Date Amended: 04/04/11  Bill No: Assembly Bill 1376
Tax Program: Sales and Use Tax  Author: Nestande
Sponsor: SunPeak Solar, LLC  Code Sections: RTC 6356.7
Related Bills: AB 204 (Halderman)  Effective Date: Upon enactment

BILL SUMMARY
This bill would provide a partial (6.25%) sales and use tax exemption for purchases of tangible personal property by a person for the construction of a facility which uses solar, biomass, wind, and geothermal energy to generate electricity.

ANALYSIS

CURRENT LAW
Under existing law, as provided by SB 71 (Ch. 10, Stats. 2010, effective 3/24/10), certain “projects” may be approved for a state and local sales and use tax exclusion by the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA). The bill amended Public Resources Code (PRC) Section 26003 and added PRC Section 26011.8 to include within the definition of “project” equipment used to manufacture products that produce energy from alternative sources such as solar, biomass, wind, and geothermal. SB 71 allows CAEATFA to authorize a sales and use tax exclusion for purchases of tangible personal property utilized for the design, manufacture, production, or assembly of advanced transportation technologies or alternative source products, components, or systems, which includes renewable energy equipment, combined heat and power equipment, and alternative transportation equipment in California.

Current law defines renewable energy to include “solar, biomass, wind, geothermal, hydroelectricity under 30 megawatts, or any other source of energy, the efficient use of which will reduce the use of fossil and nuclear fuels.”

Participating parties may apply to the CAEATFA to receive the sales and use tax exclusion. In approving qualifying projects, the law requires that the CAEATFA consider:

- The extent to which the project develops manufacturing facilities, or purchases equipment for manufacturing facilities, located in California.
- The extent to which the anticipated benefit to the state from the project equals or exceeds the projected benefit to the participating party from the sales and use tax exclusion.
- The extent to which the project will create new, permanent jobs in California.
- To the extent feasible, the extent to which the project, or the product produced by the project, results in a reduction of greenhouse gases, a reduction in air or water pollution, an increase in energy efficiency, or a reduction in energy consumption, beyond what is required by any federal or state law or regulation.

This staff analysis is provided to address various administrative, cost, revenue and policy issues; it is not to be construed to reflect or suggest the Board’s formal position.
• The extent of unemployment in the area in which the project is proposed to be located.

• Any other factors the authority deems appropriate in accordance with this section.

When the total value of exclusions awarded reaches $100 million annually, the CAEATFA must provide a 20-day notice to the Legislature prior to approving additional projects.

Current law directs CAEATFA to adopt emergency regulations for purposes of implementing PRC Section 26003 and 26011.8. Pursuant to this legislative mandate, CAEATFA approved emergency regulations at the September 22, 2010 Board meeting. The OAL approved the emergency regulations on October 4, 2010, putting them into affect for 180 days until April 15, 2011. CAEATFA is currently completing the regular rulemaking process.

Regulation 10033, *Eligibility Requirements and Application Evaluation*, interprets and makes specific the criteria for evaluating and approving a project. In general, a project must receive both a total score greater than or equal to the threshold value of 1,000 (based on the project criteria as established in SB 71) and an environmental benefits score of greater than or equal to 100 to be recommended for a sales and use tax exclusion. In addition, in order for a facility to be eligible for a sales and use tax exclusion, the tangible personal property must be “used substantially” for the design, manufacture, production or assembly of an alternative source product, component or system. The regulation defines “used substantially” as used more than 75 percent for the design, manufacture, production or assembly of an alternative source product, component, or system during the longer of (1) one year, or (2) one-half of the weighted average of the estimated useful lifespan of the qualified property, as specified.

