

Is Energy Competition like Pornography?:

Will We Know Success When We See It?



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Advancement of
Energy Markets

Center for the Advancement of Energy Markets

Discovering consumer,
business, and environmental
advantage in energy markets
transformed by technology and
competition

Center for the Advancement of Energy Markets

CAEM

- Six Years Ago
- Restructuring was Problematic
- Something Missing
- Think Tank on Energy Restructuring

Character

- Independent
- Market-Oriented
- Non-Profit-501(c)(3)
- Change Agency, Think Tank
- Not a lobbying group, trade association, or consulting firm

➤ Mission=AID

- **A**nalyze Key Issues
- **I**nform Policymakers
- **D**efend Real Competition

Canadian Affiliate

- October 2001



Thinking About Success

- Ashley Brown's proposal
- The difficulty of defining obscenity was memorably summarized by Justice Stewart in a concurring opinion when he said:

I know it
when I see it.

Framework for thinking about success

1. What Problem Are We Trying To Solve?
2. What Definitions Have Others Given?
3. Evaluating These Definitions
4. My Proposed Definition Of Success
5. Measuring Success
6. Texas Compared To Georgia

Defining Success Depends on the Problem

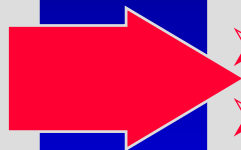
- What was wrong with the 100 years of success in electricity?
 1. Volatile Energy Prices
 - Friedman's point about oil prices and pencils
 2. Average cost pricing—poor price signals
 3. Incentives to build rather than conserve—AJ effect
 4. Inefficiency of monopolists
 5. Blunted innovation incentives
 6. Cumbersome process for price changes
 7. Creeping Mandates: Social Policy
- High prices per se are NOT the problem
- In fact, low prices are also a problem

What's it all about, Alfie?

Competitive Network Policy

Traditional

- Command-and-Control
- Monopoly Utilities
- Bundled Services
- Cost-Plus Pricing
- Silo-Based Products
- Fragmented
- Parochial
- State Focused
- Regulatory Driven



Emerging

- Market Based
- Customer Choice
- Unbundling/Access
- Performance Based
- Convergence
- Consolidated
- Regional/Global
- Federal Focused
- Antitrust Driven

So How Has It Gone To Date?

Why competitive energy markets?

1. Freedom/Choice

- The central tension of the 20th Century was over central planning versus markets/capitalism; wars have been fought to preserve/enhance freedom
- Completely apart from other benefits, there is a philosophical principle that freedom and choice should be preferred over coercion and monopoly

2. Rational Economic Decisions

- The price of pencils is effected by world oil prices
- Command and Control prices are irrational in volatile markets
- “Right Prices” not lower prices
- Average prices may be lower but some consumers, for some purposes, at certain times may pay more

3. Innovation in products and services

- Consumers: are increasingly affluent, computer savvy, lead more complex lives, have more options, are very busy
- We want flowing content services for our homes and businesses consistent with our lifestyle choices

Why competitive energy markets?

4. Technology Deployment

- Regulation retards effective technological deployment; markets enhance it

5. Environment

- Green products
- Efficient use of resources
- Conservation and efficiency
- More flexible in response to new environmental rules

6. Homeland Security

- Smaller, more flexible generation
- Better responsiveness

7. Global Competitiveness

Possible Definitions of Success

1. Lower Prices
2. Economic Efficiency
3. Choice: an option other than the monopoly utility
4. Customers Served by Competitive Suppliers
5. Policy Attributes: RED Index
6. Market Structure, Attributes, and Functions
7. Competitive Wholesale markets
8. Compare Energy Networks to Other Networks
9. Market Determined Prices
10. DOJ Competitive Markets Test
11. Meeting Customer Demands
12. National Standardization—No state is an island
13. Integrated Flowing Content

1. Lower Prices

- Principle argument of advocates of competition
- Several Dimensions
 - Prices lower than they were when reform initiated
 - Prices lower than they otherwise would have been
 - Prices lower than comparable jurisdiction
 - Prices lower for all customers in all periods
- Poor definition
- CAEM Paper for Georgia Commission

2. Economic Efficiency

- Maximizing Consumer Welfare
- Allocative Efficiency
- Productive Efficiency
- Ultimately the correct test
- Rejected because it is too theoretical and not sufficiently simple to observe and measure

3. Customer Option

- Seems to be most states' definition of success
- Success is making sure that customers have the option of buying from a supplier other than the traditional utility
- Variant: Success is based on the % of customers served by a competitive supplier
- Dominant model

