



MEMO

To Michael McDade – California Board of Equalization
From Christopher G. Cothran, Manager, Property Tax – Nextera Energy Resources, LLC
Date November 23, 2011
Subject Guidelines for Active Solar Energy Systems New Construction Exclusion

The purpose of this memorandum is to provide the California Board of Equalization with Nextera Energy Resources, LLC's suggested revisions and comments regarding the Guidelines for Active Solar Energy Systems New Construction Exclusion – Draft October 2011 (the "Draft Guidelines"). We appreciate the opportunity to be a part of this process and respectfully submit the following for your review.

1. The Draft Guidelines attempt to encompass all active solar energy systems. The guidance provided to date is heavily weighted towards systems that are annexed to an existing building or new construction rather than large scale stand-alone solar facilities. An annexed system would include solar assets that are added to residential or commercial properties such as homes, shopping centers, and industrial facilities allowing them to reduce consumption of electricity from the power grid. A stand-alone asset would include plants built solely for the purpose of generating electricity to be supplied to the power grid for sale. The only other structures associated with stand-alone systems would be auxiliary equipment (personal property) and other structures such as operations and maintenance buildings (real property) that do not contribute directly to the generation of solar power.

We suggest that the Board of Equalization (BOE) amend the Draft Guidelines and set forth two separate sections that distinguish between these types of assets: one to address annexed systems that cannot be easily removed from real property and the second to address stand-alone systems.

2. Classification: Real Property vs. Personal Property

A typical active solar energy system is classified as a fixture, and thus treated as real property, if it meets the following tests listed in the Draft Guidelines: Physical Annexation, Constructive Annexation, and Intent (Draft Guidelines; Page 3, Lines 10-18).

Please provide clarification as to why the elements of an active solar energy system above the foundation are considered real property instead of personal property? In particular removable items that are part of the active solar energy system, specifically mirrors and photo voltaic panels (“PV Panels”) appear to be treated as real property as part of the Draft Guidelines. During the life of an active solar energy system, mirrors and PV Panels can and will be exchanged for various reasons including all forms of obsolescence. Why are these mirrors and PV Panels considered real property? Should they be considered personal property as they can be relatively easily removed and exchanged from the physical structure that supports them?

3. Impact Real Property vs. Personal Property and Decline in Value Comparison:

By forcing assets that are treated as personal property¹ to be taxed as real property for ad valorem tax purposes, a gap is created between the assessable value and the fair market value of any non-excluded assets. In most cases personal property items decline in value over time due to economic, physical, and functional obsolescence. However, because the Draft Guidelines provide for the treatment of these assets as real property they are subjected to methodologies that create an artificial appreciation in value when comparing the Current market value and the Factored Base Year Value. It is important to note that the impact of this classification is deepest in regards to auxiliary equipment that is not considered to be active solar and are thus not included as part of the “new construction” exclusion for active solar. The Draft Guidelines do not provide any methodology to allocate the calculated current market value of the active solar energy system down to the non-excluded assets as part of a Decline in Value measurement, causing the Factored Base Year values of the assets to be higher than the actual fair market value for the non-excluded assets. This issue will be addressed further in the next section.

4. Decline in Value, Example:

The ‘Decline in Value’ section, page 11, includes Example 4, which begins to provide an example of determining an active solar energy system’s value for assessment purposes. This example does not fully develop into a usable example. It begins by listing the specific installation cost of an active solar energy system, but then goes no further in discussing the concluded assessment or showing a comparison between the factored base year value and the current market value. The example appears to discuss a system added to an already existing property and not a system installed as a stand-alone large scale solar generation system for the sale of electricity. We request that an example for both an annexed system and a stand-alone system be developed and resubmitted for review. Below we have provided an example for a stand-alone facility.

¹ Active market participants within the large scale solar industry treat many of the components that make up the mechanical apparatus that is used to generate electricity using energy collected directly from the sun or auxiliary components that are used to support those solar assets are treated as personal property.

Proposed Example

A property owner installs a qualified active solar energy system for \$100 million dollars (also considered the base year value for this example). In this instance, the system includes auxiliary equipment that is considered non-solar and is not excluded under the current interpretation of the Draft Guidelines. A value of \$5 million will be placed on the part of the solar facility that is not considered to be eligible for the exclusion. So, in this example we have \$95 million of the original cost being excluded from assessment as “new construction” and \$5 million of “new construction” not excluded. Five years from this point, the property owner still owns 100% of the property and is still operating it as an active solar energy system. At the lien date five years into the future, the county assessor reviews the property for a possible decline in value under Proposition 8.

The Draft Guidelines compare the factored base year value with the current market value, assuming no exclusions. According to the example provided “the county assessor would include the current market value of the active solar system in the current market value for the entire property. The current market value for the entire property would be compared to the enrolled value factored base year value, and the lesser of the two values enrolled” (Draft Guidelines; page 12, lines 3-6).

Using the fact pattern outlined above, we have conducted the following Decline in Value Test.

Step 1: When calculating the current market value according to the Draft Guidelines the assessors should value the active solar energy system as if it were available for sale on the open market. The current market value should include both excluded and non-excluded assets, as if the entire active solar energy system were made available for sale. As typical with most manufacturing businesses, the market values of active solar energy systems and other electrical plants are impacted by declines in output capabilities, market demand, prices of good produced (e.g. electricity), and other economic and/or obsolescence factors. The market value of an active solar energy system will fluctuate over time with a general downward trend as the facility ages. Assuming that the market value of the active solar energy system is estimated to be \$100 million less 5 years of depreciation of \$17 million, the plant’s estimated current market value is \$83 million. Then 5% of the current market value is allocated to the non-excluded assets which are equal to ≈\$4.2 million.