According to CAEATFA, because biomass facilities manufacture an alternative source component (biomass), these facilities may be eligible for the sales and use tax exclusion under SB 71. The equipment must be used more than 75 percent for the manufacture of an alternative source component (biomass material). In addition, the project must meet all the other criteria in SB 71, such as creating new, permanent jobs in California. According to CAEATFA, there have been several projects approved for a SB 71 sales and use tax exclusion for new landfill gas power facilities. A listing of approved projects can be found on CAEATFA website at [www.treasurer.ca.gov/caeatfa/sb71/applicants/received.pdf](http://www.treasurer.ca.gov/caeatfa/sb71/applicants/received.pdf). CAEATFA currently is evaluating a project to convert an existing coal plant into a renewable energy generating facility, which would use biomass waste wood material for fuel.

As previously stated, some purchases of equipment by renewable energy facilities may qualify for a sales and use tax exclusion under SB 71. However, currently the sales and use tax exclusion does not extend to purchases of equipment primarily used to generate electricity, such as wind turbines or solar panels.

According to CAEATFA, the SB 71 Program currently does not extend to renewable energy generation facilities. However, the passage of SB 71 increased awareness of CAEATFA’s broader statutory authority to grant sales and use tax exclusion’s for these facilities in the state. In September 2010, the CAEATFA Board directed CAEATFA staff to being the rulemaking process to establish a sales and use tax exclusion program for renewable energy generation facilities. The CAEATFA staff developed a proposal for a short-term limited Program of $50 million of sales and use tax exclusion awards.

---

*This staff analysis is provided to address various administrative, cost, revenue and policy issues; it is not to be construed to reflect or suggest the BOE’s formal position.*
However, at the February 22, 2011 CAEATFA meeting, the CAEATFA board voted to postpone Program development for renewable energy generation projects until February 2012, and then continue discussions once there is a better understanding of the State’s fiscal condition.

Other business entities engaged in renewable energy generation activities that either do not qualify for, or do not seek financial assistance through, CAEATFA and who make purchases of equipment and supplies for use in the conduct of their production activities are required to pay tax on their purchases to the same extent as any other person either engaged in business in California.

Beginning July 1, 2011, the statewide sales and use tax rate (7.25%) imposed on taxable sales and purchases of tangible personal property is made up of the following components (additional transactions and use taxes (also known as district taxes) are levied by various local jurisdictions and are not reflected in this chart):

<table>
<thead>
<tr>
<th>Rate</th>
<th>Jurisdiction</th>
<th>Purpose/Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.00%</td>
<td>State (General Fund)</td>
<td>State general purposes (RTC Sections 6051, 6051.3, 6201, and 6201.3)</td>
</tr>
<tr>
<td>0.25%</td>
<td>State (Fiscal Recovery Fund)</td>
<td>Repayment of the Economic Recovery Bonds (RTC Sections 6051.5 and 6201.5, operative 7/1/04)</td>
</tr>
<tr>
<td>0.50%</td>
<td>State (Local Revenue Fund)</td>
<td>Local governments to fund health and welfare programs (RTC Sections 6051.2 and 6201.2)</td>
</tr>
<tr>
<td>0.50%</td>
<td>State (Local Public Safety Fund)</td>
<td>Local governments to fund public safety services (Section 35, Article XIII, State Constitution)</td>
</tr>
<tr>
<td>1.00%</td>
<td>Local (City/County)</td>
<td>City and county general operations (RTC Section 7203.1, operative 7/1/04); Dedicated to county transportation purposes</td>
</tr>
<tr>
<td>0.75%</td>
<td>City and County</td>
<td></td>
</tr>
<tr>
<td>0.25%</td>
<td>County</td>
<td></td>
</tr>
<tr>
<td>7.25%</td>
<td>Total Statewide Rate</td>
<td></td>
</tr>
</tbody>
</table>

The 1% General Fund tax under Sections 6051.7 and 6201.7 will expire on 6/30/11.

**PROPOSED LAW**

This bill would add RTC 6356.7 to the Sales and Use Tax Law to provide a partial exemption (General Fund, Fiscal Recovery Fund, Local Revenue Fund, and Local Public Safety Fund) from the sales and use tax rate of 6.25% for tangible personal property purchased by a person for the construction of a facility that will use solar, biomass, wind, and geothermal energy to generate electricity of 1 megawatt or greater.