4. Customer choosing a competitive supplier

- One often used measure of success is the percentage of customers who have actually switched from the utility to a competitive supplier
- Texas/UK monopoly switching
 - How does this count?
- Some object because a decision to remain with utility is a “choice”
- This definition is in the ballpark but is too narrow a definition

5. Policy Attributes

- What are the necessary set of policies that government must implement to achieve effective reform?
- RED Index
- Helpful tool but not the right definition of success
- 95 on RED Index but last attribute is a killer

6. Market Structure

- Does it look like a duck and quack like a duck?
- What are the functional characteristics of competitive markets?
 - All customers buying from non-affiliated suppliers
 - Number of Marketers
 - Marketer Mobility
 - Concentration of Marketers
 - Product Differentiation
 - Service Differentiation
 - Customer Satisfaction
 - Efficient Investment in necessary infrastructure
 - Retail Prices aligning with wholesale prices
 - Other attributes

7. Wholesale Markets

- Success is robust competitive wholesale markets not necessarily competitive retail markets
- This is close to the natural gas model
 - Competitive wholesale markets
 - Little residential and commercial retail competition
 - Significant large commercial and industrial competition
- Good start but is too narrow a definition
 - Ignores potential benefits of retail competition to mass market
 - Some, however, debate whether there are benefits to mass market from retail competition

8. Compare to Other Networks

- One way to look at success of electric restructuring is to look at other “network” restructurings and to compare
- Plexus Industries: Industries that carry out conduit or logistical functions necessary to giving a commodity value
- Natural Gas is best analogy
- Telecom is next best
- Surprisingly large number of such industries
 - Rivers, highways, airports, cable, movie theaters, Window operating system, airwaves
- There is a common set of principles for Plexus Industries
- How closely does electric adhere to such principles
- This is a helpful way to evaluate policy in electric industry but is not in the final analysis the right test of success

9. Market Determined Prices

- Customers should see prices that to some degree respond to market forces
- New Jersey Bidding
- Mass Market natural gas model: utility purchases gas in competitive market
- This is largely a variation of wholesale competition and ignores potential benefits of full retail competition for mass market

10. Competitive Markets

- DOJ Antitrust Guidelines
 - HHI of 1000 is competitive
 - HHI of 1000 to 1800 moderately concentrated
 - HHI over 1800 is a problem market
 - Price Increase of 5% in relevant market
- DOJ Oil Pipeline Report
 - Traditional Guidelines apply to markets becoming less competitive not more competitive
 - Direction of concentration is important
 - When you are starting from a very concentrated market of 10,000 and going to a 4000, that is a move in the right direction
 - Trying to “improve” a 4000 market by regulation may be counterproductive
- Helpful tool but not very useful in evaluating success of electric markets

11. Meet Customer Demands

- Customers haven't clamored for choice so why impose it on them
 - Customers don't want choice
- Be Careful
- Many innovations created consumer demand instead of responded to it
- Rogers, Diffusion of Innovation
- S Curve of Diffusion
- With change there is often little acceptance until a point of inflection when change and acceptance is rapid
- Not a good definition of success

12. National Standardization

- Success is only possible with national standardization of a model of competition
- Some go so far as to advocate preemption of state regulation of electric utilities
- Gas Industry Standards Board shows that standardization is a necessary condition for network industries
- If we are defining the end state of success rather than evaluating a single instance of success, than standardization has to be part of the mix

13. Integrated Flowing Content

- Some argue that it is wrong to focus exclusively on electric as the definition of success for a flowing content commodity
- Analogy of buying a car; consumers do not want to buy a body, a muffler, brakes and a motor from different suppliers and to put together the car
- Restructuring of network industries where the commodity flows directly into or out of the home or business should be the goal
- Mass market customers want to purchase a set of services that are necessary for their comfort, convenience, and effective use of the home or business
- Success, then, is defined by the degree to which a single middle man can combine packages that meet all the flowing content needs of the home owner or business person

My Definition of Success

- Retail choice exercised for all customers
 - Default Options Create Distortions
 - Default Options Create Disincentives for Marketers
- No marketers affiliated with network provider
- Market Structure Attributes for commodity mirror structure of competitive markets
- National (international) standards for energy networks including distribution companies
- Flowing Content Integration that revolutionizes the product and service model

Measuring Progress: RED Index

➤ Indices—Simplify Complex Situations

- Thermometer of 104
- Economic Indicators: DOW over 11,000; Price to Earnings Ratio of 25; CPI at 3.5%; Federal Reserve Price Cuts of .5%
- Hurricane Mitch was a Category 5 on Saffir-Simpson Hurricane Intensity Scale.

