Energy & Utilities

Minority Business Development: Economic Value And Benefits

MED Week 2001
This analysis on the economic value and benefits of the energy industry was prepared by The Asaba Group and is the Group’s interpretation of the economic trends of the energy industry. The study is not a Commerce Department report, but was developed for the sole purpose of discussion amongst industry experts. The conclusion and analysis of the report do not necessarily reflect the views of the U.S. government.
Express Gratitude And Acknowledgement For Contributions To The Project:

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<tr>
<th>Minority Business Development Agency</th>
<th>National Association of Regulating Utility Commissions (NARUC)</th>
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<tr>
<td>Ronald N. Langston</td>
<td>Hon. Ed Holmes</td>
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<td>Pacific Gas and Electric Company</td>
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<td>Rhonda Gebicke</td>
<td>Bonnie Wells</td>
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<td>Walter Loyd</td>
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<td>Mary Jane McCartney</td>
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<td>Mirant</td>
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<td>Susann Felton</td>
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Create A Compelling Business Case That Demonstrates The Economic Value To Utilities Of Doing Business With Minority-Owned Companies

Business case should place emphasis on the following:

- Focus on business imperatives and free market forces
- Leverage minority demographic shifts and emerging purchase power
- Ensure alignment with current industry trends and strategies of key players
- Drive increased participation in minority business development

The Asaba Group Retained To Assist In Identifying Growth Opportunities And Strategy
Project Approach

- Market Forces and Trends
- Deregulation Trend/Process
- Customer Choice

- Demographic Realities
- Minority Market Opportunities
- Future Growth and Community Development

- Customer and Market Access
- Brand Differentiation
- Customer Loyalty and Innovation

- Current State
- Issues/Challenges
- Metrics & Tracking
Executive Summary

Industry undergoing deregulation and restructuring
- 24 states and District of Columbia already engaged in opening wholesale and retail markets to competition

Customer choice is a reality
- Price value and corporate image key determinants in selecting an energy provider

Top Ten Minority States account for over 50% of Industry revenues
- Minority commercial and residential market is $27 billion
  - Potentially $40 billion in ten years
- Significant impact on utilities located in top minority markets

Minority business development can be a strategic tool for utilities
- Effective way to connect with growing consumer base
- Representation of interest with key stakeholders and government constituents
- Enhances broad differentiation and corporate image to build customer loyalty
- Potential partners for growing revenues in new markets

Minority Businesses Are Essential Partners In Growing Economic Value
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Key Industry Trends And Highlights

U.S. Economy increasingly dependent on electricity

- In 1970 electricity accounted for 25% of consumer energy, today accounts for close to 40%
- But energy consumption as a percentage of GDP has been declining
  - Largely driven by economy transformation from industrial to knowledge-based

Deregulation occurring in the $227 Billion electric power sector

- Process accelerated by the 1996 FERC Orders 888 and 889 ordering open access markets
- Traditional utilities separating and divesting generation operations from distribution and retail operations

With deregulation, customers will have a choice of providers

- Customers are able to choose energy providers
  - Success depends on utility’s ability to build customer franchise and differentiation

However, some transitional pains are associated with deregulation

- California experiencing outages and incumbent utilities in financial crisis
- Pressure on state regulators regarding pace and thrust of deregulation process
U.S. Electric Power Industry Valued At $227 Billion
Undergoing Significant Changes

Investor-Owned Utilities Account For A Significant Share

SOURCE: Edison Electric Institute, Energy Information Administration, Asaba Group Analysis
Electricity Consumption Has Grown Modestly, With Revenues Outpacing Consumption

Electricity Consumption

- 2,712 Billion kWh in 1990
- 3,398 Billion kWh in 2000
- CAGR 90-00: 2.2%

Electricity Revenues

- $176 Billion in 1990
- $227 Billion in 2000
- CAGR 90-00: 2.6%

U.S. Electricity Consumption Growth Is Widely Expected To Decelerate Over The Next Two Decades

US Electricity Demand Growth % Per Year – CAGR Basis

Key Drivers/Trends

- DOE and NERC estimates near term demand at 1.6% to 2.0%
- Generators like Dynegy and Calpine estimate near term at 3–5% per year
- Fast growth of office and digital equipment will be offset by slowing growth in electrical appliances, e.g., lighting, space heating, etc.
- Higher efficiency standards expected to dampen growth

SOURCE: Energy Information Administration
While Consumption Per Person Will Rise, Consumption Per Dollar Of GDP Expected To Decline

US Electricity Consumption (1980 = 100)

