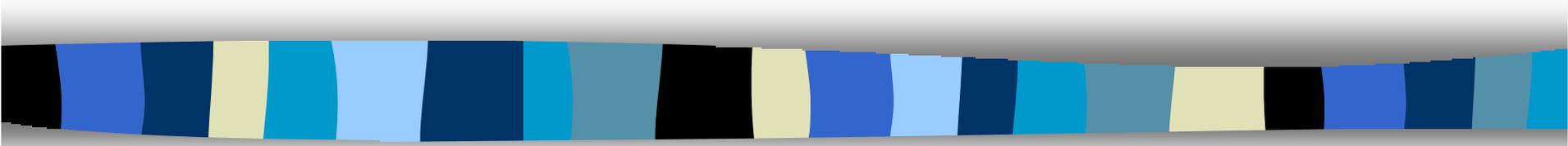
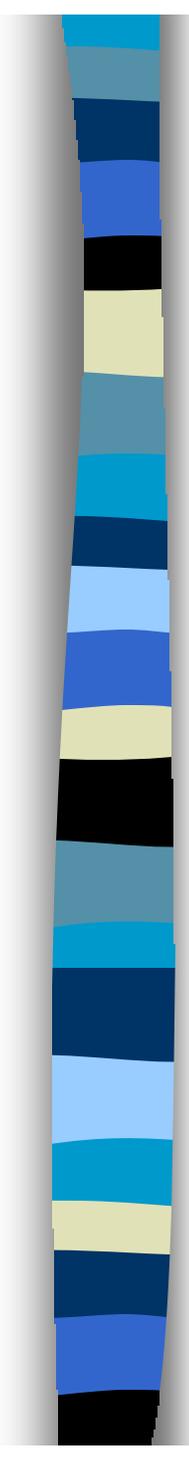


# What Do Industrial Customers Want in a Deregulated Marketplace?



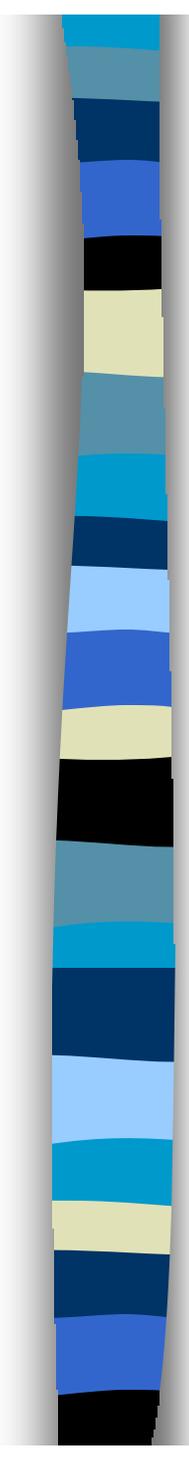
Presentation for Rocky Mountain Restructuring:  
What Works in the Western States  
May 20, 1999

Presented by  
Richard M. Anderson  
Energy Strategies, Inc.  
39 W. Market Street, Suite 200  
Salt Lake City, UT 84101  
(801) 355-4365



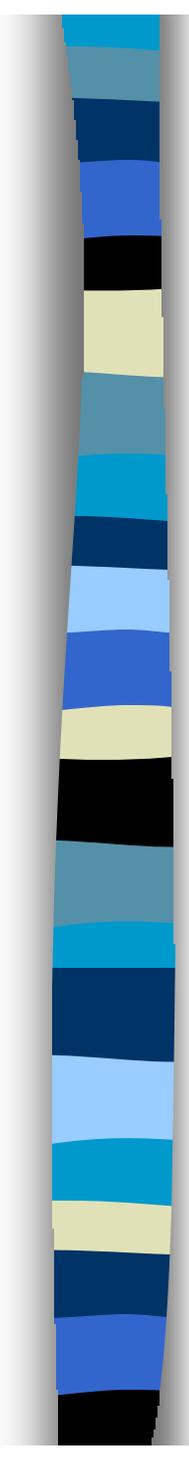
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- II. Defining Customers and What Choice Means to Them**
- III. Products and Services Provided in a Competitive Environment**
- IV. New Innovations**
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- VI. Concluding Remarks**