➤ RED=Retail Energy Deregulation

- 22 Key Issues that Determine the Quality of Access
- Scale from 0 to 100—Negative Numbers Possible
- Survey of State Commissions

➤ Comprehensive New Methodology

- Not a measure of success of retail
- Measures policies that are necessary conditions for success
- Coverage extended to Canada, Australia, New Zealand, and Great Britain
- Update of Electric and first time gas index in 2005
- RED Index Advisory Committee

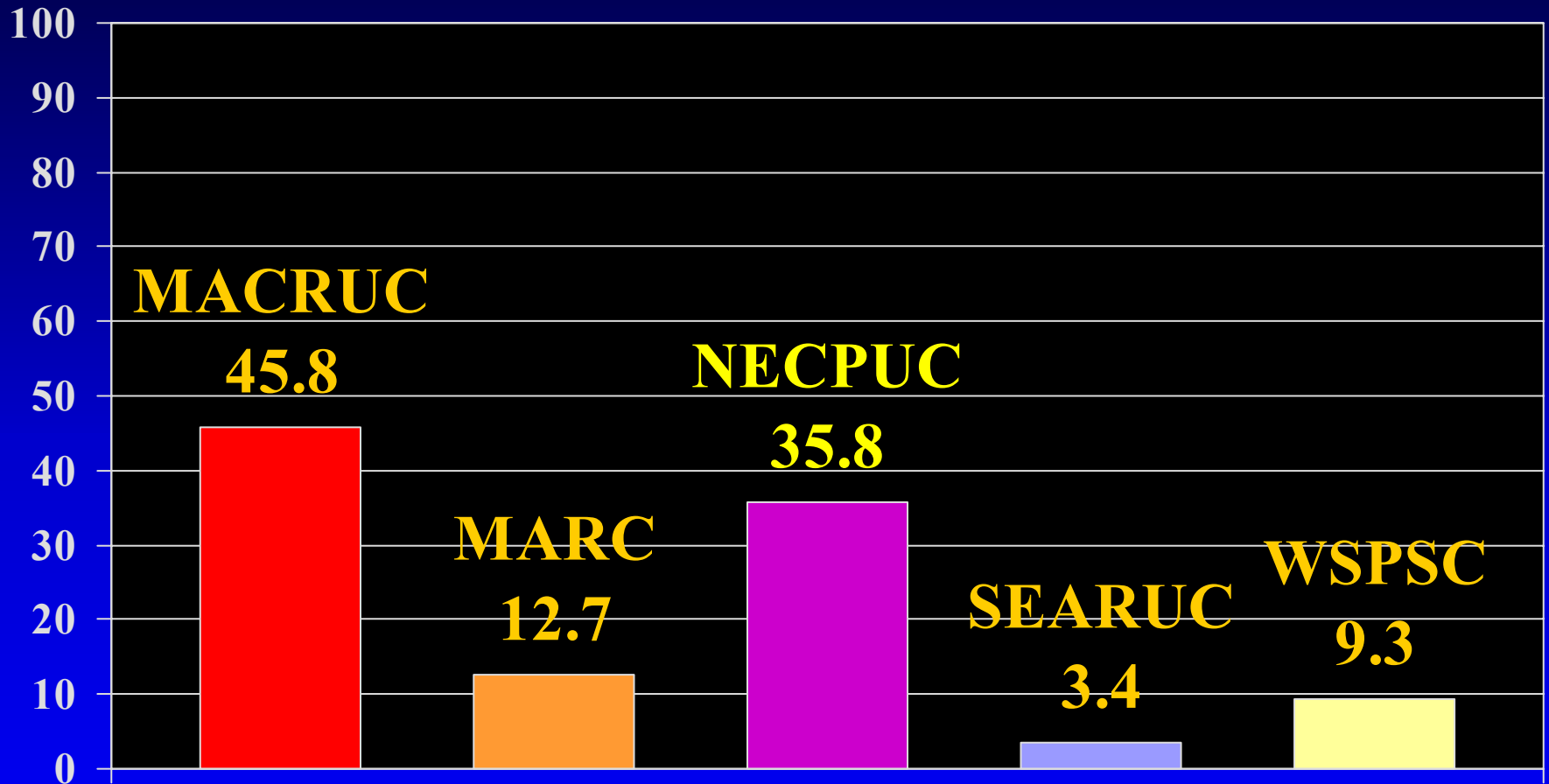
Texas Takes over First in US

Even before debacle, California barely in top 20

Country, Province, State or Territory	RED Index Score 2003	World Rank 2003
<i>England, United Kingdom</i>	<i>88</i>	<i>1</i>
<i>New Zealand</i>	<i>75</i>	<i>2</i>
<i>Texas, USA</i>	<i>69</i>	<i>3</i>
<i>Pennsylvania, USA</i>	<i>67</i>	<i>4</i>
<i>Maine, USA</i>	<i>64</i>	<i>5</i>
<i>Alberta, Canada</i>	<i>61</i>	<i>6</i>
<i>New York, USA</i>	<i>60</i>	<i>7</i>
<i>District of Columbia, USA</i>	<i>54</i>	<i>8</i>
<i>Michigan, USA</i>	<i>52</i>	<i>9</i>
<i>Maryland, USA</i>	<i>52</i>	<i>9</i>
<i>Victoria, Australia</i>	<i>50</i>	<i>11</i>
<i>Queensland, Australia</i>	<i>22</i>	<i>25</i>

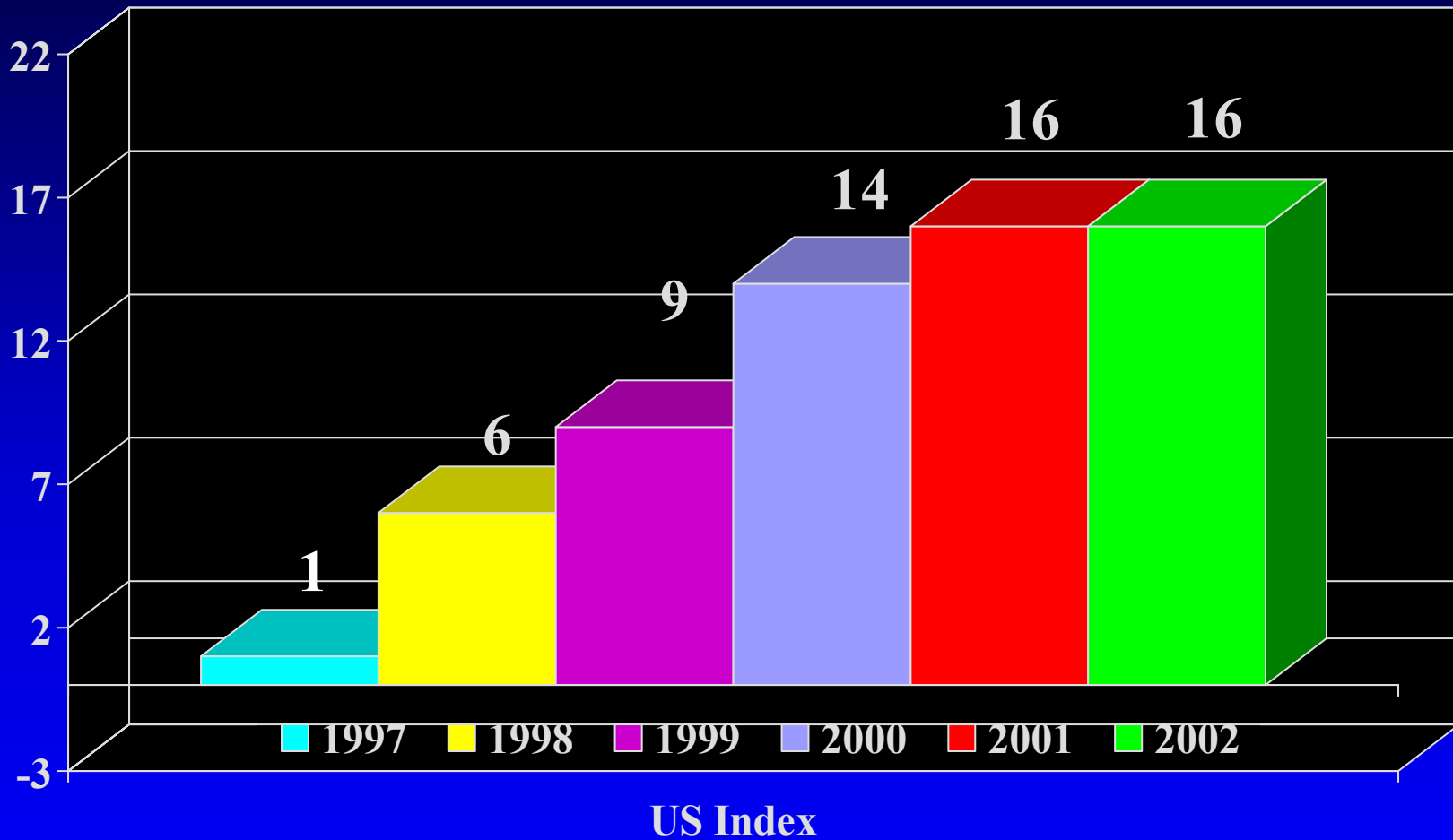
<i>Texas Attribute</i>	1998	1999	2000	2001	2002
1. Deregulation Plan	No Action	No Action	Policy	Detail	Detail
2. Percent of Eligible Customers	0	0	0	0	70
3. Percent Switching	0	0	0	0	2
4. Competitive Safeguards	No Action	No Action	No Action	No Action	Corporate
