US Power Auctions
A Sampling…

Mary Sharpe Hayes
January 12, 2007
History of US Power Auctions

• Electronic Bulletin Boards (e.g. Western US, Florida)
• California
• Independent System Operators (ISOs)—auctions for FERC-specified products
  – Tight Power Pools—NY, PJM, NEPOOL
  – Others—Texas, MISO, …
• Regional Transmission Organizations
History (cont’d)

• In general, a growing capability, as administratively-provided products have moved into auction formats
• Strong regional variation
• Liquidity concerns
• Role of Enron
• RFPs vs. Auctions
Retrospective

• Goal– Create the potential for competition
  – Open access
  – Functional separation

• Functional Separation (State initiatives)
  – Regulatory Settlements (e.g. PECO)
  – Portfolio shifts– Divestitures, Acquisitions
    • Energy and Ancillary Service Auctions, largely offered through ISOs/RTOs
    • Merger Accommodations
Theme: Good outcomes require careful planning– 2 examples

- Example 1: Capacity auction in New England
- Example 2: Asset divestiture-- Pepco
Example 1: New England Capacity Auction

- Motivation
- Process
- Outcome
Capacity Auction-- Motivation

![New England Capacity Situation Graph](image-url)
Capacity Auction-- Process

• December 2002– FERC orders locational capacity market to be part of Standard Market Design
• March 2004 deadline from FERC– Response = LICAP filing
• June 2005- ALJ acceptance
• November, 2005-March, 2006 Settlement discussions and filing
• June 2006– FERC order accepting settlement
Auctions are not novel to ISO New England

• Currently conducted host of ISO-mediated auctions:
  – Day ahead energy (real and virtual) – hourly prices and quantities
  – Real-time dispatch market – settled hourly, for each five minute interval
  – Transmission rights – monthly, 6 month, annual (path specific)
Capacity Auction—Outcome

- Soon-to-be conducted host of ISO-mediated auctions:
  - Forward Capacity Auction—annually, for 3 years hence
  - Reconfiguration Auctions
    - Annual, 3 per year
    - Seasonal, 2 per year
    - Monthly, One per month
Capacity Auctions

• FCM a Very Significant break-through
  – Formal recognition that energy and capacity are not the same
  – Deals with the political unacceptability (in New England) of energy-only solutions
  – Many compromises, but essentially a positive approach
Forward Capacity Market

• Some distinctive features
  – Locational; Qualification Process
  – All Resources (Supply, Demand; Intermittent)
  – Different treatment of existing and new capacity
  – Performance Requirement
    • Modified Shortage Hours Approach
    • Avoid Double Payment (PER)
  – Provisions concerning Market Power
Forward Capacity Market Timetable

• Transition Payments begin 12/2006
• Market Rules and Manuals 2/2007
• First Auction 2/2008
• Auction Payments begin June, 2010
Example 2: Asset Divestiture

• History in the US—
  – Individual Plants
  – Portfolios– PGE to NEES, Other California, Commonwealth Edison, New England, New York, PJM
  – ‘Last’ Mixed Fossil Portfolio Sale– Pepco to Mirant and OE
Pepco Sale to Mirant and OE

• Motivation
• Process
• Outcome
## AUCTION PROCESS

<table>
<thead>
<tr>
<th>Planning</th>
<th>Documentation</th>
<th>Terms of Sale</th>
<th>Marketing</th>
<th>Bid Analysis &amp; Selection</th>
<th>Transition Mgmt</th>
<th>Closing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Goals and Objectives • Future Industry Framework • Market Structure • Asset Structure • Divestiture Process</td>
<td>• Identify and Assemble Documents • CD-ROMs • Bidder Q&amp;A</td>
<td>• P&amp;S • P&amp;S Attachments, e.g., Asset boundaries, Environmental, Labor, Transition Contracts</td>
<td>• Early Interest Letter • Confidentiality Agreement • Qualifications • Offering Memorandum • Direct Marketing</td>
<td>• Bid Review</td>
<td>• Retail Access Program • Standard Offer Service** • Regulatory Support • Market Power Monitoring • Employee Transition • Transaction Support</td>
<td>• Bid Review • Finalize P&amp;S • Develop Transition Programs • Closing Process**</td>
</tr>
</tbody>
</table>

### Communication
- Environmental Support
  - **People Care
  - Technical & Plant Support**
Pepco Generation Divestiture--Outcome

• Closed in 2000/2001 in two principal parts
• Conemaugh to OE~ $152.5 M for 166 MW
• Rest of Portfolio (Panda, 5320 MW fossil, Transition Power Agreement) ~$2.65B for 5320 MW fossil plus contracts
• Highest $/kW for mixed fossil portfolio in US