Key Trends

- Per capital consumption has risen over the last decade
  - Largely from growth in digital device applications
- But electric energy consumption per dollar of GDP has remained constant
  - Expected to decline with shift from industrial to a knowledge based economy

Trends Dampen Industrial Demand For Electric Energy

SOURCE: Energy Information Administration
In Last 5 Years Several Forces Have Pushed For Deregulating the Industry

Global industrial companies conduct centralized sourcing and purchasing
- Increases their ability to control cost of inputs
- Location-specific cost (electric energy) has great variability across the country
- In certain situations, this has led to competitiveness

Industrial customers have tried to reduce cost variation in energy
- Some have invested in co-generation plants and facilities
- Pushed into achieving lower energy prices by creating supply in areas where supply exceeded demand

Cost-of-Service approach to pricing created situation which rewarded increased capital investment rather than lower prices and innovation

Federal Energy Regulatory Commission (FERC) Orders 888 and 889 accelerated the Deregulation process
- Required utilities to open their transmission lines to competition
  - Non-discriminatory open access tariffs
- Provide fair and open access to information about a utility's transmission system and services

State regulatory bodies drove competition in generation and retailing segment
- Required utilities to separate their wholesale businesses from transmission operation facilities
  - Addressing issues of monopoly market power situations
Typical Path Towards Deregulation and Electricity Industry Restructuring

Level of Regulation

High

Low

Time

State Legislation Passed

Public Utility Commission Rules Promulgated

Incident Market Power Addresses (Divestitures)

Independent System Operators (ISO)/Power Exchange Established

Wholesale Power Choice/Trading

Commercial & Industrial Choice

Residential Choice

Some States Have Found Deregulation Challenging
**Deregulation Driving Transitional Pain**

California Situation Exemplifies The Challenges Associated With Deregulation

- Rapid price increases for natural gas (primary raw material) for power plants
  - Record high wholesale electricity prices

- **State regulators cap retail prices - attempt to protect consumers from price increases**
  - Utilities unable to pass wholesale price increases to the retail consumers

- Creates insufficient capacity to serve all customer requirements, rolling blackouts begin

- **PG&E declares bankruptcy – unable to fund differences between high wholesale energy cost and capped retail rates**

- **Customer outrage and confusion about the deregulation process and future prospects**
  - Some consumer groups launched a failed ballot initiative to toss out the state deregulation plan

- **Enormous pressure on state regulators, industry participants and policymakers to act**

  **Ultimately Process Should Benefit All Electricity Customers**
Most Customers Will Have A Choice In Selecting Electricity Providers

Commercial and Residential Segments provide growth opportunities for nimble competitors

**Electricity Consumption**

- Res. 2000: 1186 B kWh, CAGR 2.5%
- Comm. 2000: 1028 B kWh, CAGR 3.2%
- Ind. 2000: 1071 B kWh, CAGR 0.7%
- Other 2000: 113 B kWh, CAGR 2.1%

**Electricity Revenue**

- Res. 2000: $71.7 B, CAGR 3.2%
- Comm. 2000: $74.0 B, CAGR 3.2%
- Ind. 2000: $44.9 B, CAGR 3.0%
- Other 2000: $7.0 B, CAGR 0.6%

**SOURCE:** Energy Information Administration, Edison Electric Institute
Residential and Commercial Customers Will Switch Providers Given A Choice

% of Residential Customers Indicating Willingness to Switch

- 10% Price Reduction: 20%
- 5% Price Reduction: 17%

% Of Business Customers That Have Switched

- Fewer than 100 Employees: 17%
- Between 100 and 500 Employees: 14%
- More than 500 Employees:
  - Once: 20%
  - More than Once: 14%

New Paradigm With Electric Utilities

Customers Are Indeed Switching
Already Occurring In Certain Deregulated Markets Like Pennsylvania

5,509 Megawatts of electric power have been switched to competitive suppliers

- 528,000 Customers have switched
  - 444,000 residential customers
  - 82,000 commercial customers
  - 2,700 industrial customers

Incumbent utilities are feeling the competitive pressures

- 29.4% of Duquesne’s residential customers have switched
- 13.8% of PECO’s residential customers have switched
- Over 14 competitive suppliers offer residential service in PECO Energy territory

Prices have declined, which has induced customers to switch

- Consumers save between 5% and 10% and have 4 or more choices

New Players Emerging

- Wholesale and retail supplier, aggregators, risk managers

SOURCE: Citizens for Pennsylvania’s Future

Minority Business Development Can Provide A Competitive Tool To Build Customer Loyalty
Price And Company Image Have Significant Effect On Customer Switching Behavior