The bill specifies that the proposed exemption shall not apply to any tax levied by a county, city, or district pursuant to the Bradley-Burns Uniform Local Sales and Use Tax Law or the Transactions and Use Tax Law (also known as district taxes).

The bill would take effect immediately as a tax levy.
COMMENTS

1. Sponsor and Purpose. This bill is sponsored by SunPeak Solar, LLC, in an effort to encourage the creation of new renewable energy facilities in California. According to the author’s office, “In order to facilitate the development of renewable facilities, it is important to extend the sales tax exemption for construction of these facilities. If sales tax is to continue to apply to these projects, then there will be a continuing bias to out-of-state construction and to the extent, projects are built in California, the imposition of sales tax will only add to the installed cost of projects. This means that energy in California is more expensive than it need be; with the inevitable result that commercial activity is suppressed, including the obvious result that job creation is impaired.”

2. What are the types of eligible facilities? New facilities that will use solar, biomass, wind, and geothermal energy to generate electricity of one megawatt or greater would be eligible for the proposed exemption. The California Energy Commission (CEC) describes four types of biomass facilities in California—solid combustion biomass, landfill gas, digester gas, and municipal solid waste (www.energy.ca.gov/biomass/index.html). In general, biomass facilities produce electricity which they sell to retail sellers of electricity. We note that the proposed exemption does not apply only to power plants. The exemption would apply to any new facility that uses solar, biomass, wind, and geothermal to generate electricity of at least one megawatt. Thus, the exemption could apply to, for example, an irrigation district or agricultural operation that would build a new facility to be powered by solar of one megawatt or more.

In addition, eligible facilities must generate electricity of one megawatt or greater. According to the author’s office, one megawatt will provide electricity for 1,000 homes. The California Energy Commission’s Renewable Energy Program Guidebook defines one megawatt as approximately the amount of power to meet the peak demand of a large hotel.

3. Administrative considerations. The bill lacks definitions and other administrative details necessary to implement the proposed exemption. BOE staff is available to work with the author’s office to resolve these and other concerns that may be identified.

- The bill uses the undefined terms “construction of a facility” and “solar”, “biomass”, “wind”, and “geothermal”. The absence of a definition to clarify these terms could lead to disputes with taxpayers and would complicate the administration of this exemption.

- As currently drafted, the bill could include any tangible personal property that is used to construct a facility that will use solar, biomass, wind or geothermal energy to generate electricity of one megawatt or greater. If the intent of AB 1376 is to encourage the development of new renewable energy facilities, then the author may wish to limit the definition of tangible personal property only to those types of property that are directly related to the construction of a new renewable energy facility. For example, equipment directly used in the construction of a new renewable energy facility could include solar panels, photovoltaic cells, wind turbines, boilers, compressors, distribution control systems, pumps, and generators.

This staff analysis is provided to address various administrative, cost, revenue and policy issues; it is not to be construed to reflect or suggest the BOE’s formal position.
• Is it the author’s intent to exclude tangible personal property not directly related to the construction or operation of a renewable energy facility? For example, would the proposed exemption apply to purchases of property used in administration, general management, or marketing? Would trucks used to transport materials and equipment to the facility be considered qualifying items? Would fuels used or consumed in certain activities be qualifying items? Would the exemption apply to buildings designed for purposes other than producing or generating electricity, such as storage facilities?

• The bill should specify a percentage or level of use required for a purchase to qualify for the partial exemption. For example, the partial exemption would apply when the item purchased will be used primarily or exclusively in the construction of a renewable energy facility, which the bill would also define. The BOE administers several sales and use tax exemptions, which define “primarily” to mean 50 percent or more of the time. Clarifying the percentage of use necessary for a purchase to qualify for the partial exemption will assist BOE staff in administering this exemption.

