DeSabla Centerville Project
FERC No. 803
Relicensing

Public Utility Economics
April 24, 2007
Public Utility “Cost of Service” Ratemaking

• PG&E has the obligation to serve electricity to all who want it within its service territory.

• In exchange, PG&E has an opportunity to recover its reasonable costs (its “Cost of Service”) through CPUC ratemaking.
Public Utility Economics

- Public Utility economics are made from the customer’s perspective
- PG&E is a net purchaser of electrical power, meaning PG&E no longer owns enough generating facilities to meet demand
- PG&E purchases supplemental electrical power from the market
- DeSabla-Centerville qualifies as a “renewable” electricity source per the State’s Renewable Portfolio Standard (RPS)
Resulting Economic Goals

- “Competitive” power generation projects are preferred; “economic” projects are essential
  - “Competitive” means the cost of replacing the project’s future generation with a market alternative exceeds unrecovered sunk costs plus future costs
  - “Economic” means the cost of replacing the project’s future generation with a market alternative exceeds future costs
- The CPUC’s expectation and PG&E obligation is for PG&E to obtain electric power for its customers from the least cost, best fit sources
- A problem occurs if a project’s cost-of-production exceeds the cost of purchasing equivalent electric power from market alternatives.
Economic Analysis Methods

- Life-cycle analyses using FERC’s current-cost method
- Project costs summarized as Cost-of-Production (COP)
- Project benefits are the avoided replacement Power costs
## One-Time and Annually Recurring Costs

### 2007 Dollars (x $1,000)

<table>
<thead>
<tr>
<th>Cost Description</th>
<th>FERC no action alternative</th>
<th>Estimated Range of Costs over New FERC License Term</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$14,500</td>
<td>$14,500 ($14,500)</td>
</tr>
<tr>
<td>Relicensing Transaction cost</td>
<td>$0</td>
<td>$4,800 ($4,800)</td>
</tr>
<tr>
<td>New License Condition Capital (Strawman)</td>
<td>$0</td>
<td>$785 /yr ($785)</td>
</tr>
<tr>
<td>Net Book Value</td>
<td>$31,400</td>
<td>$31,400 ($31,400)</td>
</tr>
<tr>
<td>Avg Annual Other O&amp;M</td>
<td>$2,500 /yr</td>
<td>$2,500 /yr ($2,500)</td>
</tr>
<tr>
<td>Centerville PH Capital Costs (As-is, Decom or Rebuild)</td>
<td>$0</td>
<td>$0 (As-is) ($17,300)</td>
</tr>
<tr>
<td>Avg Annual Other Capital</td>
<td>$480 /yr</td>
<td>$480 /yr ($360)</td>
</tr>
<tr>
<td>Average Annual Energy, GWh/yr</td>
<td>155.7 GWh/yr</td>
<td>119.9 GWh/yr ($119.9)</td>
</tr>
<tr>
<td>Replacement Power Value</td>
<td>$12,876 /yr</td>
<td>$9,916 /yr ($9,916)</td>
</tr>
</tbody>
</table>

### Historical Operations

- **Historical Operations** (prior to 2001) w/ Centerville Ph Generation
- **Historical Operations** (prior to 2001) w/o Centerville Ph Generation

### New License Condition Annual Expense (Strawman)

- **New License Condition Annual Expense (Strawman)**: $31,400
- **New License Condition Capital (Strawman)**: $14,500

### Relicensing Transaction cost

- **Relicensing Transaction cost**: $14,500

### Estimated Range of Costs over New FERC License Term

- **FERC no action alternative**: $14,500
- **Strawman PM&Es w/ Centerville Ph As-is**: $14,500
- **Strawman PM&Es w/ Centerville Ph Decom**: $14,500
- **Strawman PM&Es w/ Centerville Ph Rebuild**: $14,500

### Net Book Value

- **Net Book Value**: $31,400
- **New License Condition Annual Expense (Strawman)**: $31,400

### Avg Annual Other O&M

- **Avg Annual Other O&M**: $2,500 /yr
- **Centerville PH Capital Costs (As-is, Decom or Rebuild)**: $2,500 /yr

### Avg Annual Other Capital

- **Avg Annual Other Capital**: $480 /yr
- **Centerville PH Capital Costs (As-is, Decom or Rebuild)**: $480 /yr

### Average Annual Energy, GWh/yr

- **Average Annual Energy, GWh/yr**: 155.7 GWh/yr
- **Historical Operations** (prior to 2001) w/ Centerville Ph Generation: 119.9 GWh/yr

### Replacement Power Value

- **Replacement Power Value**: $12,876 /yr
- **Historical Operations** (prior to 2001) w/ Centerville Ph Generation: $9,916 /yr

### 2005 Operating Plan w/ Centerville Ph Generation

- **2005 Operating Plan w/ Centerville Ph Generation**: $11,622 /yr
Estimated Cost of Production (COP) over New License Term*

CPUC April 2007 Market Referent Price for renewable electric resources

- Net Book Value
- Avg Annual Other Capital
- Centerville PH Capital Costs (As-is, Decom or Rebuild)
- Avg Annual Other O&M
- New License Condition Annual Expense (Strawman)
- New License Condition Capital (Strawman)
- Relicensing Transaction cost
- *Cost of Market Alternative renewable

FERC no action alternative
Strawman PM&Es w/ Centerville Ph (As-is)
Strawman PM&Es w/ Centerville Ph (Decom)
Strawman PM&Es w/ Centerville Ph (Rebuild)