Residential Customers

- Company Image: 40%
- Price/Value: 30%
- Power Quality: 17%
- Billing & Payment: 8%
- Customer Service: 5%

Commercial Midsize Businesses

- Company Image: 33%
- Price/Value: 23%
- Power Quality: 22%
- Billing & Payment: 10%
- Customer Service: 8%
- Field Crews: 4%

Minority Business Development Will Enhance Image And Provide Price/Value Benefits

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Minority Populations Are Essential To U.S. Long Term Economic Stability

- Minority population fastest growing segment of the U.S. population
- Workplace demographics reflecting the growth of minorities
- Minority population much younger than non-minority population – Minority median age 28.2, Non-Minority median age 36.6

- California now a majority minority state
- Not acknowledging demographic changes has led to social tensions with communities and advocacy groups

- Minority Groups becoming a significant force in politics – Influencing outcome of elections and public policy
- Minorities occupying more political offices and contesting elections

- Even though Minorities have experienced significant growth in purchasing power, they still lag in economic producer power
- Minorities still experience significant barriers to economic opportunities

Utilities Must Anticipate And Reflect These Realities In Their Business Models
In the Last Decade, Minorities Experienced Growth In Population and Buying Power
Strong Growth In Purchasing Power

**Minority Population**

- 1990: 62.4 MM
- 2000: 82.4 MM

**Minority Buying Power**

- 1990: 647 B
- 2000: 1,300 B

CAGR 90-00:
- Minority Population: 2.8%
- Minority Buying Power: 7.3%

**An Attractive Market Segment**

*Source: U.S. Census 2000, University of Georgia Selig Institute*
Growth Trend Expected To Continue For The Next Two Decades

Population Projection (2000-2025)

2000

277.4 MM

195 MM

82.4 MM

Non-Minority

Minority

2025

337.8 MM

209 MM

128.7 MM

Non-Minority

Minority

% Change

2000 2010

% Change

26.3 MM

31.3 MM

7.2%

56.2%

19%

Minority Households Projection (2000-2010)

Greater Political And Economic Leverage

SOURCE: U.S. Census, Asaba Group Analysis
Sixty-Two Percent Of U.S. Population Reside In Deregulated States
Deregulated States Account For 70% Of Minority Population, Purchasing Power And Firms

With Impending Retail Competition, Retail Service Providers Must Focus On Minority Consumers

* Minority businesses with gross receipts and employees.
SOURCE: U.S. Census, Minority Business Development Agency (MBDA), University of Georgia Selig Institute, Asaba Group Analysis
And Top 10 Minority States Account For 50% Of Residential and Commercial Electricity Market

Residential and Commercial Electric Spending 2000

- All Other States: 48.9% of $84.0 Bn
- Top 10 Minority States: 51.1% of $87.9 Bn

2000

Top 10 Minority States

$171.9 B
$87.9 B

Largest State Utilities

- MD BGE PEPCO
- VA Dominion Virginia Power
- NC Duke Power Company CP&L
- GA Georgia Power Co
- NJ PSE&G
- IL Exelon Corporation
- FL Florida Power & Light Co Florida Power
- NY Consolidated Edison Co-NY Inc Niagara Mohawk
- TX Reliant Energy Entergy Gulf States Inc TXU
- CA Pacific Gas & Electric Co Southern California Edison Co

Retail Service Providers Will Need To Build Franchise With Minority Consumers

SOURCE: Department of Energy, Energy Information Administration, Asaba Group Analysis
With Deregulation, Utilities Must Focus On Addressing The Needs Of Key Stakeholders
Essential To Creating Long Term Shareholder Value

Utility Stakeholders

- Shareholders
- Business Partners/Alliances
- Customers
- Suppliers
- Employees
- Community and Advocacy Groups
- Environment
- Regulators

Economic Value Add

Societal Value Add

Striking An Optimal Balance Between Economic And Societal Value Add Is Essential For Long Term Success
Minority Business Development Is A Key Initiative Which Optimizes Both Economic And Societal Value Add

<table>
<thead>
<tr>
<th>Societal Value Created</th>
<th>Economic Value Created</th>
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<tbody>
<tr>
<td>Low</td>
<td>Low</td>
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<tr>
<td>High</td>
<td>High</td>
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<tr>
<th>Not For Profit</th>
<th>Sustainable Business Model</th>
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<td>Government/NGOs</td>
<td>Long Term Focused/Profitable</td>
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<th>Non-Value-Added Activities</th>
<th>Unsustainable Business Model</th>
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<td>Short Term Focused</td>
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Doing Business With Minority Businesses Is Essential To Long Term Profitability
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Minority Residential and Commercial Spending
In 2000 Estimated At $27 Billion

