2013 IRP Stochastic Cost/Risk Scatter Plots
Core Cases for EG-1 and EG-2

March 21, 2013
2013 IRP Stochastic Cost/Risk Scatter Plots
Core Cases for EG-3 and EG-4

EG-3 Zero CO2

EG-4 Zero CO2

EG-3 Medium CO2

EG-4 Medium CO2

EG-3 High CO2

EG-4 High CO2

March 21, 2013

---

2013 IRP
2013 IRP Stochastic Cost/Risk Scatter Plots
Core Cases for EG-5

**EG-5 Zero CO2**

[Scatter plot showing data points]

**EG-5 Medium CO2**

[Scatter plot showing data points]

**EG-5 High CO2**

[Scatter plot showing data points]

**Outstanding Runs**

<table>
<thead>
<tr>
<th>Case</th>
<th>EG</th>
<th>CO2</th>
</tr>
</thead>
<tbody>
<tr>
<td>C06</td>
<td>EG3</td>
<td>Zero</td>
</tr>
<tr>
<td>C06</td>
<td>EG3</td>
<td>Medium</td>
</tr>
<tr>
<td>C06</td>
<td>EG3</td>
<td>High</td>
</tr>
<tr>
<td>C06</td>
<td>EG4</td>
<td>Zero</td>
</tr>
<tr>
<td>C06</td>
<td>EG4</td>
<td>Medium</td>
</tr>
<tr>
<td>C06</td>
<td>EG4</td>
<td>High</td>
</tr>
<tr>
<td>C06</td>
<td>EG5</td>
<td>Zero</td>
</tr>
<tr>
<td>C12</td>
<td>EG3</td>
<td>Zero</td>
</tr>
<tr>
<td>C12</td>
<td>EG3</td>
<td>Medium</td>
</tr>
<tr>
<td>C12</td>
<td>EG3</td>
<td>High</td>
</tr>
<tr>
<td>C12</td>
<td>EG4</td>
<td>Zero</td>
</tr>
<tr>
<td>C12</td>
<td>EG4</td>
<td>Medium</td>
</tr>
<tr>
<td>C12</td>
<td>EG4</td>
<td>High</td>
</tr>
<tr>
<td>C12</td>
<td>EG5</td>
<td>Zero</td>
</tr>
<tr>
<td>C17</td>
<td>EG1</td>
<td>Medium</td>
</tr>
<tr>
<td>C17</td>
<td>EG1</td>
<td>High</td>
</tr>
<tr>
<td>C17</td>
<td>EG2</td>
<td>Zero</td>
</tr>
<tr>
<td>C17</td>
<td>EG2</td>
<td>Medium</td>
</tr>
<tr>
<td>C17</td>
<td>EG2</td>
<td>High</td>
</tr>
<tr>
<td>C17</td>
<td>EG3</td>
<td>Zero</td>
</tr>
<tr>
<td>C17</td>
<td>EG3</td>
<td>Medium</td>
</tr>
<tr>
<td>C17</td>
<td>EG3</td>
<td>High</td>
</tr>
<tr>
<td>C17</td>
<td>EG4</td>
<td>Zero</td>
</tr>
<tr>
<td>C17</td>
<td>EG4</td>
<td>Medium</td>
</tr>
<tr>
<td>C17</td>
<td>EG4</td>
<td>High</td>
</tr>
<tr>
<td>C17</td>
<td>EG5</td>
<td>Zero</td>
</tr>
<tr>
<td>C17</td>
<td>EG5</td>
<td>Medium</td>
</tr>
<tr>
<td>C17</td>
<td>EG5</td>
<td>High</td>
</tr>
<tr>
<td>C18</td>
<td>EG4</td>
<td>High</td>
</tr>
<tr>
<td>C19</td>
<td>EG2</td>
<td>Zero</td>
</tr>
<tr>
<td>C19</td>
<td>EG2</td>
<td>High</td>
</tr>
<tr>
<td>C19</td>
<td>EG4</td>
<td>Zero</td>
</tr>
<tr>
<td>C19</td>
<td>EG4</td>
<td>Medium</td>
</tr>
<tr>
<td>C19</td>
<td>EG5</td>
<td>Zero</td>
</tr>
</tbody>
</table>
### Detailed Portfolio Capacity by Year, Installed MW

**Case EG2-C07**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>East</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>retiring Plant Retirement/Conversion</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydropower</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Coal (Non-Retirement/Conversion)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coal (Non-Retirement/Conversion)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>others</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Capacity Resources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTL FD 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTL FD 3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lake Sen II</td>
<td>-</td>
<td>634</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCCT Zone 12</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total West</strong></td>
<td>-</td>
<td>466</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cost Avoidance</strong></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>-</td>
<td>466</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>West</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>retiring Plant Retirement/Conversion</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Capacity Resources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>-</td>
<td>466</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
1. Percentile transaction amounts reflect one-year transaction periods, are not additive, and are reported as a 10/20-year annual average.