The Consumerization of Energy
Craig Lawrence, Ph.D
VP of Products, SunEdison
## Charges

### 06/22/2007 - 06/30/2007

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Charges</td>
<td></td>
<td></td>
<td>$14.36</td>
</tr>
<tr>
<td>Baseline Quantity</td>
<td>107.10000 Kwh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline Usage</td>
<td>107.10000 Kwh</td>
<td>$0.011430</td>
<td></td>
</tr>
<tr>
<td>101-130% of Baseline</td>
<td>16.36875 Kwh</td>
<td>$0.012989</td>
<td></td>
</tr>
<tr>
<td>Net Charges</td>
<td></td>
<td></td>
<td>$14.36</td>
</tr>
</tbody>
</table>

The net charges shown above include the following component(s). Please see definitions on Page 2 of the bill.

- Generation: $5.36
- Transmission: 1.10
- Distribution: 5.10
- Public Purpose Programs: 0.98
- Nuclear Decommissioning: 0.03
- Trust Transfer Amount (TTA): 0.78
- DWR Bond Charge: 0.58
- Ongoing CTC: 0.01
- Energy Cost Recovery Amount: 0.42

### Taxes and Other

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Commission Tax</td>
<td>$0.03</td>
</tr>
<tr>
<td>Utility Users' Tax (3.500 %)</td>
<td>0.50</td>
</tr>
</tbody>
</table>

## Charges

### 07/01/2007 - 07/23/2007

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Charges</td>
<td></td>
<td></td>
<td>$36.73</td>
</tr>
<tr>
<td>Baseline Quantity</td>
<td>273.70000 Kwh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline Usage</td>
<td>273.70000 Kwh</td>
<td>$0.011430</td>
<td></td>
</tr>
<tr>
<td>101-130% of Baseline</td>
<td>41.83125 Kwh</td>
<td>$0.012989</td>
<td></td>
</tr>
</tbody>
</table>
OFF LIMITS
TO
FIREWOOD
CUTTING
SunEdison founded in 2003 to make solar a meaningful source of energy
400 MW Deployed
400 MW Deployed
700 GWh of Solar Energy Produced
400 MW Deployed
700 GWh of Solar Energy Produced
2.5 GW Pipeline
Acquired by MEMC in 2009

Silicon Technology

Solar Products

Energy Services
A focus on the customer | Solar as a Service

No capital outlay
Predictable prices
Pay for production only
Bankable technology
Managed asset

SunEdison pioneered the Solar PPA

Source: GTM
Bringing solar home

Innovative Solar Products

Partner Tools

Consumer Financing

Training

We use the latest microinverter technology in your system:

- Maximizes energy per panel
- Allows for expansion of system over time

<table>
<thead>
<tr>
<th>System size (kW)</th>
<th>3.230 kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>System size (CEC-A2)</td>
<td>4.041 kW</td>
</tr>
<tr>
<td>Annual production</td>
<td>7,220 kWh</td>
</tr>
<tr>
<td>Number of panels</td>
<td>23</td>
</tr>
<tr>
<td>Panel rating</td>
<td>230 W</td>
</tr>
<tr>
<td>Panel orientation</td>
<td>1/8</td>
</tr>
<tr>
<td>Panel tilt</td>
<td>0</td>
</tr>
<tr>
<td>Current average electricity bill</td>
<td>$</td>
</tr>
</tbody>
</table>
It’s a large opportunity - if we can connect
Let’s not re-invent the wheel
Starting with people
Going in-context
Going in-context
Build the foundation, make it accessible

Solar Electrical Systems Work

Step 1: Sun hits the solar modules, made of silicon.
Step 2: Sun's rays produce Direct Current (DC).
Step 3: DC current flows into the inverter.
Step 4: Inverter converts DC current into usable Alternate Current (AC), which is then fed into the house for use.

Cost  Tone  Design
Focus on payback can lead to missed opportunities
It’s a journey, not a destination
Design the experience

- Current experience
- Possible experience

- PURCHASE
- TIME
- ROI
Technology is not a replacement for good design
good design can enable new behaviors
Sometimes it’s all about the design
Some new twists on old ideas
*(things we are thinking about at SunEdison)*
What if... we had direct access to solar energy?

Storage remains a holy grail for the consumer. A little goes a long way. Don’t feel obligated to do it all.
What if... energy had meaning beyond our bill?

Can we create new experiences?
Bring the energy into the home and into your life
What if... solar was this simple?

What if solar were a true appliance?
Where could we take this?
Thank you