Minority Electricity Sales

- Commercial: $26.8 B
- Residential: $22.4 B

2000 Revenues

Minority Electricity Consumption

- Commercial: 322.2 B kWh
- Residential: 261.4 B kWh

Source: Electricity Information Administration, Asaba Group Analysis
Retail Competition Occurs Locally
Top 10 Minority States Account For Significant Share Of Minority Electric Consumption

Minority Electricity Market 2000¹

- **Population**: 82.4 MM
- **Electricity Market**: 322.2 B kWh
- **Electricity Market By State**:
  - **Top Ten States**: 70.2%
  - **Other**: 29.8%
  - **Other**: 119.1 B kWh
  - **Top Ten States**: 63.0%
  - **Other**: 203.1 B kWh

- **Electricity Market By State**:
  - **8.2 MD**
  - **9.2 VA**
  - **10.3 NC**
  - **13.3 GA**
  - **8.2 NJ**
  - **11.0 IL**
  - **29.2 FL**
  - **17.1 NY**
  - **49.3 TX**
  - **47.3 CA**

Retail Service Providers In These States Must Move Decidedly To Build Customer Loyalty

¹ Residential and Commercial Segments
$18.2 Billion Of Minority Electricity Revenues In Top Ten Minority States

Minority Electricity Market 2000

1. Residential and Commercial Segments

Minorities Will Account For Most Growth In Top 10 Minority States

Top 10 Minority States Population

<table>
<thead>
<tr>
<th>Year</th>
<th>Minority</th>
<th>Non-Minority</th>
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<tbody>
<tr>
<td>2000</td>
<td>55.4 MM</td>
<td>81.0 MM</td>
</tr>
<tr>
<td>2010</td>
<td>65.0 MM</td>
<td>147 MM</td>
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% Change

<table>
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<tr>
<th>Year</th>
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<th>Non-Minority</th>
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<tbody>
<tr>
<td>2000</td>
<td>17.3 %</td>
<td>1.2 %</td>
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</table>

Top 10 Minority States Electricity Consumption (Residential)

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<tr>
<th>Year</th>
<th>Minority</th>
<th>Non-Minority</th>
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<tbody>
<tr>
<td>2000</td>
<td>167.3 B kWh</td>
<td>385.8 B kWh</td>
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<tr>
<td>2010</td>
<td>203.5 B kWh</td>
<td>402.4 B kWh</td>
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% Change

<table>
<thead>
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<th>Year</th>
<th>Minority</th>
<th>Non-Minority</th>
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<tbody>
<tr>
<td>2000</td>
<td>21.9 %</td>
<td>4.3 %</td>
</tr>
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Minority Business Partnerships Are Essential For Capturing This Growth

SOURCE: U.S. Census, Asaba Group Analysis
Minority Businesses Also Represent Significant Commercial Growth Opportunity

Difficult to forecast market potential, but previous years provide valuable insight on growth potential

Number of Minority Firms

<table>
<thead>
<tr>
<th>Year</th>
<th># of Firms (MM)</th>
<th>CAGR 92-00</th>
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</thead>
<tbody>
<tr>
<td>1992</td>
<td>2.1 MM</td>
<td></td>
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<tr>
<td>1997</td>
<td>3.0 MM</td>
<td>7.0%</td>
</tr>
<tr>
<td>2000E</td>
<td>3.6 MM</td>
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Gross MBE Revenues

<table>
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<tr>
<th>Year</th>
<th>Gross Revenues ($B)</th>
<th>CAGR 92-00</th>
</tr>
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<tbody>
<tr>
<td>1992</td>
<td>$208.7 B</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>$591.3 B</td>
<td>22.1%</td>
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<tr>
<td>2000E</td>
<td>$1,030 B</td>
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Community Development Can Be Accelerated With Minority Business Development

Significant Disparity Between Minority And Non-Minority Household Income Distribution

U.S. Household Distribution 1999

<table>
<thead>
<tr>
<th>Income Group</th>
<th>Spending</th>
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</thead>
<tbody>
<tr>
<td>Over $50,000</td>
<td>$1,126</td>
</tr>
<tr>
<td>$25,001-$50,000</td>
<td>$855</td>
</tr>
<tr>
<td>$10,000-$25,000</td>
<td>$752</td>
</tr>
<tr>
<td>Under $10,000</td>
<td>$630</td>
</tr>
</tbody>
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Achieving Parity Will Increase Electricity Expenditures

SOURCE: U.S. Census, Energy Information Administration
Minority Business Development Is Prime Way To Achieve Income Parity
Minority Businesses Hire More Minority Employees Compared To Non-Minority Firms