5. Uniform Business Practices	No Action	No Action	No Action	Consensus	Consensus
6. Competitive Billing	No Action	No Action	No Action	Consolidated	Consolidated
7. Competitive Metering	No Action	No Action	No Action	Delayed	Delayed
8. Generation Market Structure	No Action	No Action	No Action	Incentives	Incentives
9. Wholesale Market Model	No Action	No Action	No Action	No Action	Bilateral
10. Stranded Cost Calculation	No Action	No Action	No Action	No Action	Not an Issue
11. Stranded Cost Implementation	No Action	No Action	No Action	No Action	Not an Issue
12. Customer Information	No Action	No Action	No Action	Excellent	Excellent
13. Consumer Education	No Action	No Action	No Action	Awareness	Understanding
14. Default Provider	No Action	No Action	No Action	No Action	Affiliate Assignment
15. Default Provider Price Risk	No Action	No Action	No Action	No Action	Fixed
16. Default Provider Rates	No Action	No Action	No Action	Wholesale/Rate Cut	Rationalization
17. Performance-Based Regulation	No Action	No Action	No Action	No Action	No Action
18. Network Pricing	COS Pricing	COS Pricing	COS Pricing	COS Pricing	COS Pricing
19. Interconnection to Grid	No Action	No Action	No Action	Aggressive	Aggressive
20. Regulatory Convergence	No Action	No Action	No Action	No Action	No Action
21. Commission Reengineering	No Action	No Action	No Action	Some	Some
22. Commission Budget	Level	Level	Level	Level	Level

