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Tax Basis for Solar PV Projects: Treasury Guidance

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Owners, and in some cases, lessees, of qualified renewable energy projects are eligible for either an investment tax credit (ITC) equal to 30% of the tax basis for the project, or until the end of this year, a cash grant paid directly by Treasury in the same amount. The ITC is claimed on the taxpayer's tax return, and eligibility for the credit is subject to normal IRS audit procedures. The cash grant (so-called "Section 1603 program"), on the other hand, is payable within 60 days after the taxpayer has submitted a properly completed application. A more complete summary of the Section 1603 program can be found here.

Whether the taxpayer claims the ITC or the cash grant, the tax basis for the property determines the amount of the credit or grant. The Treasury Department is reviewing literally thousands of applications under the Section 1603 program and has to make a determination of tax basis in a much shorter period of time than is available to IRS auditors in the field. To assist taxpayers with preparing Section 1603 applications, Treasury has published and posted to its Section 1603 website an outline of the process used by the Section 1603 review team to evaluate basis and the principles that guide the process. Although these principles are published in the context of the cash grant, they are the same tax concepts used to determine tax basis for ITC purposes as well. Moreover, although the Treasury paper addresses solar PV properties, the guidance states that "the methods used to evaluate cost basis described herein apply to all types of properties."

Basis

Basis is the amount of a taxpayer's investment in property for tax purposes. Basis is generally the cost of the property but also includes the capitalized portion of certain other costs related to buying or producing the property (e.g. permitting, engineering, and interest during construction). However, in certain circumstances, a taxpayer's stated cost for an asset does not reflect the true economic cost of that asset to the taxpayer and will be ignored for purposes of determining the basis of the asset. For example, a stated cost may be inconsistent with the eligible property's true basis "where a transaction is not conducted at arm's-length by two economically self-interested parties or where a transaction is based upon 'peculiar circumstances' which influence the purchaser to agree to a price in excess of the property's fair market value."

In order to ensure that a taxpayer's claimed cost basis reflects the eligible property's fair market value, basis is more closely scrutinized in cases involving related parties, related transactions, or other unusual circumstances. Similar to the authority of the IRS in the context of the ITC, in making cash payments under Section 1603, the Treasury Department has authority to decide that "an applicant has miscalculated or misrepresented the basis of its property." However, the Treasury cannot simply deny an application because it disagrees with the taxpayer's claimed basis. The courts have held that Treasury must pay a cash grant based on the correct basis amount. See ARRA Energy Co. I v. United States, 97 Fed. Cl. 12 (Fed. Cl. 2011) and our discussion of the case here.

The first step the Treasury review team takes to evaluate the claimed basis for solar photovoltaic (PV) properties is to compare the claimed basis to certain benchmarks. The benchmarks used by Treasury for solar PV cost basis are predicated on an open-market, arm's-length transaction between two entirely unrelated parties with adverse economic interests, specifically with respect to setting the eligible property's price.

Benchmarks considered by the Treasury review team are drawn and updated based on publicly available information and analyses by various experts, data from existing Section 1603 applications and other confidential sources, and Treasury's experience with solar PV properties. As of the first quarter of 2011, benchmark solar PV market expectations are as follows:

	Residential	**Residential/ Small Commercial**	**Commercial**	**Large Commercial/ Utility**
Size Range	< 10 kW	10 – 100 kW	100 – 1000 kW	> 1 MW
Typical Size	5 kW	25 kW	250 kW	2 MW
Turnkey Price per W	+/- $7	+/- $6	+/- $5	+/- $4

These prices reflect a high quality of equipment (modules, inverters, racking) installed by reputable companies across the United States and include profit.

These are merely benchmarks – they are not safe harbors and they are not ceilings. Each system is different and its cost will be affected by technology choice, regional market differences and differences in size within the above categories. A property may have specific characteristics that increase (or decrease) eligible costs. Such factors are considered in evaluating how a given application's basis compares with benchmark prices.

If claimed basis is deemed consistent with benchmark prices, the Section 1603 review team typically focuses the remainder of its cost review on examining line items provided in the detailed cost breakdown to ensure that only eligible items have been included and that no costs have been inappropriately attributed to the property. If there are no ineligible items, the basis reflects only items appropriately attributable to the eligible property, and if there is adequate documentation to support that the costs reflect actual costs, the cost basis is accepted.

The review team may ask the applicant to provide additional detail if a cost breakdown line item is defined too generally. If ineligible items are identified, they are removed, and the payment is based on the corrected amount. For example, although a project may necessitate a fence for security or a building for operations and maintenance, such costs are not eligible.

