or rules would increase the solar collectors' installation or maintenance costs by an amount which is estimated to be greater than 10 percent of the total cost of the initial installation of the solar collectors, including the costs of labor and equipment. A community association shall not adopt and shall not enforce any rule related to the installation or maintenance of solar collectors, if compliance with such rules inhibits the solar collectors from functioning at their intended maximum efficiency. The [Agency] shall enforce the provisions of this law in accordance with the authority granted under [section x].

Section 4. Local Ordinances

(Massachusetts model, Florida provision)

A. Zoning ordinances or by-laws adopted or amended pursuant to section five of this chapter may encourage the use of solar energy systems and protect solar access by regulation of the orientation of streets, lots and buildings, maximum building height limits, minimum building set back requirements, limitations on the type, height and placement of vegetation and other provisions. Zoning ordinances or by-laws may also establish buffer zones and additional districts that protect solar access which overlap existing zoning districts. Zoning ordinances or by-laws may further regulate the planting and trimming of vegetation on public property to

- protect the solar access of private and public solar energy systems and buildings. Solar energy systems may be exempted from set back, building height, and roof and lot coverage restrictions.
- B. Notwithstanding any provision of general or special law, the adoption of an ordinance by a city or county which prohibits or has the effect of prohibiting the installation of solar energy systems [or other device based on renewable resources] is expressly prohibited.

Section 5. Standards for the manufacture and installation of solar energy systems; building permits and fees; qualifications for installation.

- A. All solar thermal systems installed in the state must meet the standards established by the Solar Rating and Certification Corporation. All photovoltaic systems installed in the state must meet the standards established PowerMark.
- B. Every city or county with authority to enforce building codes shall require evidence of solar energy system certification in compliance with the standards in section A and shall establish a permit for the installation of solar energy systems to be known as a Solar Permit. Said permit may be issued only to those licensed contractors referred to in Section B, except that a homeowner may be issued a permit to install a solar energy system on his *or* her own home for personal, noncommercial use, provided that the homeowner actually performs the work and is solely responsible therefor. Building code jurisdictions shall adopt the FSEC PV System Design Review and Approval Process in an effort to expedite the permitting process. Building code jurisdictions are encouraged to consider waiving the fee for issuance of permits for solar energy systems. Excessive fees and requirements shall be considered a violation of the state's solar rights law.
- C. A solar energy system shall be installed by and connected by a [solar contractor/electrical contractor / plumbing contractor / NABCEP certified practitioner], except that a homeowner may install a solar water heater on his or her own home for personal, noncommercial use.
- D. All solar energy system installations shall be inspected for compliance with appropriate building codes and standards using the Inspection Guidelines for PV Systems by Brooks Engineering.