Penetration % of U.S. Firms With 50% Or More Minority Employees

- All Firms: 15.9%
- Hispanic Owned: 57%
- African American Owned: 47.6%
- Asian Pacific Owned: 47.2%
- Non-Minority Owned: 11.6%

Electric Utilities Stand To Gain From Minority Households’ Income Gains Between $1.4 And $1.8 Billion Incremental Revenues

Incremental Minority Electricity Expenditure Dollars

- **Top Ten States**
  - Parity With Non-Minorities: $1,207 MM
  - Parity With U.S. Average: $1,802 MM
- **Other**
  - Parity With Non-Minorities: $595 MM
  - Parity With U.S. Average: $471 MM

Minority Business Development Will Drive Growth

SOURCE: U.S. Census, Asaba Group Analysis
Minority Markets Provide Significant Revenue And Growth Opportunities To Utilities
Over $10 Billion Incremental Electricity Expenditures By 2010

GROWTH POTENTIAL OVER THE NEXT TEN YEARS

SOURCE: Energy Information Administration, U.S. Census, Asaba Group Analysis
Benefits Of Minority Business Development

Minority businesses are vital links in connecting with the minority consumer base

- These consumers in certain markets account for greater share of future electricity consumption
  - Typically the highest growing consumer market

Minority business development enhances community development efforts

- Potentially a circular process with significant multiplier effect on wealth creation
  - Drives increased expenditures and consumption
  - Increases the tax base and levels of discretionary income

Provides effective representation of interests with government and political constituencies

- Minority population are a significant political force and are swing votes on critical issues

Minority Business Development Can Impact Customers And Government
### Value Propositions For Doing Business With Minority-Owned Businesses

**Most Business Relationships Develop Value Proposition Around The Following:**

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<tr>
<th>Category</th>
<th>Proposition</th>
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</table>
| **Market Access**               | Provides access to new growth and strategically important market segment or consumers.  
                                 | e.g. Access to national commercial accounts, industrial and residential customers |
| **Increase Customer Loyalty**   | Enables increased and sustained profitability from existing customer base  
                                 | Provides opportunities for new revenue sources – Increase Share of Wallet (SOW)  
                                 | e.g. Loyalty drives down cost associated with customer retention and acquisition. |
| **Supply Chain Flexibility**    | Provides second sourcing alternative in supply chain  
                                 | • Reduces supplier concentration risks  
                                 | Lower cost alternatives to certain suppliers and business processes |
| **Stakeholder Satisfaction**    | Satisfy needs of key Stakeholders  
                                 | • Develop and Enhance Corporate Image  
                                 | • Environmental Coalitions/Organizations  
                                 | • Key criteria that drives customer switching |
| **Regulatory Value**            | Enhances ability to meet government mandate/compliance **without** sacrificing profits or increasing cost  
                                 | e.g. Public Utility Commission Requirements (E.g. California CPUC General Order 156) |
In a Deregulated Environment, Utilities Must Find a Way to Grow Shareholder Value

Typical Three Generic Options Exist

**Options For Value Creation**

**Scope**
- Offer more products and services
  - Telecommunications
  - Ancillary service
  - New innovative products
  - Non-commodity options

**Scale**
- Increase customer base
  - Acquire new customers
  - Create new accounts
  - Enter new markets

**Lower Cost/Operations Excellence**
- Lower Operational Cost
  - Outsource operations
  - Buy from lower-cost sources
  - Improve service/quality
  - Improve competitiveness

_Minority Business Can Impact Each Option_
Minority Businesses Can Help Utilities Grow Revenues And Reduce Costs

Scope

Partners in expanding business scope of retail activities/market expansion
- Channel partners in marketing and distributing of new products and services
  - Partnering in areas which leverages utilities core capabilities and creates new revenue streams
    → Engineering and Contracting (HVAC)
    → Energy management services partners – PG&E and James Lang LaSalle
    → Integrated broadband telecommunication – N-Star and RCN, Boston, MA

Scale

Partners in customer aggregation roles – especially in minority dominant markets
- Similar to regional telecommunication service providers

Operational Excellence

Become outsourcing low cost partners for non-core business processes
- Billing, account services, field meter reading, customer service, security, environmental testing, monitoring and abatement

Improve competitiveness by solidifying customer relationships and corporate image
- With some individual and commercial accounts, minority sourcing is a key customer benefit/requirement
- Minority businesses can solidify business image/relationship with certain stakeholders groups, advocacy groups, etc.
  - Minimizing potential loss of business

In deregulated commodities like power marketing, increase number of participants drives market efficiencies and reduces costs