Applications with a claimed basis that is materially higher than benchmarks will receive closer scrutiny. In addition to ensuring that only eligible costs are included, the review team looks at whether there are related transactions, related party considerations, or other unusual circumstances, such as:

1. Owner/applicant is related to the developer, installer, or supplier (collectively referred to as the "developer"). The developer may be a separate, legally-organized business, but there is common ownership/control. In such a case, a sale of the property by one related party to the other may not reflect an arm's-length price.

1. Owner/applicant is a party to one or more related transactions with the developer such that economic interests

in the specific transaction determining basis may not be adverse. For example, the owner/applicant purchased the energy property from the developer and leased the property back to the developer (sale-leaseback).

Where such circumstances are present, the review team evaluates whether the claimed basis is consistent with the property's fair market value. (Fair market value is also relevant in the context of applications by lessees of leased property, where the parties have elected to pass through the ITC or cash grant to the lessee.) In this context, original manufacturer's invoices/costs to the developer should be provided for major equipment, subsequent markups by the developer should be enumerated, and any markups by the owner identified. The owner may also submit a detailed and credible third-party appraisal (discussed below) demonstrating that the claimed basis is consistent with a market transaction between unrelated parties with adverse economic interests.

Ultimately, if the Section 1603 review team determines that the basis was not properly calculated or represented, the review team may adjust the basis on which a Section 1603 payment is made to a level consistent with the review team's view of the property's true cost, as informed by documentation provided by the applicant and other relevant information and analysis. This is no different than what might take place upon examination by the IRS if the applicant elected the ITC rather than the Section 1603 payment.

Fair Market Value

The IRS generally defines fair market value (FMV) as "the price at which property would change hands between a buyer and a seller, neither having to buy or sell, and both having reasonable knowledge of all necessary facts."

The review team does not prepare appraisals for energy property. Rather, the review team evaluates appraisals provided by applicants and prepared by independent, certified appraisers with expertise in solar PV properties. There are three broad and interrelated methods that are used in valuation efforts: the cost approach, market approach, and income approach.

Cost Approach. The cost approach is based on the actual cost to build the property. This approach should clearly show the cost buildup, including hard costs, soft costs, and profit. Because the Section 1603 program only applies to energy property placed in service after December 2008, properties are new, and the actual costs should be readily available. As cost data for PV systems is increasingly timely and available, this approach tends to be the most concrete and supportable analysis and is favored by the review team.

Treasury's Section 1603 review team will accept a cost approach that includes only eligible property and a markup ("developer's premium") that is consistent with industry standards and with the scope of work for which the markup is received. While appropriate markups are case-specific and can depend on the ultimate transaction price, Treasury has found that appropriate markups typically fall in the range of 10 to 20 percent of actual cost to build. This 10 to 20 percent guideline is not a safe harbor or a ceiling. A cost approach that includes a markup should explicitly address the appropriateness of the selected markup in light of the activity, capital investment, and risk for which that markup is compensating.

Market Approach. The market approach is based on sales of comparable properties. The Treasury paper suggests that "thousands of solar PV properties have been installed in the last two years, and market data are readily available."

Income Approach. The income approach is based on the discounted value of future cash flows generated by and appropriately allocable to the eligible property. Numerous assumptions must be made, including forecasts of all relevant project revenue and cost streams, cost of capital (debt and equity), rates of inflation and taxes, number of periods of income, and residual value. Treasury has found this to be the “least reliable” method of valuation given the number of variables that are subject to speculation and open to debate. However, the reliability varies with the quality of the data and assumptions. Projects with contracted power purchase agreements (PPAs) and contracted sales of environmental attributes (e.g., SRECs) have concrete cash flows on which to base an income approach. Assumptions must still be made, however, about revenues expected to be generated after the PPA expires and residual value. For purposes of Section 1603, a credible income approach to valuation will consist of a detailed spreadsheet model showing annual revenue and expenses over the term of the contract with a reasonable residual value at contract termination.

- Inflation rates should be supported by credible sources.
- Discount rates should reflect an appropriate risk premium above the risk-free rate.
- Speculative revenue (i.e., revenue that is not specifically contracted and guaranteed by a credit-worthy customer) will be closely scrutinized and must be well-supported and documented. Projected revenue beyond contracted periods should be based on conservative, publicly-available data.
- All expenses must be included, both annual ordinary operating expenses and major maintenance (e.g., inverter replacement).
- All depreciation, taxes, and other considerations should be incorporated into the model.

These and all other assumptions should be well-reasoned and sufficiently documented, and should reflect market expectations. Moreover, the income approach should explicitly address the allocation of the estimated discounted cash flows to the eligible property.

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