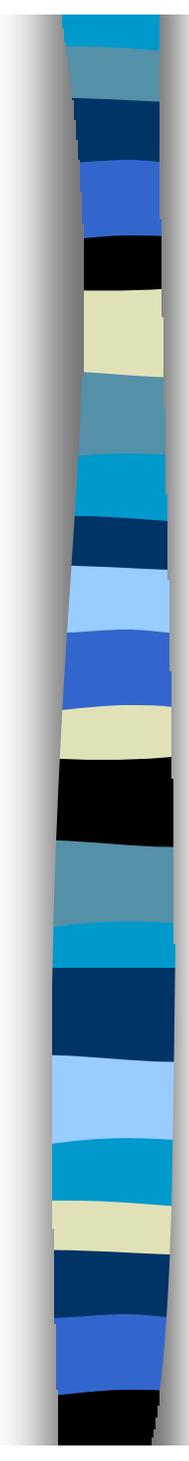
# I. Energy Strategies, Inc.

- † Energy Strategies, Inc, (ESI) was founded in 1986
- † ESI is a nationally recognized energy consulting firm providing a range of consulting services, including energy procurement, regulatory representation, contract negotiation and strategic analysis
- † ESI clients in the West consume in excess of 1500MW of power
- † ESI consults with customers on procurement contracting and electric deregulation efforts in 12 states
- † ESI's emphasis is on the customer's side of the meter



# Services Provided by ESI

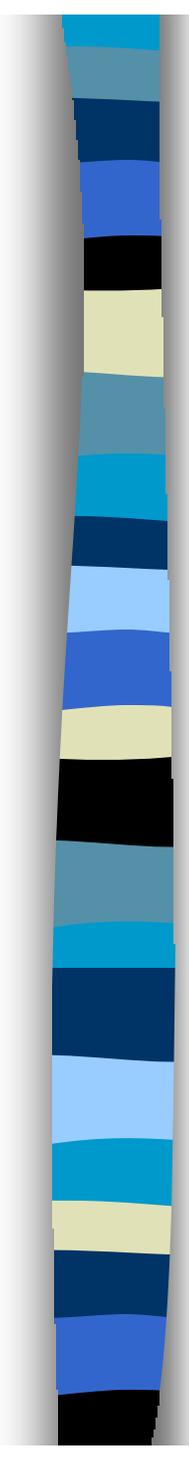
- † ESI has a broad understanding of the energy supply business including:
  - † Electric power and natural gas market analysis
  - † Electric and natural gas tariff and utility contract negotiations
  - † Fuel and electric supply hedging and management
  - † Energy commodity and transmission procurement contracts
  - † Energy performance contracting
  - † Regulatory intervention including expert testimony and rate analysis
  - † Support of owners and lenders in power facility financing
  - † Feasibility analysis of power generation facilities, gas reserve acquisitions and other energy projects
  - † Other related services



# ESI's Involvement in the Deregulation of Electricity Markets

- † ESI has worked on behalf of large customers in the competitive rulemaking processes in both California and Arizona
- † ESI has actively represented large end-users interests in the formation of the Arizona Independent System Administrator (AISA)
- † ESI has represented large customers interests in stranded cost proceedings for the three major utility companies in Arizona
- † ESI has represented large customers in efforts to restructure the electricity markets in Utah, Idaho, Wyoming, and New Mexico