Red Index Averages by NARUC Region



RED Index Average Score by NARUC Region

US National Red Index Score



Measuring Success: Studies

- PJM Study: \$3.2 billion in benefits in 2002
- Natural Gas Study: \$600 billion in benefits
- Default Study: Large customers need to be vanguard and policy should incentivize switching
- Reserve Margin Study: Pending
- DISCO of the Future: Scenario Analysis
- All these studies can be found on CAEM.ORG

My Candidate for Success

➤ Georgia Gas Model

- Date certain for customers to choose
- Passive Customers assigned to marketers based on success
- Rush of marketers: over 20
- Got consumers attention: 80% switched
- Black eye because of marketer billing and AGL rate increase

Evaluation of Georgia

- 5 years experience with 100%
- Multiple marketers
- Some concentration—top 4 have 80% market
- Top Marketer is an affiliate of AGL
- Changing Marketer Profile
- Product Differentiation: Georgia Website
- First two years of implementation were horrendous
- Billing and Bankruptcy
- Last three years much better operationally
- Complaints down
- Retail prices reflect wholesale gas prices
- First Wave of price increases—blamed on deregulation
- Price Cap Rule
- Second Wave of Price Increases
- Consumers now understand that GA prices will be affected by wholesale prices

Evaluation of Texas Electric

➤ Best Electric Model

- Standardized for all discos
- Separated commodity function from network functions
- Unified regulatory scheme (PUC jurisdiction over ERCOT)

➤ Problems

- Monopoly Assignment
- Not all customers have meaningful access
- Mass Market still very concentrated
- Little opportunity for flowing content integration

Shameless Plug Slide

➤ Take a Leadership Position

- Board Member
- IDEAS Foundation
- Strategy Committee
- Convention and Awards Committee

