Survey of Solar Permitting Practices in Colorado Local Jurisdictions

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Executive Summary

When it comes time to install a new solar energy system, the local permitting process can be a walk in the park or a nasty bureaucratic headache. Inefficient permitting is a significant barrier to solar energy adoption. A more streamlined solar permit process benefits the solar consumer by lowering the cost of the system, and the city by reducing the time and resources needed to review each proposed solar energy system.

Vote Solar has worked in partnership with Colorado Solar Energy Industries Association (COSEIA) to collect and analyze current solar permitting practices using data compiled from cities and counties throughout the state. Using industry-standard best practices as a benchmark, we have evaluated each city for the time and cost associated with solar permitting.

We found that, while many jurisdictions in Colorado's cities and counties have reasonable permitting costs and issue permits in a timely manner, several cities show room for improvement. We assessed 34 jurisdictions for the dollar amount of the permit fee, whether that fee was flat or value-based, and the number of days it takes to obtain a permit. Vote Solar recommends a permit fee of $250 or less based on the agency's cost of service and that permits should be turned around in a day, preferably over-the-counter.

Best Performing Jurisdictions
Breckenridge
Colorado Springs
Denver
Denver County
Grand Junction
Pueblo

Worst Performing Jurisdictions
Arapahoe County
Aurora
Commerce City
Douglas County
Erie
Longmont

	Best Practice	Colorado Average
Permit Fee:	$250	$498
Basis of Fees:	fixed, flat	mostly value-based
Time-to-issuance:	1 business day (over-the-counter)	7 business days

In the following report, we review the permitting practices of 34 jurisdictions in greater detail and provide 'best practices' recommendations that can be employed to improve the local permit process and thus lower transaction costs for all parties.

Introduction

Colorado has become one of the leading solar photovoltaic (PV) markets in the U.S. in the past few years as a result of forward-thinking renewable energy policies. In 2009, Colorado added 23.4 MW_{DC} ranked 4th in the U.S. in grid-tied PV installations[1]. In 2010, 44 MW_{DC} were added bringing the state to a cumulative 103 MW_{DC}.

As Colorado's market continues to mature, developers are beginning to look for opportunities to increase their operational efficiencies in order to lower system costs. According to a recent survey, solar permitting can add hundreds or thousands of dollars to the total cost of a PV system[2]. This is unsurprising when one considers the man-hours spent to get a system permitted: first pulling the permit application materials together, then driving the paperwork down to the local permitting agency, and finally scheduling a time to be at the installation site to meet with the building inspector. But solar companies will paint an even more complicated picture: say the plan reviewer asks for additional information but doesn't allow electronic submissions (common among permitting departments) so the installer needs to mail it or drive it down to the agency again, which means delay, more time spent waiting, and possibly more fuel costs. Sometimes the building inspector asks to do multiple site visits: each one can mean half a day spent waiting for the inspection to be complete.

While it is important to reduce costs in order to make solar affordable to more consumers, there are direct benefits to local jurisdictions as well. We recognize that local governments are faced with tight budgets and under-resourced staff and that permit processes are in place to provide a degree of safety and protection for customers and their communities. Ultimately, we expect that when combined with proper training for building inspectors and plan reviewers, streamlining and standardizing the permit process will help ease the burden on public agencies while ensuring that high quality systems get permitted.

Furthermore, a robust solar PV market can be a powerful engine for economic development that drives local tax revenues and job creation. In particular, PV system installation and maintenance provide high-quality building trade jobs for electricians, plumbers, roofers, designers and engineers. Local governments that work to reduce market barriers will advantageously position their communities to reap the benefits of the growing renewable energy economy.

Our review of permitting practices for the 34 jurisdictions indicates a high level of inconsistency in terms of fee levels and permit issuance times. In many cases, those fees and wait times are excessively high. In the following report, we provide recommendations for improving the local permit process and thus lowering transaction costs for all parties.