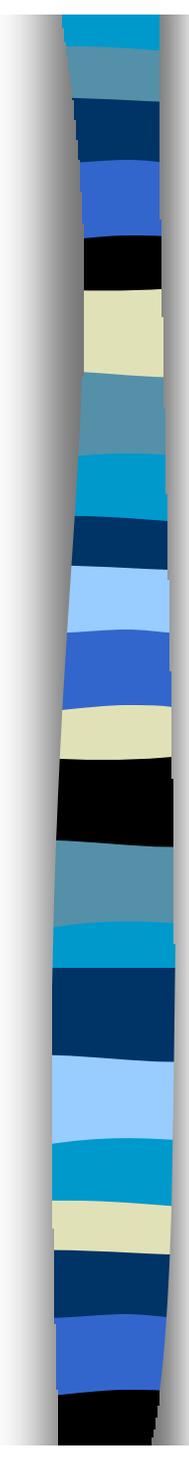
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# Helping Customers Identify Their Optimum Product Mix

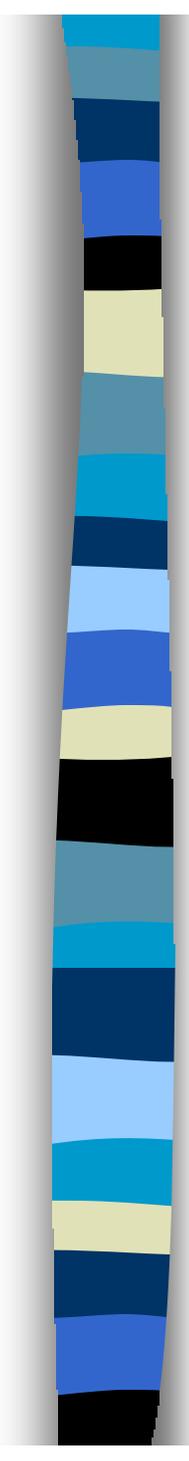
- † ESI has assisted a variety of clients in identifying their optimum product mix in a competitive environment in both California and Arizona. ESI has worked with both public sector entities and private sector entities, including:
  - † University of Arizona
  - † Arizona State University
  - † Chevron
  - † Honeywell
  - † Microchip
  - † Phelps Dodge
  - † Motorola
  - † Raytheon
  - † BHP Copper

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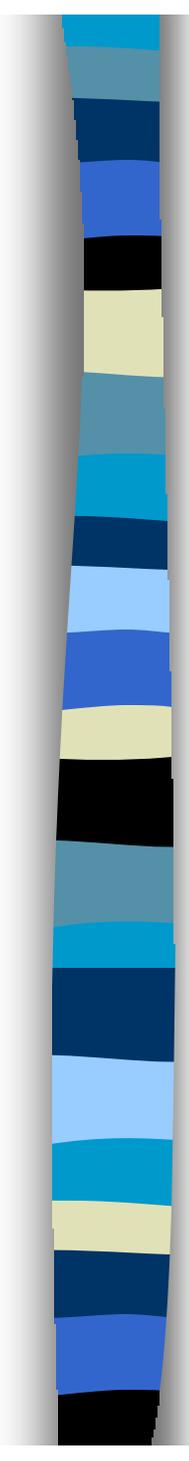
## II. What Does Choice Mean to Industrial Customers

- † Choice provides strategic opportunities for managing price and product/service procurement
- † Choice creates opportunities for new and innovative products/services



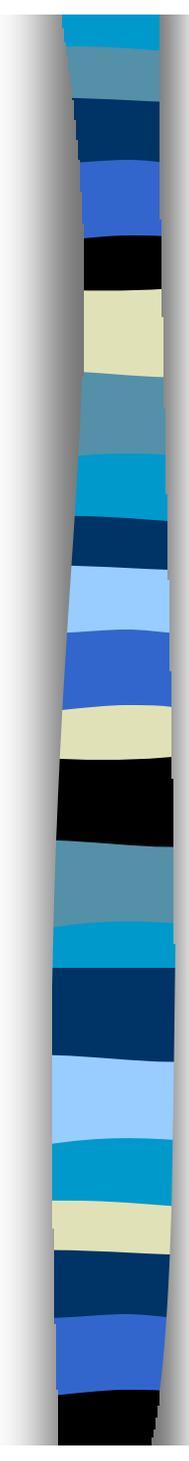
## III. New Products and Services

- † Energy Supply and Pricing Options
- † Energy Accounting Services
- † Energy Management and Engineering Services
- † Energy Generation and Distribution Services



