Behind Today’s Headlines

February 13, 2003

Bob Bellemare
President & CEO
UtiliPoint International, Inc.

- Origins dating back 70 years
- 50+ clients around the world
- Consulting services
- Publishers of IssueAlert
Industry Basics

“Story of Montana Power Goes National on CBS' 60 Minutes”

Unique Characteristics
Characteristics

▲ Real-time product
▲ Lack of substitute products
▲ Long construction times - over 2 years
▲ The laws of physics can not be changed – electrons are no respecters of political, state, or regulatory boundaries
Capital Intensive

- Big 4 long-distance carriers: AT&T, Sprint, MCI and World Com

Electricity: $585 B
Long Distance: $360 B
Natural Gas: $138 B
Airlines: $95 B

IOU Electric: $200,000,000,000
IOU Gas: $138,000,000,000
Domestic Airlines: $95,000,000,000

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Annual Consumption

FL is #3
Managing Consumption Growth

△ U.S. peak demand exceeds 760,000 MW

△ Could increase over 370,000 MW in next 20 years (2 percent per year increase)
## Highly Fragmented Industry

- Largest player is less than 6% of the total
- Variety of ownership types and jurisdictions

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
<th>% of Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investor Owned</td>
<td>250</td>
<td>76.2</td>
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<tr>
<td>Municipals</td>
<td>2,005</td>
<td>14.4</td>
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<tr>
<td>Cooperatives</td>
<td>939</td>
<td>7.8</td>
</tr>
<tr>
<td>Federal</td>
<td>10</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,204</strong></td>
<td><strong>100.0</strong></td>
</tr>
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</table>
Price Trends

![Graph showing price trends over time for different sectors such as Residential, Commercial, Other, and Total.]
Overview

“MOODY’S DOWNGRADES RATINGS OF DYNEGY INC.”

“Reliant Energy OKs $13.8M Calif. Refund”

Industry Events

Forces
Rate of Change is Accelerating
Sector Forces At Play

External
- Macro
  - Terrorism
  - Corporate governance
  - Tightening capital
- Industry
  - Credit tightening
  - Regulatory Uncertainty
  - Power Quality
  - Diversification failures
  - Wash trades, Enron
  - Environment
  - New Technologies
  - Global/Local
  - Aging Infrastructure
  - Fuel costs

Internal
- Downsizing
- Divestitures
- Strategy redefinition
- Fuel Diversification
- Asset Based Trading
- Refocus on Wires
- Outsourcing
- Write-downs
- Rate Increases
- Work Force & Expertise
The Dangers of Group Think


▲ Focus on unregulated wholesale / merchant power markets

▲ Dot.com: Montana Power
“After Nearly $5 Billion Loss, TXU Corp. to Concentrate on Core Texas Business”

“Rising cost of power gives customers a jolt Bonneville”

Fuel
Trading
Renewables
Natural Gas Prices

![Graph showing 2003 Nymex Futures and 1998 Wellhead Prices. The graph plots monthly natural gas prices from January to December. The Y-axis represents the price per million British thermal units (MBTU), ranging from 0 to 6. The X-axis represents the months of the year.]
Natural Gas

▲ North America Reserves:
   - 1,394 trillion cubic feet (Tcf)

▲ U.S. Consumption:
   - 22 Tcf per year today
   - 31 Tcf per year by 2015

▲ Production Challenge:
   - 29 percent annual replacement
   - Depletion by 2040?
Clean Coal

▲ Abundance of supply, stable price
▲ Over 70 plants representing 50,000 MW under exploration
▲ Technologies
  ❑ Gasification
  ❑ Fluidized bed
  ❑ Super/sub critical with pollution controls
▲ SO₂, Hg, and NOx control advancements, from 1970 to 1998
  ❑ SO₂ emission rate dropped 76%
  ❑ NOX emission rate dropped 58%
  ❑ PM-10 (particulate) emission rate dropped 96%
Nuclear

△ Consolidation
△ Serious consideration given to new plants
△ But…
  □ security issues have come to the forefront
  □ waste management
Renewables

▲ Renewable programs on the increase
▲ Many utilities have implemented green pricing programs
▲ States with portfolio requirements
  ▪ AZ, CA, CT, HI, IL, IA, ME, MA, MN, NV, NJ, NM, PA, TX, WI
  ▪ CA: September 12, 2002. Established the most aggressive renewable portfolio standard in the country by requiring utilities to purchase 20 percent of their electricity from renewable sources by 2017.
## Trading

### Market Drivers
- Scandals
- Poor Speculation
- Credit Rating Collapse
- Regulator Inquiries
- Highly leveraged
- Decreased price volatility

### Results
- Exits
  - Alliant Energy, Aquila, CMS, Idacorp
- Scale-back
- New Entrants
- Return to asset-based trading
- Project Cancellations
Wholesale Pricing