Step 2: For comparative values, the factored base year value is calculated as \$100 million plus a 2%² increase per year over 5 years or \$110.4 million. Then 5%³ of the factored base year value is allocated to the non-excluded assets which are equal to ≈\$5.5 million.

² For simplicity, we are assuming that the factor used to estimate factored base year value is 2% per year.

³ When the assets were placed in service 95% were excluded and 5% were non-excluded. This example assumes that this allocation of value will remain constant throughout the life of the assets for ad valorem tax purposes.

Comparison: The Draft Guidelines state that the assessed value should be the lower of the two values generated by the factored base year and current market value calculations. As can be seen above, Step 1 generated a value of ≈\$4.2 million for the non -excluded assets and Step 2 generated a value of ≈\$5.5 million for the non -excluded assets. The total assessed value for the non-excluded assets should be \$4.2 million. See illustration below.

Proposed Example as described above

Asset Value at Construction	\$100 Million
<i>Excluded New Construction</i>	<i>\$95 Million</i>
<i>Non-excluded New Construction</i>	<i>\$5 Million</i>
<hr/>	
Calculated Values (at year 5):	
Current Market Value	\$83.3 Million
<i>Excluded New Construction</i>	<i>\$79.1 Million</i>
<i>Non-excluded New Construction</i>	<i>\$4.2 Million</i>
<i>Assumes depreciation on the solar energy system as solar plants more closely resembles personal property and typically decline in value over time</i>	
Factored Base Year Value	\$110.4 Million
<i>Excluded New Construction</i>	<i>\$104.9 Million</i>
<i>Non-excluded New Construction</i>	<i>\$5.5 Million</i>
<i>Assumes a 2% annual increase for calculating the factored base year value of the \$100 million asset at year 5</i>	
<hr/>	
Comparison (at year 5):	
Current Market Value	\$4.2 Million
Factored Base Year Value	\$5.5 Million
Assessed Value	\$4.2 Million

Observations of Current Practice: Based on the lack of detailed guidance provided by the Board of Equalization (BOE) both on an historical and more current basis, many assessors are comparing the factored base year values of the non-excluded assets to the current market value of the entire active solar energy system. Logic would dictate that in order to achieve comparability between Step 1 (current market value) and Step 2 (the factored base year value); assessors should allocate the calculated values to the non-excluded assets. See illustration below which displays what the comparison looks like when the calculated values are not properly allocated to the non-excluded assets.

Observation of Assessor Methodology

Asset Value at Construction	\$100 Million
<i>Excluded New Construction</i>	<i>\$95 Million</i>
<i>Non-excluded New Construction</i>	<i>\$5 Million</i>
<hr/>	
Calculated Values (at year 5):	
Current Market Value	\$83.3 Million
Factored Base Year Value	\$110.4 Million
<i>Excluded New Construction</i>	<i>\$104.9 Million</i>
<i>Non-excluded New Construction</i>	<i>\$5.5 Million</i>
<i>Assumes a 2% annual increase for calculating the factored base year value of the \$100 million asset at year 5</i>	
<hr/>	
Comparison (at year 5):	
Current Market Value	\$83.3 Million
Factored Base Year Value	\$5.5 Million
Assessed Value	\$5.5 Million

Without further clarification of the guidance provided to date, including the underdeveloped example in the Draft Guidelines regarding the interaction between the factored base year value and current market value, there is too much room left for open interpretation and lack of consistency in the application of a decline in value test.

5. The Draft Guidelines discuss a change in ownership in two sections, 'New Construction' beginning on page 6, lines 25-27 and 'Legal Entities' beginning on page 10, lines 19-28. We would like to have further clarification regarding a change in ownership in terms of a change in ownership of the company as well as the sale of physical assets. You could have a 2% transfer of ownership or a 2% sale of the physical asset. For example, does a 2% sale of ownership of the company owning an active solar energy system equate to a 2% sale of physical assets? When does the 2% sale lose its exclusion? Is the exclusion lost under only the physical sale of assets or under both scenarios (a change in ownership of the company or an actual physical sale of the assets to another company)?

6. The Draft Guidelines contain a 'builders' exclusion' section on pages 7-8. In this section three examples are listed on page 8, lines 5-30. In addition, on page 19 within the frequently asked questions and answers section Question 10 addresses the issue regarding the builders' exclusion. In each of these items, the Draft Guidelines clarify the relationship between the lien date and sale date as it relates to the exclusion. We would like further clarification regarding this issue. We understand the Draft Guidelines currently read that the purchaser of a property can lose the exclusion of the active solar energy system if the property is not purchased prior to the first lien date that the project is complete, despite the builder of the property having no intention of owning, using or occupying the structure. Under the guidelines, the exclusion to the original user is simply a function of the date of sale. In addition to that clarification, does this then mean that if a purchaser buys a property (from a builder with no intention of owning, using or occupying) on January 2nd, the day after the lien date (for a project completed in December 31st of the previous year), that the taxable value of the property does not receive the benefit of the exclusion? If this is the case, does the property then immediately lose market value because of the loss of that exclusion and the property tax increase associated with losing the exclusion?