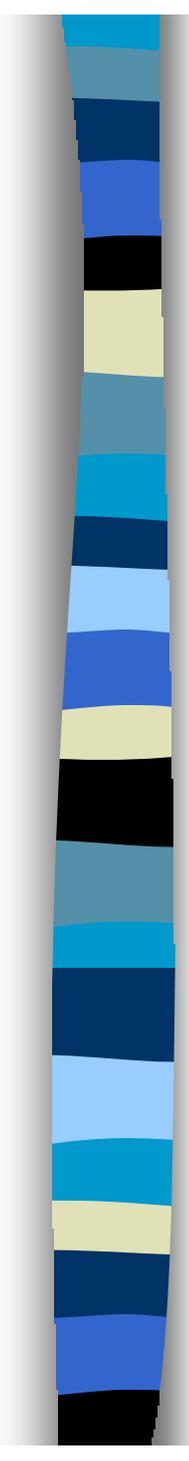
# Energy Supply and Pricing Options

- † Many Energy Service Provider's (ESP) offer two basic pricing options for the energy supply portion of the service:
  - † Index-based pricing - the commodity price is tied to an electricity index price such as the Palo Verde wholesale market index
  - † Percent-discount pricing - the commodity is priced at a percentage off the current tariff paid by the customer
- † Possible savings - Savings depends on the load shape of the customer.



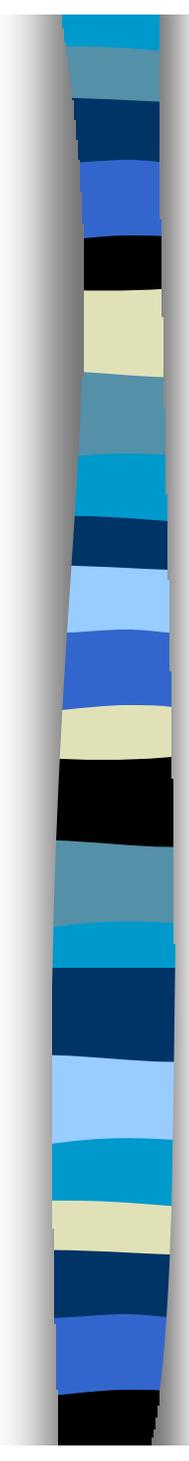
# Pricing Strategies

- † Prices will be more transparent
- † Use of financial instruments will be dominated by resellers, aggregators and marketers
- † Customers will have acquired the right mix of products that meets their needs



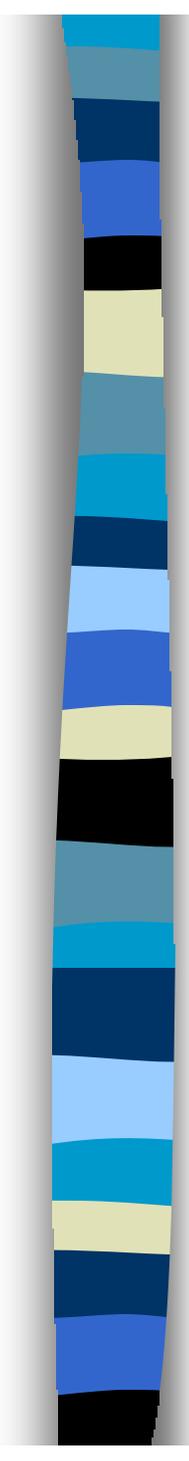
# Energy Management and Engineering Services

- † Performance contracts
- † Energy efficiency/productivity services
- † Power quality and reliability
- † Operation and management
- † Total utility and equipment outsourcing - project management