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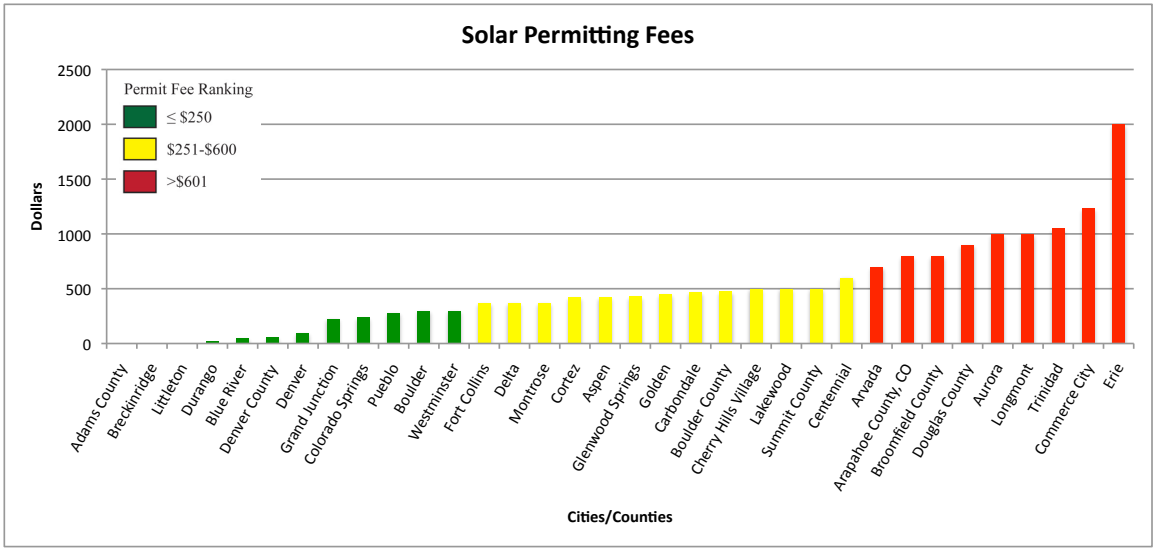
[1] Sherwood, Larry. U.S. Solar Market Trends, 2009 Edition. Interstate Renewable Energy Council. http://irecusa.org/wp-content/uploads/2010/07/IREC-Solar-Market-Trends-Report-2010_7-27-10_web1.pdf

[2] SunRun. The Impact of Local Permitting on Cost of Solar Power. Jan 2011. http://www.sunrunhome.com/permitting

Permit Fees and Fee Structure

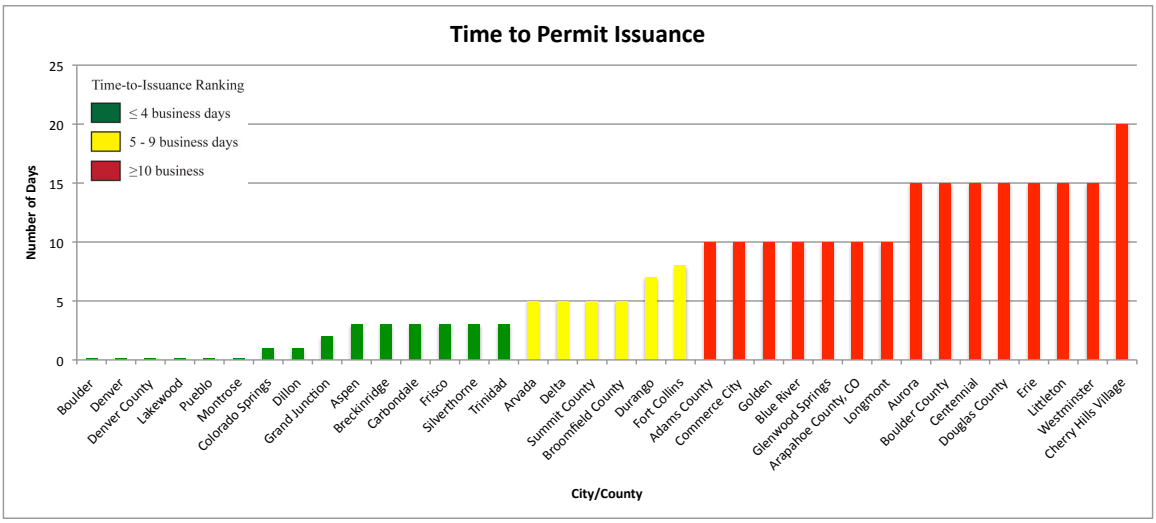
According to best practices, permitting fees should fairly reflect the time needed for staff to review and issue a permit, a transactional fee that should remain constant regardless of system size. Of the 34 jurisdictions reporting data, only 12 charge the 'best practices' fee levels. At the extreme high end, a contractor can expect to pay an estimated $2,000 for a 5kW system. This fee is arbitrarily high and hurts the economics of residential solar.