• As previously stated, the term “construction of a facility” should be defined. According to the author’s office, the partial exemption is intended to apply only to a new facility. Would a new facility include an expansion of current solar, biomass, wind, or geothermal facility? Would converting a non-renewable to a renewable energy facility, such as the conversion of a coal power plant to a waste wood fuel processing plant qualify for the partial exemption? In addition, the bill should specify a time limitation for which the exemption would apply. What is the timeframe to build a new facility? The bill should specify this.

• The term “person” should be clarified. Would the proposed exemption apply to materials and fixtures purchased by a contractor in the performance of a construction contract for persons building new renewable energy facilities? The bill needs to clarify how this would work.

4. Partial exemptions complicate administration of the tax. Currently, most sales and use tax exemptions apply to the total applicable sales and use tax. However, there are currently five partial exemptions in California law, where only the state tax portion (6.25%: General Fund (6%) and Fiscal Recovery Fund (0.25%)) of the state and local sales and use tax rate is exempted. These five partial tax exemptions include: (1) farm equipment and machinery, (2) diesel fuel used for farming and food processing, (3) teleproduction and postproduction equipment, (4) timber harvesting equipment and machinery, and (5) racehorse breeding stock. These partial tax exemptions are difficult for both retailers and the BOE. They complicate return preparation and return processing. And errors on returns attributable to these partial exemptions occur frequently, which result in additional return processing workload for the BOE.

This measure proposes a 6.25% exemption (General Fund (5%), Fiscal Recovery Fund (0.25%), Local Revenue Fund (0.50%), and Local Public Safety Fund (0.50%)), which would create a new exemption category (since current law does not have any partial exemptions other than those noted in the previous paragraph, which effective July 1, 2011 is reduced to 5.25%). This would require a revision to the sales and use tax return and result in a new, separate computation on the return. Some retailers would have to segregate in their records sales subject to the 6.25%
exemption (proposed by this bill), 5.25% exemption (July 1, 2011 partial exemption rate), sales with a full exemption (such as a sale for resale or a sale in interstate commerce), and sales that are fully taxable. This bill would add a new level of complexity, which would create a corresponding increase in errors in reporting the tax to the BOE. This increase in errors would further complicate the BOE’s administration of the sales and use tax law and complicate reporting obligations of retailers.

5. A delayed operative date is recommended. The provisions of the bill would become effective immediately. However, since retailers generally rely on receiving an “official notice” of tax law changes from the BOE before implementing a law change, it is recommended that a delayed operative date be incorporated into the bill in order for the BOE to give proper advance notice. The following language is suggested to be added to proposed Section 3 of the bill:

“However, the provisions of this act shall become operative on the first day of the first calendar quarter commencing more than 90 days after the effective date of this act.”

6. Related legislation. AB 204 (Halderman) would also provide a partial (6.25%) sales and use tax exemption for purchases of equipment by a biomass energy facility, as defined, for use in its biomass energy production in this state.

COST ESTIMATE

Because of the new partial exemption, the BOE would incur administrative costs attributable to programming, return revisions, and return processing. In addition, the BOE would incur costs to notify affected retailers, prepare a special publication and exemption certificate, audit claimed exemptions, and answer inquiries from the public and taxpayers. An estimate of these costs is pending.

REVENUE ESTIMATE

BACKGROUND, METHODOLOGY, AND ASSUMPTIONS

According to the California Energy Commission’s Investor-Owned Utility (IOU) Contracts database, 78 solar, geothermal, biomass and wind facilities located in California will come online between now and the end of 2013, representing between 7,166 and 8,235 MW of capacity. These are signed contracts between renewable energy facilities and IOU’s such as PG&E.

The Commission also indicated that their Renewable Portfolio Standards (RPS) database includes any renewable energy facility that has requested pre-certification and may come online. The RPS database has 283 solar, geothermal, biomass and wind facilities located in California that could come online between January 1, 2011 and December, 31, 2013. This represents an estimated 13,570 MW of capacity. Commission staff also indicated that many of the 78 IOU facilities are likely included in the RPS database, but it is not a certainty.