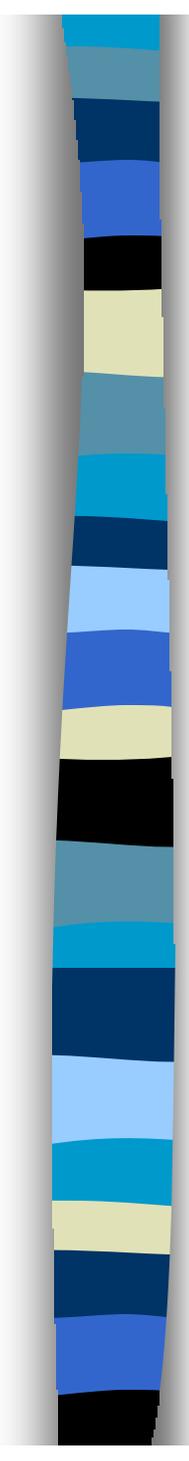
# Energy and Accounting Services

- † Energy information and accounting reporting
- † Cost forecasting and budgeting
- † Payment options
  - † Electronic billing
  - † Aggregated billing for multiple accounts, locations, and meters
- † Metering services
  - † Own, install and maintain meters
  - † More interactive meter reading and customized information on metering options



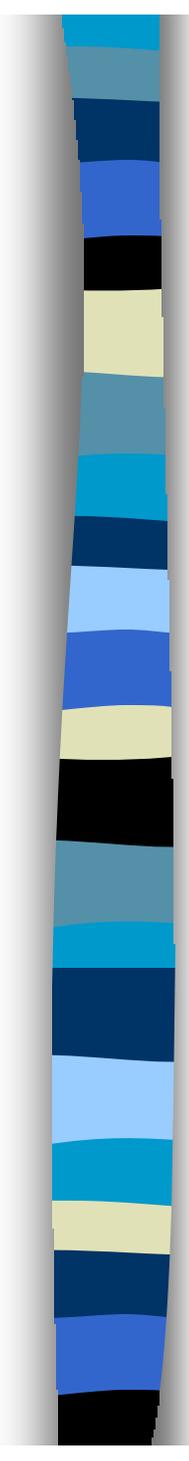
# Energy Generation and Distribution Services

- † Substation construction, finance, and maintenance
- † Self generation
- † Internal distribution system upgrades and maintenance
- † Peak shaving