Of the jurisdictions we analyzed, only 8 provide fixed fees: Breckenridge, Blue River, Colorado Springs, Denver, Denver County, Durango, Littleton, Westminster.

Time to Permit Issuance

Issuing over-the-counter permits for standard PV systems with complete, error-free applications expedites the permit process, saving time and money. The following 6 cities offer permits over-the-counter: Boulder, Denver, Denver County, Lakewood, Pueblo, Montrose, Colorado Springs and Dillon have a 1 business day turnaround time.



Best Practice Recommendations

Fair Flat Fees: Using a flat-fee method instead of a value-based method to assess permit fees streamlines the process and ensures that larger solar energy systems are not arbitrarily penalized. Fees should fairly reflect the time needed for city staff to review and issue a permit – that's something that remains constant regardless of system size. A reasonable permit fee should be $250 or less if best practices are followed.

Over-the-Counter Issuance: Issuing over-the-counter permits for standard PV systems with complete, error-free applications expedites the permit process. An inspector must still inspect the PV systems and approve the permit before it is considered final.

Standardized Permit Requirements: Local jurisdictions should set and adhere to standard permitting requirements to make the process clear and transparent for applicants. Sample guidelines from Solar American Board for Codes and Standards available online: http://www.solarabcs.org/permitting/

Allow Email and Online Transactions: Allow solar contractors to submit permit applications via email or an online system. Permit fees and process information should be easily accessible via the city's website so applicants can review and prepare materials in advance.

Train Permitting Staff in Solar: Training building department staff to review permits and perform standard fire department checks reduces time and cost. Cities should make one or half-day workshops available to relevant staff.

Remove Excessive Reviews: Eliminating reviews that do little to validate the safe and efficient operation of a proposed PV system (i.e.: plan checks with aesthetic criteria) removes unnecessary costs and expedites permit issuance.

Reduce Inspection Appointment Windows: Keeping the windows for inspection appointments at or below two hours reduces the amount of costly worker time spent waiting for inspectors to arrive. Inspectors could also call contractors as appointment time grows close to further save time.

Resources and Reports

Expedited Permit Process for PV Systems, Version 4. Solar America Board for Codes and Standards (Solar ABCs), May 2009. URL: http://www.solarabcs.org/permitting/

Solar Powering Your Community: A Guide for Local Governments. U.S. Department of Energy, Jan 2011. URL: http://solaramericacommunities.energy.gov/resources/guide_for_local_governments/

Taking the Red Tape Out of Green Power. Network for New Energy Choices, Sept 2008. URL: http://newenergychoices.org/index.php?sd=rt&page=redTape

The Impact of Local Permitting on Cost of Solar Power. SunRun, Jan 2011. URL: http://www.sunrunhome.com/permitting

The Inspector Guidelines for PV Systems. Pace University Law School, Mar 2006. URL: http://www.irecusa.org/fileadmin/user_upload/NationalOutreachPubs/InspectorGuidelines-Version2.1.pdf

Field Inspection Guidelines for PV Systems. Interstate Renewable Energy Council, Jun 2010. URL: http://irecusa.org/wp-content/uploads/2010/07/PV-Field-Inspection-Guide-June-2010-F-1.pdf

SolarTech's Permitting Initiative. SolarTech is working to develop and implement standard solar permitting forms and inspection practices through a collaborative process, working with local jurisdictions and building officials in order to reduce permit times 50% by 2011. URL: http://solartech.org/

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