MBE’s Are Key Partners In Driving Shareholder Value Growth
Minority Business Partnerships And Development Provides Customer Differentiation
Especially In Minority-Dominant Markets

Customers will increasingly choose among various providers of energy

- Source of energy and how it is purchased and delivered will be less of a differentiator

Price and Corporate Image become the most important criteria for making a purchasing decision

- Commercial and residential customers say price and corporate image are important considerations
- Price will become market-based; corporate image is the lever controlled by the utility

Ability to defend and increase market share will depend on building differentiation

Customers Will Ask “What Are You Doing For My Community?”
For Utilities, Different Core Competencies Are Needed To Grow In Retail Distribution

Branding (Customer Loyalty)

- With limited forecasted consumption growth, profits will be enhanced by reducing customer churn by building loyalty
- Developing a strong brand that promotes a utility’s competitive positioning

Innovation

- Similar to Telecommunications, profitable revenue growth will come from new innovative products
- Utilities must be smarter than their competitors. Changing the rules of the game will ensure market leadership
  - Leveraging minority businesses/partnerships can drive innovation and develop tailored products and services

Collaboration

- Collaboration with suppliers, distributors, other regional partners and stakeholders will enable utilities to leverage others and enhance their own positions

Minority Business Partnerships Are Ways To Enhance Those Competencies
<table>
<thead>
<tr>
<th>Content</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Overview/Introduction</td>
<td>3-6</td>
</tr>
<tr>
<td>Industry Trends/Overview</td>
<td>7-19</td>
</tr>
<tr>
<td>Demographic Realities</td>
<td>20-27</td>
</tr>
<tr>
<td>Minority Energy Markets</td>
<td>28-37</td>
</tr>
<tr>
<td>Minority Business Value Proposition</td>
<td>38-44</td>
</tr>
<tr>
<td>State of Minority Sourcing</td>
<td>45-59</td>
</tr>
</tbody>
</table>
Electric Utilities Minority Sourcing Dollars Estimated At $2.1 Billion*

* Based On Sample Of 18 Utilities With $62 Billion In Revenues (27% Of Industry)
SOURCE: Center for Advanced Purchasing Studies, Edison Electric Institute, Energy Information Administration, Industry Interviews, Asaba Group Analysis
Significant Concentration Of Minority Spending In Fuel Category

Estimated Category Concentration

$2.1 B

1,408

Non-Fuel 25%

Fuel 75%

Non-Fuel 96%

Fuel 4%

1,352

2000 MBE Spending

Number of Minority Suppliers

SOURCE: Industry Interviews

1999 Operation and Maintenance Spending

- Purchased Power: $38.1 B
- Fuel (Coal/Natural Gas): $31.3 B
- Nuclear Related: $12.7 B
- Distribution/Transmission: $10.5 B
- Production: $10.3 B
- Other: $13.7 B

 Minority Sourcing Opportunity*

- Purchased Power: $38.1 B
- Fuel (Coal/Natural Gas): $31.3 B
- Customer-Related: $4.6 B
- Distribution/Transmission: $5.3 B
- Production: $2.7 B
- Other: $3.7 B

* Operation and Maintenance Spending Less Wages, Nuclear Expenses, and Non-Related Overheads

Certain Commodity Dynamics Provide Challenges To Increased Minority Sourcing

Natural Gas Expenditures By Utilities Has Increased But MBE Participation Has Declined

**Natural Gas Expenditures**

- 1997: $1,080 MM
- 1998: $2,020 MM
- 1999: $2,920 MM
- 2000: $4,154 MM

**Natural Gas (MBE-Sourced)**

- 1997: $144 MM
- 1998: $126 MM
- 1999: $94 MM
- 2000: $97 MM

**CAGR 97-00**

- Natural Gas: 57%
- Natural Gas (MBE-Sourced): 12%

**Illustrative Example**

SOURCE: Asaba Group Analysis
Driven Largely By Shrinking Number Of MBE's in Natural Gas Category

Requires Innovative Solutions To Ensure MBE Participation (Such As FTA Agreement)

Largely Driven by:

- Divestiture of generating assets
- Suppliers’ consolidation and acquisition of largest MBE’s
- Shrinking margins, more competitive marketplace (increased bundling)
- Market deregulation leading suppliers to gain direct market access

% of Minority Sourcing (Natural Gas)

<table>
<thead>
<tr>
<th>Year</th>
<th>% Minority Sourcing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>13.6%</td>
</tr>
<tr>
<td>1998</td>
<td>10.5%</td>
</tr>
<tr>
<td>1999</td>
<td>5.3%</td>
</tr>
<tr>
<td>2000</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