## IV. Real Benefits from New Innovations

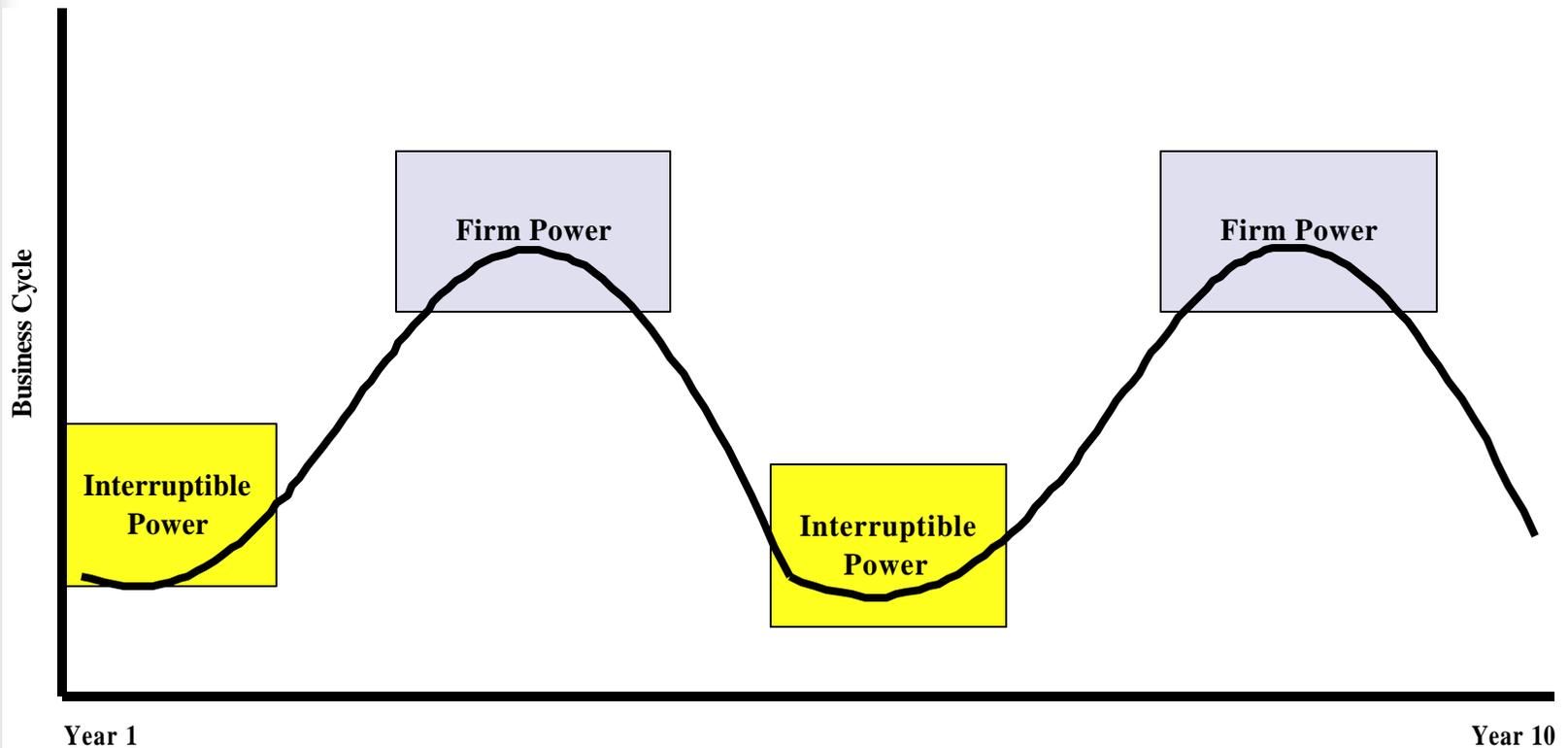
- † Some examples of ESI's customers who have realized substantial savings in the competitive market are provided below:
  - † A client in Arizona is currently served by a dedicated substation. The incumbent provider's cost for operating and maintaining the substation is extremely out-of-market. The customer has decided to purchase the substation. They have contracted with a competitive energy service provider to provide all of the O/M for the substation. The amount of money being saved by using the new provider will allow the customer to pay back the cost of purchasing the substation in two years.



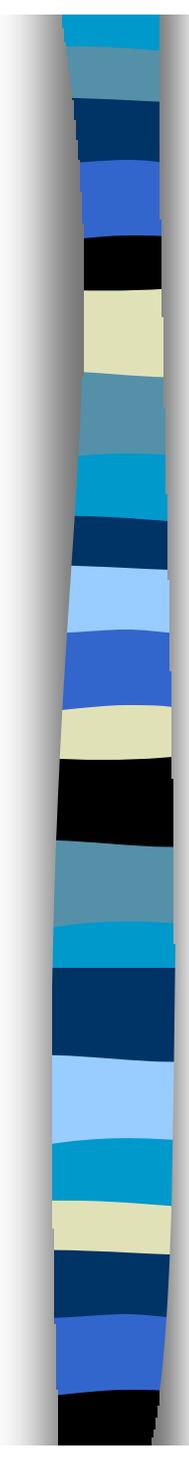
# Real Benefits from New Innovations (continued)

- † A large client in California has an internal processing cost of approximately \$ 25 for every invoice they receive. The customer has identified a competitive billing company who can process and pay all of the customers energy invoices for approximately \$ 7 per invoice. The customer is saving approximately 72% on each invoice processed.
- † A large client in Arizona has a very cyclical business resulting in an 8 to 10 year business cycle; for two to four years business will be extremely prosperous, and then the next two to four years business will be on a down slide. The deregulated energy markets will make it possible for the customer to purchase firm, non-interruptible power during the peak of its business cycle. When production slows down, the customer is able to increase its risk profile and purchase interruptible power for lower prices.