➤ Join a Project

- Default Phase II: Mass Market
- RED Index Advisory Committee

➤ Outreach

- Speeches
- Media Contact

➤ Financial Support

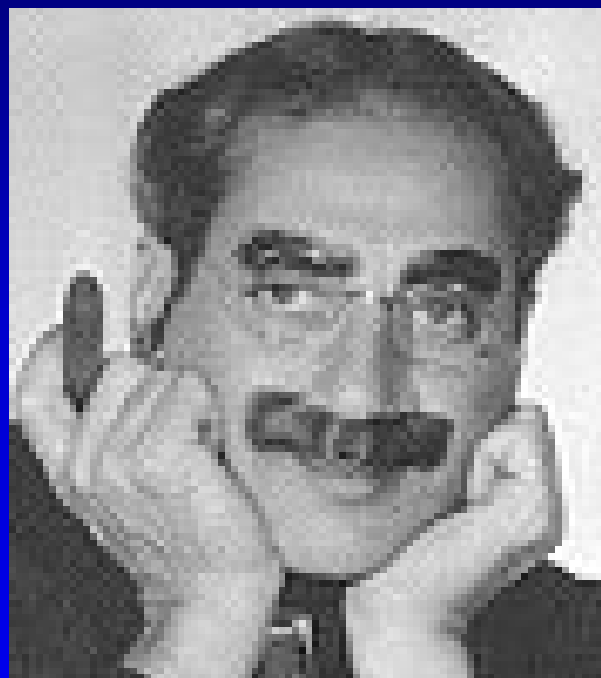
➤ Contact:

- CAEM.ORG
- Ken Malloy, kmalloy@caem.org or 703-250-1580

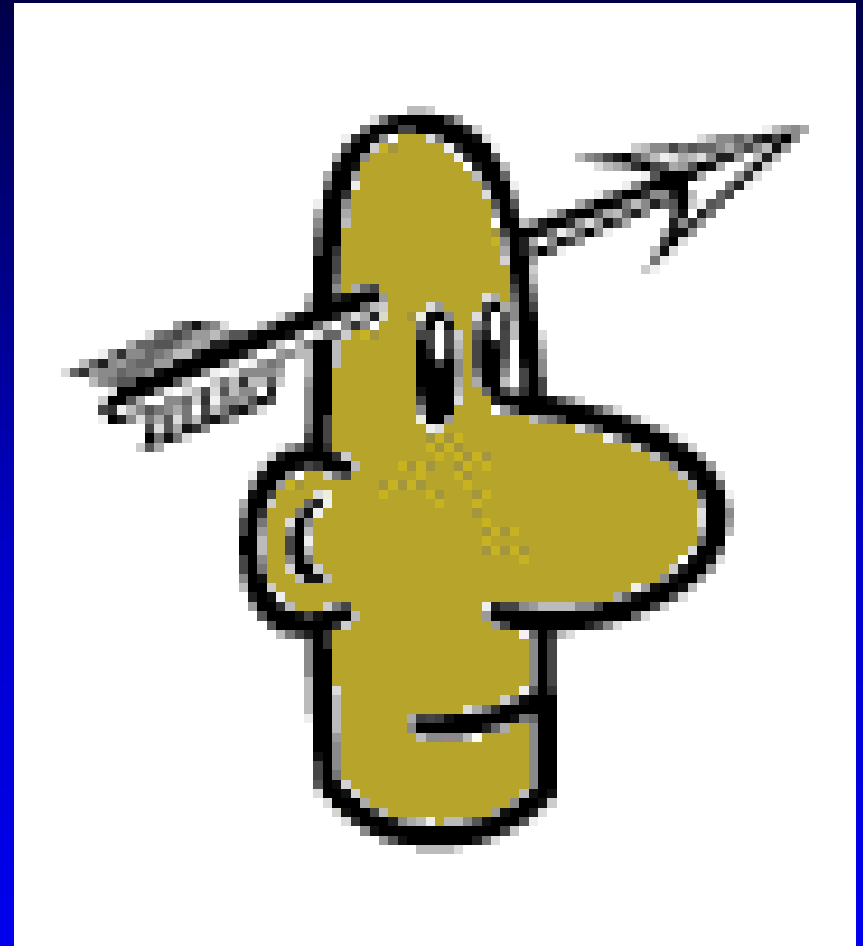
Perspectives on Change

Marx:

Politics is the art of looking for trouble, finding it everywhere, diagnosing it incorrectly, and applying the wrong remedies.



**Pioneers
get all the
arrows,
but we get
the best
campsites.**



A successful
person is one
who can lay a
firm foundation
with the bricks
that others throw
at him or her.
David Brinkley



First they ignore you.
Then they laugh at you.
Then they fight you.
Then you win.
Gandi