Given that there is a chance that many of the 78 IOU facilities are likely included in the RPS database, and that RPS facilities are only in pre-certification stages (not in contract), and we don’t know how many would result in an actual facility, we base this revenue estimate on the IOU data. The following is a breakdown of the data provided by the Commission:

This staff analysis is provided to address various administrative, cost, revenue and policy issues; it is not to be construed to reflect or suggest the BOE’s formal position.
Facilities by Type of Technology – Provided By California Energy Commission

<table>
<thead>
<tr>
<th>Technology</th>
<th>Facility Count</th>
<th>MW Capacity</th>
<th>Facility Count</th>
<th>MW Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IOU</td>
<td>IOU</td>
<td>RPS</td>
<td>RPS</td>
</tr>
<tr>
<td>wind</td>
<td>18</td>
<td>2,955</td>
<td>21</td>
<td>2,230</td>
</tr>
<tr>
<td>biogas</td>
<td>14</td>
<td>25</td>
<td>9</td>
<td>307</td>
</tr>
<tr>
<td>biomass</td>
<td>5</td>
<td>117</td>
<td>6</td>
<td>222</td>
</tr>
<tr>
<td>geothermal</td>
<td>6</td>
<td>376</td>
<td>4</td>
<td>179</td>
</tr>
<tr>
<td>solar thermal</td>
<td>11</td>
<td>2,774</td>
<td>13</td>
<td>4,374</td>
</tr>
<tr>
<td>solar photovoltaic</td>
<td>24</td>
<td>1,434</td>
<td>230</td>
<td>6,258</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>78</strong></td>
<td><strong>7,681</strong></td>
<td><strong>283</strong></td>
<td><strong>13,570</strong></td>
</tr>
</tbody>
</table>

In a 2009 report (Renewable Energy Cost of Generation Update) prepared for the Commission, the cost of generating electricity for technologies built in California is discussed extensively. An example would be that for wind facilities, the estimated “installed cost” in 2011 per gross MW is $2.5 million. Based on the IOU MW data and by using the plant cost data i.e. cost estimates (cost per gross MW) for the pertinent technologies, it is estimated that overall construction costs for all technologies would amount to an estimated $26.3 billion. Assuming that 50% would be labor costs and other nontaxable costs, it is estimated that taxable construction costs (subject to this proposal) would be 50% or $13.16 billion (50% × $26.3 billion = $13.16 billion).

**REVENUE SUMMARY**

Based on the above analysis, it is estimated that total sales and use tax loss would be $822 million (6.25% × $13.16 billion = $822 million).

We assume that a construction of a renewable facility could take about two years. Based on this assumption, the annual sales and use tax loss is estimated to be $411 million ($822 million / 2 = $411 million). The following provides a breakdown of the annual sales and use tax revenue loss:

<table>
<thead>
<tr>
<th>Revenue Impact – Estimated Annual Sales &amp; Use Tax Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>(In millions $)</td>
</tr>
<tr>
<td>State 5%</td>
</tr>
<tr>
<td>Fiscal Recovery 0.25%</td>
</tr>
<tr>
<td>Local Revenue Fund 0.50%</td>
</tr>
<tr>
<td>Public Safety Fund 0.50%</td>
</tr>
<tr>
<td><strong>$411</strong></td>
</tr>
</tbody>
</table>
Qualifying Remark. This bill would provide a partial sales and use tax exemption for construction of a broad range of renewable energy facilities, such as solar, biomass, wind, and geothermal. Each of these various technologies has its own distinctive capabilities, cost drivers and trends. Although we have been able to estimate the revenue impact based on current Commission data, a comprehensive analysis of each technology or industry is needed to better understand the bill’s long-term revenue impact.

For reasons discussed previously, we did not use the RPS data. If some of those facilities in the pre-certification stage did materialize into actual facilities, the sales and use tax revenue loss could be higher.