Number of MBE’s (Natural Gas)

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of MBE Suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>87</td>
</tr>
<tr>
<td>1996</td>
<td>27</td>
</tr>
<tr>
<td>1997</td>
<td>13</td>
</tr>
<tr>
<td>1998</td>
<td>10</td>
</tr>
<tr>
<td>1999</td>
<td>16</td>
</tr>
<tr>
<td>2000</td>
<td>14</td>
</tr>
</tbody>
</table>

SOURCE: Asaba Group Analysis

Illustrative Example
Utility Supplier Diversity Managers Mention A Host Of Challenges With Minority Sourcing

Entrenched relationships with buyers
- “Easier to stick with known relationships than risk new ones”

Changing mindsets and perceptions
- Resistance with middle management about the business objectives in diversity programs
  - No clear-cut articulation about non-social-related goals

Most utilities undergoing divestitures of generating assets may impact past efforts in MBE sourcing
- Dramatically impacts the MBE inclusion in fuel commodities
  - Issues on how to maintain successes gained in these commodities
- How to continue best policies and learning in new entity

With mergers and acquisitions, how to integrate minority sourcing into new processes with new players
- How to include MBE objectives into Post Merger Integration (PMI) business processes

SOURCE: Asaba Group Industry Interviews
Supplier Diversity Managers Highlight MBE Challenges In Recent Survey
Joint Ventures, Capital and Capacity Are Significant Hurdles

Program Managers’ View of MBE Hurdles

<table>
<thead>
<tr>
<th></th>
<th>% of Respondents</th>
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</thead>
<tbody>
<tr>
<td>Form JV/Strategic Alliances</td>
<td>50%</td>
</tr>
<tr>
<td>Capital</td>
<td>38%</td>
</tr>
<tr>
<td>Capacity Building</td>
<td>32%</td>
</tr>
<tr>
<td>E-Commerce</td>
<td>32%</td>
</tr>
</tbody>
</table>

Some Innovative Solutions Mentioned By Utility Program Managers

Change management approach with leadership from the executive suite

Reinforcement with performance incentives and recognition

Creating networking opportunities between buyers and MBE's

Encouraging partnerships between non-minority companies and MBE's
  - Creating a mentor-protégé program

Reaffirmation of top-down corporate commitment to supplier diversity initiatives
  - Creating value-added supplier relationships
  - Alignment of incentives to create win-win scenarios

Introduce MBE’s to new industry participants: ESCO’s, IPP’s, etc.

SOURCE: Asaba Group Interviews
Metrics And Tracking Of MBE Sourcing Dollars Create Additional Hurdles
Drives Spending Focus On Dollar Quantity And Less On Margin/Growth Quality

Tracking Metrics Used

% of Respondents

- 76.0% Corporate Goal
- 66.7% Business Unit
- 45.5% Commodity
- 32% Scorecard w/ Different Metrics

Challenges Observed

- Distorts the relevant scope of opportunities available to MBE’s
- Moves focus to supply side rather than demand
- Creates behavior that emphasizes % sourced or number of dollars sourced rather than profitability or sustainability

Minority Sourcing Well-Represented In Every Category
Unclear On The Nature Of Products And Services Provided