- Round-Trip Trades
- Withholding Production
- Serious financial impacts
  - BPA, Sierra-Pacific, PG&E
- Regardless:
  - High prices will occur during times of constraints
Environmental Regulation

- Clean Air Act interpretation
- Mercury limits
- Emissions trading
- Voluntary CO$_2$
The Debt Problem

- Total debt issued by merchant energy companies soared from $23.6 billion in 1999 to $48.6 billion in 2002, according to Thomson Financial

- Divestitures and write-downs
Loss of Confidence
TRANSMISSION

“AEP receives final approval for Wyoming-Jackons Ferry 765-kV project”

“Senate energy panel head criticizes FERC rules”

Siting & Investment
Standard Market Design
Siting Issues

- Lack of a strong investment incentive
- Not In My Back Yard
- Multi-state, jurisdiction
Standard Market Design

- Common tariff
- Independent control
- Locational marginal pricing
- License Plate/Postage Stamp
- Market monitoring
- Minimize seam issues
Impacts

▲ Litigation likely
▲ Completely independent transmission companies emerging
▲ Divestitures already occurring:
  - IL Power $239 M sale to Transelect
  - DTE Energy $610 M sale to KKR and Trimaran Capital Partners L.L.C.
Distribution & Retail

“AEP Completes Sale of Two Texas Retail Electric Providers to Centrica”

“Charlotte, N.C., Council Members Want Power Lines Underground”

Deregulation
Undergrounding
Public Power Initiatives
Rates
Deregulation

- Stalled
- Limited successes
- California debacle

Yet, internationally the movement towards open market continues
Distribution Undergrounding

- Recent storms, tree trimming, and reliability issues

- Install cost is 3 to 5 times overhead

- Contentious issue
Public Power Initiatives

- California, Florida, Iowa, Oregon, Nevada, South Dakota

- Motivations:
  - Market uncertainty/deregulation
  - Reliability/undergrounding
  - Bankruptcies
  - Franchise expirations
  - Lack of tax revenues
# Rate Changes

<table>
<thead>
<tr>
<th>Company</th>
<th>Type</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG&amp;E, CA</td>
<td>Investor Owned</td>
<td>46 %</td>
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<tr>
<td>SCE, CA</td>
<td>Investor Owned</td>
<td>42 %</td>
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<tr>
<td>LADWP, CA</td>
<td>Municipal</td>
<td>0 %</td>
</tr>
<tr>
<td>Sacramento, CA</td>
<td>Municipal</td>
<td>22 %</td>
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<tr>
<td>BPA</td>
<td>Federal</td>
<td>61 %</td>
</tr>
<tr>
<td>Puget Sound, WA</td>
<td>Investor Owned</td>
<td>5 %</td>
</tr>
<tr>
<td>Snohomish County</td>
<td>PUD</td>
<td>50 %</td>
</tr>
<tr>
<td>Tacoma Power, WA</td>
<td>Municipal</td>
<td>33 %</td>
</tr>
<tr>
<td>Progress</td>
<td>Investor Owned</td>
<td>-11 %</td>
</tr>
<tr>
<td>Tampa Electric</td>
<td>Investor Owned</td>
<td>7 %</td>
</tr>
<tr>
<td>OUC</td>
<td>Municipal</td>
<td>7 %</td>
</tr>
</tbody>
</table>
Outsourcing

- Pantellos – Supply Chain
- Back Office – Xcel outsource to Peace/IBM
- Billing – AEP/Insite
- Generation – TNP/Constellation, NiMo/Tractebel
- Maintenance - Puget Sound/Potelco
Acquisitions

- National Grid purchase of Nimo, NEES, and Eastern Utility Associates
- Powergen/EOn purchase of LG&E
- Scottish Power purchase of Pacificorp
- Dynegy purchase of Illinois Power
- AES purchase of IPALCo
- Warren Buffet/MidAmerican
- Pepco purchase of Conectiv
Venture Capital

▲ R&D expenditures for 20 leading utilities have decreased by 62% from 1995 to 2000
▲ Same utilities increased their subsidiary investments from $4.5 B (1995) to $15 B (2000)
▲ Venture capital in the industry increased from near zero 6 years ago to over $1 billion in 2001
▲ Venture capitalists in 2002 curtailed their fund raising for future investments to a 21-year low. While 108 venture capital funds raised a total of $6.9 billion during 2002, another 26 funds refunded $5 billion to investors.
Things we now know not to be true…

△ $50+ billion in total assets, 5 million or more customers to survive
△ Deregulation means lower rates
△ Asset-lite in trading
△ Diversification is required
△ We rely primarily on the spot market
Tomorrow’s Headlines
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