Green-e Verification Results
1998

Electricity Service Providers (ESP) offering Green-e certified products undergo an annual independent process audit to verify that they meet Green-e’s standards. This annual independent verification is an integral part of Green-e’s effort to build consumer confidence in renewable-based electricity and to spur demand for renewable power in restructured markets.

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Electricity service providers (ESP) offering Green-e certified products undergo an annual independent process audit to verify that they meet Green-e’s standards. This document represents the results of Green-e’s 1998 independent verification.

**Information Verified by Green-e Process Audit**
The Green-e process audit is different from a traditional financial audit in that the auditor only looks at those materials and processes dictated by a set of Agreed-Upon Procedures developed by the Center for Resource Solutions. In this case, the Agreed-Upon Procedures direct the auditor to review a company’s contracts, invoices and metering data to verify the quantity and type of renewable power purchased and sold by the ESP. More specifically, the independent auditor verifies that the retail ESP has contracts and processes that support the following Green-e requirements:

- the ESP purchased enough renewable power in quantity and type to meet its customer demand for each specific Green-e product;
- the non-renewable portion of the electricity product met the emissions requirements for the Green-e standard;
- the information provided on the Annual Power Content Label is accurate;
- the renewable power purchased and sold by the ESP was not sold to more than one customer;
- the ESP has a signed affidavit that it purchased no power from fuel sources for which negative marketing claims were made, (e.g. no nuclear or coal were purchased for this product);
- the product contained enough new renewable resources to meet the Green-e New Renewable Standard as well as any product marketing claims for new renewable power;
- the product does not contain any nuclear power other than what is contained in the system mix;
- the renewable power was generated from eligible renewable resources;
- the ESP’s processes for recording the amount of power sold to customers is accurate based on a statistically significant sample of metering data; and
- in California, the Annual Retail Supplier Report forms filed with the California Energy Commission (CEC) are accurate and are supported by contracts and/ or invoices for power purchased and sold.

The process audit for wholesale suppliers is similar to the retail suppliers audit, except that it does not verify materials that are unique to retailers, such as retail customer metering data, the retail power content label and for California, the CEC Annual Retailer Supplier Report.

**1998 Verification Results**
During 1998, the first year of California’s deregulated utilities market, all but one green power marketer serving the residential market offered electricity products certified by Green-e. Over the year, five wholesalers and six retailers participated in the Green-e Program. Three wholesale providers did not sell any power into the California market in 1998 and, therefore, did not conduct a process audit. All other suppliers successfully completed their audits.

### Number and Type of Retail Green-e Products Offered in 1998

<table>
<thead>
<tr>
<th>Renewable Percentage</th>
<th>Number of Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% Renewable</td>
<td>6 products</td>
</tr>
<tr>
<td>Green-e verified &lt;50% renewable</td>
<td>1 product</td>
</tr>
<tr>
<td>75% Renewable</td>
<td>2 products</td>
</tr>
<tr>
<td>50% Renewable</td>
<td>5 products</td>
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The Green-e process audits found that all wholesale and retail suppliers purchased enough renewable power to meet their product claims both in the quantity and type of renewable resources that were purchased for certified or verified electricity products. This finding allays doubts that green power customers would face widespread deception from marketers failing to meet their green power promises. Although ESPs selling Green-e certified products are required to purchase a minimum of 50% of their energy from a renewable supply, six of the fifteen Green-e certified products were 100% renewable. Furthermore, the verification reports show that Green-e products claiming to be only 50% or 75% renewable actually delivered over 99% renewable power. 1998 renewable resources purchased for retail Green-e included primarily geothermal, small hydroelectric and biomass.

Based on numbers from the Green-e process audit reports, 56,612 Californian households were served Green-e certified or verified electricity in 1998. In addition, there were approximately 5,832 non-residential (industrial, small commercial and agricultural) customers served by Green-e certified power. The total load served by Green-e electricity products in 1998 was approximately 348,000 MWh. An estimated 79% of this load was sold to residential customers and 21% to non-residential customers.

A comparison of the California Public Utility Commission data (DASR reports) for the same time period shows that Green-e represented 72% of the direct access residential market at the end of 1998. Furthermore, in January 1999, one of the most prominent alternative power suppliers in CA switched all of its customers to Green-e certified 100% renewable power. It is estimated that by the end of January 1999, more than 90% of all direct access residential customers in California were being served with Green-e renewable electricity products.

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1 Some companies asked CRS to verify their products even though they are not eligible for certification. Green-e verified electricity products are products containing less than 50% renewable power, but more than the 11% of renewable power found in the CA system mix. They do not have Green-e certification because they do not meet the required 50% renewable threshold, but they are independently verified, and do represent an incremental improvement over system power.
2 The CPUC reports that 78,881 residential customers in California were receiving their electricity from an alternative supplier in 1998. This represents 0.9% of the residential California market and 1.1% of the direct access load. Direct access customers are those who have switched their electricity provider.
The primary renewable resources used to meet the demand for wholesale Green-e certified power included geothermal, small scale hydroelectric, and biomass. Green-e wholesale suppliers sold approximately 65,400 MWh of renewable power into the competitive market during 1998. Most of this was used to supply Green-e retailers.

**Green Market and New Renewables**
Consumer demand for renewables is already spurring plans by several power marketers and wholesalers to meet future consumer demand through the construction of new renewables. Enron Wind Company has announced it will build a new 16.5 MW wind facility; Green Mountain Energy also plans to build a 2 MW wind facility. The Sacramento Municipal Utility District has contracted with developers to purchase all of the electricity from a new 8.3MW landfill gas facility. In addition, 55 projects comprising over 500 MW of new renewable resources are planned for construction under the CEC’s New Renewables Auction established by California's deregulation law. Approximately 300 MW of this new generation is scheduled to be in operation within the next year.

**For More Information**
The Green-e renewable Electricity Certification Program is the nation's first and only certification program for electricity offerings based on renewable energy supply. For more information about Green-e, please see our website at www.green-e.org or contact the Center for Resource Solutions at (415) 561-2100.