<table>
<thead>
<tr>
<th>Product Categories</th>
<th>Service</th>
</tr>
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<tbody>
<tr>
<td><strong>$381.2 MM</strong></td>
<td><strong>$722.2 MM</strong></td>
</tr>
<tr>
<td>Procurement Cards</td>
<td>Other Services*</td>
</tr>
<tr>
<td>7% $25.3 MM</td>
<td>$252.0 MM 35%</td>
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<tr>
<td>Miscellaneous</td>
<td>Professional Services</td>
</tr>
<tr>
<td>Material 21%</td>
<td>$285.9 MM 40%</td>
</tr>
<tr>
<td>$81.9 MM</td>
<td>Building Services</td>
</tr>
<tr>
<td>Office Supplies</td>
<td>$73.7 MM 45%</td>
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<tr>
<td>19% $73.3 MM</td>
<td>Other Services*</td>
</tr>
<tr>
<td>Electrical, Gas</td>
<td>$42.3 MM 26%</td>
</tr>
<tr>
<td>17% $66.5 MM</td>
<td>$73.7 MM 45%</td>
</tr>
<tr>
<td>Construction 6%</td>
<td>Professional Services</td>
</tr>
<tr>
<td>$22.2 MM</td>
<td>$285.9 MM 40%</td>
</tr>
<tr>
<td>Fuel Lube And Oil</td>
<td>Building Services</td>
</tr>
<tr>
<td>29% $112.1 MM</td>
<td>$111.2 MM 15%</td>
</tr>
<tr>
<td>Office Supplies</td>
<td>Construction Services</td>
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<tr>
<td>27% $18.7 MM</td>
<td>$73.1 MM 10%</td>
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<tr>
<td>Electrical, Gas</td>
<td>Construction Services</td>
</tr>
<tr>
<td>28% $19.0 MM</td>
<td>$39.9 MM 25%</td>
</tr>
<tr>
<td>Construction 6%</td>
<td>Building Services</td>
</tr>
<tr>
<td>$4.2 MM</td>
<td>$6.4 MM 4%</td>
</tr>
<tr>
<td>Fuel Lube And Oil</td>
<td>Other Services*</td>
</tr>
<tr>
<td>27% $18.5 MM</td>
<td>$42.3 MM 26%</td>
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<td>Office Supplies</td>
<td>Professional Services</td>
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<tr>
<td>Miscellaneous</td>
<td>$285.9 MM 40%</td>
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<tr>
<td>Material 21%</td>
<td>Building Services</td>
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<td>$8.5 MM</td>
<td>$111.2 MM 15%</td>
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<tr>
<td>Office Supplies</td>
<td>Construction Services</td>
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<td>Building Services</td>
</tr>
<tr>
<td>$4.2 MM</td>
<td>$6.4 MM 4%</td>
</tr>
</tbody>
</table>

* Other Services includes Consulting Services and Maintenance Operations

SOURCE: Asaba Group Analysis
Focus: Reported Numbers Lead To Exclusion Of Base Procurement Numbers
Need To Develop A Standard Format For Reporting Minority Spending Dollars

<table>
<thead>
<tr>
<th>(Dollars in Millions)</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>MWDVBE Spending</td>
<td>$216</td>
<td>$189</td>
<td>$201</td>
</tr>
<tr>
<td>Adjusted Purchase Base Dollars (Net Procurement)</td>
<td>$930</td>
<td>$795</td>
<td>$805</td>
</tr>
<tr>
<td>Reported % MWDVBE participation</td>
<td>23.2%</td>
<td>23.8%</td>
<td>25.0%</td>
</tr>
<tr>
<td>MBE participation</td>
<td>13.1%</td>
<td>14.0%</td>
<td>16.7%</td>
</tr>
</tbody>
</table>

Procurement Base Adjustments

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclusion</td>
<td>$327</td>
<td>$370</td>
<td>$379</td>
</tr>
<tr>
<td>Gross Base Proc.</td>
<td>$1,257</td>
<td>$1,165</td>
<td>$1,184</td>
</tr>
<tr>
<td>% MWDVBE Part.</td>
<td>17.2%</td>
<td>16.2%</td>
<td>17.0%</td>
</tr>
<tr>
<td>MBE</td>
<td>8.6%</td>
<td>9.0%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Fuel (Natural Gas)</td>
<td>510</td>
<td>775</td>
<td>1,112</td>
</tr>
<tr>
<td>MWDVBE Spend</td>
<td>32</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>% MWDVBE</td>
<td>14.0%</td>
<td>11.0%</td>
<td>9.9%</td>
</tr>
</tbody>
</table>
Proposed New Methods/Framework To Measure MBE Spending

Places new emphasis on measuring “Quality of Spending”

Asaba Group Quality Index (AGQI™)

Functions of the following
- Total Minority Spending (% of Total Purchases)
- Weighted average commodity category margin
- Weighted average category growth factor (0.1 = Low, 0.5 = Mid, 1 = High)

- AGQI solves the issues of MBE Concentration in weak value chain positions
  - Forces Commodity Buyers to provide higher quality opportunities

- AGQI enables better recognition of Lower Tier minority efforts

Reflects Industry Supply Chain Realities Without Compromising Inclusion
Asaba Group Quality Index (AGQI™) – Illustrative Example

Two companies with $2 Billion in MBE spending (10% of total purchases)

Company A

$2 B MBE Spending

- 100 Non-Production
- 100 Safety
- 200 Fuel Delivery
- 300 Navigation
- 300 Electronic Manufacturing

Margin % Growth Rate

- $2 B MBE Spending
- 3% L
- 6% M
- 10% H

AGQI Rating:

10% * 8.1% * 0.62 = 0.5

Company B

$2 B MBE Spending

- 500 Non-Production
- 250 Plastic Molding/Foam
- 250 Trim

Margin % Growth Rate

- 3% L
- 3% L
- 3% L

AGQI Rating:

10% * 3.0% * 0.10 = 0.03