# Large Customer Business Cycle

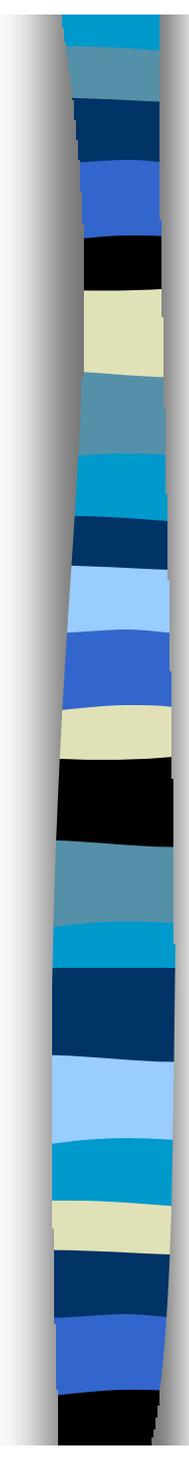


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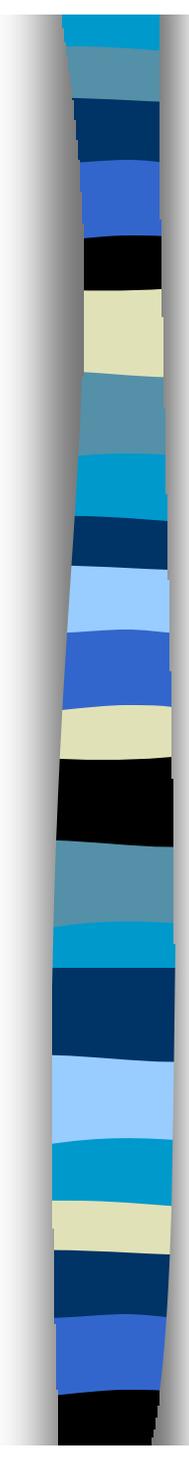
## V. Competition

- † Firms respond to the competitive market by lowering prices, almost immediately, introducing new services, reconfiguring old services to better accommodate consumer demands, thereby creating new technologies and innovations
- † Although restructuring from a regulated industry implies lower prices and more market entry - regulators as well as other government entities will assume a critical role in ensuring that customers receive the benefits of competition



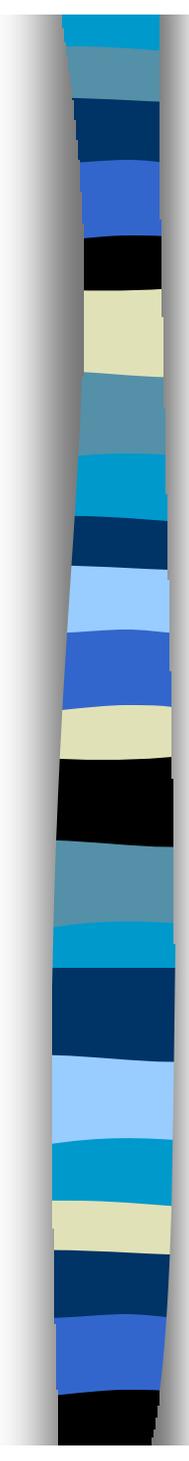
# Customer Decisions

- † Solicit competitive bids for commodity and related energy services
  - † Many vendors from which to choose
  - † Benefits highly dependent on utility rules
  - † Many commodity options available
  - † Metering and billing will be competitive
  - † Multi-vendor options available, i.e., billing, metering and commodity do not have to be bundled with single supplier
- † Stay With Host Utility
  - † Single Vendor
  - † Bundled tariff rates will still be available
  - † No extra effort required
  - † Some “natural” rate reduction possibilities
  - † Possibility of signing long term contract now - customer retention rates
  - † Limited DSM Offerings



# Characteristics of Customer Behavior in a Competitive Market

- † Customer decisions on who will supply their electricity will be driven by:
  - † Performance
  - † Pricing
  - † Product availability - customers will seek and will be offered more products to meet their particular needs



# Concluding Remarks

- † Ultimately, customers want to manage their own price risk
- † Customers require flexibility of products and services
- † These objectives are not possible under a regulated environment